

DEVELOPMENT OF A ENGINEERING DESIGN PROCEDURE

FOR A COMPLEX REVOLUTE JOINT

by

Thomas V. Hammock

Thesis Submitted to the Graduate Faculty of the
Virginia Polytechnic Institute and State University in Partial
Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE

IN

MECHANICAL ENGINEERING

APPROVED:

L. D. Mitchell, Chairman

R. H. Fries

J. B. Kosmatka

December 1988
Blacksburg, Virginia

**DEVELOPMENT OF A ENGINEERING DESIGN PROCEDURE
FOR A COMPLEX REVOLUTE JOINT**

by

Thomas V. Hammock

ABSTRACT

Design procedures are developed that combine both the finite element method and the transfer matrix method in design. These procedures were drawn up as a result of the analysis of a large continuous mining machine to be produced by Fairchild International. Combining the methods allowed the analysis to be split into smaller jobs. Two examples are given. The first example divides the machine into a number of separate finite element analyses where the internal loads on each component are determined by the transfer matrix method. The second example analyzes the transition region between each of the separate finite element analysis. Utilizing both methods in design reduced computer usage costs.

DEDICATION

This thesis is dedicated to my mother and father,
 , for their support and inspiration.

ACKNOWLEDGEMENT

The author wishes to thank his major advisor, Dr. Larry D. Mitchell, for his time and help. He understands the things Dr. Mitchell put up with and will remember it and pass it on.

The author also wishes to thank Dr. A. L. Wicks for his continued help in his academic development and Dr. Kosmatka and Dr. Fries, members of his Graduate Committee, for their guidance.

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	vii
LIST OF TABLES	ix
NOMENCLATURE	xi
 CHAPTER 1	
1.0 INTRODUCTION	1
 CHAPTER 2	
2.0 LITERATURE REVIEW	3
 CHAPTER 3	
3.1 Modeling Methodologies	4
3.1.1 Finite Element Methods	4
3.1.2 Transfer Matrix Methods	8
 CHAPTER 4	
4.1 Simplifying the Problem	13
4.1.1 Utilizing Transfer Matrix Theory to help locate critical Areas in Strucutres and to Solve for Individual Finite Element Model Internal Loads	13
4.1.2 Example: Continuous Miner Analysis	17
4.2 Solve the Problem Efficiently	22
4.2.1 Utilizing Finite Elements to Obtain Realistic Parameters for Transfer Matrix Models	22
4.2.2 Example: Yoke Joint Analysis	27
4.3 Discussion	67
 CHAPTER 5	
5.0 CONCLUSIONS AND RECOMMENDATIONS	68

TABLE OF CONTENTS (Con't)

	<u>Page</u>
REFERENCES	69
APPENDIX A: Transfer Matrix Model Utilized in Beam 4 Algorithm. . .	71
APPENDIX B: Finite Element Analysis of Revolute Joint Yoke Plate.	89
APPENDIX C: Finite Element Analysis of Revolute Joint Side Frame Plate	195
VITA	208

LIST OF FIGURES

	<u>Page</u>
Fig. 3.1 Beam in bending and the four degrees of freedom of nodes. (Figures taken from [10])	6
Fig. 3.2 Sign convention and notation for transfer matrix development. (Figures taken from [14])	9
Fig. 3.3 Cantilever subjected to force V and moment M (Figure taken from [14])	11
Fig. 4.1 Line and branched structures	16
Fig. 4.2 Continuous mining machine (After Fairchild International drawing, Glen Lynn, VA)	18
Fig. 4.3 Possible critical loadings of miner	19
Fig. 4.4 Modeling of the continuous miner as a beam	20
Fig. 4.5 x,z plane view of continuous miner modeled as a beam in critical support conditions. (Rear bumper-pan support conditions.)	21
Fig. 4.6 Shear and moment diagrams for loading cases in Figs. 4.3a (Figures taken from [15])	23
Fig. 4.7 The revolute joint analyzed on the continuous miner (side view)	24
Fig. 4.8 The top and side view of the revolute joint yoke assembly	28
Fig. 4.9 The top and side view of the revolute joint slide frame.	29
Fig. 4.10 Free-body diagram of slide frame and pins of the articulation joint with ($\delta_c = 0$). Yoke side of joint is shown as fixed.	30
Fig. 4.11 Free-body diagram of slide frame side of the articulation joint with ($\delta_c = \infty$). Yoke side of joint is shown as fixed.	31
Fig. 4.12 Slide frame side of articulation joint with bearing clearance defined (δ_c)	32
Fig. 4.13 Yoke side of joint after failure	34
Fig. 4.14 Moment supported in the articulation joint vs. angular rotation in articulation joint	35

LIST OF FIGURES (continued)

	<u>Page</u>
Fig. 4.15 Equivalent spring system ($\delta_c = 0$)	37
Fig. 4.16 Reduced equivalent spring systems of revolute joint with ($\delta_c = 0$)	39
Fig. 4.17 Simply loaded rod element used to derive the stiffness of pin A and pin B in the revolute joint	43
Fig. 4.18 Center plate examined to solve for the total angular rotation of the plate	45
Fig. 4.19 Transfer matrix model of center plate of revolute joint	49
Fig. 4.20 Finite element of yoke plate of revolute joint	50
Fig. 4.21 Finite element model of slide-frame plates of revolute joint	51
Fig. 4.22 Yoke-plate finite element models restrained and loaded to obtain radial deflections	52
Fig. 4.23 Slide-frame plate finite element model restrained and loaded to obtain radial deflections	53
Fig. 4.24 Finite element model of revolute joint yoke plate with loads and restraints shown	58
Fig. 4.25 Yoke plate finite element model loaded and restrained to obtain transverse displacements at loading points . .	59
Fig. 4.26 von Mises stress contours for the yoke-plate finite element model restrained and loaded as shown in Fig. 4.24b	61
Fig. 4.27 von Mises stress contours for the yoke-plate finite element model restrained and loaded as shown in Fig. 4.22b	64

LIST OF TABLES

	<u>Page</u>
Table A.1 Modeling data for the static load analysis of the continuous miner in a rear bumper to pan support dip straddle maneuver	72
Table A.2 Static response for the continuous miner in a rear bumper to pan support dip straddle maneuver	76
Table A.3 Modeling data for the static load analysis of the center plate of the articulation joint on the verge of yielding. Magnitude of concentrated moment load on section #1 is $-1.31\text{E}-6$ in·lb (0.148 MNm)	81
Table A.4 Static response for the center plate of the articulation joint on the verge of yielding	84
Table A.5 Modeling data for the static load analysis of the center plate of the articulation joint to calculate moment stiffness. Magnitude of concentrated moment load on section #1 is -100,000 in·lb (0.0113 MNm). . . .	85
Table A.6 Static response for the center plate of the articulation joint to calculate moment stiffness	88
Table B.1 Model loaded with 33.33 lb (148.3 N) on nodes 327, 333 and 830 (displacement listing)	90
Table B.2 Model loaded with 33.33 lb (148.3 N) on nodes 327, 333, and 830 (stress listing)	105
Table B.3 Model loaded with -33.33 lb (-148.3 N) on nodes 617, 623 and 975 (displacement listing)	120
Table B.4 Model loaded with -300 lb (-1334.4 N) on nodes 608, 611, and 966 (displacement listing)	135
Table B.5 Model loaded with -300 lb (-1334.4 N) on nodes 609, 611, and 966 (stress listing)	150
Table B.6 Model loaded with 300 lb (1334.4 N) on nodes 312, 314 and 820 (displacement listing)	165
Table B.7 Model loaded with 300 lb (1334.4 N) on nodes 312, 314 and 820 (stress listing)	180
Table C.1 Model loaded with -300 lb (-1334.4 N) on nodes 90, 96 and 318 (displacement listing)	196

LIST OF TABLES (continued)

	<u>Page</u>
Table C.2 Model loaded with 300 lb (1334.4 N) on nodes 4, 10, and 288 (displacement listing)	202

NOMENCLATURE

English Symbols

A	point contact (see Fig. 4.11)
B	point contact (see Fig. 4.11)
B _A	bottom plate of the top bearing assembly of the yoke side of the articulation joint (see Fig. 4.13)
B _B	bottom plate of the bottom assembly of the yoke side of the articulation joint (see Fig. 4.13)
C _A	top plate of the slide frame side of the articulation joints (see Fig. 4.12)
C _B	bottom plate of the slide frame side of the articulation joints (see Fig. 4.12)
d	diameter of pin A and pin B (see Fig. 4.17)
E	modulus of elasticity
f	general term for force
F	point contact (see Fig. 4.10)
{F}	external forces acting on a structure
[F]	field transfer matrix
F ₁	force (see Eq. 3.7)
F ₂	force (see Eq. 3.7)
F ₃	force (see Eq. 3.7)
F _B	reaction force (see Fig. 4.16)
F _T	reaction force (see Fig. 4.16)
G	point contact (see Fig. 4.10)
H	point contact (see Fig. 4.10)

I	second area moment of inertia (see Eq. 4.30) and also used as point contact (see Fig. 4.10)
J	point contact (see Fig. 4.10)
K	point contact (see Fig. 4.10)
[K]	stiffness matrix
K_A	stiffness of plate T_A and T_B in the transverse direction (see Fig. 4.19)
k_a	stiffness of a spring (see Fig. 3.1)
K_B	stiffness of plate B_A and B_B in the transverse direction (see Fig. 4.19)
k_b	stiffness of a spring (see Fig. 3.1)
K_{BE}	moment stiffness of the articulation joint when there is no clearance in the bearings (see. Fig. 4.16)
K_p	radial stiffness at pin A and pin B (see Eq. 4.29)
K_T	equivalent radial stiffness (see Fig. 4.16)
K_1	stiffness of plate (T_A) in the x direction (see Fig. 4.15)
K_2	stiffness of plate (B_A) in the x direction (see Fig. 4.15)
K_3	stiffness of plate (T_B) in the x direction (see Fig. 4.15)
K_4	stiffness of plate (B_B) in the x direction (see Fig. 4.15)
K_5	stiffness of plate (C_A) in the x direction (see Fig. 4.15)
K_6	stiffness of plate (C_B) in the x direction (see Fig. 4.15)
L	general term for length
ℓ_i	length of the i^{th} transfer matrix beam element
ℓ	distance between top and bottom bearing assembly ($\ell_1 + \ell_2$) (see Fig. 4.16)

l_1	distance between top bearing assembly and the center of rotation of the articulation joint (see Fig. 4.16)
l_2	distance between bottom bearing assembly and the center of rotation of the articulation joint (see Fig. 4.16)
M	general term for moment
M_T	maximum actual moment supported by the articulation joint (see Eq. 4.1)
M_1	portion of (M_T) that the articulation joint carries when there is no clearance in the bearings (see Fig. 4.10)
M_2	portion of (M_T) that the articulation joint carries when there is infinite clearance in the bearings (see Fig. 4.11)
$M_{2,yield}$	maximum moment that the articulation joint can support when there is infinite bearing clearance (see Eq. 4.41)
M_{z1}	moment about the z axis at nodal point 1 (see Eq. 3.5)
M_{z2}	moment about the z axis at nodal point 2 (see Eq. 3.5)
P	general term for concentrated load
P_{y1}	concentrated force (see Fig. 3.5)
P_{y2}	concentrated force (see Fig. 3.5)
R_A	reaction force at point A (see Fig. 4.11)
$R_{A,FE}$	force used in finite element analysis of plate T_A , B_A , T_B and B_B (see Eq. 4.44)
$R_{A,max}$	maximum force R_A that will cause yield at the base of plates T_A , B_A , T_B , and B_B (see Eq. 4.44)
R_B	reaction force at point B (see Fig. 4.11)
R_E	reaction force at point E (see Fig. 4.10)

R_F	reaction force at point F (see Fig. 4.10)
R_G	reaction force at point G (see Fig. 4.10)
R_H	reaction force at point H (see Fig. 4.10)
R_I	reaction force at force I (see Fig. 4.10)
R_J	reaction force at point J (see Fig. 4.10)
R_K	reaction force at point K (see Fig. 4.10)
S_{FE}	finite element stress result (see Eq. 4.44)
$S_{y,p}$	yield stress of plates T_A , B_A , T_B and B_B (see Eq. 4.44)
T_A	top plate of the top bearing assembly of the yoke side of the articulation joint (see Fig. 4.12)
T_B	top plate of the top bearing assembly of the yoke side of the articulation joint (see Fig. 4.12)
$\{U\}$	general term for displacement
U_1	deflection (see Eq. 3.7)
U_2	deflection (see Eq. 3.7)
U_3	deflection (see Eq. 3.7)
V	general term for shear
V_T	total shear force supported by the joint (see Fig. 4.8)
y	general term for deflection in the (y) direction
y_1	displacement in y direction (see Fig. 3.1)
y_2	displacement in y direction (see Fig. 3.1)
w	transfer matrix state vector variable for beam deflection (see Fig. 3.1)
z	Transfer state vector

Greek Symbols

δ	general rotation for deflection
δ_c	clearance in bearings (see Fig. 4.8)
δ_1	deflection used to derive K_{BE} (see Fig. 4.16)
δ_2	deflection used to derive K_{BE} (see Fig. 4.16)
ϵ	strain vector (see Eq. 3.3)
ϵ_x	normal strain in the x direction (see Eq. 3.3)
ϵ_y	normal strain in the y direction (see Eq. 3.3)
ϵ_z	normal strain in the z direction (see Eq. 3.3)
σ_x	normal stress in the x direction (see Eq. 3.3)
γ_{xy}	shear strain (see Eq. 3.3)
γ_{yz}	shear strain (see Eq. 3.3)
γ_{zx}	shear strain (see Eq. 3.3)
σ	stress vector (see Eq. 3.3)
σ_y	normal stress in the y direction (see Eq. 3.3)
σ_z	normal stress in the z direction (see Eq. 3.3)
τ_{xy}	shear stress on the x force in the y direction (see Eq. 3.3)
τ_{yz}	shear stress on the y force in the z direction (see Eq. 3.3)
τ_{zx}	shear stress on the z force in the x direction (see Eq. 3.3)
ψ	transfer matrix state vector element for beam rotation
θ_c	angular rotation of articulation joint due to clearance in bearings (see Fig. 4.12)
θ_{z1}	angular deflection about the z axis at the first nodal point (see Fig. 3.1)
θ_{z2}	angular deflection about the z at the second nodal point axis (see Fig. 3.1)

- θ_T total angular rotation at articulation joint (see Fig. 4.18)
- θ_1 angular rotation in articular joint after there is no clearance in the bearings (see Fig. 4.16)

Mathematical Symbols

- { } matrix column vector
- [] matrix indicator
- E exponential notation (e.g., 4.0E03 = 4,000)

1.0 INTRODUCTION

Technological advancement in computers has enabled the finite element design approach to become a practical option for engineers. Utilizing finite element methods permits one to model complex systems and their response on the computer. This allows the engineer to change the design to meet desired response before bringing the design to reality. But there are problems in which the model becomes too big for the available computer hardware or for the available project money.

This thesis presents a solution methodology for this problem. Utilizing transfer matrix methods with finite element analysis, the engineer can break the system into smaller components and analyze each part separately. The transfer matrix method is used to step through each part of the system defining load-based boundary conditions. These boundary conditions are used to load and restrain each individual part analyzed using finite elements.

The idea seems simple enough but many assumptions need to be made when going from a three-dimensional finite element model to a one-dimensional transfer matrix model. A design procedure and examples utilizing this procedure are presented.

The data utilized to draw up these guidelines were generated in an analysis of a large continuous mining machine. The machine was projected into one dimension and treated like a one-dimensional beam. Analysis utilizing transfer matrix theory gives the moment and shear along the beam. These loads are used to load the finite element model of each component.

Also included is a revolute joint failure analysis that utilizes the finite element method and transfer matrix theory. This example shows how both methods can be used together to reduce analysis time.

2.0 LITERATURE REVIEW

Dokainish [1]^{*} was the first to combine both finite element and transfer matrix method. He was able to show that for a particular problem the finite element transfer matrix (FETM) method led to frequency determinant of size 18 by 18, while the standard finite element technique produced a 108 by 108 determinant, the number of nodes being the same in both cases. The main advantage of the finite element transfer matrix method is that it yields a reduced set of equations by operating at the elemental level. [2]

There are two limitations of Dokainish's finite element transfer matrix method: (1) the method is applicable only to 'chain like' structures, and (2) it requires the number of degrees of freedom (DOF) along the edges of all substructures to be equal. Several authors [3-9] have proposed means to overcome the second limitation by utilizing approximations. These approximations reduce the second limitation of the finite element transfer matrix method, but they do not eliminate them.

^{*}Numbers in square brackets refer to Reference List at the end of this thesis.

3.1 Modeling Methodologies

3.1.1 Finite Element Methods

In the finite element method (FEM) a machine member (any elastic continuum) is divided into geometric zones. These zones may be divided into discrete grid points connected by elements. Each element and the model must satisfy equilibrium of forces and moments, strain-displacement relations, and stress-strain relations.

For the static case equilibrium of forces and moments give

$$\sum F = 0 \quad (3.1)$$

$$\sum M = 0 \quad (3.2)$$

and the displacement criteria is that a deformed continuum must be free of discontinuities. Stress-strain relations are expressed by Hooke's Law for linear materials.

$$\{\sigma\} = [E] \{\epsilon\} \quad (3.3)$$

where

$$\{\sigma\} = \{\sigma_x, \sigma_y, \sigma_z, \tau_{xy}, \tau_{yz}, \tau_{zx}\}$$

$$\{\epsilon\} = \{\epsilon_x, \epsilon_y, \epsilon_z, \gamma_{xy}, \gamma_{yz}, \gamma_{zx}\}$$

$[E]$ = 6 x 6 matrix of elastic constants.

The above equations are applied to each element and solved utilizing the boundary conditions supplied by the surrounding elements at the node points.

There are two ways of solving the model equations. The first is the force method where displacements are applied at the nodes. The load and restraint forces are calculated. The second is the displacement method where the nodal load and restraints are applied and displacements are calculated.

The stiffness matrix, $[K]$, relates the forces acting on the structure and the displacements by the equation

$$\{F\} = [K] \{U\} \quad (3.4)$$

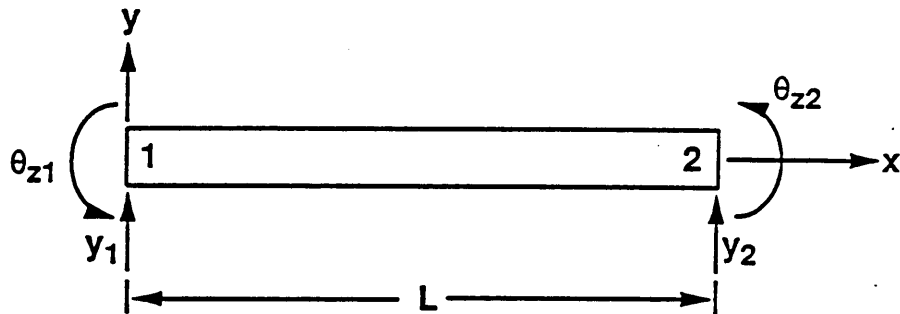
where

$\{F\}$ = forces acting on the structure

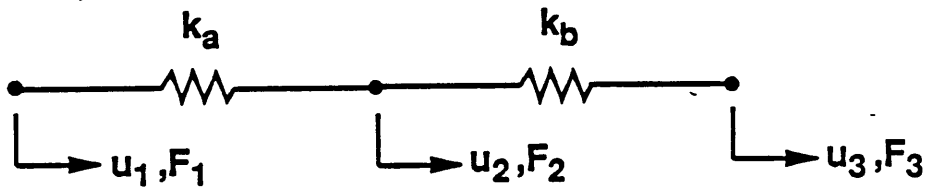
$[K]$ = $[K_{ij}]$ where K_{ij} is the displacement at i due to a unit force at j with all other forces set equal to zero.

$\{U\}$ = displacements resulting from $\{F\}$

The following two examples taken from [10] show the formulation of a elemental stiffness matrix and global stiffness matrix. Consider the one-dimensional beam in bending in the x-y plane shown in Fig. 3.1a. Here there are four degrees of freedom, two rotations about the z axis (θ_{z1}, θ_{z2}) and two translations in the y direction (y_1, y_2). If the beam is loaded with forces (P_{y1}, P_{y2}) and moments (M_{z1}, M_{z2}) we have



(a) Beam in bending in the x-y plane .



(b) Two axial rods (springs)

Fig. 3.1 Beam in bending and the one degree-of-freedom nodes.
(Figures taken from [10])

$$\begin{Bmatrix} P_{y1} \\ M_{z1} \\ P_{y2} \\ M_{z2} \end{Bmatrix} = \frac{2EI}{L^3} \begin{bmatrix} 6 & 3L & -6 & 3L \\ 3L & 2L^2 & -3L & L^2 \\ -6 & -3L & 6 & -3L \\ 3L & L^2 & -3L & 2L^2 \end{bmatrix} \begin{Bmatrix} y_1 \\ \theta_{z1} \\ y_2 \\ \theta_{z2} \end{Bmatrix} \quad (3.5)$$

where $[K]$ is the elemental stiffness matrix.

As stated earlier, any elastic continuum can be divided and modeled as a collection of individual elements. Combining the elemental stiffness matrices representing a structure gives the Global Stiffness Matrix. In Fig. 3.1b, two axial rods (springs) are shown. Separating the springs and solving gives the elemental stiffness matrices

$$\begin{Bmatrix} F_1 \\ F_2 \end{Bmatrix} = \begin{bmatrix} K_a & -K_a \\ -K_a & K_a \end{bmatrix} \begin{Bmatrix} U_1 \\ U_2 \end{Bmatrix} \text{ and } \begin{Bmatrix} F_2 \\ F_3 \end{Bmatrix} = \begin{bmatrix} K_b & -K_b \\ -K_b & K_b \end{bmatrix} \begin{Bmatrix} U_2 \\ U_3 \end{Bmatrix} \quad (3.6)$$

Superposing we have

$$\begin{Bmatrix} F_1 \\ F_2 \\ F_3 \end{Bmatrix} = \begin{bmatrix} K_a & -K_a & 0 \\ -K_a & (K_a + K_b) & -K_b \\ 0 & -K_b & K_b \end{bmatrix} \begin{Bmatrix} U_1 \\ U_2 \\ U_3 \end{Bmatrix} \quad (3.7)$$

These are simple examples illustrating some basic ideas in finite elements. References [11-13] give a more detailed introduction to finite element theory.

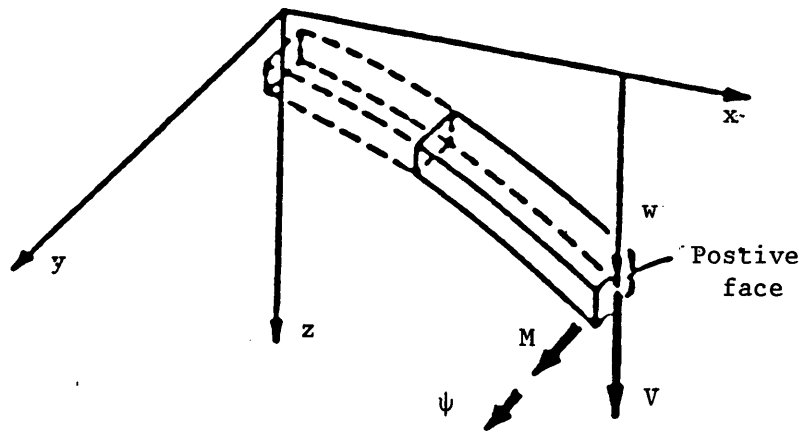
It should be noted that direct determination of the element stiffness matrix is limited to one- and one-dimensional elements with limited degrees of freedom. For higher-order elements such as (general beams, plates, solids), energy principles and assumed element shape functions are used to determine elemental stiffness matrices. The resulting element stiffness matrices derived from the displacement method and energy method are equivalent [10].

3.1.2 Transfer Matrix Theory

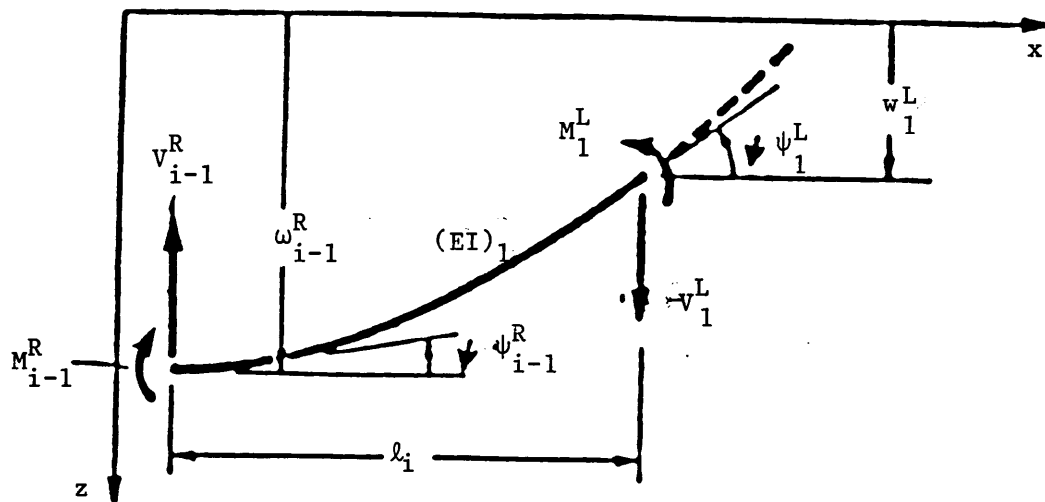
Transfer matrix theory utilizes classical methods and exact solutions to partial differential equations for the modeling of structural components. The system of equations, classical and/or exact, are set up in matrix form and solved using matrix theory. This method is a valuable tool in the analysis of structures that can be modeled as a system of beams, shells, plates, etc. because it offers a high degree of physical insight as well as being computationally efficient.

Pestel and Leckie [14] gives a general derivation of the transfer matrix for plane flexural deformation of a straight massless beam. For a better understanding of the concept this derivation is summarized below.

The sign convention for this derivation is shown in Fig. 3.2a. This general beam is positioned in 3-space coordinates with its unknown equilibrium forces and moments and with its general state of deflection. As shown in Fig. 3.2b, the two displacements are the deflection w and the slope ψ , and the forces are the shear force V and the bending moment M . To meet equilibrium we sum forces at and moments about $i-l$.



(a) Sign convention for beam



(b) Positive end forces pairs and deflections for massless beam

Fig. 3.2 Sign convention and notation for transfer matrix development. (Figures taken from [14])

$$V_i^L - V_{i-1}^R = 0 \quad (3.8)$$

$$M_i^L - M_{i-1}^R - V_i^L \ell_i = 0 \quad (3.9)$$

and from elementary beam theory for a cantilever beam, see Fig. 3.3.

$$w = -\frac{M\ell^2}{2EI} + \frac{V\ell^3}{3EI} \quad (3.10)$$

$$\psi = \frac{M\ell}{EI} - \frac{V\ell^2}{2EI} \quad (3.11)$$

Recalling that the point $i-1$ has a deflection w_{i-1} and a slope ψ_{i-1}

$$w_i^L = w_{i-1}^R - \psi_{i-1}^R \ell_i - M_i^L \frac{\ell_i^2}{2(EI)_i} + V_i^L \frac{\ell_i^3}{3(EI)_i} \quad (3.12)$$

$$\psi_i^L = \psi_{i-1}^R + M_i^L \frac{\ell_i}{(EI)_i} - V_i^L \frac{\ell_i^2}{2(EI)_i} \quad (3.13)$$

And from Eqs. (3.9) and (3.10)

$$V_i^L = V_{i-1}^R \quad (3.14)$$

$$M_i^L = M_{i-1}^R + V_{i-1}^R \ell_i \quad (3.15)$$

Now the above equations can be written such that all the state-vector elements at point i^L can be expressed in terms of those at point $i-1^R$

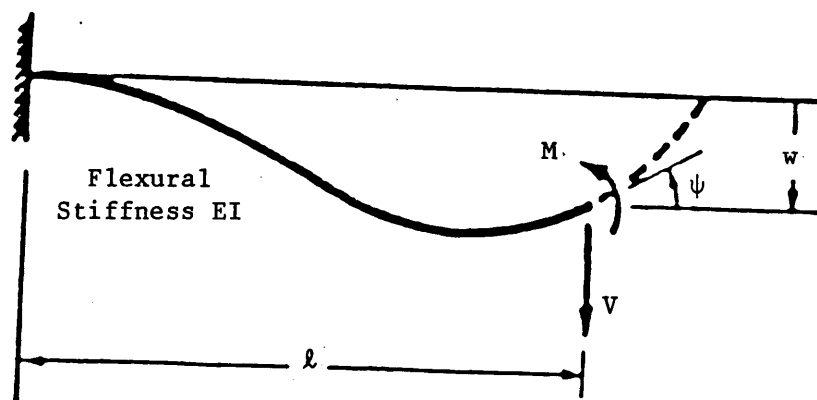


Fig. 3.3 Cantilever subjected to force V and moment M
(Figure taken from [14])

$$-w_i^L = -w_{i-1}^R + \ell_i \psi_{i-1}^R + \frac{\ell_i^2}{2(EI)_i} M_{i-1}^R + \frac{\ell_i^3}{6(EI)_i} V_{i-1}^R \quad (3.16)$$

$$\psi_i^L = \psi_{i-1}^R + \frac{\ell_i^2}{(EI)_i} M_{i-1}^R + \frac{\ell_i^3}{2(EI)_i} V_{i-1}^R \quad (3.17)$$

$$M_i^L = M_{i-1}^R + L_i V_{i-1}^R \quad (3.18)$$

$$V_i^L = V_{i-1}^R \quad (3.19)$$

or in matrix notation

$$\begin{Bmatrix} -w \\ \psi \\ M \\ V \end{Bmatrix}_i^L = \begin{bmatrix} 1 & \ell & \frac{\ell^2}{2EI} & \frac{\ell^3}{6EI} \\ 0 & 1 & \frac{\ell}{EI} & \frac{\ell^2}{2EI} \\ 0 & 0 & 1 & \ell \\ 0 & 0 & 0 & 1 \end{bmatrix} \begin{Bmatrix} -w \\ \psi \\ M \\ V \end{Bmatrix}_{i-1}^R \quad (3.20)$$

or

$$\{Z\}_i^L = [F]_i \{Z\}_{i-1}^R \quad (3.21)$$

where $[F]_i$ is the Transfer Matrix.

This transfer matrix involves only simple equilibrium and strength-of-materials relations. Other transfer matrices are not derived in such a straightforward manner [14].

4.1 Simplifying the Problem

4.1.1 Utilizing Transfer Matrix Theory to Solve for Individual Finite Element Model Internal Loads

The straightforward application of finite elements to large structures is hindered by the dimension of the mathematical models. If the structure can be broken up into sections or components, then each section can be analyzed separately by the finite element method. This allows the designer to handle the large mathematical model of the entire structure by breaking it down into components. Each component was mathematically modeled. The concept of breaking up large structures for analysis is not new, but the procedure for utilizing one-dimensional transfer matrices to accomplish this deserves study.

Here we present a procedure that utilize transfer matrices to obtain internal moments and shears going through the structure and it's components. Knowing the internal moments and shears of the structure allows the designer to apply the appropriate joint load to each component finite element model. With the component material and dimensions known, the stresses in the component can be calculated. These stresses determine the critical component. This procedure eliminates the need for a coupled finite element analysis of the entire assembly. This procedure is introduced as follows:

- 1) Define a global coordinate reference system.
- 2) Define a critical loading case or cases.
- 3) Make a transfer matrix model in that coordinate system.
- 4) Utilize the transfer matrix computer algorithm to obtain the internal moment and shear diagrams or other pertinent internal loads.

- 5) Review the transfer matrix internal loads in light of the cross sections supporting those loads so as to select, based upon stress, the probable critical sections of the overall structure.
- 6) Develop a finite element model of the critical components.
- 7) Utilize the transfer matrix output to find the internal loads that are to be placed on the component boundary.
- 8) Determine detailed component stress via the finite element method.

The term "global" in step one is used here to recognize that the coordinate origin and orientation should be defined for each model. This does not mean that each model (blue prints, transfer matrix model, or finite element model) must have the same coordinate origin and orientation. This procedure is usually standard in engineering problems and is important enough to be listed as a separate step.

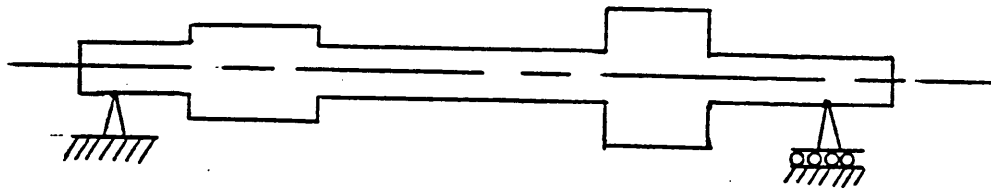
When analyzing a structure, the designer must know the critical loading conditions (see step two). At this point it might prove efficient to have the design team "brainstorm" the topic of critical design loads to define all of the high-loading scenarios. This provides a list of possible critical-loading cases. The single most critical loading case can not be determined until the transfer matrix model has been loaded with all of the suspected dangerous loading scenarios. It should be noted that different components in the system may have different critical load cases.

In step three, the structure must be modeled using an appropriate transfer matrix procedure. Modeling the structure as a line solution might prove difficult and even impossible for some branched structures.

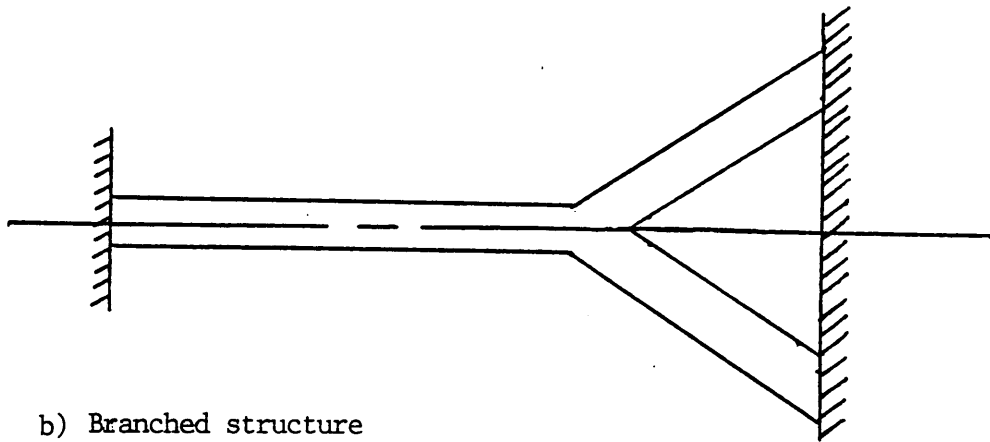
For example, if the machine can be modeled as a beam as shown in Fig. 4.1a, then a transfer matrix computer algorithm such as BEAM4 [15] can be used to obtain moment and shear diagrams. But if the structure has a branch as shown in Fig. 4.1b, then the transfer matrix solution becomes difficult, but not impossible. If the structure can be modeled as a line solution, then the transfer matrix solution gives moment and shear diagrams called for in step four. From these diagrams the designer determines the internal loads of the machine.

Even though the stresses in the machine components are unknown, the known moments and shears are related to these stresses. With this, cross-sectional area moments of inertia, cross-sectional areas, and engineering judgement, the critical zones can usually be located (see step five).

Locating the troubled areas allows the designer to select the machine component (see step six), to be analyzed using finite elements. For different critical load cases the moment and shear diagrams might shift and show other danger areas. Note that the finite element model of the critical component will not include the adjoining regions. These adjoining regions are replaced by the internal loads determined from the transfer matrix analysis (see step seven). These internal loads are to be input into the finite element model so that a detailed component stress analysis may be made (see step eight). An example problem is presented below to better define and illustrate this procedure.



a) Line structure



b) Branched structure

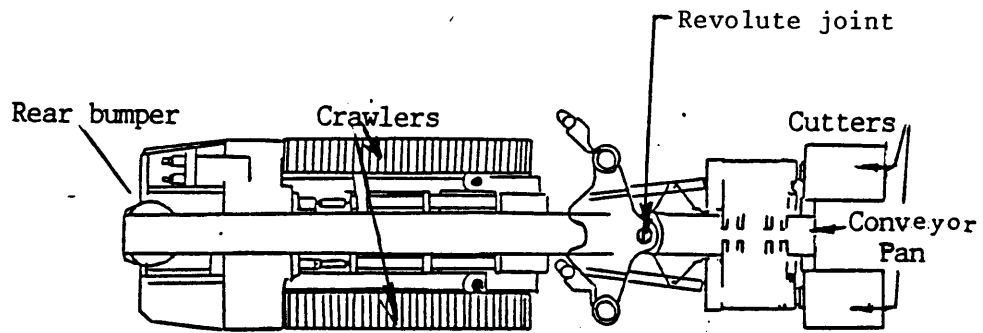
Fig. 4.1 Line and branched structures.

4.1.2 Example: Continuous Miner Analysis

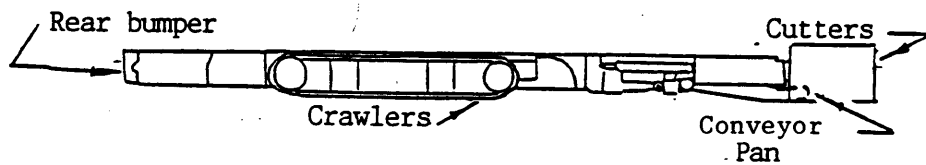
The problem to be addressed is to complete a static analysis of the continuous mining machine shown in Fig. 4.2. Drawings, material listing and component weights concerning the machine were provided by the manufacturer.

Since the blueprints have individual component dimensions it was not necessary to locate a blueprint origin or orientation for step one. Following step two, some of the critical load configurations are shown in Fig. 4.3. These proved to be critical loadings because the length and weight of the miner. In this example the loading in Fig. 4.3a was used to locate the critical component. Other critical components could be found in a similar manner by using other loading cases.

To set up the transfer matrix model in step three, the miner is analyzed in the x,z plane. A picture of the miner in the x,z plane is shown in Fig. 4.4a with the supports modeled as pinned ends. The weight of the machine components, such as pistons, motors, tractors, etc. and their locations are shown in Fig. 4.4b. The transfer matrix method allows the designer to define the moment and shear characteristics of the miner section by section. The orientation and origin of the x,y,z axis is shown in Fig. 4.5b. A listing of each of the section descriptions is given in Appendix Table A.1. It should be noted that the weights (modeled here as concentrated loads) for each section is the total weight of the components for that section placed at their average center of gravity.

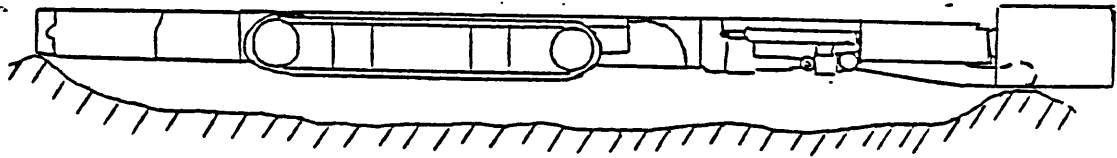


(a) Top view of machine

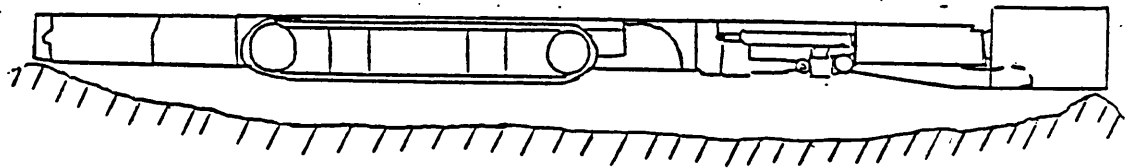


(b) Side view of machine

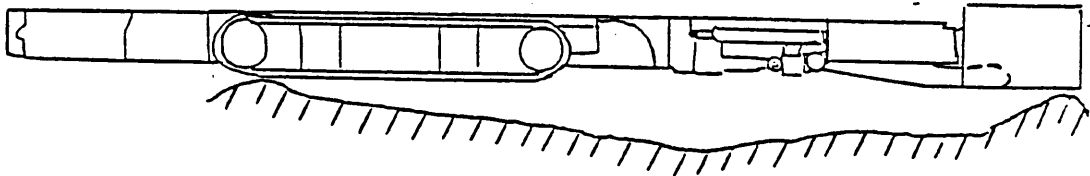
Fig. 4.2 Continuous mining machine
(After Fairchild International drawing, Glen Lynn, VA)



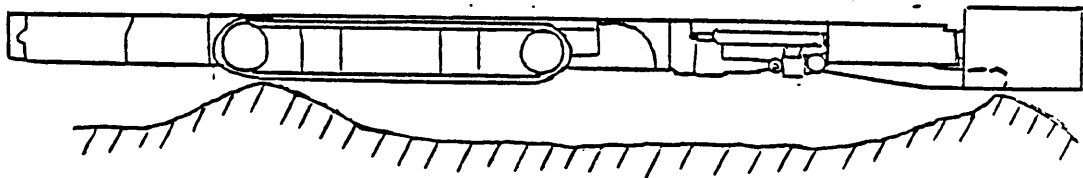
(a) Rear bumper - Pan support



(b) Rear bumper - Cutter support



(c) Crawler - Cutter support



(d) Crawler - Pan support

Fig. 4.3 Possible critical loadings of miner.

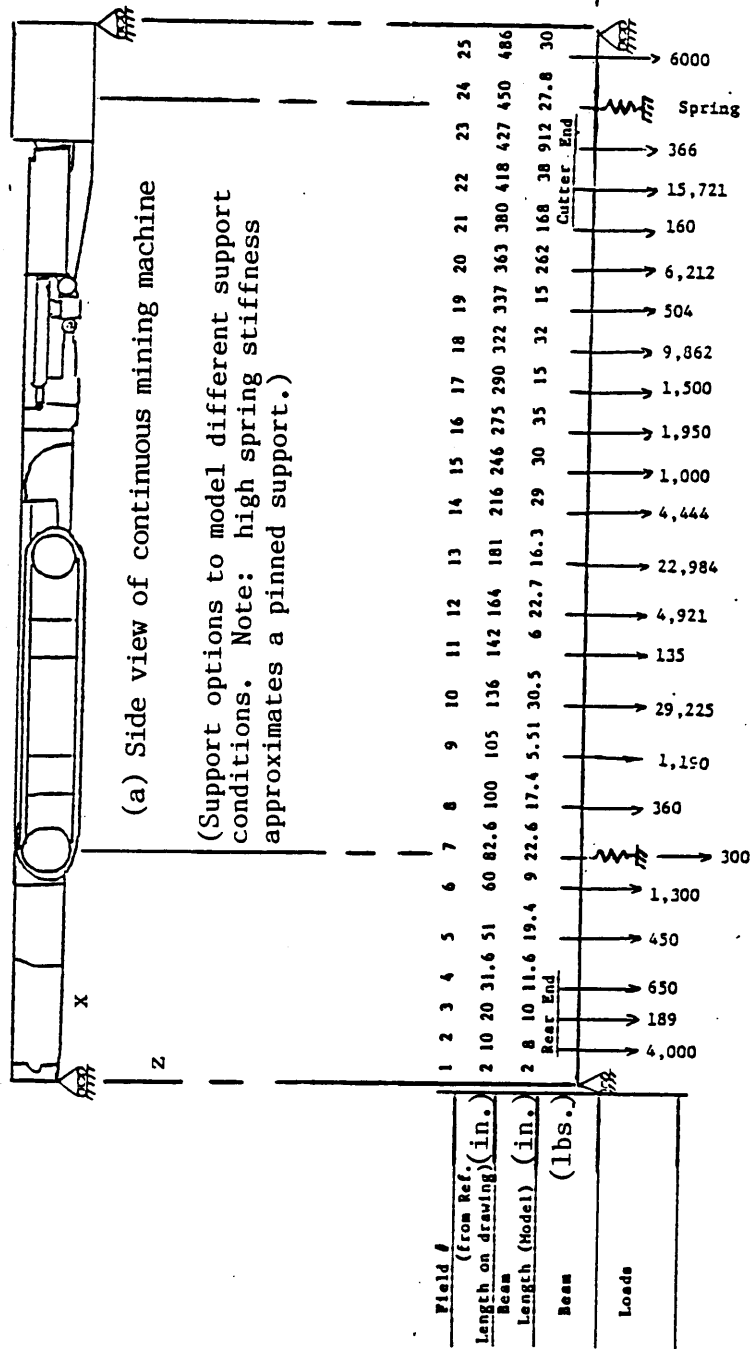


Fig. 4.4 Modeling of the continuous miner as a beam.

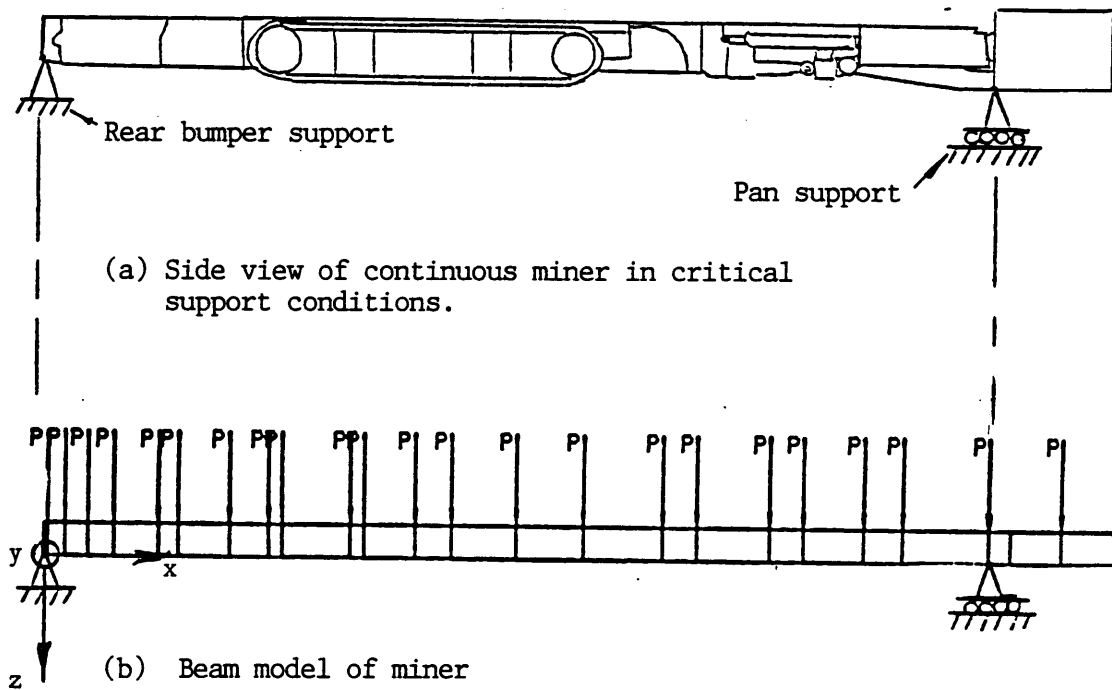


Fig. 4.5 x, z plane view of continuous miner modeled as a beam in critical support conditions. (Rear bumper-pan support conditions.)

The transfer matrix algorithm BEAM4 [16] gives the moment and shear diagrams called for in step four. The model output is listed in Appendix Table A.2. The diagrams are shown in Fig. 4.6c. Note that the deflections and slopes calculated in Table A.2 are incorrect because the second area moments of inertia for each section were not calculated. Instead, a "dummy" value was used and is listed in Table A.1.

After studying the miner, the internal moments, and shear loads, engineering judgement points to the revolute joint shown in Fig. 4.7 as one of the critical components (see step five). For step six, the right and left side of the revolute joint are to be analyzed using finite elements. This was done and the documented by Schultz and Kosmatka [17]. As stated in step seven, the loads used in Schultz's analysis were obtained from Appendix Table A.2. For example, the revolute joint is located 311 in. (790 cm) in the x direction. In Appendix Table A.2, linear interpolation between a length of 306 in. and 322 in. gives a moment (M_T) of $4.33E06$ in·lb (0.490 MNm), and shear (V_T) of $2.66E04$ lb (119 kN). Again, the detailed analysis called for in step eight is reported by Schultz and Kosmatka [17].

4.2 Solve the Problem Efficiently

4.2.1 Utilizing Finite Elements to Obtain Realistic Parameters for Transfer Matrix Models

In the previous section, transfer matrix methodology is used to help locate the critical sections in large structures and to calculate the loads in those critical sections. This section develops a procedure for using transfer matrix and finite element methodology to model the

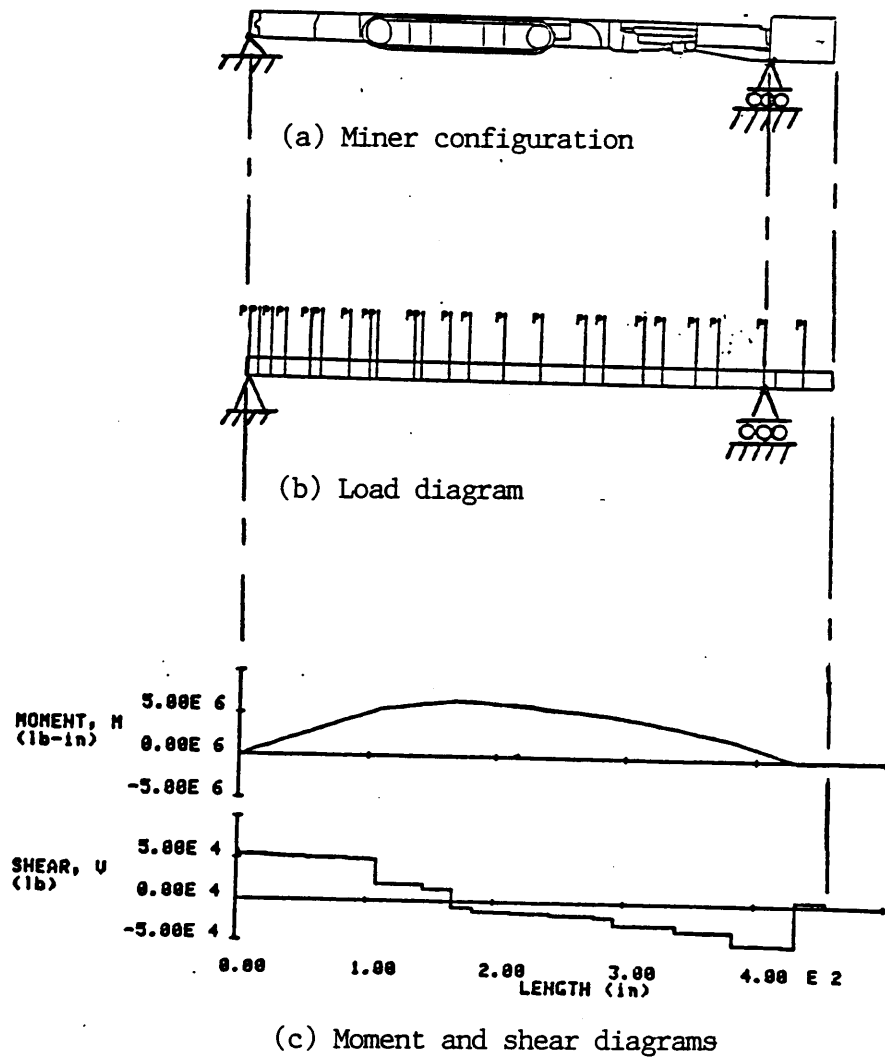
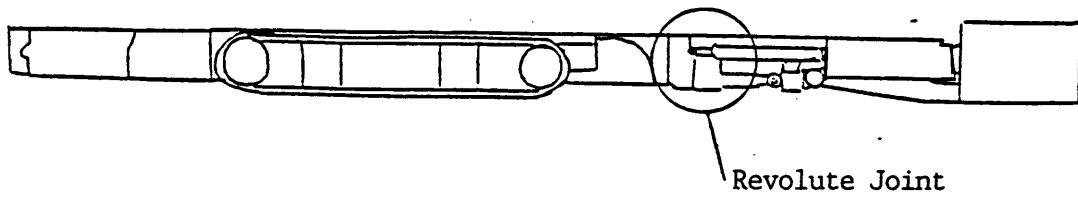
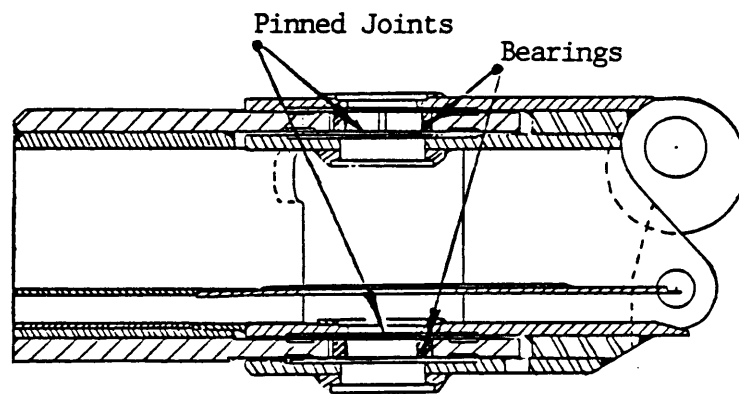


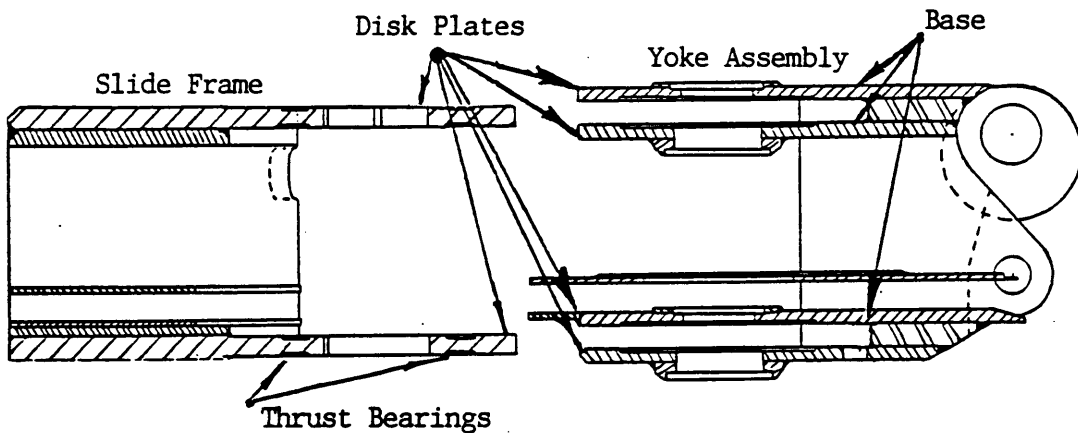
Fig. 4.6 Shear and moment diagrams for loading cases in Fig. 4.3a. (Figures taken from [15])



(a) Continuous miner locating revolute joint analyzed



(b) Closeup of revolute joint locating pinned joints and bearing locations.



(c) Revolute Joint disassembled

Fig. 4.7 The revolute joint analyzed on the continuous miner.

reactions of the critical sections under load. Combining transfer matrix and finite element methodology to model the critical areas of a structure simplifies the analysis.

For example, if the area being analyzed has connected members (hinges, joints, bolted joints) then a finite element analysis calls for the use of gap elements [18]. This approach requires a fine element mesh near the contacting surfaces and many iterations are required for convergence. The finite element method gives detailed analysis of the problem, but sometimes the excessive computer time makes its use economically infeasible.

The use of transfer matrix methodology to analyze the critical area gives much detailed information and has its advantages. The main advantage is the simplicity of modeling, of running the computer job, and the short computer run times. It also allows the engineer to get a quick feel for the problem areas. But sometimes the use of transfer matrices alone is inaccurate because of unrealistic parameter assumptions that are sometimes required.

The procedures presented below use the finite element method to obtain parameters (stiffness, load and stress relations, etc.) for the transfer matrix model of the critical area. This allows the designer to utilize the finite element method to obtain realistic parameters aided by the transfer matrix model. This procedure is presented as follows:

- 1) Draw a free-body diagram (F.B.D.) of the critical area.
- 2) Define the critical loadings and failure mode of the area under analysis.

- 3) Define the known and unknowns needed to complete the analysis.
- 4) Make a finite element model and transfer matrix model of the components needed.
- 5) Obtain the parameters needed from the finite element analysis for the transfer matrix analysis.
- 6) Obtain the desired unknowns needed to complete the transfer matrix analysis.
- 7) Verify analysis assumptions and make necessary assumption adjustments needed to refine the analysis.

The free-body diagram of the critical area in step one gives an understanding of how the structure is loaded. If the loading condition is unknown (loading distribution on surface contact areas, location of loads in hinges, bolted joints, etc.), it allows the designer to define loading cases. This is where the designer defines some of the symbols that are going to be used throughout the analysis.

With the load cases defined in step one, the designer needs wear or failure information from the vendor for step two. Any hint or insight into the failure mode of the area under analysis helps define the failure loading.

For each failure mode the designer defines the knowns and unknowns in step three. This requires a complete outline of the solution procedures including equations and derivatives. With this outline the designer can decide what finite element and transfer matrix models are needed to complete the analysis. Step three is the "body" of the analysis and can be rather extensive.

Setting up the finite element and transfer matrix models in step four requires the designer to make some software selections. These selections are usually limited by the designer's experience, corporate availability, and familiarity with the packages. The numbers needed to complete the calculations in step three are obtained in step five and six. In step seven the engineer is called to check the assumptions made in the calculation of the results. An example problem is presented below to better define and illustrate these guidelines.

4.2.2 Example: Yoke Revolute Joint Analysis

In section 4.1.2 a suspected critical area of the continuous miner was located as shown in Fig. 4.7, 4.8, and 4.9. This example continues the analysis of that joint utilizing the loads found in section 4.1.2. These loads, ($M_T = 4.33E06 \text{ in}\cdot\text{lb}$ (0.490 MNm) and $V_T = 2.66E04 \text{ lb}$ (119 kN), are defined as the actual loads supported by the joint when the miner is positioned as shown in Fig. 4.3a.

Following the procedures above a free-body diagram of the critical area is shown in Fig. 4.10 and 4.11. For the shear loading distribution we assume a point contact at A as located in Fig. 4.11. This assumption will be explained in step two. For the moment loading we assume that (M_1) and (M_2) as shown in Fig. 4.10 and Fig. 4.11 can be added together to equal the total moment (M_T) that is supported by the joint. Moment (M_1) is that part of the total moment (M_T) that would be distributed as shown in Fig. 4.10. This loading distribution would occur after closing the radial bearing clearance. The radial bearing clearance is defined in Fig. 4.12. Moment (M_2) is that part of the total moment (M_T) that

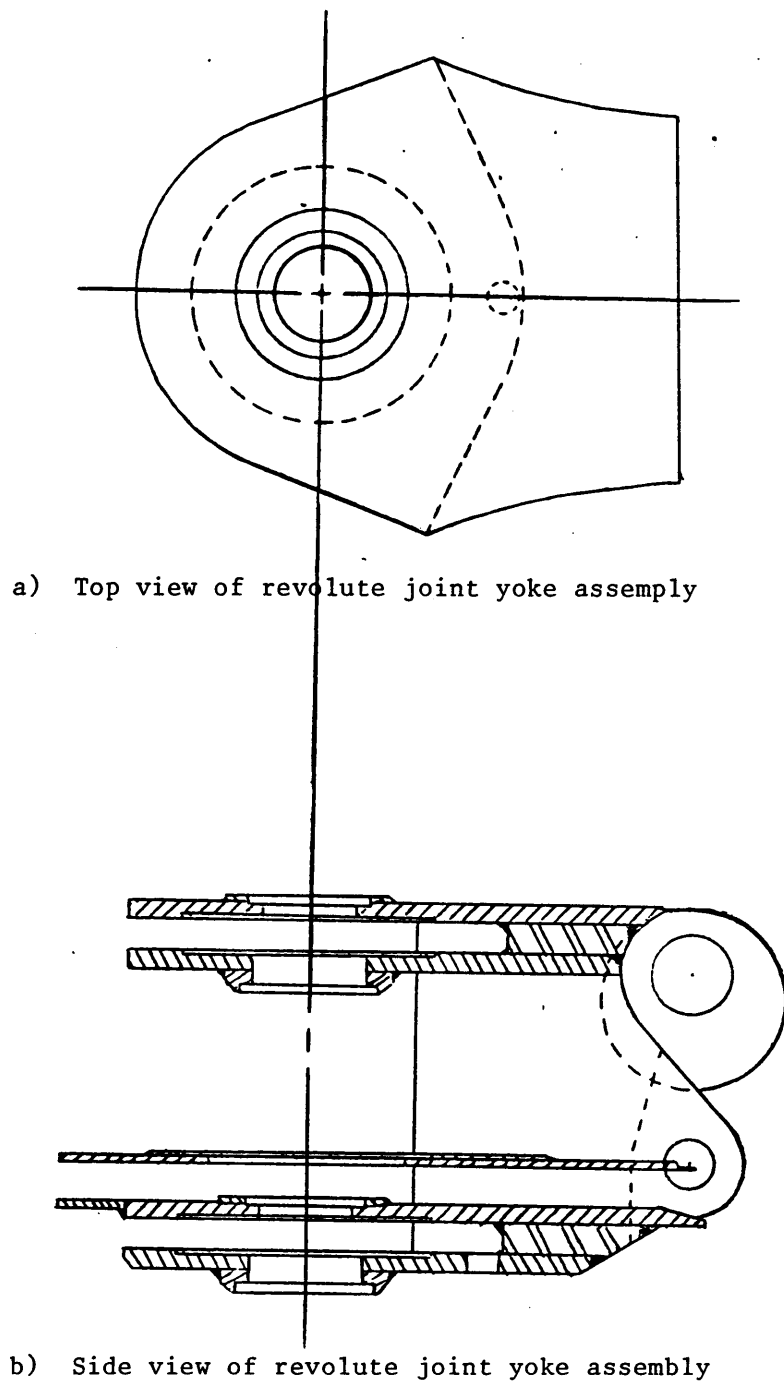
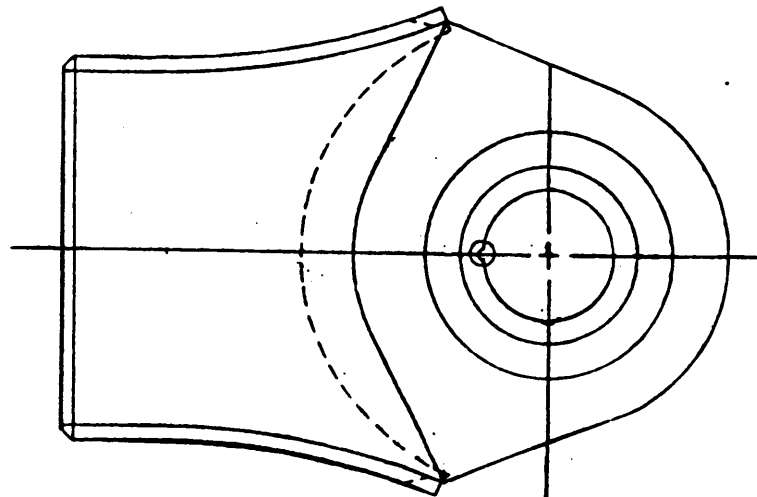
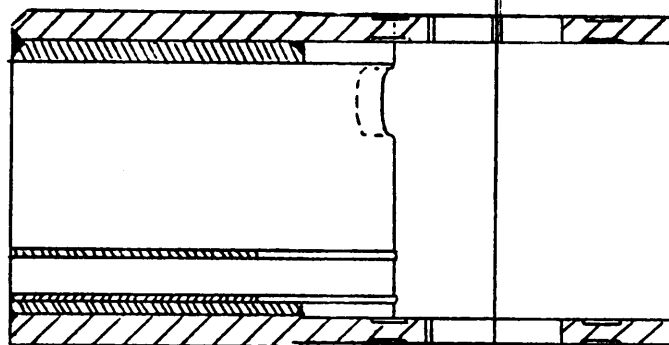


Fig. 4.8 The top and side view of the revolute joint yoke assembly.



a) Top view of the revolute joint slide frame.



b) Side view of the revolute joint slide frame.

Fig. 4.9 The top and side view of the revolute joint slide frame.

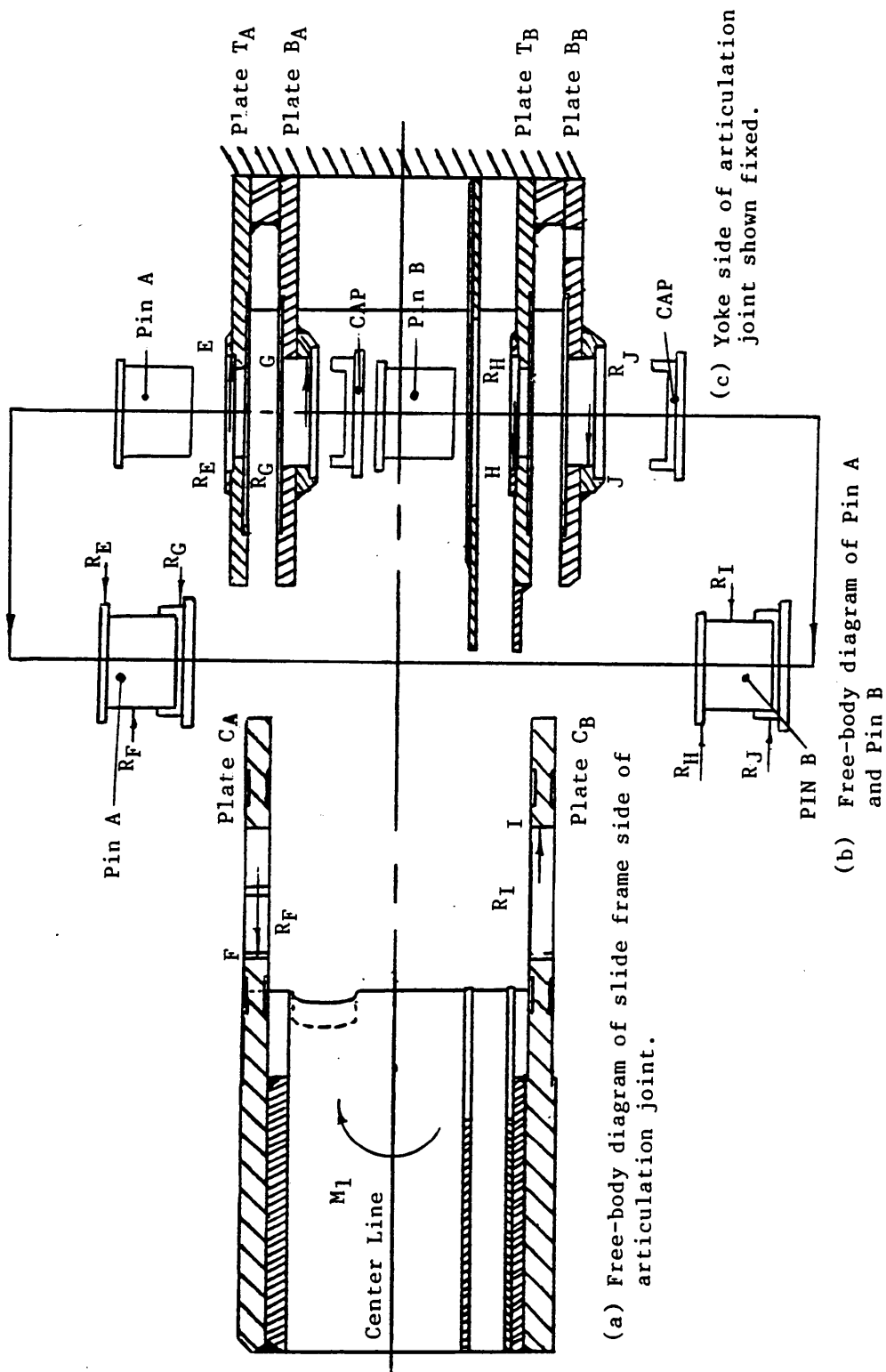


Fig. 4.10 Free-body diagram of slide frame and pins of the articulation joint with ($\delta_c = 0$). Yoke side of joint is shown as fixed.

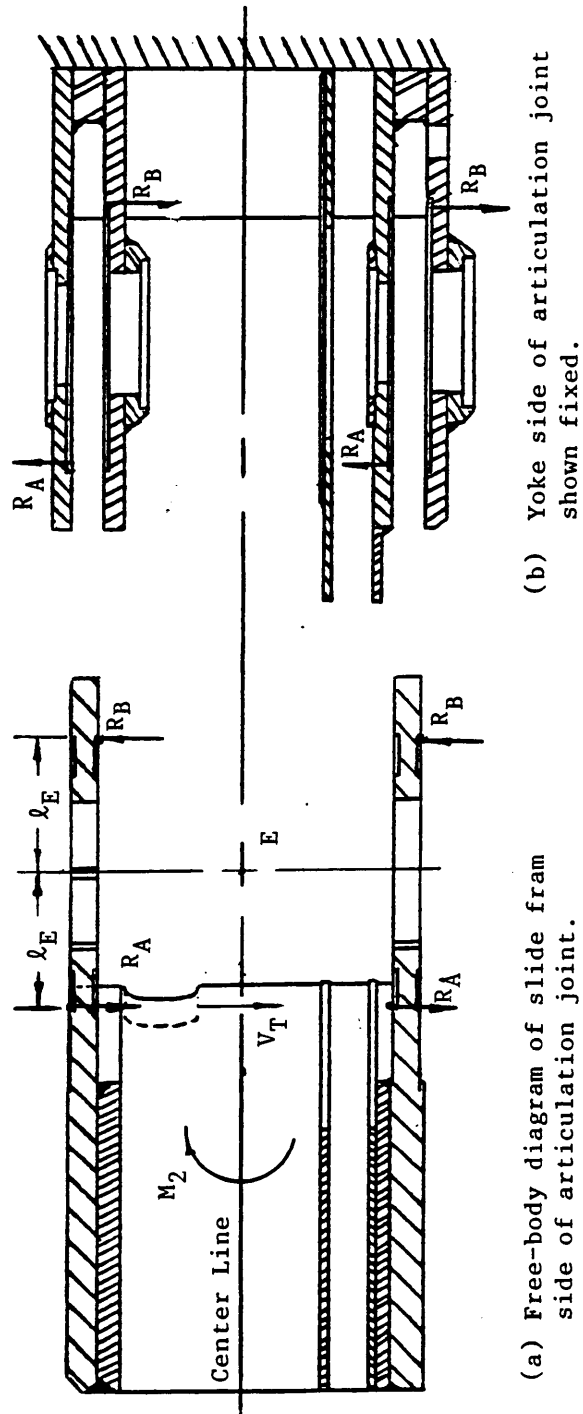


Fig. 4.11 Free-body diagram of slide frame side of the articulation joint with ($\delta_c = \infty$).
Yoke side of joint is shown as fixed.

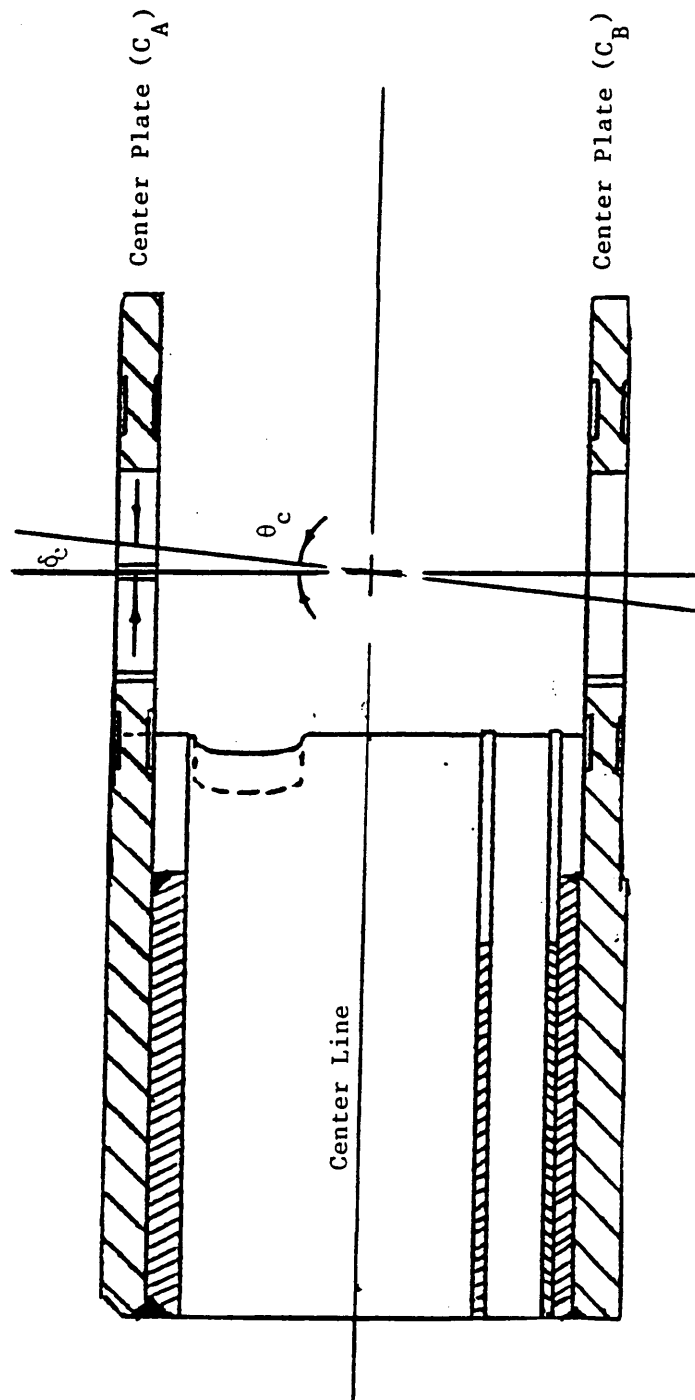


Fig. 4.12 Slide frame side of articulation joint with bearing clearance defined (δ_c)

would be distributed as shown in Fig. 4.11. This assumed loading distribution wedges the plates T_A , B_A , and T_B , B_B apart as shown in Fig. 4.13.

Fairchild International supplied the information describing how the joint fails for step two. In Fig. 4.13, it is shown how the top assembly tends to pry apart. This similar type of failure occurs in the bottom assembly. The assumed loading distribution shown in Fig. 4.11 is the worst loading case, or the loading arrangement that will cause the highest stresses at the base of the plates. Here we will analyze the joint to define the allowable bearing clearance before the top and bottom assembly of plates yield.

Using the notation from the free-body diagrams, we can begin defining the knowns and unknowns in step three. The variables are also listed and defined on pages (xi-xvi). The plot in Fig. 4.14 show the moment versus angular rotation relationship in the joint. The slope K_p is the moment stiffness of the joint caused by plate bending before the bearing clearance is reduced to zero. The second slope ($K_{BE} + K_p$) is the moment stiffness in the joint after the bearing clearance is reduced to zero. Since compressive stiffness are usually very high and since K_{BE} is a function of the compressive stiffnesses, we assume that ($K_{BE} + K_p$) is vertical setting (θ_c) (defined in Fig. 4.13) equal to the total angular rotation in the joint. This assumption will be checked at the end of this analysis. Utilizing superposition we have

$$M_T = M_1 + M_2 \quad (4.1)$$

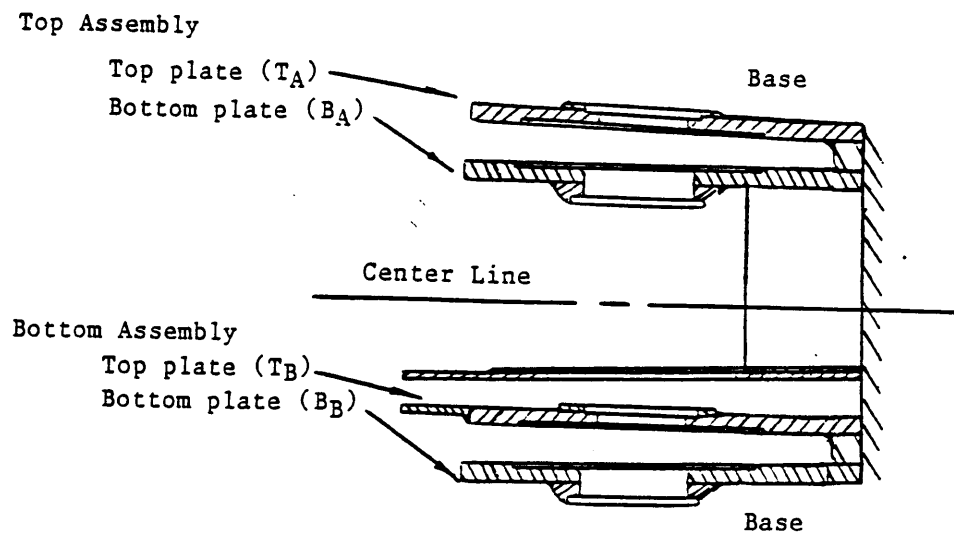
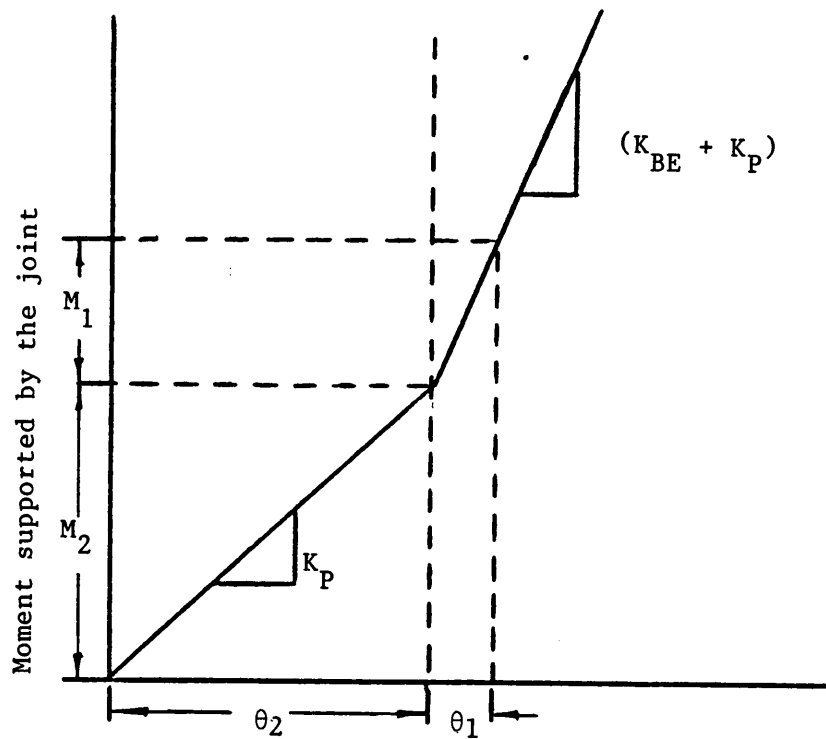


Fig. 4.13 Yoke side of joint after failure



Angular deflection of the joint

Note: If $K_{BE} \gg K_P$ then $K_{BE} + K_P = K_{BE}$

If $K_{BE} \gg K_P$ then $\theta_1 = 0$

Fig. 4.14 Moment supported in the articulation joint vs. angular rotation in articulation joint.

Note here that in Fig. 4.11 we have removed pin A and pin B. This is to model the case where the joint is operating in the radial clearance space so that pin A and pin B do not restrain the plates in the transverse and the in-plane directions. This assumption is made to simplify the analysis for a "first run" calculation.

We start by considering two cases of bearing clearance. That is, when the clearance has been taken up and when the joint is operating in the radial clearance space of the bearing pin assembly. The drawings show that the joint is symmetric about the centerline shown in Fig. 4.10 and Fig. 4.11. Because of this, the moment and shear supported by the joint are distributed equally between the top and bottom plate sets.

The moment (M_1) can be expressed as

$$M_1 \approx K_{BE} \theta_1 \quad (4.2)$$

To solve for the moment stiffness (K_{BE}) of the pair of bearing in the top and bottom plate sets we model the joint with a spring system as shown in Fig. 4.15. The moment stiffness comes from the radial stiffness of each bearing support plate and from the span between the plates. The top plates are in compression and the bottom plates are in tension. The finite element method was used to solve for K_1 through K_6 .

Since the top plates T_A and B_A are identical and since the bottom plates, T_B and B_B are identical, we have

$$K_1 = K_2 \quad (4.3)$$

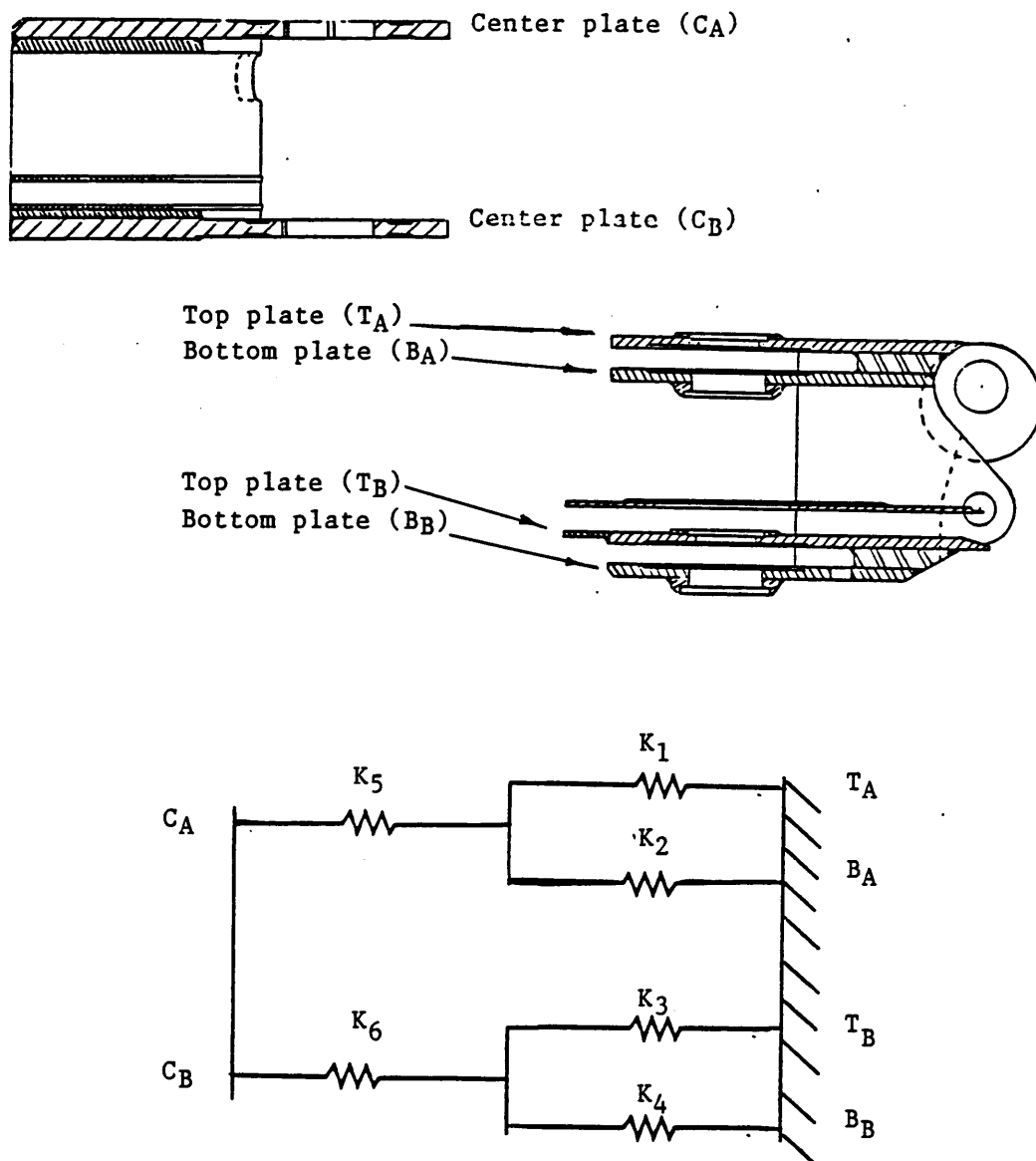


Fig. 4.15 Equivalent spring system ($\delta_c = 0$).

$$K_3 = K_4 \quad (4.4)$$

Also the center plates, C_A and C_B are the same. Replacing the spring system in Fig. 4.15 with an equivalent spring system shown in Fig. 4.16a we have

$$K_T = \frac{2K_5 K_1}{(K_5 + 2K_1)} \quad (4.5)$$

$$K_B = \frac{2K_6 K_3}{(K_6 + 2K_3)} \quad (4.6)$$

Applying a moment (M_1) to the joint we have, from the free-body diagram Fig. 4.16

$$\Sigma F_x = F_T - F_B = 0 \quad (4.7)$$

Therefore,

$$F_T = F_B \quad (4.8)$$

Since $K = F/\delta$

$$F_T = K_T \delta_1 ; F_B = K_B \delta_2 \quad (4.9)$$

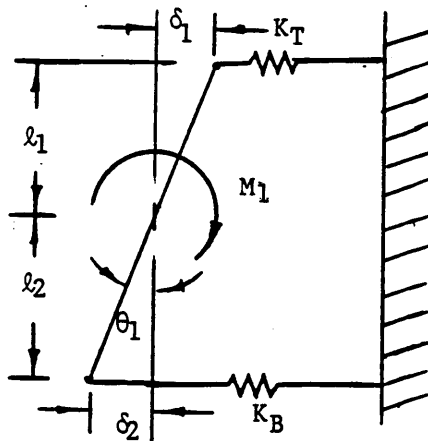
So

$$K_T \delta_1 = K_B \delta_2 \quad (4.10)$$

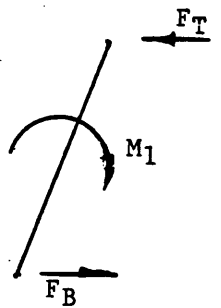
So

$$\delta_1 = \frac{K_B}{K_T} \delta_2 \quad (4.11)$$

We will check to see if the radial deflection (δ_1 and δ_2) after the clearance is reduced to zero is much less than the bearing



(a) Reduced equivalent spring system of revolute joint with ($\delta_c = 0$)



(b) Free-body diagram of reactions due to M_1

Fig. 4.16 Reduced equivalent spring system of revolute joint with ($\delta_c = 0$).

clearance (δ_c). This is what we have assumed in saying that the moment stiffness in the joint after the bearing clearance is taken up ($K_{BE} + K_p$) is much greater than the moment stiffness (K_p) when there is clearance in the bearings. We will check to make sure that K_{BE} is greater than K_p . Note that (K_{BE}) and (K_p) are added in parallel so that if ($K_{BE} + K_p$) is much greater than (K_p), then (K_{BE}) must also be much greater than (K_p).

By similar triangles

$$\frac{\ell_1}{\delta_1} = \frac{\ell_2}{\delta_2} \quad (4.12)$$

$$\frac{\frac{\ell_1}{K_B}}{\frac{\ell_2}{K_T}} = \frac{\ell_2}{\delta_2} \quad (4.13)$$

$$\ell_1 = \frac{K_B}{K_T} \ell_2 \quad (4.14)$$

Now add $\frac{K_B}{K_T} \ell_1$ to both sides

$$\ell_1 + \frac{K_B}{K_T} \ell_1 = \frac{K_B}{K_T} (\ell_1 + \ell_2) \quad (4.15)$$

$$\ell_1 \left(1 + \frac{K_B}{K_T}\right) = \frac{K_B}{K_T} (\ell_1 + \ell_2) \quad (4.16)$$

$$\ell_1 = \frac{K_B}{K_T \left(1 + \frac{K_B}{K_T}\right)} (\ell_1 + \ell_2) = \frac{K_B}{(K_T + K_B)} (\ell_1 + \ell_2) \quad (4.17)$$

$$\Sigma M = F_T(\ell_1) + F_B(\ell_2) - M_1 = 0 \quad (4.18)$$

$$F_T = \delta_1 K_T \quad (4.19)$$

$$\theta_1 = \frac{\delta_1}{\ell_1} = \frac{\delta_2}{\ell_2} \quad (4.20)$$

From Eqs. (4.8) and (4.18)

$$F_T(\ell_1 + \ell_2) - M_1 = 0 \quad (4.21)$$

And from Eq. (4.19)

$$\delta_1 K_T(\ell_1 + \ell_2) - M_1 = 0 \quad (4.22)$$

Rearranging we have

$$\delta_1 = \frac{M_1}{K_T(\ell_1 + \ell_2)} \quad (4.23)$$

We can write Eq. (4.20) as

$$\ell_1 \theta_1 = \delta_1 \quad (4.24)$$

And substituting this in Eq. (4.23) gives

$$\ell_1 \theta_1 = \frac{M_1}{K_T(\ell_1 + \ell_2)} \quad (4.25)$$

Defining K_{BE} as the moment stiffness of the joint when there is no radial bearing clearance, we have the relation

$$K_{BE} = \frac{M_1}{\theta_1} \quad (4.26)$$

Equation (4.25) can be rearranged solving for K_{BE}

$$K_{BE} = \frac{M_1}{\theta_1} = \ell_1 K_T (\ell_1 + \ell_2) \quad (4.27)$$

Using Eq. (4.17) we find

$$K_{BE} = (\ell_1 + \ell_2)^2 \frac{K_B K_T}{(K_T + K_B)} \quad (4.28)$$

Note that in solving for K_{BE} , the radial stiffness of the top and bottom pins in Fig. 4.10 is assumed rigid. If the pin stiffness is much higher than K_T and K_B then this assumption is justified. To justify this model we can approximate the pin stiffness (lower bound) by a simply-supported beam element as shown in Fig. 4.17. Because a fixed-fixed end pin (upper bound) gives higher stiffness it was not calculated. Thus,

$$K_P = \frac{48EI}{L^3} \quad (4.29)$$

Where L is the length of the pin and I is the second area moment of inertia given as

$$I = \frac{\pi d^4}{64} \quad (4.30)$$

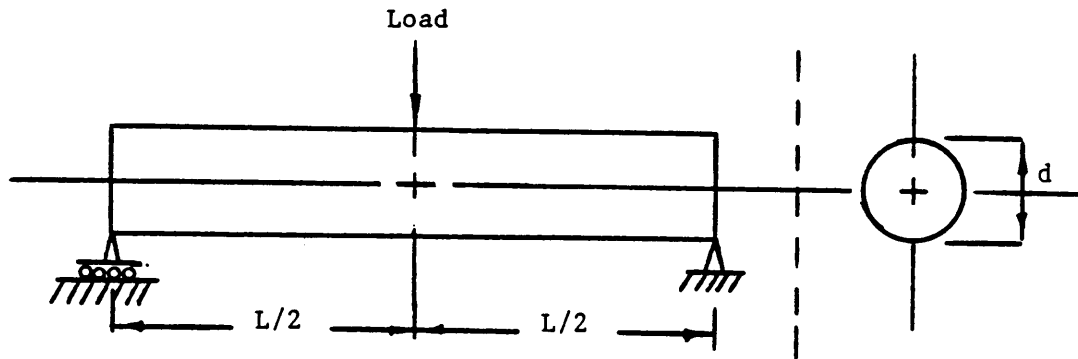


Fig. 4.17 Simply loaded rod element used to derive the stiffness of pin A and pin B in the revolute joint.

In the calculations, K_P will be compared to K_T and K_B . The derivations above concern Case I assumptions where there is no radial clearance in the bearings.

The center plate is examined in Fig. 4.18 to find the relation between the total angular rotation (θ_T) and the clearance in the bearings (δ_c). Here we assume that the radial wear at the top and bottom pin are the same. Next, the manufacturer advised that the transverse clearance in the thrust washer area is zero. If the centerplates (C_A and C_B , Fig. 4.18) are orthogonal to the base, then the joint rotates about $l/2$ and we have

$$\delta_c = \theta_c \, l/2 \quad (4.31)$$

and

$$\theta_T = \theta_c \quad (4.32)$$

The relation in Eq. (4.32) holds true until the radial clearance is taken up. When the clearance is taken up ($\delta_c = 0$) and we have the relation

$$\theta_T = \theta_c + \theta_1 \quad (4.33)$$

holds true.

Recall Eqs. (4.1) and (4.2)

$$M_T = M_1 + M_2 \quad (4.1)$$

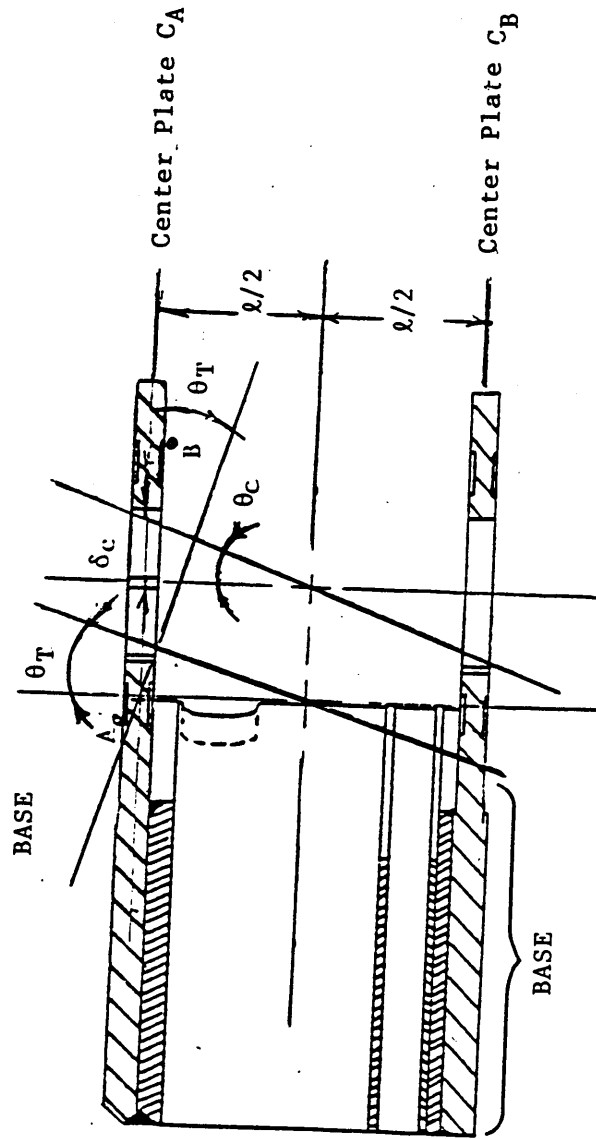


Fig. 4.18 Center plate examined to solve for the total angular rotation of the plate.

$$M_1 \approx K_{BE} \theta_1 \quad (4.2)$$

From the information of the failure mode in step two we assume that the critical area fails after the joint has rotated beyond (θ_c) , taking up the radial clearance in the bearings. With this assumption, the joint fails when it rotates (θ_T) as expressed in Eq. (4.33). Rearranging we can express Eq. (4.33) as

$$\theta_1 = (\theta_T - \theta_c) \quad (4.34)$$

Substituting this into Eqs. (4.1) and (4.2) gives

$$M_T \approx K_{BE}(\theta_T - \theta_c) + M_2 \quad (4.35)$$

Summing the forces and moments on the slide frame in Fig. 4.11 we have

$$\Sigma F = -\frac{V_T}{2} - R_A + R_B = 0 \quad (4.36)$$

$$\Sigma M = -\frac{M_2}{2} + \frac{V_T}{2}(\ell_E) + R_A(\ell_E) + R_B(\ell_E) = 0 \quad (4.37)$$

Solving for R_A and R_B yields

$$R_A = \frac{M_2}{4\ell_E} - \frac{V_T}{2} \quad (4.38)$$

$$R_B = \frac{M_2}{4\ell_E} \quad (4.39)$$

To define the limiting reaction we look at the types of stresses causing the joint to fail. From Fig. 4.11 we see that the reactions R_A and R_B cause bending stresses at the base. From Fig. 4.10 we see that the reaction R_E causes compressive stresses in plate T_A and reaction R_H causes tensile stresses in plate T_B . Here we will assume that the compressive and tensile stresses are much smaller than the bending stresses to simplify the problem. We will proceed with the analysis assuming that R_A is the limiting reaction because of its distance from the base. To simplify the analysis we will assume failure as the load (R_A) that causes the stresses at the base of the plates to reach yield.

Knowing the yield strength of the plates, finite element analysis can be used to calculate the maximum reaction allowed ($R_{A, \max}$) at (A) as it will cause plate yielding. The finite element model was loaded with a load ($R_{A, FE}$). This load was divided by the stress results (S_{FE}) from the finite element analysis. This quantity was multiplied by the allowable yield stress to solve for the reaction at (A), ($R_{A, \max}$), that will cause the stress at the base of the plate to reach yield

$$\frac{R_{A, FE}}{S_{FE}} (S_{y, p}) = R_{A, \max} \quad (4.40)$$

With this limiting reaction, we calculate the limiting moment ($M_{2, \text{yield}}$) that the joint will support. In Eq. (4.37) we replace M_2 with $M_{2, \text{yield}}$, R_A with $R_{A, \max}$, R_B with Eq. (4.39) and solve for $M_{2, \text{yield}}$ to get

$$M_{2,yield} = 4\ell_E(R_{A,max} + \frac{V_T}{2}) \quad (4.41)$$

Now setting $M_{2,yield}$ equal to M_2 and substituting into Eq. (4.35), we can express M_T as

$$M_T = K_{BE}(\theta_T - \theta_c) + M_{2,yield} \quad (4.42)$$

or

$$M_T = K_{BE}(\theta_T - \theta_c) + 4\ell_E(R_{A,max} + \frac{V_T}{2}) \quad (4.43)$$

Solving for θ_c we have

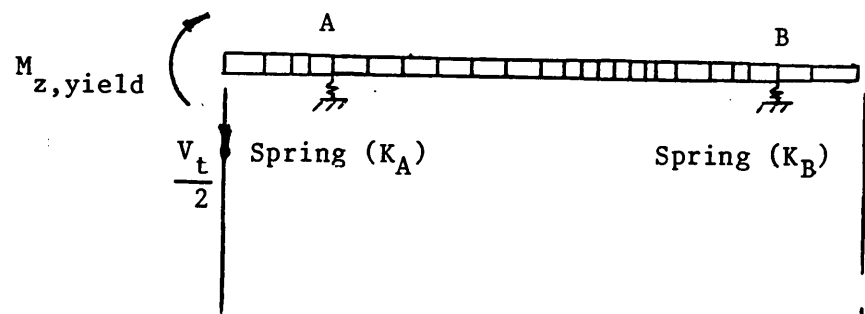
$$\theta_c = \frac{-M_T + 4\ell_E(R_{A,max} + \frac{V_T}{2})}{K_{BE}} + \theta_T \quad (4.44)$$

Solving for δ_c in Eq. (4.31) and substituting into Eq. (4.44) we have

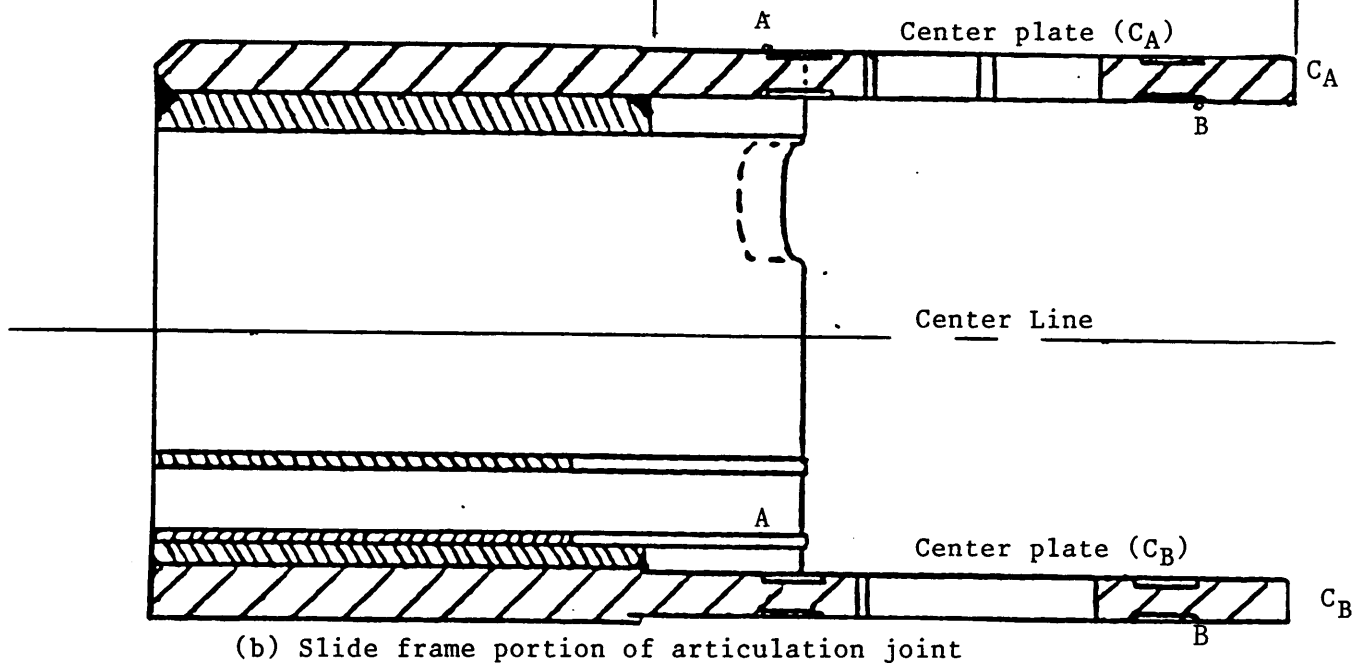
$$\delta_c = (\frac{\ell}{2}) \left[\frac{-M_T + 4\ell_E(R_{A,max} + \frac{V_T}{2})}{K_{BE}} + \theta_T \right] \quad (4.45)$$

All the variables on the right side of Eq. (4.45) are known except θ_T .

Transfer matrices are used to solve for θ_T . For the transfer matrix model of the joint reaction, the transverse stiffness at the thrust bearing contact points A and B on the yoke side of the joint are calculated utilizing finite elements. These stiffnesses are utilized in a one-dimensional beam transfer matrix analysis of the center plate. The transfer matrix model of the centerplate with its reaction point stiffness options are shown in Fig. 4.19.



(a) Transfer matrix model of center plate C_A and C_B



(b) Slide frame portion of articulation joint

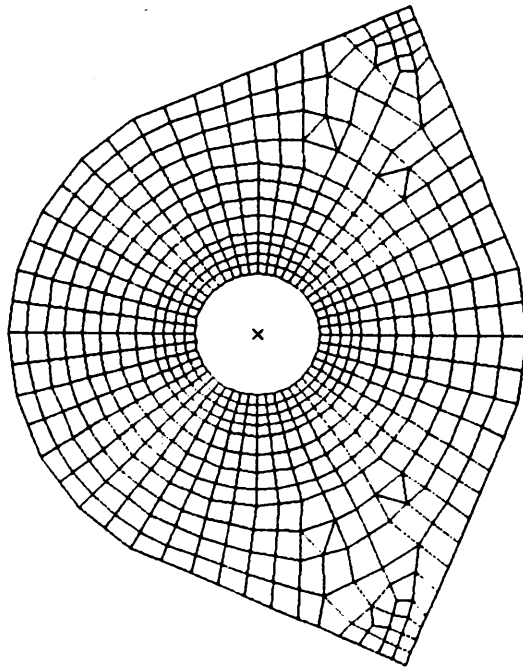
Fig. 4.19 Transfer matrix model of center plate of revolute joint.

This model is loaded with the allowable moment ($M_{2,yield}$) calculated in Eq. (4.41) and the actual shear (V_T) found in section 4.1.2. Utilizing a transfer matrix computer algorithm (BEAM4), the total angular rotation (θ_T) can be calculated.

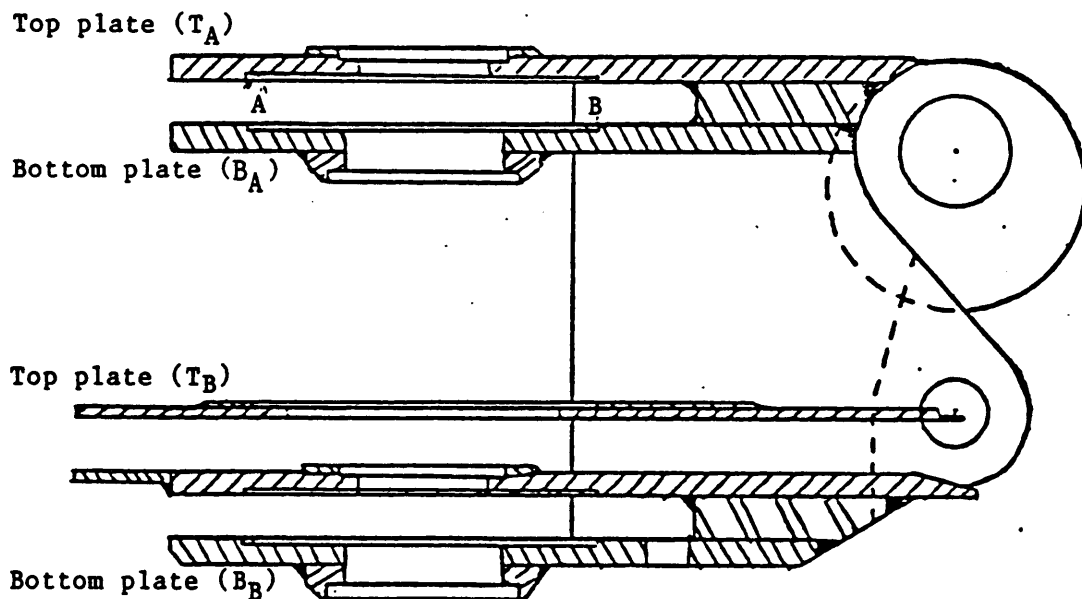
From step three we know what models are required in step four. The finite element models of the yoke plate and slide-frame plate are shown in Fig. 4.20 and Fig. 4.21 respectively. Also, a transfer matrix model of the center plate via discretizing the plate as shown in Fig. 4.19. For each section the area moment of inertia and cross sectional area is calculated. The model is documented in appendix A. In steps five and six these models are used to solve the problem. The slide-frame and yoke-frame finite element models were run from a coarse mesh to a finer mesh until the stress results converged.

To calculate K_1 through K_6 the finite element models are restrained and loaded as shown in Figs. 4.22 and 4.23. Here the restraints look like vectors, so to avoid confusion, loads and restraints are labeled. The displacement results are in appendix B and C. The three node loading distribution of 300 lbs each (1336 N) is based on engineering judgement.

From this we have the average in-plane displacement of the three loaded nodes on the yoke plate in tension (δ_{yt}) and in compression (δ_{yc}) to be $5.54E-05$ in. ($1.41E-06$ m) and $3.545E-06$ in. ($9.01E-07$ m), respectively. The average displacement of the three nodes loaded on the slide-frame plates in tension (δ_{st}) and compression (δ_{sc}) is $3.91E-05$ in. ($9.92E-07$ m) and $1.67E-05$ in. ($4.25E-07$ m), respectively. Calculating K_1 through K_6 we have

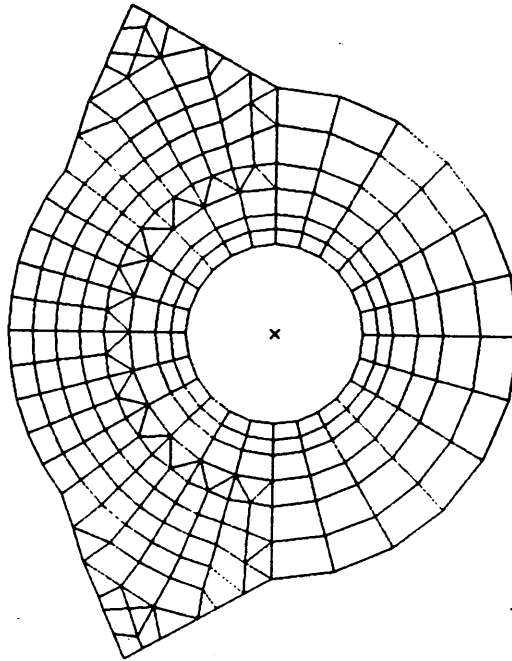


(a) F.E.M. of (T_A) Top View

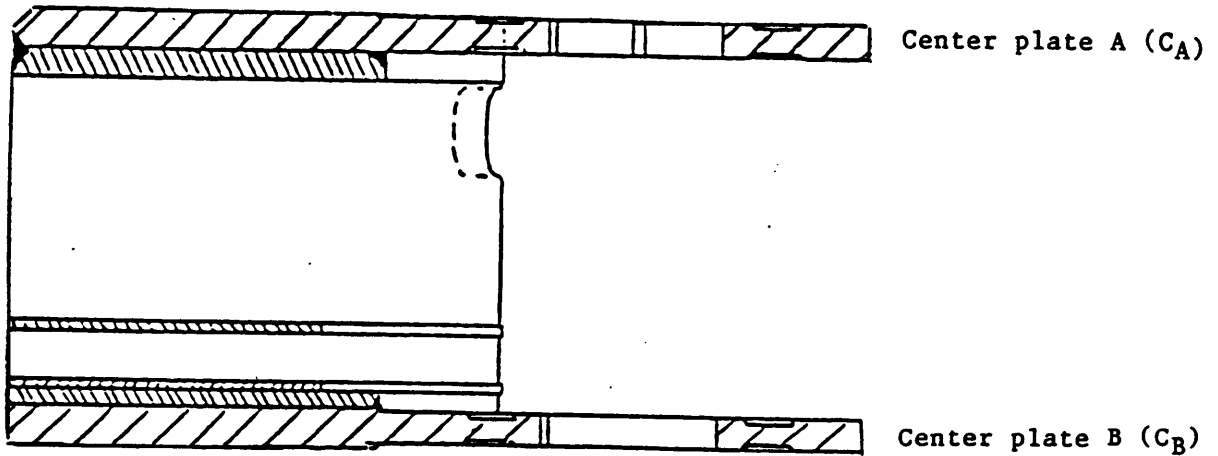


(b) Side view of yoke side of revolute joint

Fig. 4.20 Finite element of yoke plate of revolute joint.

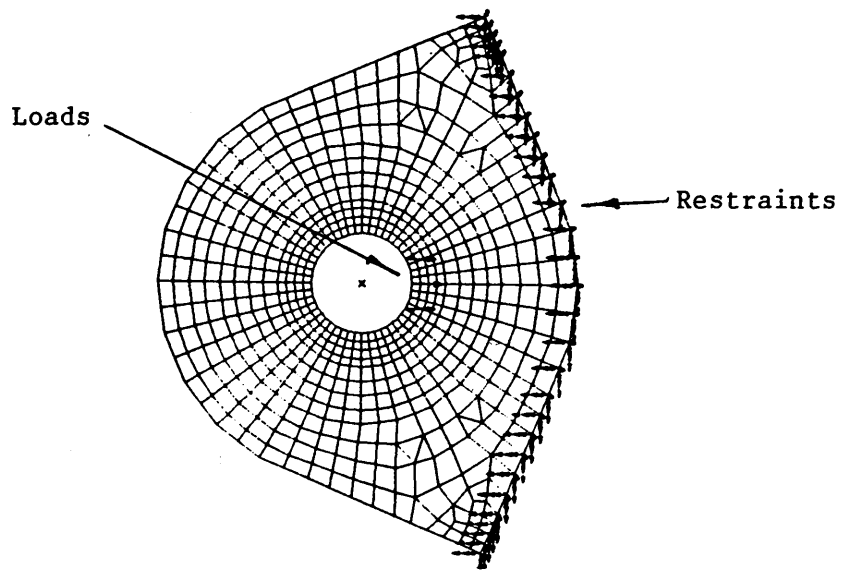


(a) F.E.M. of (C_A) Top View

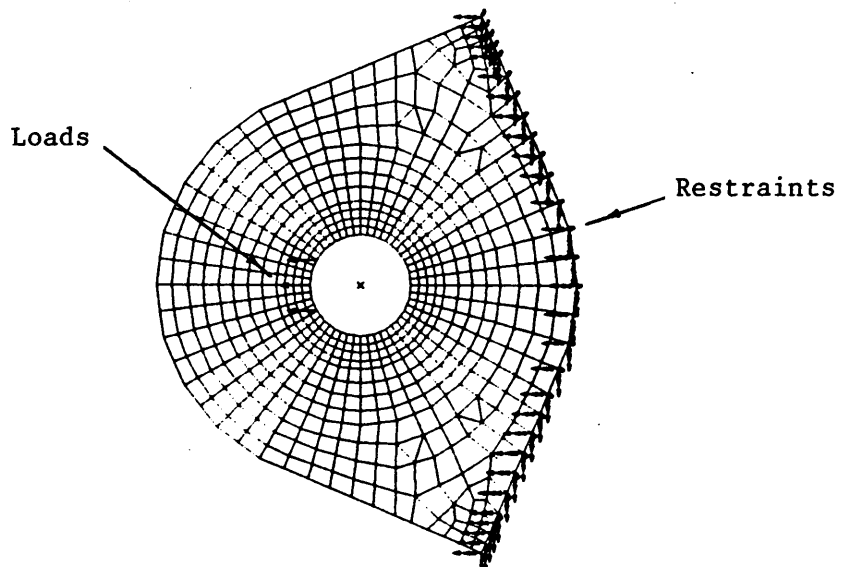


(b) Side view of slide frame plates of revolute joint.

Fig. 4.21 Finite element model of slide-frame plates of revolute joint.

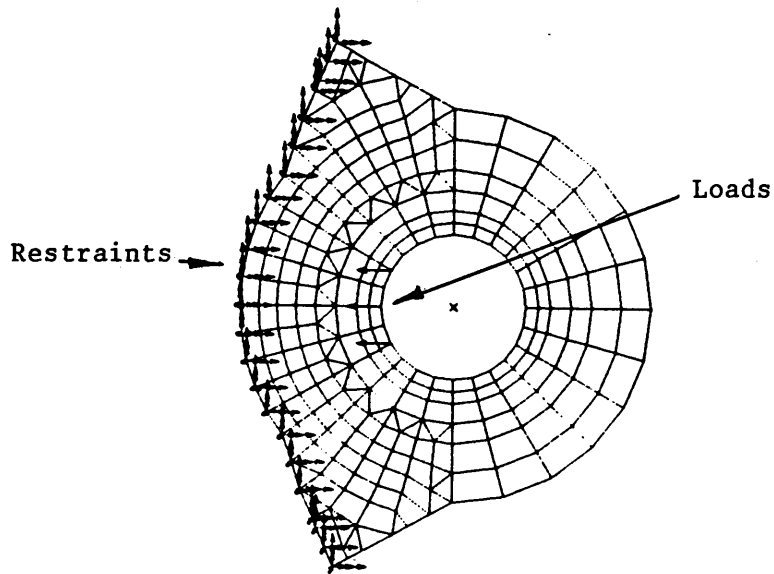


(a) Yoke top plate in compression

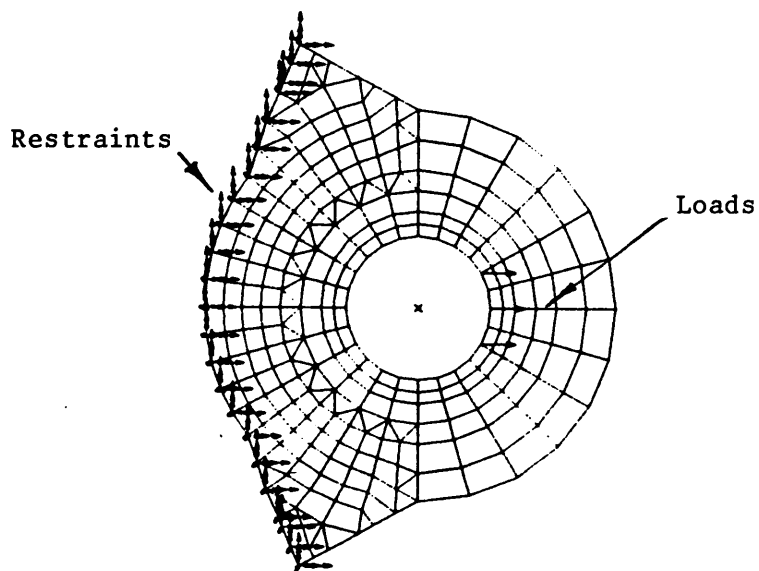


(b) Yoke bottom plate in tension

Fig. 4.22 Yoke-plate finite element models restrained and loaded to obtained radial deflections.



(a) Slide frame top center plate in compression



(b) Slide-frame bottom center plate in tension

Fig. 4.23 Slide-frame plate finite element model restrained and loaded to obtain radial deflections.

$$K_1 = K_2 = \frac{900 \text{ lb}}{3.54\text{E-}05 \text{ in.}} = 25.4\text{E}06 \text{ lb/in. (44.6E}08 \text{ N/m)}$$

$$K_3 = K_4 = \frac{900 \text{ lb}}{5.54\text{E-}05 \text{ in.}} = 16.3\text{E}06 \text{ lb/in. (28.6E}08 \text{ N/m)}$$

$$K_5 = \frac{900 \text{ lb}}{1.67\text{E-}05 \text{ in.}} = 53.8\text{E}06 \text{ lb/in. (94.5E}08 \text{ N/m)}$$

$$K_6 = \frac{900 \text{ lb}}{3.91\text{E-}05 \text{ in.}} = 23.0\text{E}06 \text{ lb/in. (40.4E}08 \text{ N/m)}$$

Recall

$$K_T = \frac{2K_5 K_1}{(K_5 + 2K_1)} \quad (4.5)$$

$$K_T = \frac{2(53.8\text{E}06)(25.4\text{E}06)}{(53.8\text{E}06 + (2) 25.4\text{E}06)}$$

$$= 26.1\text{E}06 \text{ lb/in. (45.8E}08 \text{ N/m)}$$

and

$$K_B = \frac{2K_6 K_3}{(K_6 + 2K_3)} \quad (4.6)$$

$$K_B = \frac{2(23.0\text{E}06)(16.3\text{E}06)}{(23.0\text{E}06 + (2) 16.3\text{E}06)}$$

$$= 13.5\text{E}06 \text{ lb/in. (23.7E}08 \text{ N/m)}$$

Here we have $K_B < K_T$ so that from Eq. (4.11) $\delta_1 < \delta_2$. We will continue with the analysis and solve for M_1 so that the difference in δ_1 and δ_2

can be determined. Solving for K_{BE} allows us to calculate the angular deflection of the joint by Eq. (4.2)

$$\theta_1 = \frac{M_1}{K_{BE}} \quad (4.2)$$

Solving for K_{BE} using Eq. (4.28) we have

$$\begin{aligned} K_{BE} = \frac{M_1}{\theta_1} &= (\ell_1 + \ell_2)^2 \frac{K_B K_T}{K_T + K_B} \\ &= (20)^2 \frac{(26.1E06)(13.5E06)}{(26.1E06 + 13.5E06)} \\ &= 3.55E09 \frac{\text{lb}\cdot\text{in.}}{\text{rad}} \quad (4.03E08 \text{ Nm/rad}) \end{aligned} \quad (4.28)$$

Now we will calculate K_P . The pin used here is 6 in. (0.15 m) in diameter and 3.5 in. (0.089 m) long.

$$K_P = \frac{48 EI}{L^3} \quad (4.29)$$

$$I = \frac{\pi d^4}{64} \quad (4.30)$$

So that

$$K_P = \frac{48E \pi d^4}{64 L^3} \quad (4.47)$$

$$K_P = \frac{48(30E6 \text{ psi})\pi(6 \text{ in.})^4}{64 (3.5 \text{ in.})^3} = 2.14E09 \text{ lb/in.} \quad (3.76E11 \text{ N/m})$$

So $K_P \gg K_T = 2.61E07 \text{ lb/in.} \quad (45.8E08 \text{ N/m})$, therefore the pin can be assumed rigid.

Recall that

$$R_{A,max} = \frac{R_{A,FE}}{S_{FE}} (S_{y,p}) \quad (4.40)$$

$$M_{2,yield} = 4\ell_E \left(R_{A,max} + \frac{V_T}{2} \right) \quad (4.41)$$

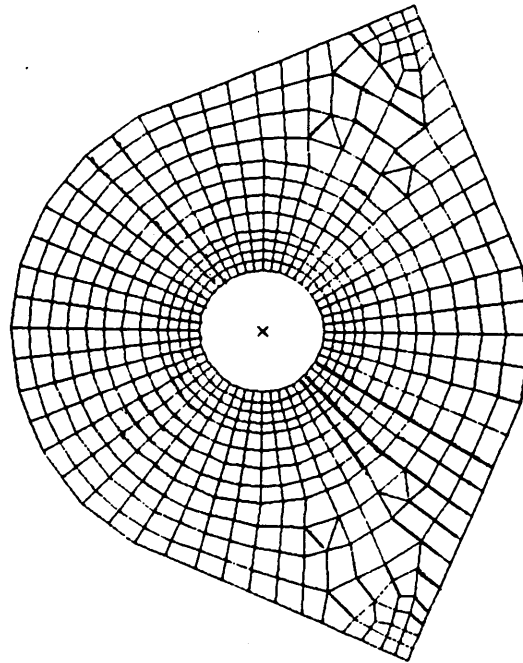
The finite element model of the yoke plate is shown in Fig. 4.20. All the yoke plates are similar so we use one as typical. The fixed boundary conditions are labeled in Fig. 4.24 and the loads are shown as vectors on node 830, 327, and 333. The fixed boundary conditions resemble vectors but should not be mistaken as such. The nodes are loaded on the edge of the thrust washer based on engineering judgment. Each load ($R_{A,FE}$) is 33.3 lbs (148 N) in the direction shown. The deflection and stress results are in appendix BI and BII, respectively.

The stress listings are in appendix BII and a von Mises stress contour is shown in Fig. 4.25. Node 786 has the largest von Mises stress of 271 psi (1.87 MPa) and this is taken as S_{FE} in Eq. (4.44). The material used to manufacture the joint has a yield strength ($S_{y,p}$) of 70,000 psi (483 MPa).

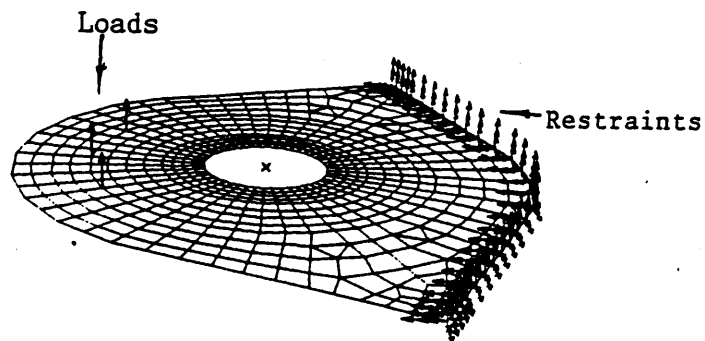
Solving for $R_{A,max}$ we have

$$R_{A,max} = \frac{R_{A,FE}}{S_{FE}} (S_{y,p}) \quad (4.40)$$

$$R_{A,max} = \frac{100 \text{ lbs}}{271 \text{ psi}} (70,000 \text{ psi}) = 25,870 \text{ lbs}$$



(a) Top view of yoke plate finite element model with nodes labeled.



(b) Loads and restraints shown.



Fig. 4.24 Finite element model of revolute joint yoke plate with loads and restraints shown.

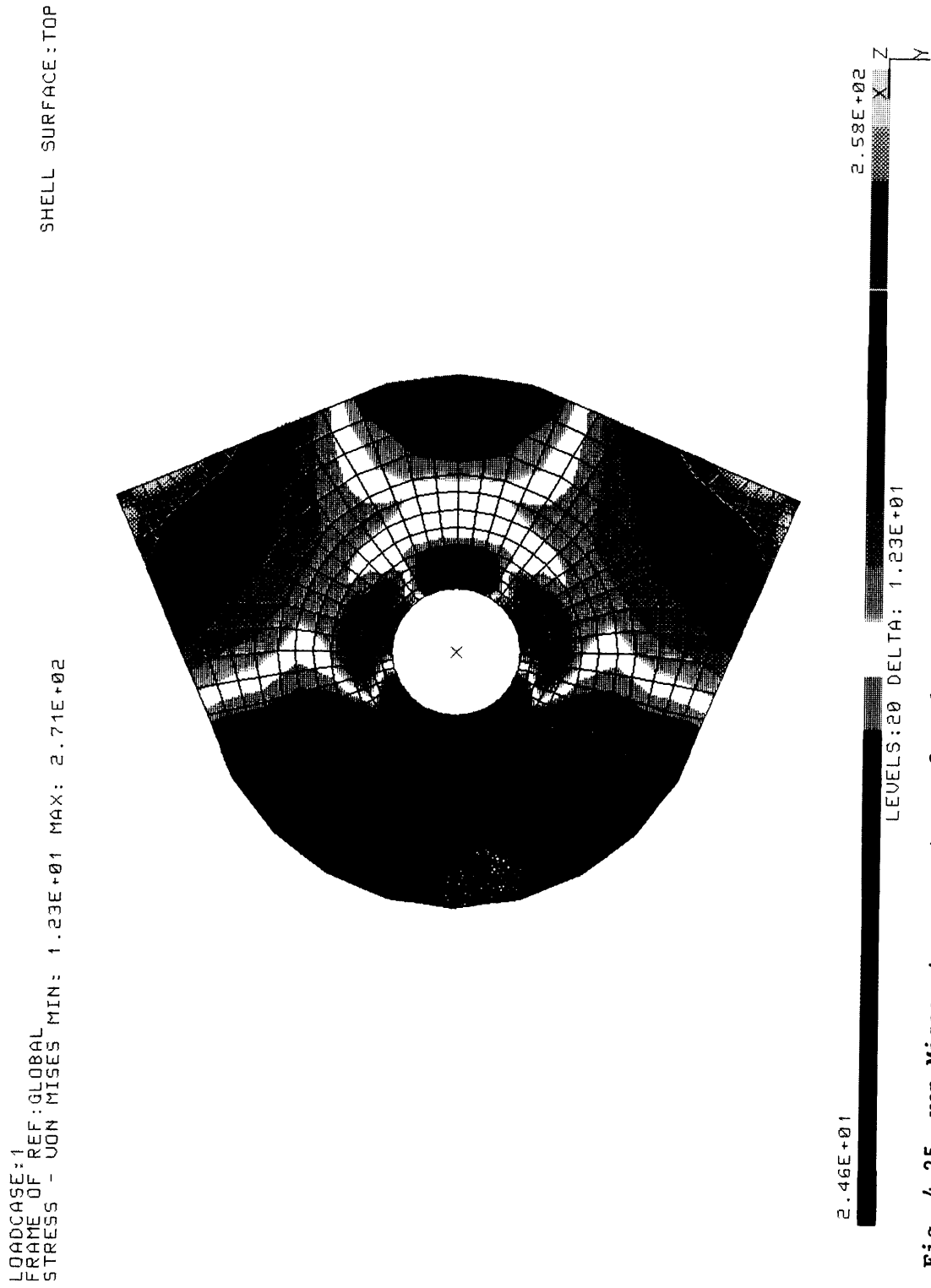


Fig. 4.25 von Mises stress contours for the yoke-plate finite element model restrained and loaded as shown in Fig. 4.24b.

$$M_{2,yield} = 4\ell_E(R_{A,max} + \frac{V_T}{2}) \quad (4.41)$$

$$M_{2,yield} = 4(8.37)(25,870 + \frac{2.66E04}{2}) = 1.31E06 \text{ in}\cdot\text{lbs} \text{ (0.148 MNm)}$$

Recall the assumption that bending stresses are the dominate stresses causing failure. Here we have neglected the compressive and tensile stresses in plates T_A and T_B caused by reaction forces R_E and R_H shown in Fig. 4.10. To justify neglecting the compressive and tensile stresses, we will load the finite element model of the yoke plate as shown in Fig. 4.22. Dividing the stress result calculated from finite elements by the load finite element and then multiplying by the reaction R_E or R_H gives the actual stresses in the plate. This quantity can be compared to 70,000 ($S_{y,p}$). The stress results for the yoke plate in compression and tension is documented in appendix B-V and the tension loading give the highest von Mises stresses. This stress contour is shown in Fig. 4.26. The maximum von Mises stress at node 786 caused by the loads shown in Fig. 4.22b are 40.7 psi (0.28 MPa).

To calculate reactions R_E and R_H we know from Eq. (4.1) that

$$M_1 = M_T - M_2 \quad (4.45)$$

$$M_1 = 4.33E06 - 1.31E6$$

$$= 3.02E06 \text{ in/lb (0.341 MNm)}$$

and from Eq. (4.21)

LOADCASE:3
 FRAME OF REF:GLOBAL
 STRESS - VON MISES MIN: 2.92E+00 MAX: 7.53E+02

SHELL SURFACE:TOP

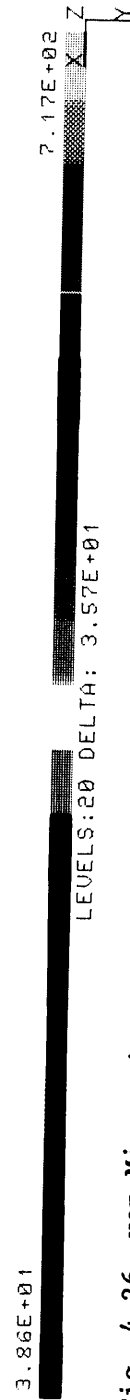
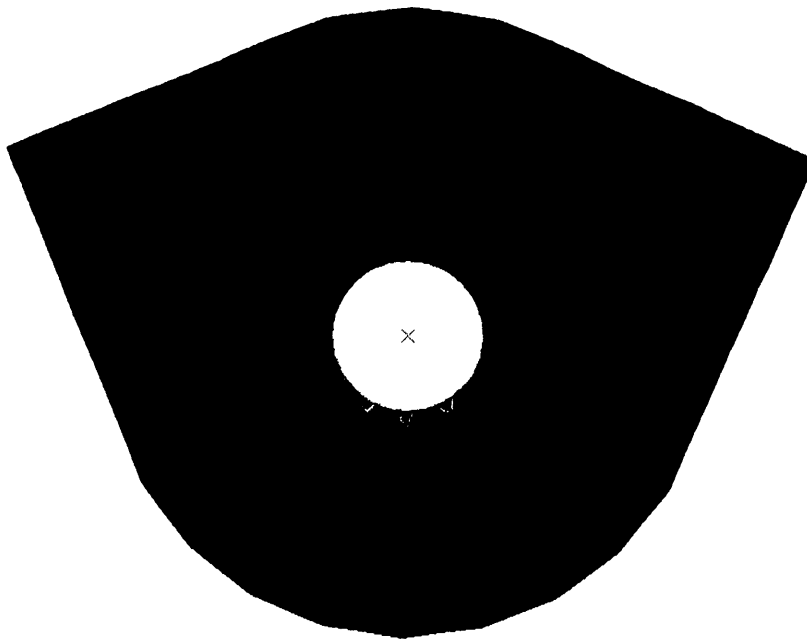


Fig. 4.26 von Mises stress contours for the yoke-plate finite element model restrained and loaded as shown in Fig. 4.22b.

$$F_T = \frac{M_1}{(\ell_1 + \ell_2)} \quad (4.46)$$

$$= \frac{3.02E06}{20}$$

$$= 1.51E05 \text{ lbs (676 kN)}$$

Figure 4.10 shows that

$$R_E = R_H = \frac{F_T}{2} \quad (4.47)$$

$$= \frac{1.51E05}{2}$$

$$= 7.55E04 \text{ lbs (338 kN)}$$

So that the actual maximum von Mises stress at node 786 caused by the loads shown in Fig. 4.22b are

$$\frac{40.7}{900} 7.55E04 = 3,410 \text{ psi (23.5 MPa)}$$

This is the actual maximum von Mises stress at node 786 that is neglected in assuming that the reaction load (R_A) is the only load that causes the plates to yield. Therefore, we justify assuming that bending stresses are the dominate stresses that cause failure at the base.

To solve for the total angular deflection (θ_T), the transfer matrix method was used. To accomplish this, the transverse stiffness at point

A (K_A) and point B (K_B) on the yoke side needs to be calculated (Fig. 4.11). As before, the models are loaded and the loads are divided by the displacement under that load to give K_A and K_B . The node restraints and loads are labeled in Fig. 4.27.

The same three-node load assumptions are made with each load equal to 33.3 lbs (148 N). The results are listed in appendix BI. The average displacement for the three nodes at point A (δ_A) is $1.50E-03$ in. ($13.81E-05$ m) and for point B (δ_B) is $2.13E-05$ in. ($5.42E-07$ m). Calculating the transverse stiffness at point A and B we have

$$K_A = \frac{100 \text{ lb}}{1.50E-03 \text{ in.}} = 6.67E04 \text{ lb/in. (1.17E07 N/m)}$$

$$K_B = \frac{100 \text{ lb}}{2.13E-05 \text{ in.}} = 4.68E06 \text{ lb/in. (8.89E08 N/m)}$$

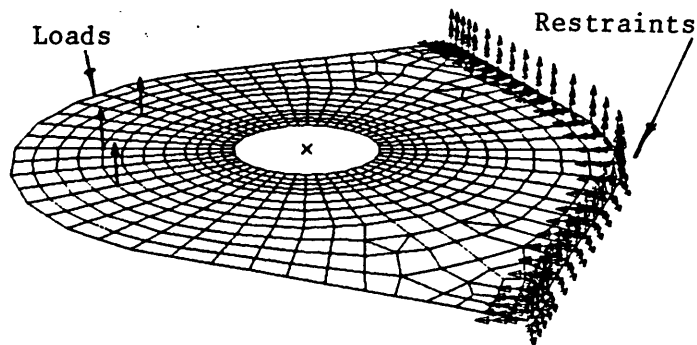
The transfer matrix model of the center plate with its reaction point stiffnesses (K_A and K_B) is shown in Fig. 4.19 and is documented in appendix A-II. Loading the model with the moment and shear

$$M_{2,\text{yield}} = 1.31E06 \text{ in. lbs (0.148 MNm)}$$

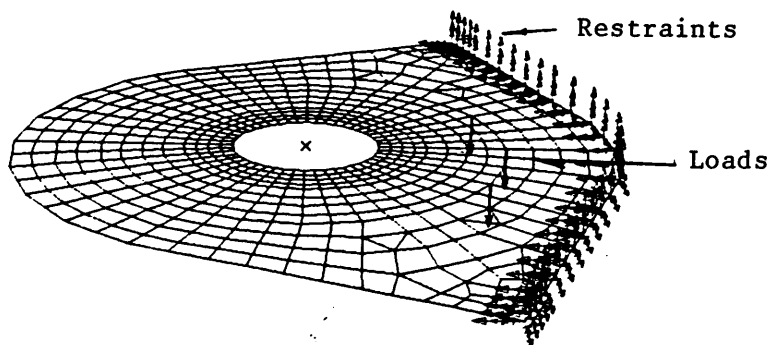
$$V_T = 2.66E04 \text{ lb (119 kN)}$$

but V_T must be divided by two because we are only looking at the one set of plates. Therefore, we load the model with

$$\frac{V_T}{2} = 13.3E04 \text{ lb (59.3 kN)}$$



- (a) Yoke top plate loaded and restrained to obtain transverse displacements at point A (see Fig. 4.11 and 4.12). 



- (b) Yoke bottom plate loaded and restrained to obtain transverse displacements at point B (see Fig. 4.11 and 4.12). 

Fig. 4.27 Yoke plate finite element model loaded and restrained to obtain transverse displacements at loading points.

The resulting total angular deflection at the extreme left end is 0.066 rad. Using Eq. (4.48)

$$\delta_c = \frac{\ell}{2} \left(\frac{-M_T + 4\ell E (R_{A,\max} + \frac{V_T}{2})}{K_{BE}} + \theta_T \right) \quad (4.48)$$

$$= \frac{20}{2} \left[\frac{-4.3E6 + 4(8.37)(25.870 + \frac{1.66E04}{2})}{3.55E09} + 0.066 \right]$$

$$\delta_c = 0.66 \text{ in } (0.017 \text{ m})$$

This is the radial bearing clearance that will bring the plates to the verge of yielding. Upon closing the radial loads help support the external moment. At equilibrium the plates are on the verge of yielding. Now we will calculate δ_1 and δ_2 to check and see if they are much less than δ_c . From Eq. (4.19)

$$F_T = \delta_1 K_T \quad (4.19)$$

$$\delta_1 = \frac{F_T}{K_T} \quad (4.49)$$

$$= \frac{1.51E05}{26.1E06} = 0.0058 \text{ in } (0.00015 \text{ m})$$

and

$$\delta_2 = \frac{K_T}{K_B} \delta_1 \quad (4.50)$$

$$= \frac{26.1E06}{13.5E06} (0.00579)$$

$$= 0.0112 \text{ in } (0.0029 \text{ m})$$

So δ_1 and δ_2 is much less than δ_c .

We must also calculate K_p to check and see if it is much less than K_{BE} . To do this we load the model in Fig. 4.19 with a moment of -100,000 in lb and divide this by the slope on the left end of the beam given by the Beam 4 results. This model is documented in Appendix A-III and the output gives a slope of 0.00586 rad. This quantity is multiplied by two because the top and bottom plates are similar and their moment stiffnesses add together in parallel.

$$K_p = (2) \frac{100,000 \text{ in lb}}{0.00586 \text{ rad}} = 34.1\text{E}06 \frac{\text{in}\cdot\text{lb}}{\text{rad}} \left(3.85 \frac{\text{MNm}}{\text{rad}} \right)$$

Recall

$$K_{BE} = 3,550\text{E}06 \frac{\text{in}\cdot\text{lb}}{\text{rad}} \left(401 \frac{\text{MNm}}{\text{rad}} \right)$$

So

$$K_{BE} \gg K_p .$$

Here we have used the example to illustrate the procedure presented in Section 4.2.1. A complete study of the articulation joint would take many iterations, each having different assumptions.

4.3 Discussion

The δ_c calculated in this example is expected to be high because we assume that pin A and pin B do not restrain the plates T_A and T_B in the transverse direction. This assumption increases the transverse flexibility of point A, thus increasing θ_c . If the pin did restrain the plates in the transverse direction, then the transverse stiffness of point A would increase. With this stiffness increasing, the total angular rotation of the transfer matrix model of the center plate would decrease, thus decreasing the allowed radial wear clearance.

For step seven we can adjust the assumption that pin A and pin B has no transverse restrain on plate T_A and T_B . This can be done by restraining the finite element model in the transverse direction at the hole with spring elements. The spring stiffness can be modeled by adding the transverse stiffness of the plate at the hole to the axial stiffness of the pin in series. Calculating this equivalent stiffness gives the transverse restraint of the pin on plate T_A and T_B . This stiffness can be divided by the number of spring elements at the nodes around the plate hole. Note that this modification will increase the stiffness of K_A , but it will also change the stress distribution and possibly the point and magnitude of maximum stress.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The guidelines developed to combine two-dimensional finite element and one-dimensional transfer matrix theory allows a designer to handle large jobs. The time saved utilizing transfer matrix theory is traded for the accuracy obtained in finite element analysis. These procedures are general and allow for safe design but the engineer must decide if utilizing this approach is optimum for the particular job at hand. The transfer matrix method as utilized here would not be applicable for machines that can not be resembled as beams; however, matrices are available for more complex structures such as shells, plates, etc.

Future work that could be done in this area is developing procedures for comparing the two-dimensional finite element theory with one-dimensional transfer matrix techniques. The problem arises when deflection, slope, loads, boundary conditions, etc. are projected from two-dimensional elements into one-dimensional elements. Work done in this area would give some idea of the safety factor estimates needed for a safe design.

REFERENCES

1. Dokainish, M. A., "A New Approach for Plate Vibrations: Combination of Transfer Matrix and Finite-Element Technique," J. Eng. Ind. Trans., 1982, pp. 526-530.
2. Juang, J. N., "Controller Design via Structural Reduced Modeling of FETM," NASA Technical Report, Contract No. NAG-1-622, 1987.
3. Chiatti, G., and A. Sestieri, "Analysis of Static and Dynamic Problems by a Combined Finite-Transfer Matrix Method," J. Sound Vib., Vol. 67, 1979, pp. 35-42.
4. Mucino, V. H., and V. Pavelic, "An Exact Condensation Procedure for Chain-Like Structures Using a Finite Element Transfer Maxtrix Approach," J. Mech. Design, Vol. 103, 1981, pp. 296-303.
5. McDonald, J. J., and K. B. Eversole, "A Combined Finite Element Transfer Matrix Structural Analysis Method," J. Sound Vib., Vol. 51, 1977, pp. 157-169.
6. Sankar, S., and S. V. Hoa, "An Extended Transfer Maxtrix Finite Element Method for Free Vibration of Plates," J. Sound Vib., Vol. 70, 1980, pp. 205-211.
7. Ohga, M., and T. Shigematsu, "Structural Analysis by a Combined Finite Element Transfer Matrix Method," Comput. Struct., Vol. 17, 1983, pp. 321-326.
8. Pestel, E. C., "Note: Rectangular Transfer Matrices," Int. J. Mech. Sci., Vol. 5, 1983, pp. 419-421.
9. Degen, E., and N. Shepard, "Combined Finite Element Transfer Matrix Method Based on Mixed Formulation," Comput. Struct., Vol. 20, 1985, pp. 173-180.
10. Muskivitch, J. C., Basic MSC/Nastran Analysis Linear Static and Normal Modes Analysis, Version 65, The MacNeal-Schwendler Corporation, Rockville, MD, 1988, pp. 2.9-2.18.
11. Reddy, J. N., An Introduction to the Finite Element Method, McGraw-Hill, New York, NY, 1984.
12. Wait, R., "Finite Spaces," in The Mathematical Basis of Finite Element Methods, Oxford University Press, NY, 1984.
13. Martin, H. C., and G. F. Carey, Introduction to Finite Element Analysis, McGraw-Hill, NY, 1973.
14. Pestel, E. C., and F. A. Leckie, Matrix Methods in Elastomechanics, McGraw-Hill, NY, 1963.

15. Mitchell, L. D., and T. V. Hammock, Final Report on Design Evaluation of the Articulation Yoke Assembly, Fairchild International, Inc., Glen Lyn, VA, August 1988.
16. Mitchell, L. D., User's Guide - Beam IV, Mechanical Engineering Department, Virginia Polytechnic Institute and State University, Blacksburg, VA, September 1988.
17. Kosmatka, J. B., and J. F. Schultze, Structural Analysis of Fairchild Mark 22-72 Main Frame: Final Report, Fairchild International, Inc., Glen Lyn, VA, August 1988.
18. DeSalva, G. J., and J. A. Swanson, ANSYS Engineering Analysis System User's Manual, Swanson Analysis Systems, Inc., Houston, PA, Vol. 1, pp. 4.12.1-4.12.6 and pp. 4.52.1-4.52.6, 1983.

APPENDIX A

Transfer matrix models utilized with the BEAM4 algorithm were:

- I Transfer matrix model of continuous miner in worst loading condition as shown in Fig. 4.3a (Rear Bumper-Pin Support).
- II Transfer matrix model of center slide frame plate restrained and loaded to obtain θ_T (total angular rotation of joint) in worst allowable loading condition.
- III Transfer matrix model of center slide frame plate restrained and loaded to obtain the moment stiffness (K_p).

A-I Table A.1 Modeling data for the static load analysis of the continuous miner in a rear bumper to pan support dip straddle maneuver.

PROBLEM DATA:

TMM

CREATED BY:HAMMOCKTV
EDITED BY:HAMMOCKTV

ON:10-Aug-88 09:43 AM
ON:18-Jan-89 04:50 PM

For section # 1 :

Length of this section.....=1.5700E+00 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=1.5920E+01 in⁻⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=5.1380E+01 in⁻²
Magnitude of Concentrated Load.....=1.3315E+04 lb
Stiffness of Support.....=2.0000E+05 lb/in

For section # 2 :

Length of this section.....=5.0800E+00 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=1.5920E+01 in⁻⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=5.1380E+01 in⁻²

For section # 3 :

Length of this section.....=8.1000E-01 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=1.5500E+01 in⁻⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=5.1680E+01 in⁻²

For section # 4 :

Length of this section.....=5.1000E-01 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=1.5270E+01 in⁻⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=5.1110E+01 in⁻²

For section # 5 :

Length of this section.....=6.8000E-01 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=1.3060E+01 in⁻⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=4.3530E+01 in⁻²

For section # 6 :

Length of this section.....=1.0100E+00 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=1.1240E+01 in⁻⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=3.7330E+01 in⁻²

For section # 7 :

Length of this section.....=1.0100E+00 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=1.0100E+01 in⁻⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=3.3450E+01 in⁻²

Table A.1 Continued.

For section # 8 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=9.3100E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.0740E+01 in⁻²

For section # 9 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.7800E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.8910E+01 in⁻²

For section # 10 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.4900E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.7880E+01 in⁻²

For section # 11 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.4800E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.7780E+01 in⁻²

For section # 12 :

Length of this section.....=6.8000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.8400E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.8890E+01 in⁻²

For section # 13 :

Length of this section.....=5.1000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=9.1400E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.9890E+01 in⁻²

For section # 14 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.0010E+01 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.2780E+01 in⁻²

For section # 15 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.1570E+01 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.8160E+01 in⁻²

For section # 16 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.1280E+01 in⁻⁴

Table A.1 Continued.

Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.6790E+01 in ⁻²
For section # 17 :	
Length of this section.....	=4.4000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.1110E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.5820E+01 in ⁻²
For section # 18 :	
Length of this section.....	=3.0000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0930E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.3850E+01 in ⁻²
For section # 19 :	
Length of this section.....	=6.1000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0910E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.3920E+01 in ⁻²
For section # 20 :	
Length of this section.....	=9.8000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0230E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.2470E+01 in ⁻²
For section # 21 :	
Length of this section.....	=6.8000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=9.3700E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.1160E+01 in ⁻²
Stiffness of Support.....	=1.6700E+07 lb/in
For section # 22 :	
Length of this section.....	=4.7000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=9.0800E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.1820E+01 in ⁻²
For section # 23 :	
Length of this section.....	=8.5000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=8.2900E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=2.9080E+01 in ⁻²
For section # 24 :	
Length of this section.....	=1.0100E+00 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=6.8900E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=2.4160E+01 in ⁻²

Table A.1 Continued.

For section # 25 :
Length of this section.....=1.3500E+00 in
Modulus of Elasticity.....=3.0000E+07 psi
Area Moment of Inertia.....=4.9000E+00 in⁴
Shear Modulus.....=1.1500E+07 psi
Shear Area.....=1.7170E+01 in²

Table A.2 Static response for the continuous miner in a rear bumper to pan support dip straddle maneuver.

*** STATIC RESPONSE.

***PROBLEM TITLE: TMM

***MODELED BY: HAMMOCKTV

ON: 10-Aug-88 09:43 AM

***EDITED BY: HAMMOCKTV

ON: 18-Jan-89 04:50 PM

***SAVED BY: HAMMOCKTV

ON: 18-Jan-89 04:55 PM

LENGTH (in)	DEFLECTION (in)	SLOPE (Radian)	MOMENT (lb-in)	SHEAR (lb)
0.000E+00	-5.391E-01	-5.459E-02	0.000E+00	0.000E+00
15.700E-02	-5.306E-01	-5.459E-02	0.000E+00	0.000E+00
31.400E-02	-5.220E-01	-5.459E-02	0.000E+00	0.000E+00
47.100E-02	-5.134E-01	-5.459E-02	0.000E+00	0.000E+00
62.800E-02	-5.048E-01	-5.459E-02	0.000E+00	0.000E+00
78.500E-02	-4.963E-01	-5.459E-02	0.000E+00	0.000E+00
94.200E-02	-4.877E-01	-5.459E-02	0.000E+00	0.000E+00
10.990E-01	-4.791E-01	-5.459E-02	0.000E+00	0.000E+00
12.560E-01	-4.706E-01	-5.459E-02	0.000E+00	0.000E+00
14.130E-01	-4.620E-01	-5.459E-02	0.000E+00	0.000E+00
15.700E-01	-4.534E-01	-5.459E-02	0.000E+00	0.000E+00
15.700E-01	-4.534E-01	-5.459E-02	19.500E+05	-1.040E+05
20.780E-01	-4.263E-01	-5.254E-02	18.972E+05	-1.040E+05
25.860E-01	-4.002E-01	-5.055E-02	18.443E+05	-1.040E+05
30.940E-01	-3.751E-01	-4.862E-02	17.915E+05	-1.040E+05
36.020E-01	-3.510E-01	-4.674E-02	17.387E+05	-1.040E+05
41.100E-01	-3.278E-01	-4.492E-02	16.858E+05	-1.040E+05
46.180E-01	-3.055E-01	-4.315E-02	16.330E+05	-1.040E+05
51.260E-01	-2.841E-01	-4.144E-02	15.802E+05	-1.040E+05
56.340E-01	-2.636E-01	-3.979E-02	15.273E+05	-1.040E+05
61.420E-01	-2.439E-01	-3.820E-02	14.745E+05	-1.040E+05
66.500E-01	-2.249E-01	-3.666E-02	14.217E+05	-1.040E+05
66.500E-01	-2.249E-01	-3.666E-02	14.217E+05	-1.040E+05
67.310E-01	-2.220E-01	-3.641E-02	14.133E+05	-1.040E+05
68.120E-01	-2.191E-01	-3.616E-02	14.048E+05	-1.040E+05
68.930E-01	-2.162E-01	-3.592E-02	13.964E+05	-1.040E+05
69.740E-01	-2.133E-01	-3.568E-02	13.880E+05	-1.040E+05
70.550E-01	-2.104E-01	-3.544E-02	13.796E+05	-1.040E+05
71.360E-01	-2.076E-01	-3.520E-02	13.711E+05	-1.040E+05
72.170E-01	-2.047E-01	-3.496E-02	13.627E+05	-1.040E+05
72.980E-01	-2.019E-01	-3.472E-02	13.543E+05	-1.040E+05
73.790E-01	-1.991E-01	-3.449E-02	13.459E+05	-1.040E+05
74.600E-01	-1.964E-01	-3.425E-02	13.374E+05	-1.040E+05
75.110E-01	-1.946E-01	-3.410E-02	13.321E+05	-1.040E+05
75.620E-01	-1.929E-01	-3.396E-02	13.268E+05	-1.040E+05
76.130E-01	-1.912E-01	-3.381E-02	13.215E+05	-1.040E+05
76.640E-01	-1.895E-01	-3.366E-02	13.162E+05	-1.040E+05
77.150E-01	-1.878E-01	-3.351E-02	13.109E+05	-1.040E+05
77.660E-01	-1.861E-01	-3.337E-02	13.056E+05	-1.040E+05
78.170E-01	-1.844E-01	-3.322E-02	13.003E+05	-1.040E+05
78.680E-01	-1.827E-01	-3.308E-02	12.950E+05	-1.040E+05
79.190E-01	-1.810E-01	-3.294E-02	12.897E+05	-1.040E+05
79.700E-01	-1.794E-01	-3.279E-02	12.844E+05	-1.040E+05
80.380E-01	-1.772E-01	-3.257E-02	12.773E+05	-1.040E+05
81.060E-01	-1.750E-01	-3.235E-02	12.703E+05	-1.040E+05
81.740E-01	-1.728E-01	-3.213E-02	12.632E+05	-1.040E+05
82.420E-01	-1.706E-01	-3.191E-02	12.561E+05	-1.040E+05
83.100E-01	-1.685E-01	-3.169E-02	12.490E+05	-1.040E+05
83.780E-01	-1.664E-01	-3.148E-02	12.420E+05	-1.040E+05

Table A.2 Continued.

84.460E-01	-1.642E-01	-3.126E-02	12.349E+05	-1.040E+05
85.140E-01	-1.621E-01	-3.105E-02	12.278E+05	-1.040E+05
85.820E-01	-1.600E-01	-3.084E-02	12.208E+05	-1.040E+05
86.500E-01	-1.580E-01	-3.062E-02	12.137E+05	-1.040E+05
87.510E-01	-1.549E-01	-3.026E-02	12.032E+05	-1.040E+05
88.520E-01	-1.519E-01	-2.990E-02	11.927E+05	-1.040E+05
89.530E-01	-1.489E-01	-2.955E-02	11.822E+05	-1.040E+05
90.540E-01	-1.460E-01	-2.920E-02	11.717E+05	-1.040E+05
91.550E-01	-1.431E-01	-2.885E-02	11.612E+05	-1.040E+05
92.560E-01	-1.402E-01	-2.850E-02	11.507E+05	-1.040E+05
93.570E-01	-1.374E-01	-2.816E-02	11.402E+05	-1.040E+05
94.580E-01	-1.346E-01	-2.782E-02	11.296E+05	-1.040E+05
95.590E-01	-1.318E-01	-2.748E-02	11.191E+05	-1.040E+05
96.600E-01	-1.291E-01	-2.715E-02	11.086E+05	-1.040E+05
97.610E-01	-1.264E-01	-2.678E-02	10.981E+05	-1.040E+05
98.620E-01	-1.237E-01	-2.641E-02	10.876E+05	-1.040E+05
99.630E-01	-1.211E-01	-2.605E-02	10.771E+05	-1.040E+05
10.064E+00	-1.185E-01	-2.570E-02	10.666E+05	-1.040E+05
10.165E+00	-1.159E-01	-2.534E-02	10.561E+05	-1.040E+05
10.266E+00	-1.134E-01	-2.499E-02	10.456E+05	-1.040E+05
10.367E+00	-1.110E-01	-2.465E-02	10.351E+05	-1.040E+05
10.468E+00	-1.085E-01	-2.430E-02	10.246E+05	-1.040E+05
10.569E+00	-1.061E-01	-2.396E-02	10.141E+05	-1.040E+05
10.670E+00	-1.037E-01	-2.363E-02	10.036E+05	-1.040E+05
10.771E+00	-1.014E-01	-2.327E-02	99.931E+04	-1.040E+05
10.872E+00	-9.908E-02	-2.291E-02	98.825E+04	-1.040E+05
10.973E+00	-9.681E-02	-2.255E-02	97.719E+04	-1.040E+05
11.074E+00	-9.458E-02	-2.221E-02	96.613E+04	-1.040E+05
11.175E+00	-9.239E-02	-2.186E-02	95.507E+04	-1.040E+05
11.276E+00	-9.023E-02	-2.152E-02	94.401E+04	-1.040E+05
11.377E+00	-8.810E-02	-2.118E-02	93.295E+04	-1.040E+05
11.478E+00	-8.601E-02	-2.084E-02	92.189E+04	-1.040E+05
11.579E+00	-8.395E-02	-2.051E-02	91.083E+04	-1.040E+05
11.680E+00	-8.192E-02	-2.019E-02	89.977E+04	-1.040E+05
11.781E+00	-7.993E-02	-1.984E-02	88.871E+04	-1.040E+05
11.882E+00	-7.798E-02	-1.951E-02	87.765E+04	-1.040E+05
11.983E+00	-7.606E-02	-1.917E-02	86.659E+04	-1.040E+05
12.084E+00	-7.417E-02	-1.884E-02	85.553E+04	-1.040E+05
12.185E+00	-7.231E-02	-1.851E-02	84.447E+04	-1.040E+05
12.286E+00	-7.049E-02	-1.819E-02	83.341E+04	-1.040E+05
12.387E+00	-6.870E-02	-1.787E-02	82.235E+04	-1.040E+05
12.488E+00	-6.694E-02	-1.756E-02	81.129E+04	-1.040E+05
12.589E+00	-6.522E-02	-1.725E-02	80.023E+04	-1.040E+05
12.690E+00	-6.352E-02	-1.694E-02	78.917E+04	-1.040E+05
12.791E+00	-6.186E-02	-1.663E-02	77.811E+04	-1.040E+05
12.892E+00	-6.023E-02	-1.632E-02	76.705E+04	-1.040E+05
12.993E+00	-5.863E-02	-1.602E-02	75.599E+04	-1.040E+05
13.094E+00	-5.706E-02	-1.572E-02	74.493E+04	-1.040E+05
13.195E+00	-5.552E-02	-1.542E-02	73.387E+04	-1.040E+05
13.296E+00	-5.401E-02	-1.513E-02	72.281E+04	-1.040E+05
13.397E+00	-5.253E-02	-1.484E-02	71.175E+04	-1.040E+05
13.498E+00	-5.108E-02	-1.456E-02	70.069E+04	-1.040E+05
13.599E+00	-4.965E-02	-1.428E-02	68.963E+04	-1.040E+05
13.700E+00	-4.826E-02	-1.400E-02	67.857E+04	-1.040E+05
13.801E+00	-4.689E-02	-1.373E-02	66.751E+04	-1.040E+05
13.902E+00	-4.555E-02	-1.347E-02	65.645E+04	-1.040E+05
14.003E+00	-4.423E-02	-1.320E-02	64.539E+04	-1.040E+05
14.104E+00	-4.295E-02	-1.294E-02	63.433E+04	-1.040E+05
14.205E+00	-4.168E-02	-1.269E-02	62.327E+04	-1.040E+05
14.306E+00	-4.045E-02	-1.244E-02	61.221E+04	-1.040E+05

Table A.2 Continued.

14.407E+00	-3.924E-02	-1.219E-02	61.495E+04	-1.040E+05
14.508E+00	-3.805E-02	-1.195E-02	60.445E+04	-1.040E+05
14.609E+00	-3.689E-02	-1.171E-02	59.394E+04	-1.040E+05
14.710E+00	-3.575E-02	-1.148E-02	58.344E+04	-1.040E+05
14.778E+00	-3.500E-02	-1.133E-02	57.637E+04	-1.040E+05
14.846E+00	-3.425E-02	-1.118E-02	56.930E+04	-1.040E+05
14.914E+00	-3.352E-02	-1.104E-02	56.222E+04	-1.040E+05
14.982E+00	-3.279E-02	-1.090E-02	55.515E+04	-1.040E+05
15.050E+00	-3.208E-02	-1.075E-02	54.808E+04	-1.040E+05
15.118E+00	-3.137E-02	-1.061E-02	54.101E+04	-1.040E+05
15.186E+00	-3.068E-02	-1.048E-02	53.394E+04	-1.040E+05
15.254E+00	-2.999E-02	-1.034E-02	52.686E+04	-1.040E+05
15.322E+00	-2.931E-02	-1.021E-02	51.979E+04	-1.040E+05
15.390E+00	-2.865E-02	-1.007E-02	51.272E+04	-1.040E+05
15.441E+00	-2.815E-02	-9.980E-03	50.742E+04	-1.040E+05
15.492E+00	-2.766E-02	-9.886E-03	50.211E+04	-1.040E+05
15.543E+00	-2.717E-02	-9.793E-03	49.681E+04	-1.040E+05
15.594E+00	-2.669E-02	-9.701E-03	49.150E+04	-1.040E+05
15.645E+00	-2.621E-02	-9.610E-03	48.620E+04	-1.040E+05
15.696E+00	-2.574E-02	-9.520E-03	48.090E+04	-1.040E+05
15.747E+00	-2.527E-02	-9.431E-03	47.559E+04	-1.040E+05
15.798E+00	-2.481E-02	-9.343E-03	47.029E+04	-1.040E+05
15.849E+00	-2.435E-02	-9.256E-03	46.498E+04	-1.040E+05
15.900E+00	-2.390E-02	-9.170E-03	45.968E+04	-1.040E+05
15.947E+00	-2.348E-02	-9.099E-03	45.479E+04	-1.040E+05
15.994E+00	-2.307E-02	-9.028E-03	44.990E+04	-1.040E+05
16.041E+00	-2.266E-02	-8.958E-03	44.502E+04	-1.040E+05
16.088E+00	-2.225E-02	-8.888E-03	44.013E+04	-1.040E+05
16.135E+00	-2.185E-02	-8.820E-03	43.524E+04	-1.040E+05
16.182E+00	-2.145E-02	-8.752E-03	43.035E+04	-1.040E+05
16.229E+00	-2.105E-02	-8.685E-03	42.546E+04	-1.040E+05
16.276E+00	-2.066E-02	-8.619E-03	42.058E+04	-1.040E+05
16.323E+00	-2.027E-02	-8.554E-03	41.569E+04	-1.040E+05
16.370E+00	-1.988E-02	-8.489E-03	41.080E+04	-1.040E+05
16.417E+00	-1.949E-02	-8.434E-03	40.591E+04	-1.040E+05
16.464E+00	-1.911E-02	-8.379E-03	40.102E+04	-1.040E+05
16.511E+00	-1.873E-02	-8.325E-03	39.614E+04	-1.040E+05
16.558E+00	-1.835E-02	-8.272E-03	39.125E+04	-1.040E+05
16.605E+00	-1.797E-02	-8.219E-03	38.636E+04	-1.040E+05
16.652E+00	-1.760E-02	-8.167E-03	38.147E+04	-1.040E+05
16.699E+00	-1.723E-02	-8.116E-03	37.658E+04	-1.040E+05
16.746E+00	-1.686E-02	-8.065E-03	37.170E+04	-1.040E+05
16.793E+00	-1.649E-02	-8.015E-03	36.681E+04	-1.040E+05
16.840E+00	-1.613E-02	-7.966E-03	36.192E+04	-1.040E+05
16.887E+00	-1.576E-02	-7.916E-03	35.703E+04	-1.040E+05
16.934E+00	-1.541E-02	-7.867E-03	35.214E+04	-1.040E+05
16.981E+00	-1.505E-02	-7.818E-03	34.726E+04	-1.040E+05
17.028E+00	-1.469E-02	-7.770E-03	34.237E+04	-1.040E+05
17.075E+00	-1.434E-02	-7.723E-03	33.748E+04	-1.040E+05
17.122E+00	-1.399E-02	-7.676E-03	33.259E+04	-1.040E+05
17.169E+00	-1.364E-02	-7.631E-03	32.770E+04	-1.040E+05
17.216E+00	-1.330E-02	-7.585E-03	32.282E+04	-1.040E+05
17.263E+00	-1.295E-02	-7.541E-03	31.793E+04	-1.040E+05
17.310E+00	-1.261E-02	-7.497E-03	31.304E+04	-1.040E+05
17.354E+00	-1.229E-02	-7.456E-03	30.846E+04	-1.040E+05
17.398E+00	-1.198E-02	-7.416E-03	30.389E+04	-1.040E+05
17.442E+00	-1.166E-02	-7.376E-03	29.931E+04	-1.040E+05
17.486E+00	-1.135E-02	-7.337E-03	29.474E+04	-1.040E+05
17.530E+00	-1.104E-02	-7.298E-03	29.016E+04	-1.040E+05
17.574E+00	-1.073E-02	-7.260E-03	28.558E+04	-1.040E+05

Table A.2 Continued.

17.618E+00	-1.042E-02	-7.223E-03	28.101E+04	-1.040E+05
17.662E+00	-1.012E-02	-7.186E-03	27.643E+04	-1.040E+05
17.706E+00	-9.813E-03	-7.150E-03	27.186E+04	-1.040E+05
17.750E+00	-9.510E-03	-7.114E-03	26.728E+04	-1.040E+05
17.750E+00	-9.510E-03	-7.114E-03	26.728E+04	-1.040E+05
17.780E+00	-9.305E-03	-7.090E-03	26.416E+04	-1.040E+05
17.810E+00	-9.101E-03	-7.066E-03	26.104E+04	-1.040E+05
17.840E+00	-8.897E-03	-7.042E-03	25.792E+04	-1.040E+05
17.870E+00	-8.694E-03	-7.018E-03	25.480E+04	-1.040E+05
17.900E+00	-8.492E-03	-6.995E-03	25.168E+04	-1.040E+05
17.930E+00	-8.290E-03	-6.972E-03	24.856E+04	-1.040E+05
17.960E+00	-8.090E-03	-6.950E-03	24.544E+04	-1.040E+05
17.990E+00	-7.889E-03	-6.927E-03	24.232E+04	-1.040E+05
18.020E+00	-7.690E-03	-6.905E-03	23.920E+04	-1.040E+05
18.050E+00	-7.491E-03	-6.884E-03	23.608E+04	-1.040E+05
18.111E+00	-7.089E-03	-6.840E-03	22.974E+04	-1.040E+05
18.172E+00	-6.689E-03	-6.798E-03	22.339E+04	-1.040E+05
18.233E+00	-6.292E-03	-6.757E-03	21.705E+04	-1.040E+05
18.294E+00	-5.897E-03	-6.717E-03	21.070E+04	-1.040E+05
18.355E+00	-5.505E-03	-6.678E-03	20.436E+04	-1.040E+05
18.416E+00	-5.115E-03	-6.641E-03	19.802E+04	-1.040E+05
18.477E+00	-4.727E-03	-6.605E-03	19.167E+04	-1.040E+05
18.538E+00	-4.342E-03	-6.570E-03	18.533E+04	-1.040E+05
18.599E+00	-3.958E-03	-6.536E-03	17.898E+04	-1.040E+05
18.660E+00	-3.577E-03	-6.503E-03	17.264E+04	-1.040E+05
18.758E+00	-2.970E-03	-6.449E-03	16.245E+04	-1.040E+05
18.856E+00	-2.367E-03	-6.399E-03	15.226E+04	-1.040E+05
18.954E+00	-1.770E-03	-6.352E-03	14.206E+04	-1.040E+05
19.052E+00	-1.177E-03	-6.308E-03	13.187E+04	-1.040E+05
19.150E+00	-5.879E-04	-6.268E-03	12.168E+04	-1.040E+05
19.248E+00	-2.759E-06	-6.231E-03	11.149E+04	-1.040E+05
19.346E+00	57.886E-05	-6.197E-03	10.130E+04	-1.040E+05
19.444E+00	11.573E-04	-6.166E-03	9.1104E+03	-1.040E+05
19.542E+00	17.329E-04	-6.138E-03	8.0.912E+03	-1.040E+05
19.640E+00	23.060E-04	-6.114E-03	7.0.720E+03	-1.040E+05
19.708E+00	27.014E-04	-6.098E-03	6.3.648E+03	-1.040E+05
19.776E+00	30.959E-04	-6.083E-03	5.6.576E+03	-1.040E+05
19.844E+00	34.894E-04	-6.071E-03	4.9.504E+03	-1.040E+05
19.912E+00	38.820E-04	-6.060E-03	4.2.432E+03	-1.040E+05
19.980E+00	42.740E-04	-6.050E-03	3.5.360E+03	-1.040E+05
20.048E+00	46.654E-04	-6.042E-03	2.8.288E+03	-1.040E+05
20.116E+00	50.564E-04	-6.036E-03	2.1.216E+03	-1.040E+05
20.184E+00	54.470E-04	-6.032E-03	1.4.144E+03	-1.040E+05
20.252E+00	58.373E-04	-6.030E-03	7.0.720E+02	-1.040E+05
20.320E+00	62.275E-04	-6.029E-03	6.2.573E-11	-1.040E+05
20.320E+00	62.275E-04	-6.029E-03	6.2.573E-11	18.754E-10
20.367E+00	65.109E-04	-6.029E-03	7.1.388E-11	18.754E-10
20.414E+00	67.942E-04	-6.029E-03	8.0.202E-11	18.754E-10
20.461E+00	70.776E-04	-6.029E-03	8.9.016E-11	18.754E-10
20.508E+00	73.609E-04	-6.029E-03	9.7.830E-11	18.754E-10
20.555E+00	76.443E-04	-6.029E-03	1.0.664E-10	18.754E-10
20.602E+00	79.277E-04	-6.029E-03	1.1.546E-10	18.754E-10
20.649E+00	82.110E-04	-6.029E-03	1.2.427E-10	18.754E-10
20.696E+00	84.944E-04	-6.029E-03	1.3.309E-10	18.754E-10
20.743E+00	87.777E-04	-6.029E-03	1.4.190E-10	18.754E-10
20.790E+00	90.611E-04	-6.029E-03	1.5.072E-10	18.754E-10
20.875E+00	95.735E-04	-6.029E-03	1.6.666E-10	18.754E-10
20.960E+00	10.086E-03	-6.029E-03	1.8.260E-10	18.754E-10
21.045E+00	10.598E-03	-6.029E-03	1.9.854E-10	18.754E-10
21.130E+00	11.111E-03	-6.029E-03	2.1.448E-10	18.754E-10

Table A.2 Continued.

21.215E+00	11.623E-03	-6.029E-03	23.042E-10	18.754E-10
21.300E+00	12.136E-03	-6.029E-03	24.636E-10	18.754E-10
21.385E+00	12.648E-03	-6.029E-03	26.230E-10	18.754E-10
21.470E+00	13.161E-03	-6.029E-03	27.824E-10	18.754E-10
21.555E+00	13.673E-03	-6.029E-03	29.418E-10	18.754E-10
21.640E+00	14.185E-03	-6.029E-03	31.012E-10	18.754E-10
21.741E+00	14.794E-03	-6.029E-03	32.906E-10	18.754E-10
21.842E+00	15.403E-03	-6.029E-03	34.801E-10	18.754E-10
21.943E+00	16.012E-03	-6.029E-03	36.695E-10	18.754E-10
22.044E+00	16.621E-03	-6.029E-03	38.589E-10	18.754E-10
22.145E+00	17.230E-03	-6.029E-03	40.483E-10	18.754E-10
22.246E+00	17.839E-03	-6.029E-03	42.377E-10	18.754E-10
22.347E+00	18.448E-03	-6.029E-03	44.271E-10	18.754E-10
22.448E+00	19.057E-03	-6.029E-03	46.165E-10	18.754E-10
22.549E+00	19.666E-03	-6.029E-03	48.060E-10	18.754E-10
22.650E+00	20.275E-03	-6.029E-03	49.954E-10	18.754E-10
22.785E+00	21.088E-03	-6.029E-03	52.485E-10	18.754E-10
22.920E+00	21.902E-03	-6.029E-03	55.017E-10	18.754E-10
23.055E+00	22.716E-03	-6.029E-03	57.549E-10	18.754E-10
23.190E+00	23.530E-03	-6.029E-03	60.081E-10	18.754E-10
23.325E+00	24.344E-03	-6.029E-03	62.612E-10	18.754E-10
23.460E+00	25.158E-03	-6.029E-03	65.144E-10	18.754E-10
23.595E+00	25.972E-03	-6.029E-03	67.676E-10	18.754E-10
23.730E+00	26.786E-03	-6.029E-03	70.208E-10	18.754E-10
23.865E+00	27.599E-03	-6.029E-03	72.739E-10	18.754E-10
24.000E+00	28.413E-03	-6.029E-03	75.271E-10	18.754E-10
24.000E+00	28.413E-03	-6.029E-03	75.271E-10	18.754E-10

Table A.3 Modeling data for the static load analysis of the center plate of the articulation joint on the verge of yielding. Magnitude of concentrated moment load on section #1 is $-1.31\text{E}06$ in·lb (0.148 MNm).

PROBLEM DATA:

FINEYIELD

CREATED BY:HAMMOCKTV
EDITED BY:HAMMOCKTV

ON:10-Aug-88 09:43 AM
ON:14-Feb-89 08:33 AM

For section # 1 :

Length of this section.....= $1.5700\text{E}+00$ in
Modulus of Elasticity.....= $3.0000\text{E}+07$ psi
Area Moment of Inertia.....= $1.5920\text{E}+01$ in⁴
Shear Modulus.....= $1.1500\text{E}+07$ psi
Shear Area.....= $5.1380\text{E}+01$ in²
Magnitude of Concentrated Load.....= $1.3315\text{E}+04$ lb
Stiffness of Support.....= $6.6742\text{E}+04$ lb/in

For section # 2 :

Length of this section.....= $5.0800\text{E}+00$ in
Modulus of Elasticity.....= $3.0000\text{E}+07$ psi
Area Moment of Inertia.....= $1.5920\text{E}+01$ in⁴
Shear Modulus.....= $1.1500\text{E}+07$ psi
Shear Area.....= $5.1380\text{E}+01$ in²

For section # 3 :

Length of this section.....= $8.1000\text{E}-01$ in
Modulus of Elasticity.....= $3.0000\text{E}+07$ psi
Area Moment of Inertia.....= $1.5500\text{E}+01$ in⁴
Shear Modulus.....= $1.1500\text{E}+07$ psi
Shear Area.....= $5.1680\text{E}+01$ in²

For section # 4 :

Length of this section.....= $5.1000\text{E}-01$ in
Modulus of Elasticity.....= $3.0000\text{E}+07$ psi
Area Moment of Inertia.....= $1.5270\text{E}+01$ in⁴
Shear Modulus.....= $1.1500\text{E}+07$ psi
Shear Area.....= $5.1110\text{E}+01$ in²

For section # 5 :

Length of this section.....= $6.8000\text{E}-01$ in
Modulus of Elasticity.....= $3.0000\text{E}+07$ psi
Area Moment of Inertia.....= $1.3060\text{E}+01$ in⁴
Shear Modulus.....= $1.1500\text{E}+07$ psi
Shear Area.....= $4.3530\text{E}+01$ in²

For section # 6 :

Length of this section.....= $1.0100\text{E}+00$ in
Modulus of Elasticity.....= $3.0000\text{E}+07$ psi
Area Moment of Inertia.....= $1.1240\text{E}+01$ in⁴
Shear Modulus.....= $1.1500\text{E}+07$ psi
Shear Area.....= $3.7330\text{E}+01$ in²

For section # 7 :

Length of this section.....= $1.0100\text{E}+00$ in
Modulus of Elasticity.....= $3.0000\text{E}+07$ psi
Area Moment of Inertia.....= $1.0100\text{E}+01$ in⁴
Shear Modulus.....= $1.1500\text{E}+07$ psi
Shear Area.....= $3.3450\text{E}+01$ in²

Table A.3 (continued)

For section # 8 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=9.3100E+00 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.0740E+01 in²

For section # 9 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.7800E+00 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.8910E+01 in²

For section # 10 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.4900E+00 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.7880E+01 in²

For section # 11 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.4800E+00 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.7780E+01 in²

For section # 12 :

Length of this section.....=6.8000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.8400E+00 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.8890E+01 in²

For section # 13 :

Length of this section.....=5.1000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=9.1400E+00 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.9890E+01 in²

For section # 14 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.0010E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.2780E+01 in²

For section # 15 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.1570E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.8160E+01 in²

For section # 16 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.1280E+01 in⁴

Table A.3 (continued)

Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.6790E+01 in ⁻²
For section # 17 :	
Length of this section.....	=4.4000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.1110E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.5820E+01 in ⁻²
For section # 18 :	
Length of this section.....	=3.0000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0930E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.3850E+01 in ⁻²
For section # 19 :	
Length of this section.....	=6.1000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0910E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.3920E+01 in ⁻²
For section # 20 :	
Length of this section.....	=9.8000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0230E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.2470E+01 in ⁻²
For section # 21 :	
Length of this section.....	=6.8000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=9.3700E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.1160E+01 in ⁻²
Stiffness of Support.....	=4.6845E+06 lb/in
For section # 22 :	
Length of this section.....	=4.7000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=9.0800E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.1820E+01 in ⁻²
For section # 23 :	
Length of this section.....	=8.5000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=8.2900E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=2.9080E+01 in ⁻²
For section # 24 :	
Length of this section.....	=1.0100E+00 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=6.8900E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=2.4160E+01 in ⁻²
For section # 25 :	
Length of this section.....	=1.3500E+00 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=4.9000E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=1.7170E+01 in ⁻²

Table A.4 Static response for the center plate of the articulation joint on the verge of yielding.

*** STATIC RESPONSE.

***PROBLEM TITLE: FINEYIELD

***MODELED BY: HAMMOCKTV ON: 10-Aug-88 09:43 AM

***EDITED BY: HAMMOCKTV ON: 14-Feb-89 08:33 AM

***SAVED BY: HAMMOCKTV ON: 14-Feb-89 08:36 AM

LENGTH (in)	DEFLECTION (in)	SLOPE (Radian)	MOMENT (lb-in)	SHEAR (lb)
0.000E+00	-9.521E-01	-6.625E-02	0.000E+00	0.000E+00
78.500E-02	-9.001E-01	-6.625E-02	0.000E+00	0.000E+00
15.700E-01	-8.481E-01	-6.625E-02	0.000E+00	0.000E+00
15.700E-01	-8.481E-01	-6.625E-02	13.110E+05	-6.992E+04
41.100E-01	-6.886E-01	-5.975E-02	11.334E+05	-6.992E+04
66.500E-01	-5.444E-01	-5.419E-02	95.581E+04	-6.992E+04
66.500E-01	-5.444E-01	-5.419E-02	95.581E+04	-6.992E+04
70.550E-01	-5.227E-01	-5.337E-02	92.749E+04	-6.992E+04
74.600E-01	-5.013E-01	-5.258E-02	89.917E+04	-6.992E+04
77.150E-01	-4.880E-01	-5.208E-02	88.134E+04	-6.992E+04
79.700E-01	-4.748E-01	-5.159E-02	86.351E+04	-6.992E+04
83.100E-01	-4.574E-01	-5.086E-02	83.974E+04	-6.992E+04
86.500E-01	-4.403E-01	-5.014E-02	81.597E+04	-6.992E+04
91.550E-01	-4.153E-01	-4.894E-02	78.066E+04	-6.992E+04
96.600E-01	-3.910E-01	-4.780E-02	74.535E+04	-6.992E+04
10.165E+00	-3.673E-01	-4.659E-02	71.004E+04	-6.992E+04
10.670E+00	-3.441E-01	-4.543E-02	67.473E+04	-6.992E+04
11.175E+00	-3.216E-01	-4.424E-02	63.942E+04	-6.992E+04
11.680E+00	-2.996E-01	-4.312E-02	60.411E+04	-6.992E+04
12.185E+00	-2.782E-01	-4.200E-02	56.880E+04	-6.992E+04
12.690E+00	-2.574E-01	-4.094E-02	53.349E+04	-6.992E+04
13.195E+00	-2.371E-01	-3.992E-02	49.818E+04	-6.992E+04
13.700E+00	-2.173E-01	-3.896E-02	46.287E+04	-6.992E+04
14.205E+00	-1.980E-01	-3.808E-02	42.756E+04	-6.992E+04
14.710E+00	-1.791E-01	-3.727E-02	39.225E+04	-6.992E+04
15.050E+00	-1.665E-01	-3.678E-02	36.848E+04	-6.992E+04
15.390E+00	-1.542E-01	-3.632E-02	34.471E+04	-6.992E+04
15.645E+00	-1.450E-01	-3.601E-02	32.688E+04	-6.992E+04
15.900E+00	-1.359E-01	-3.571E-02	30.905E+04	-6.992E+04
16.135E+00	-1.276E-01	-3.548E-02	29.262E+04	-6.992E+04
16.370E+00	-1.193E-01	-3.525E-02	27.618E+04	-6.992E+04
16.605E+00	-1.111E-01	-3.507E-02	25.975E+04	-6.992E+04
16.840E+00	-1.029E-01	-3.490E-02	24.332E+04	-6.992E+04
17.075E+00	-9.478E-02	-3.474E-02	22.689E+04	-6.992E+04
17.310E+00	-8.668E-02	-3.459E-02	21.046E+04	-6.992E+04
17.530E+00	-7.912E-02	-3.445E-02	19.508E+04	-6.992E+04
17.750E+00	-7.159E-02	-3.433E-02	17.969E+04	-6.992E+04
17.750E+00	-7.159E-02	-3.433E-02	17.969E+04	-6.992E+04
17.900E+00	-6.647E-02	-3.425E-02	16.921E+04	-6.992E+04
18.050E+00	-6.137E-02	-3.418E-02	15.872E+04	-6.992E+04
18.355E+00	-5.102E-02	-3.404E-02	13.739E+04	-6.992E+04
18.660E+00	-4.071E-02	-3.392E-02	11.607E+04	-6.992E+04
19.150E+00	-2.423E-02	-3.376E-02	81.806E+03	-6.992E+04
19.640E+00	-7.803E-03	-3.366E-02	47.546E+03	-6.992E+04
19.980E+00	35.663E-04	-3.361E-02	23.773E+03	-6.992E+04
20.320E+00	14.926E-03	-3.360E-02	-5.457E-12	-6.992E+04
20.320E+00	14.926E-03	-3.360E-02	-5.457E-12	-3.492E-10
20.555E+00	22.822E-03	-3.360E-02	-8.753E-11	-3.492E-10
20.790E+00	30.718E-03	-3.360E-02	-1.696E-10	-3.492E-10
21.215E+00	44.998E-03	-3.360E-02	-3.180E-10	-3.492E-10
21.640E+00	59.279E-03	-3.360E-02	-4.665E-10	-3.492E-10
22.145E+00	76.247E-03	-3.360E-02	-6.428E-10	-3.492E-10
22.650E+00	93.215E-03	-3.360E-02	-8.192E-10	-3.492E-10
23.325E+00	11.590E-02	-3.360E-02	-1.055E-09	-3.492E-10
24.000E+00	13.858E-02	-3.360E-02	-1.291E-09	-3.492E-10
24.000E+00	13.858E-02	-3.360E-02	-1.291E-09	-3.492E-10

Table A.5 Modeling data for the static load analysis of the center plate of the articulation joint to calculate moment stiffness. Magnitude of contracted moment load on section #1 is -100,000 in·lb. (0.0113 MPa).

PROBLEM DATA:

1

CREATED BY:HAMMOCKTV

ON:10-Aug-88 09:43 AM

EDITED BY:HAMMOCKTV

ON:14-Feb-89 08:37 AM

For section # 1 :

Length of this section.....=1.5700E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.5920E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=5.1380E+01 in²
 Stiffness of Support.....=6.6742E+04 lb/in

For section # 2 :

Length of this section.....=5.0800E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.5920E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=5.1380E+01 in²

For section # 3 :

Length of this section.....=8.1000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.5500E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=5.1680E+01 in²

For section # 4 :

Length of this section.....=5.1000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.5270E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=5.1110E+01 in²

For section # 5 :

Length of this section.....=6.8000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.3060E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=4.3530E+01 in²

For section # 6 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.1240E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.7330E+01 in²

For section # 7 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.0100E+01 in⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.3450E+01 in²

For section # 8 :

Table A.5 (continued)

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=9.3100E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.0740E+01 in⁻²

For section # 9 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.7800E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.8910E+01 in⁻²

For section # 10 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.4900E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.7880E+01 in⁻²

For section # 11 :

Length of this section.....=1.0100E+00 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.4800E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.7780E+01 in⁻²

For section # 12 :

Length of this section.....=6.8000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=8.8400E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.8890E+01 in⁻²

For section # 13 :

Length of this section.....=5.1000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=9.1400E+00 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=2.9890E+01 in⁻²

For section # 14 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.0010E+01 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.2780E+01 in⁻²

For section # 15 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.1570E+01 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi
 Shear Area.....=3.8160E+01 in⁻²

For section # 16 :

Length of this section.....=4.7000E-01 in
 Modulus of Elasticity.....=3.0000E+07 psi
 Area Moment of Inertia.....=1.1280E+01 in⁻⁴
 Shear Modulus.....=1.1500E+07 psi

Table A.5 (continued)

Shear Area.....	=3.6790E+01 in ⁻²
For section # 17 :	
Length of this section.....	=4.4000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.1110E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.5820E+01 in ⁻²
For section # 18 :	
Length of this section.....	=3.0000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0930E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.3850E+01 in ⁻²
For section # 19 :	
Length of this section.....	=6.1000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0910E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.3920E+01 in ⁻²
For section # 20 :	
Length of this section.....	=9.8000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=1.0230E+01 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.2470E+01 in ⁻²
For section # 21 :	
Length of this section.....	=6.8000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=9.3700E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.1160E+01 in ⁻²
Stiffness of Support.....	=4.6845E+06 lb/in
For section # 22 :	
Length of this section.....	=4.7000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=9.0800E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=3.1820E+01 in ⁻²
For section # 23 :	
Length of this section.....	=8.5000E-01 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=8.2900E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=2.9080E+01 in ⁻²
For section # 24 :	
Length of this section.....	=1.0100E+00 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=6.8900E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=2.4160E+01 in ⁻²
For section # 25 :	
Length of this section.....	=1.3500E+00 in
Modulus of Elasticity.....	=3.0000E+07 psi
Area Moment of Inertia.....	=4.9000E+00 in ⁻⁴
Shear Modulus.....	=1.1500E+07 psi
Shear Area.....	=1.7170E+01 in ⁻²

Table A.6 Static response for the center plate of the articulation joint to calculate moment stiffness.

*** STATIC RESPONSE.

***PROBLEM TITLE: 1

***MODELED BY: HAMMOCKTV

ON: 10-Aug-88 09:43 AM

***EDITED BY: HAMMOCKTV

ON: 14-Feb-89 08:37 AM

***SAVED BY: HAMMOCKTV

ON: 14-Feb-89 08:40 AM

LENGTH (in)	DEFLECTION (in)	SLOPE (Radian)	MOMENT (lb-in)	SHEAR (lb)
0.000E+00	-8.912E-02	-5.865E-03	0.000E+00	0.000E+00
78.500E-02	-8.451E-02	-5.865E-03	0.000E+00	0.000E+00
15.700E-01	-7.991E-02	-5.865E-03	0.000E+00	0.000E+00
15.700E-01	-7.991E-02	-5.865E-03	10.000E+04	-5.333E+03
41.100E-01	-6.568E-02	-5.369E-03	86.453E+03	-5.333E+03
66.500E-01	-5.262E-02	-4.945E-03	72.907E+03	-5.333E+03
66.500E-01	-5.262E-02	-4.945E-03	72.907E+03	-5.333E+03
70.550E-01	-5.063E-02	-4.883E-03	70.747E+03	-5.333E+03
74.600E-01	-4.867E-02	-4.822E-03	68.587E+03	-5.333E+03
77.150E-01	-4.745E-02	-4.784E-03	67.227E+03	-5.333E+03
79.700E-01	-4.624E-02	-4.747E-03	65.867E+03	-5.333E+03
83.100E-01	-4.464E-02	-4.691E-03	64.053E+03	-5.333E+03
86.500E-01	-4.305E-02	-4.636E-03	62.240E+03	-5.333E+03
91.550E-01	-4.074E-02	-4.545E-03	59.547E+03	-5.333E+03
96.600E-01	-3.848E-02	-4.458E-03	56.853E+03	-5.333E+03
10.165E+00	-3.626E-02	-4.365E-03	54.160E+03	-5.333E+03
10.670E+00	-3.408E-02	-4.277E-03	51.467E+03	-5.333E+03
11.175E+00	-3.195E-02	-4.186E-03	48.773E+03	-5.333E+03
11.680E+00	-2.987E-02	-4.101E-03	46.080E+03	-5.333E+03
12.185E+00	-2.783E-02	-4.015E-03	43.387E+03	-5.333E+03
12.690E+00	-2.583E-02	-3.934E-03	40.693E+03	-5.333E+03
13.195E+00	-2.387E-02	-3.856E-03	38.000E+03	-5.333E+03
13.700E+00	-2.195E-02	-3.784E-03	35.307E+03	-5.333E+03
14.205E+00	-2.006E-02	-3.716E-03	32.613E+03	-5.333E+03
14.710E+00	-1.821E-02	-3.654E-03	29.920E+03	-5.333E+03
15.050E+00	-1.698E-02	-3.617E-03	28.107E+03	-5.333E+03
15.390E+00	-1.576E-02	-3.582E-03	26.293E+03	-5.333E+03
15.645E+00	-1.486E-02	-3.558E-03	24.933E+03	-5.333E+03
15.900E+00	-1.396E-02	-3.536E-03	23.573E+03	-5.333E+03
16.135E+00	-1.313E-02	-3.518E-03	22.320E+03	-5.333E+03
16.370E+00	-1.231E-02	-3.501E-03	21.067E+03	-5.333E+03
16.605E+00	-1.149E-02	-3.487E-03	19.813E+03	-5.333E+03
16.840E+00	-1.068E-02	-3.474E-03	18.560E+03	-5.333E+03
17.075E+00	-9.864E-03	-3.461E-03	17.307E+03	-5.333E+03
17.310E+00	-9.054E-03	-3.450E-03	16.053E+03	-5.333E+03
17.530E+00	-8.299E-03	-3.440E-03	14.880E+03	-5.333E+03
17.750E+00	-7.547E-03	-3.430E-03	13.707E+03	-5.333E+03
17.750E+00	-7.547E-03	-3.430E-03	13.707E+03	-5.333E+03
17.900E+00	-7.035E-03	-3.424E-03	12.907E+03	-5.333E+03
18.050E+00	-6.523E-03	-3.418E-03	12.107E+03	-5.333E+03
18.355E+00	-5.487E-03	-3.408E-03	10.480E+03	-5.333E+03
18.660E+00	-4.453E-03	-3.399E-03	88.533E+02	-5.333E+03
19.150E+00	-2.798E-03	-3.387E-03	62.400E+02	-5.333E+03
19.640E+00	-1.147E-03	-3.379E-03	36.267E+02	-5.333E+03
19.980E+00	-3.911E-06	-3.376E-03	18.133E+02	-5.333E+03
20.320E+00	11.385E-04	-3.375E-03	-4.263E-12	-5.333E+03
20.320E+00	11.385E-04	-3.375E-03	-4.263E-12	23.533E-12
20.555E+00	19.315E-04	-3.375E-03	12.670E-13	23.533E-12
20.790E+00	27.246E-04	-3.375E-03	67.973E-13	23.533E-12
21.215E+00	41.587E-04	-3.375E-03	16.799E-12	23.533E-12
21.640E+00	55.929E-04	-3.375E-03	26.801E-12	23.533E-12
22.145E+00	72.971E-04	-3.375E-03	38.685E-12	23.533E-12
22.650E+00	90.012E-04	-3.375E-03	50.569E-12	23.533E-12
23.325E+00	11.279E-03	-3.375E-03	66.454E-12	23.533E-12
24.000E+00	13.557E-03	-3.375E-03	82.339E-12	23.533E-12
24.000E+00	13.557E-03	-3.375E-03	82.339E-12	23.533E-12

APPENDIX B

Finite Element Analysis of Revolute Joint Yoke Plate

- I. Model loaded with 33.33 lb (148.3N) on nodes 830, 327, and 333
(Displacement listing)
- II. Model loaded with 33.33 lb (148.3N) on nodes 830, 327, and 333
(Stress listing)
- III. Model loaded with -33.33 lb (-148.3N) on nodes 617, 623, and 975 (Displacement listing)
- IV. Model loaded with -300 lb (-1334.4N) on nodes 609, 611, and 966 (Displacement listing)
- V. Model loaded with -300 lb (-1334.4N) on nodes 609, 611, 966
(stress listing)
- VI. Model loaded with 300 lb (1334.4N) on nodes 312, 314 and 820
(Displacement listing)
- VII. Model loaded with 300 lb (1334.4N) on nodes 312, 314, and 820
(Stress Listing)

Note: All load sign conventions are determined by the coordinate sign conventions.

Table B.1 Model loaded with 33.33 lb (148.3 N) on nodes 327, 333 and 830 (stress listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:07:46

```

Group ID      : PERMANENT GROUP1
Analysis Dataset : 3 - CASE 1,LOAD 1,DISPLACEMENTS
Report Type    : Contour                               Units      : IN
Dataset Type   : Displacements                         Load Set    : 1
Frame of Reference: Global                             Data Component: Z-Component

```

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
312	0.000E+00	0.000E+00	9.254E-04	-2.592E-16	-1.242E-04	0.000E+00
313	0.000E+00	0.000E+00	9.114E-04	-3.420E-06	-1.238E-04	0.000E+00
314	0.000E+00	0.000E+00	8.710E-04	-6.115E-06	-1.225E-04	0.000E+00
315	0.000E+00	0.000E+00	8.088E-04	-7.552E-06	-1.199E-04	0.000E+00
316	0.000E+00	0.000E+00	7.320E-04	-7.531E-06	-1.156E-04	0.000E+00
317	0.000E+00	0.000E+00	6.483E-04	-6.232E-06	-1.095E-04	0.000E+00
318	0.000E+00	0.000E+00	5.656E-04	-4.137E-06	-1.018E-04	0.000E+00
325	0.000E+00	0.000E+00	1.051E-03	-2.338E-16	-1.264E-04	0.000E+00
326	0.000E+00	0.000E+00	1.178E-03	-2.193E-16	-1.285E-04	0.000E+00
327	0.000E+00	0.000E+00	1.623E-03	-2.329E-16	-1.332E-04	0.000E+00
328	0.000E+00	0.000E+00	1.031E-03	-4.758E-06	-1.260E-04	0.000E+00
329	0.000E+00	0.000E+00	1.152E-03	-5.892E-06	-1.282E-04	0.000E+00
330	0.000E+00	0.000E+00	1.574E-03	-9.651E-06	-1.331E-04	0.000E+00
331	0.000E+00	0.000E+00	9.743E-04	-8.490E-06	-1.248E-04	0.000E+00
332	0.000E+00	0.000E+00	1.079E-03	-1.056E-05	-1.269E-04	0.000E+00
333	0.000E+00	0.000E+00	1.436E-03	-1.783E-05	-1.322E-04	0.000E+00
334	0.000E+00	0.000E+00	8.879E-04	-1.052E-05	-1.219E-04	0.000E+00
335	0.000E+00	0.000E+00	9.664E-04	-1.321E-05	-1.238E-04	0.000E+00
336	0.000E+00	0.000E+00	1.225E-03	-2.330E-05	-1.292E-04	0.000E+00
337	0.000E+00	0.000E+00	7.822E-04	-1.072E-05	-1.167E-04	0.000E+00
338	0.000E+00	0.000E+00	8.303E-04	-1.371E-05	-1.179E-04	0.000E+00
339	0.000E+00	0.000E+00	7.749E-04	-2.505E-05	-1.216E-04	0.000E+00
340	0.000E+00	0.000E+00	6.690E-04	-9.571E-06	-1.091E-04	0.000E+00
341	0.000E+00	0.000E+00	6.865E-04	-1.270E-05	-1.091E-04	0.000E+00
342	0.000E+00	0.000E+00	7.203E-04	-2.427E-05	-1.093E-04	0.000E+00
343	0.000E+00	0.000E+00	5.597E-04	-7.823E-06	-9.959E-05	0.000E+00
344	0.000E+00	0.000E+00	5.502E-04	-1.111E-05	-9.817E-05	0.000E+00
345	0.000E+00	0.000E+00	4.937E-04	-2.129E-05	-9.322E-05	0.000E+00
360	0.000E+00	0.000E+00	6.194E-05	-2.879E-06	-2.825E-05	0.000E+00
364	0.000E+00	0.000E+00	1.399E-03	-2.189E-16	-1.325E-04	0.000E+00
365	0.000E+00	0.000E+00	1.362E-03	-7.576E-06	-1.319E-04	0.000E+00
366	0.000E+00	0.000E+00	1.257E-03	-1.384E-05	-1.307E-04	0.000E+00
367	0.000E+00	0.000E+00	1.097E-03	-1.822E-05	-1.269E-04	0.000E+00
368	0.000E+00	0.000E+00	9.059E-04	-1.971E-05	-1.197E-04	0.000E+00
369	0.000E+00	0.000E+00	7.081E-04	-1.906E-05	-1.091E-04	0.000E+00
370	0.000E+00	0.000E+00	5.262E-04	-1.699E-05	-9.593E-05	0.000E+00
377	0.000E+00	0.000E+00	2.110E-03	-2.766E-16	-1.362E-04	0.000E+00
378	0.000E+00	0.000E+00	2.035E-03	-1.271E-05	-1.365E-04	0.000E+00
379	0.000E+00	0.000E+00	1.819E-03	-2.337E-05	-1.364E-04	0.000E+00
380	0.000E+00	0.000E+00	1.493E-03	-3.032E-05	-1.341E-04	0.000E+00
381	0.000E+00	0.000E+00	1.107E-03	-3.313E-05	-1.265E-04	0.000E+00
382	0.000E+00	0.000E+00	7.218E-04	-3.360E-05	-1.105E-04	0.000E+00
383	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.1 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
384	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
385	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
386	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
387	0.000E+00	0.000E+00	1.865E-03	-2.563E-16	-1.342E-04	0.000E+00
388	0.000E+00	0.000E+00	1.803E-03	-1.144E-05	-1.344E-04	0.000E+00
389	0.000E+00	0.000E+00	1.627E-03	-2.113E-05	-1.339E-04	0.000E+00
390	0.000E+00	0.000E+00	1.360E-03	-2.731E-05	-1.315E-04	0.000E+00
391	0.000E+00	0.000E+00	1.043E-03	-2.954E-05	-1.239E-04	0.000E+00
392	0.000E+00	0.000E+00	7.250E-04	-2.901E-05	-1.097E-04	0.000E+00
393	0.000E+00	0.000E+00	1.283E-05	-3.779E-17	-1.200E-05	0.000E+00
394	0.000E+00	0.000E+00	1.424E-05	-2.357E-06	-1.302E-05	0.000E+00
395	0.000E+00	0.000E+00	2.103E-05	-5.008E-06	-1.748E-05	0.000E+00
396	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	0.000E+00	0.000E+00	4.270E-04	-3.216E-05	-8.906E-05	0.000E+00
401	0.000E+00	0.000E+00	1.974E-04	-2.767E-05	-6.268E-05	0.000E+00
402	0.000E+00	0.000E+00	4.664E-04	-2.659E-05	-9.133E-05	0.000E+00
403	0.000E+00	0.000E+00	2.641E-04	-2.233E-05	-7.047E-05	0.000E+00
404	0.000E+00	0.000E+00	1.385E-04	-1.611E-05	-5.162E-05	0.000E+00
405	0.000E+00	0.000E+00	1.125E-05	-1.029E-05	-1.472E-05	0.000E+00
406	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	0.000E+00	0.000E+00	1.350E-05	-7.895E-06	-1.710E-05	0.000E+00
408	0.000E+00	0.000E+00	3.242E-06	-4.197E-06	-8.206E-06	0.000E+00
411	0.000E+00	0.000E+00	3.242E-05	-7.407E-06	-2.354E-05	0.000E+00
412	0.000E+00	0.000E+00	6.765E-05	-1.104E-05	-3.558E-05	0.000E+00
413	0.000E+00	0.000E+00	9.187E-04	-1.733E-06	-1.241E-04	0.000E+00
414	0.000E+00	0.000E+00	9.877E-04	-2.445E-16	-1.252E-04	0.000E+00
415	0.000E+00	0.000E+00	1.041E-03	-2.424E-06	-1.263E-04	0.000E+00
416	0.000E+00	0.000E+00	1.114E-03	-2.254E-16	-1.274E-04	0.000E+00
417	0.000E+00	0.000E+00	1.166E-03	-3.012E-06	-1.283E-04	0.000E+00
418	0.000E+00	0.000E+00	1.287E-03	-2.168E-16	-1.308E-04	0.000E+00
419	0.000E+00	0.000E+00	1.382E-03	-3.922E-06	-1.322E-04	0.000E+00
420	0.000E+00	0.000E+00	1.511E-03	-2.243E-16	-1.334E-04	0.000E+00
421	0.000E+00	0.000E+00	1.601E-03	-5.220E-06	-1.333E-04	0.000E+00
422	0.000E+00	0.000E+00	9.835E-04	-2.137E-06	-1.251E-04	0.000E+00
423	0.000E+00	0.000E+00	1.108E-03	-2.759E-06	-1.273E-04	0.000E+00
424	0.000E+00	0.000E+00	1.280E-03	-3.432E-06	-1.307E-04	0.000E+00
425	0.000E+00	0.000E+00	1.500E-03	-4.633E-06	-1.331E-04	0.000E+00
426	0.000E+00	0.000E+00	9.709E-04	-4.148E-06	-1.248E-04	0.000E+00
427	0.000E+00	0.000E+00	1.091E-03	-5.364E-06	-1.271E-04	0.000E+00
428	0.000E+00	0.000E+00	1.256E-03	-6.654E-06	-1.304E-04	0.000E+00
429	0.000E+00	0.000E+00	1.468E-03	-8.596E-06	-1.328E-04	0.000E+00
430	0.000E+00	0.000E+00	9.504E-04	-5.929E-06	-1.244E-04	0.000E+00
431	0.000E+00	0.000E+00	1.064E-03	-7.669E-06	-1.266E-04	0.000E+00
432	0.000E+00	0.000E+00	1.218E-03	-9.559E-06	-1.299E-04	0.000E+00
433	0.000E+00	0.000E+00	1.416E-03	-1.218E-05	-1.323E-04	0.000E+00
434	0.000E+00	0.000E+00	9.225E-04	-7.374E-06	-1.236E-04	0.000E+00
435	0.000E+00	0.000E+00	1.026E-03	-9.577E-06	-1.258E-04	0.000E+00

Table B.1 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
436	0.000E+00	0.000E+00	1.167E-03	-1.210E-05	-1.290E-04	0.000E+00
437	0.000E+00	0.000E+00	1.346E-03	-1.570E-05	-1.318E-04	0.000E+00
438	0.000E+00	0.000E+00	8.882E-04	-8.433E-06	-1.225E-04	0.000E+00
439	0.000E+00	0.000E+00	9.803E-04	-1.100E-05	-1.246E-04	0.000E+00
440	0.000E+00	0.000E+00	1.104E-03	-1.416E-05	-1.275E-04	0.000E+00
441	0.000E+00	0.000E+00	1.260E-03	-1.882E-05	-1.305E-04	0.000E+00
442	0.000E+00	0.000E+00	8.485E-04	-9.056E-06	-1.209E-04	0.000E+00
443	0.000E+00	0.000E+00	9.272E-04	-1.189E-05	-1.228E-04	0.000E+00
444	0.000E+00	0.000E+00	1.032E-03	-1.563E-05	-1.254E-04	0.000E+00
445	0.000E+00	0.000E+00	1.162E-03	-2.083E-05	-1.281E-04	0.000E+00
446	0.000E+00	0.000E+00	8.044E-04	-9.260E-06	-1.188E-04	0.000E+00
447	0.000E+00	0.000E+00	8.687E-04	-1.228E-05	-1.204E-04	0.000E+00
448	0.000E+00	0.000E+00	9.527E-04	-1.648E-05	-1.224E-04	0.000E+00
449	0.000E+00	0.000E+00	1.054E-03	-2.200E-05	-1.249E-04	0.000E+00
450	0.000E+00	0.000E+00	7.574E-04	-9.071E-06	-1.162E-04	0.000E+00
451	0.000E+00	0.000E+00	8.065E-04	-1.220E-05	-1.173E-04	0.000E+00
452	0.000E+00	0.000E+00	8.690E-04	-1.677E-05	-1.187E-04	0.000E+00
453	0.000E+00	0.000E+00	9.412E-04	-2.249E-05	-1.207E-04	0.000E+00
454	0.000E+00	0.000E+00	7.085E-04	-8.558E-06	-1.130E-04	0.000E+00
455	0.000E+00	0.000E+00	7.424E-04	-1.178E-05	-1.135E-04	0.000E+00
456	0.000E+00	0.000E+00	7.835E-04	-1.660E-05	-1.143E-04	0.000E+00
457	0.000E+00	0.000E+00	8.271E-04	-2.239E-05	-1.154E-04	0.000E+00
458	0.000E+00	0.000E+00	6.591E-04	-7.808E-06	-1.093E-04	0.000E+00
459	0.000E+00	0.000E+00	6.782E-04	-1.109E-05	-1.091E-04	0.000E+00
460	0.000E+00	0.000E+00	6.986E-04	-1.606E-05	-1.091E-04	0.000E+00
461	0.000E+00	0.000E+00	7.152E-04	-2.179E-05	-1.092E-04	0.000E+00
462	0.000E+00	0.000E+00	6.103E-04	-6.898E-06	-1.051E-04	0.000E+00
463	0.000E+00	0.000E+00	6.154E-04	-1.030E-05	-1.041E-04	0.000E+00
464	0.000E+00	0.000E+00	6.166E-04	-1.527E-05	-1.033E-04	0.000E+00
465	0.000E+00	0.000E+00	6.089E-04	-2.072E-05	-1.022E-04	0.000E+00
466	0.000E+00	0.000E+00	5.631E-04	-5.935E-06	-1.005E-04	0.000E+00
467	0.000E+00	0.000E+00	5.554E-04	-9.448E-06	-9.881E-05	0.000E+00
468	0.000E+00	0.000E+00	5.394E-04	-1.431E-05	-9.710E-05	0.000E+00
469	0.000E+00	0.000E+00	5.108E-04	-1.929E-05	-9.464E-05	0.000E+00
518	0.000E+00	0.000E+00	8.913E-04	-4.835E-06	-1.233E-04	0.000E+00
519	0.000E+00	0.000E+00	1.003E-03	-6.740E-06	-1.255E-04	0.000E+00
520	0.000E+00	0.000E+00	1.116E-03	-8.380E-06	-1.276E-04	0.000E+00
521	0.000E+00	0.000E+00	1.310E-03	-1.075E-05	-1.314E-04	0.000E+00
522	0.000E+00	0.000E+00	1.507E-03	-1.356E-05	-1.326E-04	0.000E+00
523	0.000E+00	0.000E+00	8.399E-04	-6.939E-06	-1.213E-04	0.000E+00
524	0.000E+00	0.000E+00	9.311E-04	-9.647E-06	-1.235E-04	0.000E+00
525	0.000E+00	0.000E+00	1.022E-03	-1.207E-05	-1.256E-04	0.000E+00
526	0.000E+00	0.000E+00	1.177E-03	-1.625E-05	-1.291E-04	0.000E+00
527	0.000E+00	0.000E+00	1.331E-03	-2.104E-05	-1.312E-04	0.000E+00
528	0.000E+00	0.000E+00	7.701E-04	-7.665E-06	-1.179E-04	0.000E+00
529	0.000E+00	0.000E+00	8.345E-04	-1.073E-05	-1.195E-04	0.000E+00
530	0.000E+00	0.000E+00	8.976E-04	-1.359E-05	-1.211E-04	0.000E+00
531	0.000E+00	0.000E+00	1.001E-03	-1.909E-05	-1.236E-04	0.000E+00
532	0.000E+00	0.000E+00	1.099E-03	-2.432E-05	-1.259E-04	0.000E+00

Table B.1 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
533	0.000E+00	0.000E+00	6.896E-04	-6.988E-06	-1.128E-04	0.000E+00
534	0.000E+00	0.000E+00	7.246E-04	-1.018E-05	-1.132E-04	0.000E+00
535	0.000E+00	0.000E+00	7.570E-04	-1.319E-05	-1.138E-04	0.000E+00
536	0.000E+00	0.000E+00	8.048E-04	-1.941E-05	-1.148E-04	0.000E+00
537	0.000E+00	0.000E+00	8.444E-04	-2.476E-05	-1.160E-04	0.000E+00
538	0.000E+00	0.000E+00	6.062E-04	-5.231E-06	-1.059E-04	0.000E+00
539	0.000E+00	0.000E+00	6.131E-04	-8.638E-06	-1.046E-04	0.000E+00
540	0.000E+00	0.000E+00	6.165E-04	-1.177E-05	-1.039E-04	0.000E+00
541	0.000E+00	0.000E+00	6.142E-04	-1.798E-05	-1.028E-04	0.000E+00
542	0.000E+00	0.000E+00	6.025E-04	-2.285E-05	-1.017E-04	0.000E+00
557	0.000E+00	0.000E+00	1.532E-04	-1.053E-05	-5.111E-05	0.000E+00
562	0.000E+00	0.000E+00	9.779E-05	-7.233E-06	-3.881E-05	0.000E+00
609	0.000E+00	0.000E+00	3.148E-04	-4.855E-16	-6.184E-05	0.000E+00
610	0.000E+00	0.000E+00	3.215E-04	8.940E-07	-6.340E-05	0.000E+00
611	0.000E+00	0.000E+00	3.421E-04	1.382E-06	-6.793E-05	0.000E+00
612	0.000E+00	0.000E+00	3.770E-04	1.141E-06	-7.492E-05	0.000E+00
613	0.000E+00	0.000E+00	4.266E-04	2.437E-08	-8.354E-05	0.000E+00
614	0.000E+00	0.000E+00	4.903E-04	-1.861E-06	-9.283E-05	0.000E+00
615	0.000E+00	0.000E+00	2.539E-04	-4.922E-16	-5.910E-05	0.000E+00
616	0.000E+00	0.000E+00	1.961E-04	-6.052E-16	-5.593E-05	0.000E+00
617	0.000E+00	0.000E+00	5.721E-05	5.982E-15	-2.656E-05	0.000E+00
618	0.000E+00	0.000E+00	2.613E-04	-1.410E-06	-6.037E-05	0.000E+00
619	0.000E+00	0.000E+00	2.038E-04	-3.013E-06	-5.705E-05	0.000E+00
621	0.000E+00	0.000E+00	2.842E-04	-2.644E-06	-6.419E-05	0.000E+00
622	0.000E+00	0.000E+00	2.280E-04	-5.492E-06	-6.056E-05	0.000E+00
623	0.000E+00	0.000E+00	7.922E-05	-5.759E-06	-3.381E-05	0.000E+00
624	0.000E+00	0.000E+00	3.244E-04	-3.696E-06	-7.054E-05	0.000E+00
625	0.000E+00	0.000E+00	2.719E-04	-7.231E-06	-6.673E-05	0.000E+00
626	0.000E+00	0.000E+00	1.184E-04	-8.823E-06	-4.392E-05	0.000E+00
627	0.000E+00	0.000E+00	3.838E-04	-4.770E-06	-7.911E-05	0.000E+00
628	0.000E+00	0.000E+00	3.393E-04	-8.458E-06	-7.556E-05	0.000E+00
629	0.000E+00	0.000E+00	1.930E-04	-1.252E-05	-5.832E-05	0.000E+00
630	0.000E+00	0.000E+00	4.628E-04	-6.123E-06	-8.916E-05	0.000E+00
631	0.000E+00	0.000E+00	4.324E-04	-9.645E-06	-8.645E-05	0.000E+00
632	0.000E+00	0.000E+00	3.160E-04	-1.692E-05	-7.544E-05	0.000E+00
633	0.000E+00	0.000E+00	1.142E-04	-5.960E-16	-4.117E-05	0.000E+00
634	0.000E+00	0.000E+00	1.211E-04	-3.135E-06	-4.275E-05	0.000E+00
635	0.000E+00	0.000E+00	1.439E-04	-6.038E-06	-4.766E-05	0.000E+00
636	0.000E+00	0.000E+00	1.888E-04	-8.704E-06	-5.611E-05	0.000E+00
637	0.000E+00	0.000E+00	2.639E-04	-1.137E-05	-6.776E-05	0.000E+00
638	0.000E+00	0.000E+00	3.759E-04	-1.421E-05	-8.156E-05	0.000E+00
639	0.000E+00	0.000E+00	3.180E-04	5.163E-07	-6.224E-05	0.000E+00
640	0.000E+00	0.000E+00	2.840E-04	-4.754E-16	-6.105E-05	0.000E+00
641	0.000E+00	0.000E+00	2.577E-04	-6.827E-07	-5.950E-05	0.000E+00
642	0.000E+00	0.000E+00	2.246E-04	-5.323E-16	-5.783E-05	0.000E+00
643	0.000E+00	0.000E+00	2.004E-04	-1.529E-06	-5.646E-05	0.000E+00
644	0.000E+00	0.000E+00	1.521E-04	-8.047E-16	-4.856E-05	0.000E+00
645	0.000E+00	0.000E+00	1.183E-04	-1.586E-06	-4.206E-05	0.000E+00
646	0.000E+00	0.000E+00	8.263E-05	2.360E-15	-3.379E-05	0.000E+00

Table B.1 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
647	0.000E+00	0.000E+00	6.030E-05	-1.443E-06	-2.750E-05	0.000E+00
648	0.000E+00	0.000E+00	2.857E-04	-2.532E-07	-6.138E-05	0.000E+00
649	0.000E+00	0.000E+00	2.265E-04	-1.200E-06	-5.811E-05	0.000E+00
650	0.000E+00	0.000E+00	1.539E-04	-1.571E-06	-4.890E-05	0.000E+00
651	0.000E+00	0.000E+00	8.406E-05	-1.545E-06	-3.421E-05	0.000E+00
652	0.000E+00	0.000E+00	2.911E-04	-5.013E-07	-6.239E-05	0.000E+00
653	0.000E+00	0.000E+00	2.322E-04	-2.344E-06	-5.898E-05	0.000E+00
654	0.000E+00	0.000E+00	1.595E-04	-3.091E-06	-4.995E-05	0.000E+00
655	0.000E+00	0.000E+00	8.853E-05	-3.067E-06	-3.547E-05	0.000E+00
656	0.000E+00	0.000E+00	3.001E-04	-7.619E-07	-6.405E-05	0.000E+00
657	0.000E+00	0.000E+00	2.419E-04	-3.381E-06	-6.045E-05	0.000E+00
658	0.000E+00	0.000E+00	1.693E-04	-4.514E-06	-5.172E-05	0.000E+00
659	0.000E+00	0.000E+00	9.656E-05	-4.569E-06	-3.766E-05	0.000E+00
660	0.000E+00	0.000E+00	3.130E-04	-1.024E-06	-6.637E-05	0.000E+00
661	0.000E+00	0.000E+00	2.559E-04	-4.285E-06	-6.255E-05	0.000E+00
662	0.000E+00	0.000E+00	1.836E-04	-5.824E-06	-5.426E-05	0.000E+00
663	0.000E+00	0.000E+00	1.090E-04	-6.020E-06	-4.082E-05	0.000E+00
664	0.000E+00	0.000E+00	3.298E-04	-1.329E-06	-6.929E-05	0.000E+00
665	0.000E+00	0.000E+00	2.745E-04	-5.047E-06	-6.529E-05	0.000E+00
666	0.000E+00	0.000E+00	2.033E-04	-7.007E-06	-5.757E-05	0.000E+00
667	0.000E+00	0.000E+00	1.269E-04	-7.472E-06	-4.500E-05	0.000E+00
668	0.000E+00	0.000E+00	3.507E-04	-1.676E-06	-7.280E-05	0.000E+00
669	0.000E+00	0.000E+00	2.981E-04	-5.686E-06	-6.868E-05	0.000E+00
670	0.000E+00	0.000E+00	2.290E-04	-8.102E-06	-6.165E-05	0.000E+00
671	0.000E+00	0.000E+00	1.518E-04	-8.945E-06	-5.019E-05	0.000E+00
672	0.000E+00	0.000E+00	3.759E-04	-2.113E-06	-7.679E-05	0.000E+00
673	0.000E+00	0.000E+00	3.271E-04	-6.250E-06	-7.271E-05	0.000E+00
674	0.000E+00	0.000E+00	2.614E-04	-9.126E-06	-6.646E-05	0.000E+00
675	0.000E+00	0.000E+00	1.849E-04	-1.050E-05	-5.630E-05	0.000E+00
676	0.000E+00	0.000E+00	4.054E-04	-2.648E-06	-8.121E-05	0.000E+00
677	0.000E+00	0.000E+00	3.617E-04	-6.770E-06	-7.728E-05	0.000E+00
678	0.000E+00	0.000E+00	3.013E-04	-1.014E-05	-7.190E-05	0.000E+00
679	0.000E+00	0.000E+00	2.277E-04	-1.216E-05	-6.323E-05	0.000E+00
680	0.000E+00	0.000E+00	4.392E-04	-3.306E-06	-8.592E-05	0.000E+00
681	0.000E+00	0.000E+00	4.020E-04	-7.335E-06	-8.234E-05	0.000E+00
682	0.000E+00	0.000E+00	3.490E-04	-1.115E-05	-7.787E-05	0.000E+00
683	0.000E+00	0.000E+00	2.812E-04	-1.392E-05	-7.074E-05	0.000E+00
684	0.000E+00	0.000E+00	4.769E-04	-4.089E-06	-9.081E-05	0.000E+00
685	0.000E+00	0.000E+00	4.480E-04	-7.942E-06	-8.772E-05	0.000E+00
686	0.000E+00	0.000E+00	4.048E-04	-1.220E-05	-8.418E-05	0.000E+00
687	0.000E+00	0.000E+00	3.462E-04	-1.576E-05	-7.864E-05	0.000E+00
688	0.000E+00	0.000E+00	5.184E-04	-4.973E-06	-9.572E-05	0.000E+00
689	0.000E+00	0.000E+00	4.993E-04	-8.671E-06	-9.328E-05	0.000E+00
690	0.000E+00	0.000E+00	4.685E-04	-1.327E-05	-9.066E-05	0.000E+00
691	0.000E+00	0.000E+00	4.229E-04	-1.758E-05	-8.669E-05	0.000E+00
692	0.000E+00	0.000E+00	3.316E-04	1.324E-06	-6.537E-05	0.000E+00
693	0.000E+00	0.000E+00	2.727E-04	-1.958E-06	-6.206E-05	0.000E+00
694	0.000E+00	0.000E+00	2.160E-04	-4.297E-06	-5.873E-05	0.000E+00
695	0.000E+00	0.000E+00	1.327E-04	-4.622E-06	-4.525E-05	0.000E+00

Table B.1 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
696	0.000E+00	0.000E+00	7.074E-05	-4.321E-06	-3.102E-05	0.000E+00
697	0.000E+00	0.000E+00	3.591E-04	1.508E-06	-7.126E-05	0.000E+00
698	0.000E+00	0.000E+00	3.039E-04	-3.052E-06	-6.719E-05	0.000E+00
699	0.000E+00	0.000E+00	2.495E-04	-6.375E-06	-6.352E-05	0.000E+00
700	0.000E+00	0.000E+00	1.657E-04	-7.372E-06	-5.187E-05	0.000E+00
702	0.000E+00	0.000E+00	4.012E-04	8.151E-07	-7.922E-05	0.000E+00
703	0.000E+00	0.000E+00	3.533E-04	-4.078E-06	-7.472E-05	0.000E+00
704	0.000E+00	0.000E+00	3.045E-04	-7.780E-06	-7.101E-05	0.000E+00
705	0.000E+00	0.000E+00	2.247E-04	-9.975E-06	-6.193E-05	0.000E+00
707	0.000E+00	0.000E+00	4.577E-04	-7.627E-07	-8.831E-05	0.000E+00
708	0.000E+00	0.000E+00	4.221E-04	-5.282E-06	-8.414E-05	0.000E+00
709	0.000E+00	0.000E+00	3.843E-04	-8.904E-06	-8.095E-05	0.000E+00
710	0.000E+00	0.000E+00	3.174E-04	-1.267E-05	-7.472E-05	0.000E+00
711	0.000E+00	0.000E+00	2.506E-04	-1.457E-05	-6.701E-05	0.000E+00
712	0.000E+00	0.000E+00	5.271E-04	-2.949E-06	-9.749E-05	0.000E+00
713	0.000E+00	0.000E+00	5.099E-04	-6.841E-06	-9.449E-05	0.000E+00
714	0.000E+00	0.000E+00	4.894E-04	-1.020E-05	-9.239E-05	0.000E+00
715	0.000E+00	0.000E+00	4.480E-04	-1.549E-05	-8.891E-05	0.000E+00
716	0.000E+00	0.000E+00	4.002E-04	-1.907E-05	-8.459E-05	0.000E+00
717	0.000E+00	0.000E+00	1.744E-03	-2.446E-16	-1.334E-04	0.000E+00
718	0.000E+00	0.000E+00	1.987E-03	-2.671E-16	-1.352E-04	0.000E+00
719	0.000E+00	0.000E+00	1.838E-03	-5.946E-06	-1.343E-04	0.000E+00
720	0.000E+00	0.000E+00	2.078E-03	-6.506E-06	-1.363E-04	0.000E+00
721	0.000E+00	0.000E+00	1.730E-03	-5.671E-06	-1.336E-04	0.000E+00
722	0.000E+00	0.000E+00	1.970E-03	-6.260E-06	-1.353E-04	0.000E+00
723	0.000E+00	0.000E+00	1.689E-03	-1.062E-05	-1.337E-04	0.000E+00
724	0.000E+00	0.000E+00	1.919E-03	-1.212E-05	-1.354E-04	0.000E+00
725	0.000E+00	0.000E+00	1.622E-03	-1.521E-05	-1.333E-04	0.000E+00
726	0.000E+00	0.000E+00	1.835E-03	-1.747E-05	-1.354E-04	0.000E+00
727	0.000E+00	0.000E+00	1.531E-03	-1.971E-05	-1.328E-04	0.000E+00
728	0.000E+00	0.000E+00	1.722E-03	-2.232E-05	-1.351E-04	0.000E+00
729	0.000E+00	0.000E+00	1.420E-03	-2.323E-05	-1.321E-04	0.000E+00
730	0.000E+00	0.000E+00	1.584E-03	-2.619E-05	-1.345E-04	0.000E+00
731	0.000E+00	0.000E+00	1.293E-03	-2.547E-05	-1.303E-04	0.000E+00
732	0.000E+00	0.000E+00	1.426E-03	-2.891E-05	-1.328E-04	0.000E+00
733	0.000E+00	0.000E+00	1.154E-03	-2.680E-05	-1.272E-04	0.000E+00
734	0.000E+00	0.000E+00	1.254E-03	-3.059E-05	-1.297E-04	0.000E+00
735	0.000E+00	0.000E+00	1.010E-03	-2.740E-05	-1.227E-04	0.000E+00
736	0.000E+00	0.000E+00	1.076E-03	-3.145E-05	-1.251E-04	0.000E+00
737	0.000E+00	0.000E+00	8.644E-04	-2.736E-05	-1.168E-04	0.000E+00
738	0.000E+00	0.000E+00	8.964E-04	-3.178E-05	-1.187E-04	0.000E+00
739	0.000E+00	0.000E+00	7.237E-04	-2.666E-05	-1.095E-04	0.000E+00
740	0.000E+00	0.000E+00	7.244E-04	-3.132E-05	-1.100E-04	0.000E+00
741	0.000E+00	0.000E+00	1.718E-03	-1.637E-05	-1.342E-04	0.000E+00
742	0.000E+00	0.000E+00	1.931E-03	-1.821E-05	-1.365E-04	0.000E+00
743	0.000E+00	0.000E+00	1.494E-03	-2.468E-05	-1.331E-04	0.000E+00
744	0.000E+00	0.000E+00	1.657E-03	-2.728E-05	-1.357E-04	0.000E+00
745	0.000E+00	0.000E+00	1.200E-03	-2.863E-05	-1.283E-04	0.000E+00
746	0.000E+00	0.000E+00	1.298E-03	-3.202E-05	-1.309E-04	0.000E+00

Table B.1 (continued)

Page 7

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
747	0.000E+00	0.000E+00	8.796E-04	-2.943E-05	-1.176E-04	0.000E+00
748	0.000E+00	0.000E+00	9.088E-04	-3.348E-05	-1.197E-04	0.000E+00
749	0.000E+00	0.000E+00	5.673E-04	-3.319E-05	-1.005E-04	0.000E+00
750	0.000E+00	0.000E+00	5.900E-04	-2.796E-05	-1.010E-04	0.000E+00
751	0.000E+00	0.000E+00	5.976E-04	-2.540E-05	-1.013E-04	0.000E+00
752	0.000E+00	0.000E+00	4.815E-04	-2.394E-05	-9.232E-05	0.000E+00
753	0.000E+00	0.000E+00	5.800E-04	-3.054E-05	-1.007E-04	0.000E+00
754	0.000E+00	0.000E+00	4.483E-04	-2.929E-05	-9.024E-05	0.000E+00
755	0.000E+00	0.000E+00	3.031E-04	-3.039E-05	-7.641E-05	0.000E+00
756	0.000E+00	0.000E+00	3.588E-04	-2.460E-05	-8.117E-05	0.000E+00
757	0.000E+00	0.000E+00	3.328E-04	-2.735E-05	-7.898E-05	0.000E+00
758	0.000E+00	0.000E+00	3.813E-04	-2.188E-05	-8.301E-05	0.000E+00
759	0.000E+00	0.000E+00	2.920E-04	-1.977E-05	-7.323E-05	0.000E+00
760	0.000E+00	0.000E+00	2.327E-04	-2.473E-05	-6.697E-05	0.000E+00
761	0.000E+00	0.000E+00	1.928E-04	-1.593E-05	-5.967E-05	0.000E+00
762	0.000E+00	0.000E+00	9.986E-05	-1.341E-05	-4.366E-05	0.000E+00
763	0.000E+00	0.000E+00	1.445E-04	-1.357E-05	-5.137E-05	0.000E+00
764	0.000E+00	0.000E+00	1.080E-04	-1.147E-05	-4.383E-05	0.000E+00
765	0.000E+00	0.000E+00	6.961E-05	-8.772E-06	-3.405E-05	0.000E+00
766	0.000E+00	0.000E+00	2.645E-05	-6.185E-06	-2.045E-05	0.000E+00
767	0.000E+00	0.000E+00	5.717E-05	-7.272E-06	-2.986E-05	0.000E+00
768	0.000E+00	0.000E+00	4.591E-05	-5.845E-06	-2.583E-05	0.000E+00
769	0.000E+00	0.000E+00	1.789E-05	-3.762E-06	-1.528E-05	0.000E+00
770	0.000E+00	0.000E+00	4.008E-05	-4.378E-06	-2.320E-05	0.000E+00
771	0.000E+00	0.000E+00	3.377E-05	-2.867E-06	-2.061E-05	0.000E+00
772	0.000E+00	0.000E+00	1.430E-05	-1.184E-06	-1.281E-05	0.000E+00
774	0.000E+00	0.000E+00	3.310E-05	-1.434E-06	-2.004E-05	0.000E+00
775	0.000E+00	0.000E+00	3.078E-05	-1.385E-05	-1.916E-05	0.000E+00
776	0.000E+00	0.000E+00	2.883E-06	-4.536E-17	-5.409E-06	0.000E+00
777	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
778	0.000E+00	0.000E+00	3.490E-06	-7.045E-07	-6.167E-06	0.000E+00
779	0.000E+00	0.000E+00	3.218E-06	-1.356E-06	-5.860E-06	0.000E+00
780	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
781	0.000E+00	0.000E+00	4.491E-06	-2.420E-06	-7.481E-06	0.000E+00
782	0.000E+00	0.000E+00	5.421E-06	-3.159E-06	-8.853E-06	0.000E+00
783	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
784	0.000E+00	0.000E+00	6.898E-06	-3.873E-06	-1.051E-05	0.000E+00
785	0.000E+00	0.000E+00	8.509E-06	-4.585E-06	-1.222E-05	0.000E+00
786	0.000E+00	0.000E+00	2.384E-06	-5.181E-06	-6.369E-06	0.000E+00
787	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
788	0.000E+00	0.000E+00	3.479E-06	-3.982E-06	-8.937E-06	0.000E+00
789	0.000E+00	0.000E+00	1.286E-05	-8.698E-06	-1.622E-05	0.000E+00
790	0.000E+00	0.000E+00	5.931E-06	-4.759E-06	-1.171E-05	0.000E+00
792	0.000E+00	0.000E+00	1.784E-05	-7.992E-06	-1.985E-05	0.000E+00
794	0.000E+00	0.000E+00	1.820E-05	-7.079E-06	-1.908E-05	0.000E+00
795	0.000E+00	0.000E+00	5.254E-05	-1.174E-05	-3.280E-05	0.000E+00
796	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
797	0.000E+00	0.000E+00	1.154E-05	-6.158E-06	-1.579E-05	0.000E+00
798	0.000E+00	0.000E+00	3.330E-05	-1.016E-05	-2.660E-05	0.000E+00

Table B.1 (continued)

Page 8

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
799	0.000E+00	0.000E+00	1.527E-04	-2.136E-05	-5.496E-05	0.000E+00
803	0.000E+00	0.000E+00	1.965E-04	-1.915E-05	-6.120E-05	0.000E+00
804	0.000E+00	0.000E+00	4.819E-05	-9.176E-06	-2.949E-05	0.000E+00
805	0.000E+00	0.000E+00	1.281E-05	-5.790E-06	-1.554E-05	0.000E+00
806	0.000E+00	0.000E+00	9.660E-05	-1.615E-05	-4.407E-05	0.000E+00
808	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
809	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
810	0.000E+00	0.000E+00	4.704E-06	-4.417E-06	-1.051E-05	0.000E+00
811	0.000E+00	0.000E+00	1.577E-05	-7.947E-06	-1.867E-05	0.000E+00
812	0.000E+00	0.000E+00	3.720E-05	-1.643E-05	-2.748E-05	0.000E+00
813	0.000E+00	0.000E+00	7.756E-05	-2.121E-05	-3.980E-05	0.000E+00
814	0.000E+00	0.000E+00	1.313E-04	-2.488E-05	-5.165E-05	0.000E+00
815	0.000E+00	0.000E+00	4.682E-05	-1.292E-05	-3.132E-05	0.000E+00
816	0.000E+00	0.000E+00	6.519E-05	-1.732E-05	-3.651E-05	0.000E+00
817	0.000E+00	0.000E+00	3.416E-05	-1.347E-05	-2.650E-05	0.000E+00
818	0.000E+00	0.000E+00	3.277E-05	-1.228E-05	-2.619E-05	0.000E+00
819	0.000E+00	0.000E+00	9.114E-04	3.420E-06	-1.238E-04	0.000E+00
820	0.000E+00	0.000E+00	8.710E-04	6.115E-06	-1.225E-04	0.000E+00
821	0.000E+00	0.000E+00	8.088E-04	7.552E-06	-1.199E-04	0.000E+00
822	0.000E+00	0.000E+00	7.320E-04	7.531E-06	-1.156E-04	0.000E+00
823	0.000E+00	0.000E+00	6.483E-04	6.232E-06	-1.095E-04	0.000E+00
824	0.000E+00	0.000E+00	5.656E-04	4.137E-06	-1.018E-04	0.000E+00
825	0.000E+00	0.000E+00	1.031E-03	4.758E-06	-1.260E-04	0.000E+00
826	0.000E+00	0.000E+00	1.152E-03	5.892E-06	-1.282E-04	0.000E+00
827	0.000E+00	0.000E+00	1.574E-03	9.651E-06	-1.331E-04	0.000E+00
828	0.000E+00	0.000E+00	9.743E-04	8.490E-06	-1.248E-04	0.000E+00
829	0.000E+00	0.000E+00	1.079E-03	1.056E-05	-1.269E-04	0.000E+00
830	0.000E+00	0.000E+00	1.436E-03	1.783E-05	-1.322E-04	0.000E+00
831	0.000E+00	0.000E+00	8.879E-04	1.052E-05	-1.219E-04	0.000E+00
832	0.000E+00	0.000E+00	9.664E-04	1.321E-05	-1.238E-04	0.000E+00
833	0.000E+00	0.000E+00	1.225E-03	2.330E-05	-1.292E-04	0.000E+00
834	0.000E+00	0.000E+00	7.822E-04	1.072E-05	-1.167E-04	0.000E+00
835	0.000E+00	0.000E+00	8.303E-04	1.371E-05	-1.179E-04	0.000E+00
836	0.000E+00	0.000E+00	9.749E-04	2.505E-05	-1.216E-04	0.000E+00
837	0.000E+00	0.000E+00	6.690E-04	9.571E-06	-1.091E-04	0.000E+00
838	0.000E+00	0.000E+00	6.865E-04	1.270E-05	-1.091E-04	0.000E+00
839	0.000E+00	0.000E+00	7.203E-04	2.427E-05	-1.093E-04	0.000E+00
840	0.000E+00	0.000E+00	5.597E-04	7.823E-06	-9.959E-05	0.000E+00
841	0.000E+00	0.000E+00	5.502E-04	1.111E-05	-9.817E-05	0.000E+00
842	0.000E+00	0.000E+00	4.937E-04	2.129E-05	-9.322E-05	0.000E+00
847	0.000E+00	0.000E+00	1.362E-03	7.576E-06	-1.319E-04	0.000E+00
848	0.000E+00	0.000E+00	1.257E-03	1.384E-05	-1.307E-04	0.000E+00
849	0.000E+00	0.000E+00	1.097E-03	1.822E-05	-1.269E-04	0.000E+00
850	0.000E+00	0.000E+00	9.059E-04	1.971E-05	-1.197E-04	0.000E+00
851	0.000E+00	0.000E+00	7.081E-04	1.906E-05	-1.091E-04	0.000E+00
852	0.000E+00	0.000E+00	5.262E-04	1.699E-05	-9.593E-05	0.000E+00
853	0.000E+00	0.000E+00	2.035E-03	1.271E-05	-1.365E-04	0.000E+00
854	0.000E+00	0.000E+00	1.819E-03	2.337E-05	-1.364E-04	0.000E+00
855	0.000E+00	0.000E+00	1.493E-03	3.032E-05	-1.341E-04	0.000E+00

Table B.1 (continued)

Page 9

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
856	0.000E+00	0.000E+00	1.107E-03	3.313E-05	-1.265E-04	0.000E+00
857	0.000E+00	0.000E+00	7.218E-04	3.360E-05	-1.105E-04	0.000E+00
858	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
859	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
860	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
861	0.000E+00	0.000E+00	1.803E-03	1.144E-05	-1.344E-04	0.000E+00
862	0.000E+00	0.000E+00	1.627E-03	2.113E-05	-1.339E-04	0.000E+00
863	0.000E+00	0.000E+00	1.360E-03	2.731E-05	-1.315E-04	0.000E+00
864	0.000E+00	0.000E+00	1.043E-03	2.954E-05	-1.239E-04	0.000E+00
865	0.000E+00	0.000E+00	7.250E-04	2.901E-05	-1.097E-04	0.000E+00
866	0.000E+00	0.000E+00	1.424E-05	2.357E-06	-1.302E-05	0.000E+00
867	0.000E+00	0.000E+00	2.103E-05	5.008E-06	-1.748E-05	0.000E+00
868	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
869	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
870	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
871	0.000E+00	0.000E+00	4.270E-04	3.216E-05	-8.906E-05	0.000E+00
872	0.000E+00	0.000E+00	1.974E-04	2.767E-05	-6.268E-05	0.000E+00
873	0.000E+00	0.000E+00	4.664E-04	2.659E-05	-9.133E-05	0.000E+00
874	0.000E+00	0.000E+00	2.641E-04	2.233E-05	-7.047E-05	0.000E+00
875	0.000E+00	0.000E+00	1.385E-04	1.611E-05	-5.162E-05	0.000E+00
876	0.000E+00	0.000E+00	1.125E-05	1.029E-05	-1.472E-05	0.000E+00
877	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
878	0.000E+00	0.000E+00	1.350E-05	7.895E-06	-1.710E-05	0.000E+00
879	0.000E+00	0.000E+00	3.242E-06	4.197E-06	-8.206E-06	0.000E+00
880	0.000E+00	0.000E+00	3.242E-05	7.407E-06	-2.354E-05	0.000E+00
881	0.000E+00	0.000E+00	6.765E-05	1.104E-05	-3.558E-05	0.000E+00
882	0.000E+00	0.000E+00	9.187E-04	1.733E-06	-1.241E-04	0.000E+00
883	0.000E+00	0.000E+00	1.041E-03	2.424E-06	-1.263E-04	0.000E+00
884	0.000E+00	0.000E+00	1.166E-03	3.012E-06	-1.283E-04	0.000E+00
885	0.000E+00	0.000E+00	1.382E-03	3.922E-06	-1.322E-04	0.000E+00
886	0.000E+00	0.000E+00	1.601E-03	5.220E-06	-1.333E-04	0.000E+00
887	0.000E+00	0.000E+00	9.835E-04	2.137E-06	-1.251E-04	0.000E+00
888	0.000E+00	0.000E+00	1.108E-03	2.759E-06	-1.273E-04	0.000E+00
889	0.000E+00	0.000E+00	1.280E-03	3.432E-06	-1.307E-04	0.000E+00
890	0.000E+00	0.000E+00	1.500E-03	4.633E-06	-1.331E-04	0.000E+00
891	0.000E+00	0.000E+00	9.709E-04	4.148E-06	-1.248E-04	0.000E+00
892	0.000E+00	0.000E+00	1.091E-03	5.364E-06	-1.271E-04	0.000E+00
893	0.000E+00	0.000E+00	1.256E-03	6.654E-06	-1.304E-04	0.000E+00
894	0.000E+00	0.000E+00	1.468E-03	8.596E-06	-1.328E-04	0.000E+00
895	0.000E+00	0.000E+00	9.504E-04	5.929E-06	-1.244E-04	0.000E+00
896	0.000E+00	0.000E+00	1.064E-03	7.669E-06	-1.266E-04	0.000E+00
897	0.000E+00	0.000E+00	1.218E-03	9.559E-06	-1.299E-04	0.000E+00
898	0.000E+00	0.000E+00	1.416E-03	1.218E-05	-1.323E-04	0.000E+00
899	0.000E+00	0.000E+00	9.225E-04	7.374E-06	-1.236E-04	0.000E+00
900	0.000E+00	0.000E+00	1.026E-03	9.577E-06	-1.258E-04	0.000E+00
901	0.000E+00	0.000E+00	1.167E-03	1.210E-05	-1.290E-04	0.000E+00
902	0.000E+00	0.000E+00	1.346E-03	1.570E-05	-1.318E-04	0.000E+00
903	0.000E+00	0.000E+00	8.882E-04	8.433E-06	-1.225E-04	0.000E+00
904	0.000E+00	0.000E+00	9.803E-04	1.100E-05	-1.246E-04	0.000E+00

Table B.1 (continued)

Page 10

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
905	0.000E+00	0.000E+00	1.104E-03	1.416E-05	-1.275E-04	0.000E+00
906	0.000E+00	0.000E+00	1.260E-03	1.882E-05	-1.305E-04	0.000E+00
907	0.000E+00	0.000E+00	8.485E-04	9.056E-06	-1.209E-04	0.000E+00
908	0.000E+00	0.000E+00	9.272E-04	1.189E-05	-1.228E-04	0.000E+00
909	0.000E+00	0.000E+00	1.032E-03	1.563E-05	-1.254E-04	0.000E+00
910	0.000E+00	0.000E+00	1.162E-03	2.083E-05	-1.281E-04	0.000E+00
911	0.000E+00	0.000E+00	8.044E-04	9.260E-06	-1.188E-04	0.000E+00
912	0.000E+00	0.000E+00	8.687E-04	1.228E-05	-1.204E-04	0.000E+00
913	0.000E+00	0.000E+00	9.527E-04	1.648E-05	-1.224E-04	0.000E+00
914	0.000E+00	0.000E+00	1.054E-03	2.200E-05	-1.249E-04	0.000E+00
915	0.000E+00	0.000E+00	7.574E-04	9.071E-06	-1.162E-04	0.000E+00
916	0.000E+00	0.000E+00	8.065E-04	1.220E-05	-1.173E-04	0.000E+00
917	0.000E+00	0.000E+00	8.690E-04	1.677E-05	-1.187E-04	0.000E+00
918	0.000E+00	0.000E+00	9.412E-04	2.249E-05	-1.207E-04	0.000E+00
919	0.000E+00	0.000E+00	7.085E-04	8.558E-06	-1.130E-04	0.000E+00
920	0.000E+00	0.000E+00	7.424E-04	1.178E-05	-1.135E-04	0.000E+00
921	0.000E+00	0.000E+00	7.835E-04	1.660E-05	-1.143E-04	0.000E+00
922	0.000E+00	0.000E+00	8.271E-04	2.239E-05	-1.154E-04	0.000E+00
923	0.000E+00	0.000E+00	6.591E-04	7.808E-06	-1.093E-04	0.000E+00
924	0.000E+00	0.000E+00	6.782E-04	1.109E-05	-1.091E-04	0.000E+00
925	0.000E+00	0.000E+00	6.986E-04	1.606E-05	-1.091E-04	0.000E+00
926	0.000E+00	0.000E+00	7.152E-04	2.179E-05	-1.092E-04	0.000E+00
927	0.000E+00	0.000E+00	6.103E-04	6.898E-06	-1.051E-04	0.000E+00
928	0.000E+00	0.000E+00	6.154E-04	1.030E-05	-1.041E-04	0.000E+00
929	0.000E+00	0.000E+00	6.166E-04	1.527E-05	-1.033E-04	0.000E+00
930	0.000E+00	0.000E+00	6.089E-04	2.072E-05	-1.022E-04	0.000E+00
931	0.000E+00	0.000E+00	5.631E-04	5.935E-06	-1.005E-04	0.000E+00
932	0.000E+00	0.000E+00	5.554E-04	9.448E-06	-9.881E-05	0.000E+00
933	0.000E+00	0.000E+00	5.394E-04	1.431E-05	-9.710E-05	0.000E+00
934	0.000E+00	0.000E+00	5.108E-04	1.929E-05	-9.464E-05	0.000E+00
935	0.000E+00	0.000E+00	8.913E-04	4.835E-06	-1.233E-04	0.000E+00
936	0.000E+00	0.000E+00	1.003E-03	6.740E-06	-1.255E-04	0.000E+00
937	0.000E+00	0.000E+00	1.116E-03	8.380E-06	-1.276E-04	0.000E+00
938	0.000E+00	0.000E+00	1.310E-03	1.075E-05	-1.314E-04	0.000E+00
939	0.000E+00	0.000E+00	1.507E-03	1.356E-05	-1.326E-04	0.000E+00
940	0.000E+00	0.000E+00	8.399E-04	6.939E-06	-1.213E-04	0.000E+00
941	0.000E+00	0.000E+00	9.311E-04	9.647E-06	-1.235E-04	0.000E+00
942	0.000E+00	0.000E+00	1.022E-03	1.207E-05	-1.256E-04	0.000E+00
943	0.000E+00	0.000E+00	1.177E-03	1.625E-05	-1.291E-04	0.000E+00
944	0.000E+00	0.000E+00	1.331E-03	2.104E-05	-1.312E-04	0.000E+00
945	0.000E+00	0.000E+00	7.701E-04	7.665E-06	-1.179E-04	0.000E+00
946	0.000E+00	0.000E+00	8.345E-04	1.073E-05	-1.195E-04	0.000E+00
947	0.000E+00	0.000E+00	8.976E-04	1.359E-05	-1.211E-04	0.000E+00
948	0.000E+00	0.000E+00	1.001E-03	1.909E-05	-1.236E-04	0.000E+00
949	0.000E+00	0.000E+00	1.099E-03	2.432E-05	-1.259E-04	0.000E+00
950	0.000E+00	0.000E+00	6.896E-04	6.988E-06	-1.128E-04	0.000E+00
951	0.000E+00	0.000E+00	7.246E-04	1.018E-05	-1.132E-04	0.000E+00
952	0.000E+00	0.000E+00	7.570E-04	1.319E-05	-1.138E-04	0.000E+00
953	0.000E+00	0.000E+00	8.048E-04	1.941E-05	-1.148E-04	0.000E+00

Table B.1 (continued)

Page 11

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
954	0.000E+00	0.000E+00	8.444E-04	2.476E-05	-1.160E-04	0.000E+00
955	0.000E+00	0.000E+00	6.062E-04	5.231E-06	-1.059E-04	0.000E+00
956	0.000E+00	0.000E+00	6.131E-04	8.638E-06	-1.046E-04	0.000E+00
957	0.000E+00	0.000E+00	6.165E-04	1.177E-05	-1.039E-04	0.000E+00
958	0.000E+00	0.000E+00	6.142E-04	1.798E-05	-1.028E-04	0.000E+00
959	0.000E+00	0.000E+00	6.025E-04	2.285E-05	-1.017E-04	0.000E+00
960	0.000E+00	0.000E+00	4.002E-04	1.907E-05	-8.459E-05	0.000E+00
964	0.000E+00	0.000E+00	6.030E-05	1.443E-06	-2.750E-05	0.000E+00
965	0.000E+00	0.000E+00	3.215E-04	-8.940E-07	-6.340E-05	0.000E+00
966	0.000E+00	0.000E+00	3.421E-04	-1.382E-06	-6.793E-05	0.000E+00
967	0.000E+00	0.000E+00	3.770E-04	-1.141E-06	-7.492E-05	0.000E+00
968	0.000E+00	0.000E+00	4.266E-04	-2.437E-08	-8.354E-05	0.000E+00
969	0.000E+00	0.000E+00	4.903E-04	1.861E-06	-9.283E-05	0.000E+00
970	0.000E+00	0.000E+00	2.613E-04	1.410E-06	-6.037E-05	0.000E+00
971	0.000E+00	0.000E+00	2.038E-04	3.013E-06	-5.705E-05	0.000E+00
972	0.000E+00	0.000E+00	6.194E-05	2.879E-06	-2.825E-05	0.000E+00
973	0.000E+00	0.000E+00	2.842E-04	2.644E-06	-6.419E-05	0.000E+00
974	0.000E+00	0.000E+00	2.280E-04	5.492E-06	-6.056E-05	0.000E+00
975	0.000E+00	0.000E+00	7.922E-05	5.759E-06	-3.381E-05	0.000E+00
976	0.000E+00	0.000E+00	3.244E-04	3.696E-06	-7.054E-05	0.000E+00
977	0.000E+00	0.000E+00	2.719E-04	7.231E-06	-6.673E-05	0.000E+00
978	0.000E+00	0.000E+00	1.184E-04	8.823E-06	-4.392E-05	0.000E+00
979	0.000E+00	0.000E+00	3.838E-04	4.770E-06	-7.911E-05	0.000E+00
980	0.000E+00	0.000E+00	3.393E-04	8.458E-06	-7.556E-05	0.000E+00
981	0.000E+00	0.000E+00	1.930E-04	1.252E-05	-5.832E-05	0.000E+00
982	0.000E+00	0.000E+00	4.628E-04	6.123E-06	-8.916E-05	0.000E+00
983	0.000E+00	0.000E+00	4.324E-04	9.645E-06	-8.645E-05	0.000E+00
984	0.000E+00	0.000E+00	3.160E-04	1.692E-05	-7.544E-05	0.000E+00
985	0.000E+00	0.000E+00	1.211E-04	3.135E-06	-4.275E-05	0.000E+00
986	0.000E+00	0.000E+00	1.439E-04	6.038E-06	-4.766E-05	0.000E+00
987	0.000E+00	0.000E+00	1.888E-04	8.704E-06	-5.611E-05	0.000E+00
988	0.000E+00	0.000E+00	2.639E-04	1.137E-05	-6.776E-05	0.000E+00
989	0.000E+00	0.000E+00	3.759E-04	1.421E-05	-8.156E-05	0.000E+00
990	0.000E+00	0.000E+00	3.180E-04	-5.163E-07	-6.224E-05	0.000E+00
991	0.000E+00	0.000E+00	2.577E-04	6.827E-07	-5.950E-05	0.000E+00
992	0.000E+00	0.000E+00	2.004E-04	1.529E-06	-5.646E-05	0.000E+00
993	0.000E+00	0.000E+00	1.183E-04	1.586E-06	-4.206E-05	0.000E+00
995	0.000E+00	0.000E+00	2.857E-04	2.532E-07	-6.138E-05	0.000E+00
996	0.000E+00	0.000E+00	2.265E-04	1.200E-06	-5.811E-05	0.000E+00
997	0.000E+00	0.000E+00	1.539E-04	1.571E-06	-4.890E-05	0.000E+00
998	0.000E+00	0.000E+00	8.406E-05	1.545E-06	-3.421E-05	0.000E+00
999	0.000E+00	0.000E+00	2.911E-04	5.013E-07	-6.239E-05	0.000E+00
1000	0.000E+00	0.000E+00	2.322E-04	2.344E-06	-5.898E-05	0.000E+00
1001	0.000E+00	0.000E+00	1.595E-04	3.091E-06	-4.995E-05	0.000E+00
1002	0.000E+00	0.000E+00	8.853E-05	3.067E-06	-3.547E-05	0.000E+00
1003	0.000E+00	0.000E+00	3.001E-04	7.619E-07	-6.405E-05	0.000E+00
1004	0.000E+00	0.000E+00	2.419E-04	3.381E-06	-6.045E-05	0.000E+00
1005	0.000E+00	0.000E+00	1.693E-04	4.514E-06	-5.172E-05	0.000E+00
1006	0.000E+00	0.000E+00	9.656E-05	4.569E-06	-3.766E-05	0.000E+00

Table B.1 (continued)

Page 12

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1007	0.000E+00	0.000E+00	3.130E-04	1.024E-06	-6.637E-05	0.000E+00
1008	0.000E+00	0.000E+00	2.559E-04	4.285E-06	-6.255E-05	0.000E+00
1009	0.000E+00	0.000E+00	1.836E-04	5.824E-06	-5.426E-05	0.000E+00
1010	0.000E+00	0.000E+00	1.090E-04	6.020E-06	-4.082E-05	0.000E+00
1011	0.000E+00	0.000E+00	3.298E-04	1.329E-06	-6.929E-05	0.000E+00
1012	0.000E+00	0.000E+00	2.745E-04	5.047E-06	-6.529E-05	0.000E+00
1013	0.000E+00	0.000E+00	2.033E-04	7.007E-06	-5.757E-05	0.000E+00
1014	0.000E+00	0.000E+00	1.269E-04	7.472E-06	-4.500E-05	0.000E+00
1015	0.000E+00	0.000E+00	3.507E-04	1.676E-06	-7.280E-05	0.000E+00
1016	0.000E+00	0.000E+00	2.981E-04	5.686E-06	-6.868E-05	0.000E+00
1017	0.000E+00	0.000E+00	2.290E-04	8.102E-06	-6.165E-05	0.000E+00
1018	0.000E+00	0.000E+00	1.518E-04	8.945E-06	-5.019E-05	0.000E+00
1019	0.000E+00	0.000E+00	3.759E-04	2.113E-06	-7.679E-05	0.000E+00
1020	0.000E+00	0.000E+00	3.271E-04	6.250E-06	-7.271E-05	0.000E+00
1021	0.000E+00	0.000E+00	2.614E-04	9.126E-06	-6.646E-05	0.000E+00
1022	0.000E+00	0.000E+00	1.849E-04	1.050E-05	-5.630E-05	0.000E+00
1023	0.000E+00	0.000E+00	4.054E-04	2.648E-06	-8.121E-05	0.000E+00
1024	0.000E+00	0.000E+00	3.617E-04	6.770E-06	-7.728E-05	0.000E+00
1025	0.000E+00	0.000E+00	3.013E-04	1.014E-05	-7.190E-05	0.000E+00
1026	0.000E+00	0.000E+00	2.277E-04	1.216E-05	-6.323E-05	0.000E+00
1027	0.000E+00	0.000E+00	4.392E-04	3.306E-06	-8.592E-05	0.000E+00
1028	0.000E+00	0.000E+00	4.020E-04	7.335E-06	-8.234E-05	0.000E+00
1029	0.000E+00	0.000E+00	3.490E-04	1.115E-05	-7.787E-05	0.000E+00
1030	0.000E+00	0.000E+00	2.812E-04	1.392E-05	-7.074E-05	0.000E+00
1031	0.000E+00	0.000E+00	4.769E-04	4.089E-06	-9.081E-05	0.000E+00
1032	0.000E+00	0.000E+00	4.480E-04	7.942E-06	-8.772E-05	0.000E+00
1033	0.000E+00	0.000E+00	4.048E-04	1.220E-05	-8.418E-05	0.000E+00
1034	0.000E+00	0.000E+00	3.462E-04	1.576E-05	-7.864E-05	0.000E+00
1035	0.000E+00	0.000E+00	5.184E-04	4.973E-06	-9.572E-05	0.000E+00
1036	0.000E+00	0.000E+00	4.993E-04	8.671E-06	-9.328E-05	0.000E+00
1037	0.000E+00	0.000E+00	4.685E-04	1.327E-05	-9.066E-05	0.000E+00
1038	0.000E+00	0.000E+00	4.229E-04	1.758E-05	-8.669E-05	0.000E+00
1039	0.000E+00	0.000E+00	3.316E-04	-1.324E-06	-6.537E-05	0.000E+00
1040	0.000E+00	0.000E+00	2.727E-04	1.958E-06	-6.206E-05	0.000E+00
1041	0.000E+00	0.000E+00	2.160E-04	4.297E-06	-5.873E-05	0.000E+00
1042	0.000E+00	0.000E+00	1.327E-04	4.622E-06	-4.525E-05	0.000E+00
1043	0.000E+00	0.000E+00	7.074E-05	4.321E-06	-3.102E-05	0.000E+00
1044	0.000E+00	0.000E+00	3.591E-04	-1.508E-06	-7.126E-05	0.000E+00
1045	0.000E+00	0.000E+00	3.039E-04	3.052E-06	-6.719E-05	0.000E+00
1046	0.000E+00	0.000E+00	2.495E-04	6.375E-06	-6.352E-05	0.000E+00
1047	0.000E+00	0.000E+00	1.657E-04	7.372E-06	-5.187E-05	0.000E+00
1048	0.000E+00	0.000E+00	9.779E-05	7.233E-06	-3.881E-05	0.000E+00
1049	0.000E+00	0.000E+00	4.012E-04	-8.151E-07	-7.922E-05	0.000E+00
1050	0.000E+00	0.000E+00	3.533E-04	4.078E-06	-7.472E-05	0.000E+00
1051	0.000E+00	0.000E+00	3.045E-04	7.780E-06	-7.101E-05	0.000E+00
1052	0.000E+00	0.000E+00	2.247E-04	9.975E-06	-6.193E-05	0.000E+00
1053	0.000E+00	0.000E+00	1.532E-04	1.053E-05	-5.111E-05	0.000E+00
1054	0.000E+00	0.000E+00	4.577E-04	7.627E-07	-8.831E-05	0.000E+00
1055	0.000E+00	0.000E+00	4.221E-04	5.282E-06	-8.414E-05	0.000E+00

Table B.1 (continued)

Page 13

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1056	0.000E+00	0.000E+00	3.843E-04	8.904E-06	-8.095E-05	0.000E+00
1057	0.000E+00	0.000E+00	3.174E-04	1.267E-05	-7.472E-05	0.000E+00
1058	0.000E+00	0.000E+00	2.506E-04	1.457E-05	-6.701E-05	0.000E+00
1059	0.000E+00	0.000E+00	5.271E-04	2.949E-06	-9.749E-05	0.000E+00
1060	0.000E+00	0.000E+00	5.099E-04	6.841E-06	-9.449E-05	0.000E+00
1061	0.000E+00	0.000E+00	4.894E-04	1.020E-05	-9.239E-05	0.000E+00
1062	0.000E+00	0.000E+00	4.480E-04	1.549E-05	-8.891E-05	0.000E+00
1064	0.000E+00	0.000E+00	1.838E-03	5.946E-06	-1.343E-04	0.000E+00
1065	0.000E+00	0.000E+00	2.078E-03	6.506E-06	-1.363E-04	0.000E+00
1066	0.000E+00	0.000E+00	1.730E-03	5.671E-06	-1.336E-04	0.000E+00
1067	0.000E+00	0.000E+00	1.970E-03	6.260E-06	-1.353E-04	0.000E+00
1068	0.000E+00	0.000E+00	1.689E-03	1.062E-05	-1.337E-04	0.000E+00
1069	0.000E+00	0.000E+00	1.919E-03	1.212E-05	-1.354E-04	0.000E+00
1070	0.000E+00	0.000E+00	1.622E-03	1.521E-05	-1.333E-04	0.000E+00
1071	0.000E+00	0.000E+00	1.835E-03	1.747E-05	-1.354E-04	0.000E+00
1072	0.000E+00	0.000E+00	1.531E-03	1.971E-05	-1.328E-04	0.000E+00
1073	0.000E+00	0.000E+00	1.722E-03	2.232E-05	-1.351E-04	0.000E+00
1074	0.000E+00	0.000E+00	1.420E-03	2.323E-05	-1.321E-04	0.000E+00
1075	0.000E+00	0.000E+00	1.584E-03	2.619E-05	-1.345E-04	0.000E+00
1076	0.000E+00	0.000E+00	1.293E-03	2.547E-05	-1.303E-04	0.000E+00
1077	0.000E+00	0.000E+00	1.426E-03	2.891E-05	-1.328E-04	0.000E+00
1078	0.000E+00	0.000E+00	1.154E-03	2.680E-05	-1.272E-04	0.000E+00
1079	0.000E+00	0.000E+00	1.254E-03	3.059E-05	-1.297E-04	0.000E+00
1080	0.000E+00	0.000E+00	1.010E-03	2.740E-05	-1.227E-04	0.000E+00
1081	0.000E+00	0.000E+00	1.076E-03	3.145E-05	-1.251E-04	0.000E+00
1082	0.000E+00	0.000E+00	8.644E-04	2.736E-05	-1.168E-04	0.000E+00
1083	0.000E+00	0.000E+00	8.964E-04	3.178E-05	-1.187E-04	0.000E+00
1084	0.000E+00	0.000E+00	7.237E-04	2.666E-05	-1.095E-04	0.000E+00
1085	0.000E+00	0.000E+00	7.244E-04	3.132E-05	-1.100E-04	0.000E+00
1086	0.000E+00	0.000E+00	1.718E-03	1.637E-05	-1.342E-04	0.000E+00
1087	0.000E+00	0.000E+00	1.931E-03	1.821E-05	-1.365E-04	0.000E+00
1088	0.000E+00	0.000E+00	1.494E-03	2.468E-05	-1.331E-04	0.000E+00
1089	0.000E+00	0.000E+00	1.657E-03	2.728E-05	-1.357E-04	0.000E+00
1090	0.000E+00	0.000E+00	1.200E-03	2.863E-05	-1.283E-04	0.000E+00
1091	0.000E+00	0.000E+00	1.298E-03	3.202E-05	-1.309E-04	0.000E+00
1092	0.000E+00	0.000E+00	8.796E-04	2.943E-05	-1.176E-04	0.000E+00
1093	0.000E+00	0.000E+00	9.088E-04	3.348E-05	-1.197E-04	0.000E+00
1094	0.000E+00	0.000E+00	5.673E-04	3.319E-05	-1.005E-04	0.000E+00
1095	0.000E+00	0.000E+00	5.900E-04	2.796E-05	-1.010E-04	0.000E+00
1096	0.000E+00	0.000E+00	5.976E-04	2.540E-05	-1.013E-04	0.000E+00
1097	0.000E+00	0.000E+00	4.815E-04	2.394E-05	-9.232E-05	0.000E+00
1098	0.000E+00	0.000E+00	5.800E-04	3.054E-05	-1.007E-04	0.000E+00
1099	0.000E+00	0.000E+00	4.483E-04	2.929E-05	-9.024E-05	0.000E+00
1100	0.000E+00	0.000E+00	3.031E-04	3.039E-05	-7.641E-05	0.000E+00
1101	0.000E+00	0.000E+00	3.588E-04	2.460E-05	-8.117E-05	0.000E+00
1102	0.000E+00	0.000E+00	3.328E-04	2.735E-05	-7.898E-05	0.000E+00
1103	0.000E+00	0.000E+00	3.813E-04	2.188E-05	-8.301E-05	0.000E+00
1104	0.000E+00	0.000E+00	2.920E-04	1.977E-05	-7.323E-05	0.000E+00
1105	0.000E+00	0.000E+00	2.327E-04	2.473E-05	-6.697E-05	0.000E+00

Table B.1 (continued)

Page 14

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:07:46

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1106	0.000E+00	0.000E+00	1.928E-04	1.593E-05	-5.967E-05	0.000E+00
1107	0.000E+00	0.000E+00	9.986E-05	1.341E-05	-4.366E-05	0.000E+00
1108	0.000E+00	0.000E+00	1.445E-04	1.357E-05	-5.137E-05	0.000E+00
1109	0.000E+00	0.000E+00	1.080E-04	1.147E-05	-4.383E-05	0.000E+00
1110	0.000E+00	0.000E+00	6.961E-05	8.772E-06	-3.405E-05	0.000E+00
1111	0.000E+00	0.000E+00	2.645E-05	6.185E-06	-2.045E-05	0.000E+00
1112	0.000E+00	0.000E+00	5.717E-05	7.272E-06	-2.986E-05	0.000E+00
1113	0.000E+00	0.000E+00	4.591E-05	5.845E-06	-2.583E-05	0.000E+00
1114	0.000E+00	0.000E+00	1.789E-05	3.762E-06	-1.528E-05	0.000E+00
1115	0.000E+00	0.000E+00	4.008E-05	4.378E-06	-2.320E-05	0.000E+00
1116	0.000E+00	0.000E+00	3.377E-05	2.867E-06	-2.061E-05	0.000E+00
1117	0.000E+00	0.000E+00	1.430E-05	1.184E-06	-1.281E-05	0.000E+00
1118	0.000E+00	0.000E+00	3.310E-05	1.434E-06	-2.004E-05	0.000E+00
1119	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1120	0.000E+00	0.000E+00	3.490E-06	7.045E-07	-6.167E-06	0.000E+00
1121	0.000E+00	0.000E+00	3.218E-06	1.356E-06	-5.860E-06	0.000E+00
1122	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1123	0.000E+00	0.000E+00	4.491E-06	2.420E-06	-7.481E-06	0.000E+00
1124	0.000E+00	0.000E+00	5.421E-06	3.159E-06	-8.853E-06	0.000E+00
1125	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1126	0.000E+00	0.000E+00	6.898E-06	3.873E-06	-1.051E-05	0.000E+00
1127	0.000E+00	0.000E+00	8.509E-06	4.585E-06	-1.222E-05	0.000E+00
1128	0.000E+00	0.000E+00	2.384E-06	5.181E-06	-6.369E-06	0.000E+00
1129	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1130	0.000E+00	0.000E+00	3.479E-06	3.982E-06	-8.937E-06	0.000E+00
1131	0.000E+00	0.000E+00	1.286E-05	8.698E-06	-1.622E-05	0.000E+00
1132	0.000E+00	0.000E+00	5.931E-06	4.759E-06	-1.171E-05	0.000E+00
1133	0.000E+00	0.000E+00	1.784E-05	7.992E-06	-1.985E-05	0.000E+00
1134	0.000E+00	0.000E+00	1.820E-05	7.079E-06	-1.908E-05	0.000E+00
1135	0.000E+00	0.000E+00	5.254E-05	1.174E-05	-3.280E-05	0.000E+00
1136	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1137	0.000E+00	0.000E+00	1.154E-05	6.158E-06	-1.579E-05	0.000E+00
1138	0.000E+00	0.000E+00	3.330E-05	1.016E-05	-2.660E-05	0.000E+00
1139	0.000E+00	0.000E+00	1.527E-04	2.136E-05	-5.496E-05	0.000E+00
1140	0.000E+00	0.000E+00	1.965E-04	1.915E-05	-6.120E-05	0.000E+00
1141	0.000E+00	0.000E+00	4.819E-05	9.176E-06	-2.949E-05	0.000E+00
1142	0.000E+00	0.000E+00	1.281E-05	5.790E-06	-1.554E-05	0.000E+00
1143	0.000E+00	0.000E+00	9.660E-05	1.615E-05	-4.407E-05	0.000E+00
1144	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1145	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1146	0.000E+00	0.000E+00	4.704E-06	4.417E-06	-1.051E-05	0.000E+00
1147	0.000E+00	0.000E+00	1.577E-05	7.947E-06	-1.867E-05	0.000E+00
1148	0.000E+00	0.000E+00	3.720E-05	1.643E-05	-2.748E-05	0.000E+00
1149	0.000E+00	0.000E+00	7.756E-05	2.121E-05	-3.980E-05	0.000E+00
1150	0.000E+00	0.000E+00	1.313E-04	2.488E-05	-5.165E-05	0.000E+00
1151	0.000E+00	0.000E+00	4.682E-05	1.292E-05	-3.132E-05	0.000E+00
1152	0.000E+00	0.000E+00	6.519E-05	1.732E-05	-3.651E-05	0.000E+00
1153	0.000E+00	0.000E+00	3.416E-05	1.347E-05	-2.650E-05	0.000E+00
1154	0.000E+00	0.000E+00	3.277E-05	1.228E-05	-2.619E-05	0.000E+00

Table B.1 (continued)

Page 15

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:07:46

	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
	312	312	377	857	383	312
Maximum	0.000E+00	0.000E+00	2.110E-03	3.360E-05	0.000E+00	0.000E+00
	312	312	383	382	742	312
Minimum	0.000E+00	0.000E+00	0.000E+00	-3.360E-05	-1.365E-04	0.000E+00
Average	0.000E+00	0.000E+00	5.997E-04	1.391E-13	-8.314E-05	0.000E+00

Table B.2 Model loaded with 33.33 lb (148.3 N) on nodes 327, 333, and 830 (stress listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

Group ID : PERMANENT GROUP1
Analysis Dataset : 7 - CASE 1, LOAD 1, STRESSES
Report Type : Contour Units : IN
Dataset Type : Stress Load Set : 1
Frame of Reference: Global Data Component: Von Mises
Surface Type : Top

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
312	7.159E+01	0.000E+00	-1.395E+00	3.649E+01	7.229E+01
313	6.599E+01	0.000E+00	-9.541E+00	3.777E+01	7.124E+01
314	5.011E+01	0.000E+00	-3.211E+01	4.111E+01	7.177E+01
315	2.809E+01	0.000E+00	-6.508E+01	4.659E+01	8.279E+01
316	8.804E+00	0.000E+00	-1.040E+02	5.641E+01	1.087E+02
317	8.462E-01	0.000E+00	-1.431E+02	7.197E+01	1.435E+02
318	6.560E+00	0.000E+00	-1.738E+02	9.019E+01	1.772E+02
325	8.733E+01	0.000E+00	-1.267E+01	5.000E+01	9.431E+01
326	8.202E+01	0.000E+00	-2.991E+01	5.596E+01	1.004E+02
327	1.153E+02	0.000E+00	4.732E+01	3.398E+01	1.004E+02
328	7.885E+01	0.000E+00	-1.826E+01	4.855E+01	8.939E+01
329	7.345E+01	0.000E+00	-3.175E+01	5.260E+01	9.346E+01
330	7.523E+01	0.000E+00	1.419E+01	3.052E+01	6.923E+01
331	5.788E+01	0.000E+00	-3.658E+01	4.723E+01	8.250E+01
332	5.448E+01	0.000E+00	-4.110E+01	4.779E+01	8.305E+01
333	9.736E+01	0.000E+00	2.828E+01	3.454E+01	8.675E+01
334	3.501E+01	0.000E+00	-7.070E+01	5.286E+01	9.327E+01
335	3.792E+01	0.000E+00	-6.534E+01	5.163E+01	9.047E+01
336	4.475E+01	0.000E+00	-3.498E+01	3.987E+01	6.922E+01
337	1.912E+01	0.000E+00	-1.157E+02	6.742E+01	1.264E+02
338	3.237E+01	0.000E+00	-1.037E+02	6.806E+01	1.232E+02
339	2.629E+01	0.000E+00	-7.668E+01	5.149E+01	9.267E+01
340	1.197E+01	0.000E+00	-1.585E+02	8.522E+01	1.648E+02
341	3.111E+01	0.000E+00	-1.416E+02	8.633E+01	1.594E+02
342	1.353E+01	0.000E+00	-1.162E+02	6.488E+01	1.236E+02
343	1.244E+01	0.000E+00	-1.870E+02	9.971E+01	1.935E+02
344	2.747E+01	0.000E+00	-1.661E+02	9.676E+01	1.814E+02
345	2.042E+00	0.000E+00	-1.471E+02	7.459E+01	1.482E+02
360	-1.865E+01	0.000E+00	-1.418E+02	6.157E+01	1.334E+02
364	7.792E+01	0.000E+00	-2.539E+00	4.023E+01	7.922E+01
365	6.722E+01	0.000E+00	-4.966E+00	3.609E+01	6.984E+01
366	6.125E+01	0.000E+00	-1.754E+01	3.939E+01	7.164E+01
367	4.565E+01	0.000E+00	-4.674E+01	4.619E+01	8.001E+01
368	3.305E+01	0.000E+00	-7.947E+01	5.626E+01	1.002E+02
369	2.385E+01	0.000E+00	-1.112E+02	6.754E+01	1.249E+02
370	1.298E+01	0.000E+00	-1.359E+02	7.442E+01	1.428E+02
377	7.404E+01	0.000E+00	-1.261E+00	3.765E+01	7.468E+01
378	6.652E+01	0.000E+00	-3.981E+00	3.525E+01	6.860E+01
379	5.350E+01	0.000E+00	-1.151E+01	3.250E+01	6.008E+01
380	3.003E+01	0.000E+00	-3.070E+01	3.036E+01	5.259E+01
381	1.487E+01	0.000E+00	-6.445E+01	3.966E+01	7.303E+01
382	8.576E+00	0.000E+00	-1.255E+02	6.705E+01	1.300E+02

Table B.2 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
383	-1.979E+01	0.000E+00	-7.927E+01	2.974E+01	7.146E+01
384	-2.190E+01	0.000E+00	-8.870E+01	3.340E+01	8.003E+01
385	-5.001E+01	0.000E+00	-1.745E+02	6.225E+01	1.557E+02
386	-5.689E+00	0.000E+00	-1.565E+02	7.542E+01	1.538E+02
387	8.817E+01	0.000E+00	7.077E+00	4.055E+01	8.486E+01
388	7.567E+01	0.000E+00	3.360E+00	3.616E+01	7.405E+01
389	6.488E+01	0.000E+00	-5.850E+00	3.536E+01	6.799E+01
390	3.536E+01	0.000E+00	-3.146E+01	3.341E+01	5.790E+01
391	2.000E+01	0.000E+00	-7.328E+01	4.664E+01	8.506E+01
392	1.166E+01	0.000E+00	-1.212E+02	6.645E+01	1.275E+02
393	-1.949E+01	0.000E+00	-1.184E+02	4.947E+01	1.100E+02
394	-2.212E+01	0.000E+00	-1.296E+02	5.375E+01	1.201E+02
395	-3.526E+01	0.000E+00	-1.583E+02	6.154E+01	1.440E+02
396	-6.544E+01	0.000E+00	-2.237E+02	7.915E+01	1.992E+02
397	-7.992E+01	0.000E+00	-2.661E+02	9.311E+01	2.365E+02
398	-8.810E+01	0.000E+00	-2.989E+02	1.054E+02	2.661E+02
399	7.888E+00	0.000E+00	-1.634E+02	8.564E+01	1.675E+02
401	2.057E+00	0.000E+00	-1.954E+02	9.873E+01	1.964E+02
402	3.242E+00	0.000E+00	-1.555E+02	7.937E+01	1.571E+02
403	-1.124E+01	0.000E+00	-1.779E+02	8.331E+01	1.725E+02
404	-3.089E+01	0.000E+00	-1.917E+02	8.040E+01	1.783E+02
405	7.574E-01	0.000E+00	-2.613E+02	1.310E+02	2.617E+02
406	-9.084E+01	0.000E+00	-3.031E+02	1.061E+02	2.694E+02
407	-5.278E+01	0.000E+00	-2.522E+02	9.973E+01	2.304E+02
408	-4.888E+01	0.000E+00	-2.576E+02	1.043E+02	2.369E+02
411	-4.157E+01	0.000E+00	-1.833E+02	7.084E+01	1.664E+02
412	-4.343E+01	0.000E+00	-1.925E+02	7.454E+01	1.749E+02
413	6.407E+01	0.000E+00	-4.326E+00	3.420E+01	6.634E+01
414	6.693E+01	0.000E+00	-1.588E+01	4.141E+01	7.612E+01
415	7.992E+01	0.000E+00	-1.792E+01	4.892E+01	9.023E+01
416	1.011E+02	0.000E+00	-1.854E+01	5.981E+01	1.115E+02
417	8.342E+01	0.000E+00	-2.698E+01	5.520E+01	9.969E+01
418	7.169E+01	0.000E+00	-1.829E+01	4.499E+01	8.237E+01
419	7.349E+01	0.000E+00	-4.134E+00	3.881E+01	7.564E+01
420	8.927E+01	0.000E+00	1.418E+01	3.755E+01	8.309E+01
421	7.966E+01	0.000E+00	2.133E+01	2.917E+01	7.142E+01
422	6.393E+01	0.000E+00	-1.606E+01	4.000E+01	7.329E+01
423	9.890E+01	0.000E+00	-1.979E+01	5.935E+01	1.101E+02
424	6.962E+01	0.000E+00	-1.921E+01	4.441E+01	8.095E+01
425	7.786E+01	0.000E+00	1.327E+01	3.230E+01	7.214E+01
426	6.044E+01	0.000E+00	-1.990E+01	4.017E+01	7.247E+01
427	9.100E+01	0.000E+00	-2.379E+01	5.740E+01	1.049E+02
428	6.419E+01	0.000E+00	-1.988E+01	4.204E+01	7.610E+01
429	7.015E+01	0.000E+00	8.988E+00	3.058E+01	6.612E+01
430	5.255E+01	0.000E+00	-2.497E+01	3.876E+01	6.853E+01
431	8.012E+01	0.000E+00	-3.105E+01	5.558E+01	9.935E+01
432	5.882E+01	0.000E+00	-2.341E+01	4.112E+01	7.338E+01
433	6.797E+01	0.000E+00	6.571E+00	3.070E+01	6.493E+01
434	4.448E+01	0.000E+00	-3.326E+01	3.887E+01	6.756E+01

Table B.2 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
435	6.665E+01	0.000E+00	-4.238E+01	5.452E+01	9.521E+01
436	5.323E+01	0.000E+00	-2.947E+01	4.135E+01	7.260E+01
437	7.190E+01	0.000E+00	-1.937E+00	3.692E+01	7.289E+01
438	3.569E+01	0.000E+00	-4.448E+01	4.009E+01	6.957E+01
439	5.305E+01	0.000E+00	-5.839E+01	5.572E+01	9.655E+01
440	4.686E+01	0.000E+00	-3.970E+01	4.328E+01	7.504E+01
441	6.026E+01	0.000E+00	-2.057E+01	4.042E+01	7.276E+01
442	2.803E+01	0.000E+00	-5.884E+01	4.344E+01	7.679E+01
443	4.129E+01	0.000E+00	-7.913E+01	6.021E+01	1.060E+02
444	4.107E+01	0.000E+00	-5.273E+01	4.690E+01	8.144E+01
445	4.734E+01	0.000E+00	-3.927E+01	4.330E+01	7.511E+01
446	2.182E+01	0.000E+00	-7.513E+01	4.848E+01	8.810E+01
447	3.184E+01	0.000E+00	-1.039E+02	6.787E+01	1.230E+02
448	3.693E+01	0.000E+00	-6.788E+01	5.241E+01	9.208E+01
449	3.784E+01	0.000E+00	-5.752E+01	4.768E+01	8.317E+01
450	1.830E+01	0.000E+00	-9.416E+01	5.623E+01	1.045E+02
451	2.537E+01	0.000E+00	-1.294E+02	7.738E+01	1.438E+02
452	3.368E+01	0.000E+00	-8.387E+01	5.877E+01	1.048E+02
453	3.085E+01	0.000E+00	-7.547E+01	5.316E+01	9.474E+01
454	1.502E+01	0.000E+00	-1.107E+02	6.287E+01	1.189E+02
455	2.094E+01	0.000E+00	-1.553E+02	8.814E+01	1.668E+02
456	3.186E+01	0.000E+00	-1.003E+02	6.608E+01	1.195E+02
457	2.490E+01	0.000E+00	-9.293E+01	5.892E+01	1.076E+02
458	1.560E+01	0.000E+00	-1.294E+02	7.248E+01	1.378E+02
459	1.858E+01	0.000E+00	-1.767E+02	9.762E+01	1.866E+02
460	2.841E+01	0.000E+00	-1.147E+02	7.157E+01	1.313E+02
461	1.955E+01	0.000E+00	-1.097E+02	6.464E+01	1.207E+02
462	1.481E+01	0.000E+00	-1.415E+02	7.816E+01	1.495E+02
463	1.770E+01	0.000E+00	-1.956E+02	1.067E+02	2.050E+02
464	2.562E+01	0.000E+00	-1.280E+02	7.683E+01	1.426E+02
465	1.356E+01	0.000E+00	-1.240E+02	6.877E+01	1.313E+02
466	1.795E+01	0.000E+00	-1.548E+02	8.636E+01	1.645E+02
467	1.815E+01	0.000E+00	-2.065E+02	1.123E+02	2.161E+02
468	1.975E+01	0.000E+00	-1.375E+02	7.862E+01	1.484E+02
469	7.304E+00	0.000E+00	-1.368E+02	7.204E+01	1.406E+02
518	5.610E+01	0.000E+00	-2.037E+01	3.823E+01	6.859E+01
519	6.609E+01	0.000E+00	-2.823E+01	4.716E+01	8.385E+01
520	6.693E+01	0.000E+00	-3.296E+01	4.994E+01	8.816E+01
521	6.325E+01	0.000E+00	-9.799E+00	3.653E+01	6.868E+01
522	7.265E+01	0.000E+00	1.062E+01	3.102E+01	6.796E+01
523	3.971E+01	0.000E+00	-4.698E+01	4.335E+01	7.517E+01
524	4.593E+01	0.000E+00	-5.179E+01	4.886E+01	8.467E+01
525	4.511E+01	0.000E+00	-5.130E+01	4.821E+01	8.355E+01
526	5.393E+01	0.000E+00	-3.211E+01	4.302E+01	7.531E+01
527	5.862E+01	0.000E+00	-1.306E+01	3.584E+01	6.612E+01
528	1.938E+01	0.000E+00	-7.898E+01	4.918E+01	9.024E+01
529	2.914E+01	0.000E+00	-8.890E+01	5.902E+01	1.065E+02
530	3.169E+01	0.000E+00	-8.698E+01	5.934E+01	1.064E+02
531	3.861E+01	0.000E+00	-6.339E+01	5.100E+01	8.920E+01

Table B.2 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
532	3.515E+01	0.000E+00	-5.611E+01	4.563E+01	7.972E+01
533	5.206E+00	0.000E+00	-1.134E+02	5.931E+01	1.161E+02
534	2.019E+01	0.000E+00	-1.307E+02	7.545E+01	1.419E+02
535	2.716E+01	0.000E+00	-1.299E+02	7.851E+01	1.454E+02
536	2.862E+01	0.000E+00	-9.632E+01	6.247E+01	1.134E+02
537	2.116E+01	0.000E+00	-9.595E+01	5.856E+01	1.081E+02
538	4.817E+00	0.000E+00	-1.461E+02	7.546E+01	1.486E+02
539	1.849E+01	0.000E+00	-1.652E+02	9.183E+01	1.751E+02
540	2.419E+01	0.000E+00	-1.639E+02	9.402E+01	1.772E+02
541	1.918E+01	0.000E+00	-1.250E+02	7.208E+01	1.356E+02
542	9.663E+00	0.000E+00	-1.309E+02	7.028E+01	1.360E+02
557	-2.329E+01	0.000E+00	-1.719E+02	7.432E+01	1.616E+02
562	-2.554E+01	0.000E+00	-1.633E+02	6.887E+01	1.521E+02
609	-6.386E+00	0.000E+00	-1.415E+01	3.881E+00	1.227E+01
610	2.600E+01	0.000E+00	-5.768E+01	4.184E+01	7.418E+01
611	4.597E+01	0.000E+00	-1.079E+02	7.694E+01	1.368E+02
612	4.915E+01	0.000E+00	-1.517E+02	1.004E+02	1.813E+02
613	3.884E+01	0.000E+00	-1.802E+02	1.095E+02	2.024E+02
614	2.181E+01	0.000E+00	-1.877E+02	1.048E+02	1.995E+02
615	1.226E+01	0.000E+00	-5.228E+01	3.227E+01	5.937E+01
616	1.203E+01	0.000E+00	-1.199E+02	6.596E+01	1.263E+02
617	-1.674E+01	0.000E+00	-1.363E+02	5.978E+01	1.288E+02
618	2.020E+01	0.000E+00	-7.103E+01	4.562E+01	8.300E+01
619	9.234E+00	0.000E+00	-1.225E+02	6.587E+01	1.274E+02
621	2.928E+01	0.000E+00	-1.093E+02	6.930E+01	1.265E+02
622	4.211E+00	0.000E+00	-1.312E+02	6.772E+01	1.334E+02
623	-2.377E+01	0.000E+00	-1.555E+02	6.588E+01	1.451E+02
624	3.073E+01	0.000E+00	-1.495E+02	9.014E+01	1.670E+02
625	3.645E+00	0.000E+00	-1.465E+02	7.505E+01	1.483E+02
626	-2.601E+01	0.000E+00	-1.681E+02	7.103E+01	1.567E+02
627	2.573E+01	0.000E+00	-1.807E+02	1.032E+02	1.949E+02
628	9.916E+00	0.000E+00	-1.633E+02	8.660E+01	1.685E+02
629	-2.090E+01	0.000E+00	-1.733E+02	7.622E+01	1.639E+02
630	1.819E+01	0.000E+00	-1.947E+02	1.064E+02	2.044E+02
631	1.952E+01	0.000E+00	-1.724E+02	9.598E+01	1.830E+02
632	-9.833E+00	0.000E+00	-1.657E+02	7.793E+01	1.610E+02
633	-1.360E+01	0.000E+00	-1.527E+02	6.955E+01	1.464E+02
634	-1.575E+01	0.000E+00	-1.537E+02	6.898E+01	1.465E+02
635	-2.012E+01	0.000E+00	-1.559E+02	6.791E+01	1.469E+02
636	-2.087E+01	0.000E+00	-1.578E+02	6.848E+01	1.485E+02
637	-1.399E+01	0.000E+00	-1.571E+02	7.154E+01	1.506E+02
638	-8.887E-01	0.000E+00	-1.506E+02	7.484E+01	1.501E+02
639	1.148E+01	0.000E+00	-3.228E+01	2.188E+01	3.930E+01
640	-5.687E+00	0.000E+00	-4.990E+01	2.211E+01	4.732E+01
641	1.206E+01	0.000E+00	-6.069E+01	3.638E+01	6.754E+01
642	2.704E+01	0.000E+00	-6.656E+01	4.680E+01	8.343E+01
643	1.231E+01	0.000E+00	-1.133E+02	6.280E+01	1.199E+02
644	-8.541E+00	0.000E+00	-1.497E+02	7.058E+01	1.456E+02
645	-1.379E+01	0.000E+00	-1.528E+02	6.951E+01	1.464E+02

Table B.2 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
646	-1.766E+01	0.000E+00	-1.530E+02	6.766E+01	1.450E+02
647	-1.665E+01	0.000E+00	-1.404E+02	6.185E+01	1.328E+02
648	-3.053E+00	0.000E+00	-5.513E+01	2.604E+01	5.367E+01
649	2.785E+01	0.000E+00	-7.037E+01	4.911E+01	8.767E+01
650	-9.233E+00	0.000E+00	-1.511E+02	7.095E+01	1.467E+02
651	-1.864E+01	0.000E+00	-1.536E+02	6.749E+01	1.452E+02
652	6.250E+00	0.000E+00	-6.910E+01	3.767E+01	7.242E+01
653	2.988E+01	0.000E+00	-8.137E+01	5.563E+01	9.973E+01
654	-1.104E+01	0.000E+00	-1.494E+02	6.917E+01	1.442E+02
655	-1.994E+01	0.000E+00	-1.555E+02	6.781E+01	1.466E+02
656	1.394E+01	0.000E+00	-8.584E+01	4.989E+01	9.360E+01
657	3.182E+01	0.000E+00	-9.752E+01	6.467E+01	1.167E+02
658	-1.375E+01	0.000E+00	-1.503E+02	6.827E+01	1.439E+02
659	-2.280E+01	0.000E+00	-1.583E+02	6.777E+01	1.483E+02
660	2.049E+01	0.000E+00	-1.027E+02	6.162E+01	1.144E+02
661	3.300E+01	0.000E+00	-1.168E+02	7.488E+01	1.363E+02
662	-1.577E+01	0.000E+00	-1.490E+02	6.663E+01	1.418E+02
663	-2.506E+01	0.000E+00	-1.611E+02	6.800E+01	1.501E+02
664	2.505E+01	0.000E+00	-1.199E+02	7.249E+01	1.342E+02
665	3.293E+01	0.000E+00	-1.380E+02	8.547E+01	1.571E+02
666	-1.732E+01	0.000E+00	-1.499E+02	6.629E+01	1.420E+02
667	-2.701E+01	0.000E+00	-1.638E+02	6.837E+01	1.521E+02
668	2.724E+01	0.000E+00	-1.347E+02	8.099E+01	1.502E+02
669	3.185E+01	0.000E+00	-1.584E+02	9.510E+01	1.765E+02
670	-1.601E+01	0.000E+00	-1.500E+02	6.699E+01	1.427E+02
671	-2.681E+01	0.000E+00	-1.651E+02	6.914E+01	1.535E+02
672	2.789E+01	0.000E+00	-1.474E+02	8.764E+01	1.631E+02
673	2.978E+01	0.000E+00	-1.783E+02	1.040E+02	1.949E+02
674	-1.323E+01	0.000E+00	-1.512E+02	6.900E+01	1.451E+02
675	-2.509E+01	0.000E+00	-1.655E+02	7.021E+01	1.545E+02
676	2.707E+01	0.000E+00	-1.571E+02	9.210E+01	1.723E+02
677	2.723E+01	0.000E+00	-1.936E+02	1.104E+02	2.085E+02
678	-7.670E+00	0.000E+00	-1.515E+02	7.193E+01	1.478E+02
679	-2.081E+01	0.000E+00	-1.636E+02	7.138E+01	1.542E+02
680	2.467E+01	0.000E+00	-1.619E+02	9.328E+01	1.755E+02
681	2.442E+01	0.000E+00	-2.065E+02	1.154E+02	2.197E+02
682	-7.888E-01	0.000E+00	-1.515E+02	7.537E+01	1.511E+02
683	-1.490E+01	0.000E+00	-1.599E+02	7.250E+01	1.530E+02
684	2.283E+01	0.000E+00	-1.646E+02	9.370E+01	1.771E+02
685	2.178E+01	0.000E+00	-2.118E+02	1.168E+02	2.235E+02
686	6.387E+00	0.000E+00	-1.490E+02	7.771E+01	1.523E+02
687	-7.513E+00	0.000E+00	-1.542E+02	7.333E+01	1.506E+02
688	1.906E+01	0.000E+00	-1.599E+02	8.948E+01	1.702E+02
689	1.959E+01	0.000E+00	-2.136E+02	1.166E+02	2.241E+02
690	1.422E+01	0.000E+00	-1.452E+02	7.970E+01	1.528E+02
691	-2.788E-02	0.000E+00	-1.463E+02	7.316E+01	1.463E+02
692	4.034E+01	0.000E+00	-8.038E+01	6.036E+01	1.064E+02
693	2.409E+01	0.000E+00	-9.045E+01	5.727E+01	1.046E+02
694	7.331E+00	0.000E+00	-1.212E+02	6.426E+01	1.250E+02

Table B.2 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
695	-1.769E+01	0.000E+00	-1.545E+02	6.839E+01	1.464E+02
696	-2.071E+01	0.000E+00	-1.499E+02	6.459E+01	1.407E+02
697	5.294E+01	0.000E+00	-1.259E+02	8.944E+01	1.591E+02
698	3.191E+01	0.000E+00	-1.282E+02	8.007E+01	1.468E+02
699	3.154E+00	0.000E+00	-1.375E+02	7.032E+01	1.391E+02
700	-2.103E+01	0.000E+00	-1.566E+02	6.781E+01	1.473E+02
702	4.962E+01	0.000E+00	-1.596E+02	1.046E+02	1.893E+02
703	3.246E+01	0.000E+00	-1.616E+02	9.701E+01	1.800E+02
704	4.670E+00	0.000E+00	-1.588E+02	8.173E+01	1.612E+02
705	-1.800E+01	0.000E+00	-1.577E+02	6.988E+01	1.496E+02
707	3.507E+01	0.000E+00	-1.747E+02	1.049E+02	1.946E+02
708	2.796E+01	0.000E+00	-1.818E+02	1.049E+02	1.973E+02
709	1.114E+01	0.000E+00	-1.761E+02	9.360E+01	1.819E+02
710	-7.392E+00	0.000E+00	-1.547E+02	7.365E+01	1.511E+02
711	-1.517E+01	0.000E+00	-1.691E+02	7.697E+01	1.621E+02
712	1.715E+01	0.000E+00	-1.691E+02	9.312E+01	1.783E+02
713	2.207E+01	0.000E+00	-1.834E+02	1.027E+02	1.954E+02
714	1.876E+01	0.000E+00	-1.796E+02	9.920E+01	1.897E+02
715	6.767E+00	0.000E+00	-1.446E+02	7.566E+01	1.481E+02
716	-2.546E+00	0.000E+00	-1.558E+02	7.664E+01	1.546E+02
717	9.767E+01	0.000E+00	1.407E+01	4.180E+01	9.145E+01
718	8.129E+01	0.000E+00	2.726E+00	3.928E+01	7.997E+01
719	8.349E+01	0.000E+00	6.700E+00	3.839E+01	8.035E+01
720	8.232E+01	0.000E+00	1.814E+00	4.026E+01	8.143E+01
721	8.514E+01	0.000E+00	1.366E+01	3.574E+01	7.919E+01
722	8.130E+01	0.000E+00	1.632E+00	3.983E+01	8.049E+01
723	7.721E+01	0.000E+00	8.529E+00	3.434E+01	7.332E+01
724	7.210E+01	0.000E+00	-2.046E-01	3.615E+01	7.221E+01
725	7.653E+01	0.000E+00	3.642E+00	3.644E+01	7.477E+01
726	6.941E+01	0.000E+00	-4.114E+00	3.676E+01	7.155E+01
727	7.448E+01	0.000E+00	-2.974E-01	3.739E+01	7.463E+01
728	5.884E+01	0.000E+00	-8.946E+00	3.389E+01	6.378E+01
729	5.303E+01	0.000E+00	-1.188E+01	3.246E+01	5.986E+01
730	4.586E+01	0.000E+00	-1.692E+01	3.139E+01	5.626E+01
731	3.967E+01	0.000E+00	-3.323E+01	3.645E+01	6.322E+01
732	3.276E+01	0.000E+00	-3.093E+01	3.184E+01	5.516E+01
733	3.030E+01	0.000E+00	-5.519E+01	4.274E+01	7.507E+01
734	2.327E+01	0.000E+00	-4.986E+01	3.657E+01	6.472E+01
735	2.336E+01	0.000E+00	-7.692E+01	5.014E+01	9.088E+01
736	1.719E+01	0.000E+00	-6.955E+01	4.337E+01	7.955E+01
737	1.761E+01	0.000E+00	-9.957E+01	5.859E+01	1.094E+02
738	1.273E+01	0.000E+00	-9.730E+01	5.501E+01	1.042E+02
739	1.295E+01	0.000E+00	-1.211E+02	6.705E+01	1.281E+02
740	1.069E+01	0.000E+00	-1.225E+02	6.659E+01	1.282E+02
741	7.289E+01	0.000E+00	-8.213E-01	3.686E+01	7.331E+01
742	6.933E+01	0.000E+00	-3.660E+00	3.649E+01	7.123E+01
743	4.912E+01	0.000E+00	-1.466E+01	3.189E+01	5.786E+01
744	4.471E+01	0.000E+00	-1.707E+01	3.089E+01	5.526E+01
745	2.687E+01	0.000E+00	-5.224E+01	3.955E+01	6.968E+01

Table B.2 (continued)

Page 7

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
746	1.971E+01	0.000E+00	-4.962E+01	3.466E+01	6.188E+01
747	1.589E+01	0.000E+00	-9.830E+01	5.710E+01	1.071E+02
748	7.997E+00	0.000E+00	-9.706E+01	5.253E+01	1.013E+02
749	9.049E+00	0.000E+00	-1.456E+02	7.730E+01	1.503E+02
750	8.008E+00	0.000E+00	-1.399E+02	7.394E+01	1.440E+02
751	8.292E+00	0.000E+00	-1.387E+02	7.349E+01	1.430E+02
752	3.317E+00	0.000E+00	-1.537E+02	7.849E+01	1.553E+02
753	8.047E+00	0.000E+00	-1.421E+02	7.510E+01	1.463E+02
754	4.338E+00	0.000E+00	-1.590E+02	8.166E+01	1.612E+02
755	5.679E+00	0.000E+00	-1.796E+02	9.264E+01	1.825E+02
756	-2.973E+00	0.000E+00	-1.679E+02	8.247E+01	1.665E+02
757	-1.059E+00	0.000E+00	-1.733E+02	8.613E+01	1.728E+02
758	-2.846E+00	0.000E+00	-1.646E+02	8.086E+01	1.632E+02
759	-1.056E+01	0.000E+00	-1.718E+02	8.062E+01	1.668E+02
760	-7.781E+00	0.000E+00	-1.877E+02	8.998E+01	1.840E+02
761	-2.163E+01	0.000E+00	-1.806E+02	7.946E+01	1.708E+02
762	-3.846E+01	0.000E+00	-1.947E+02	7.813E+01	1.786E+02
763	-2.711E+01	0.000E+00	-1.828E+02	7.783E+01	1.708E+02
764	-3.070E+01	0.000E+00	-1.811E+02	7.520E+01	1.679E+02
765	-3.040E+01	0.000E+00	-1.737E+02	7.165E+01	1.607E+02
766	-4.008E+01	0.000E+00	-1.714E+02	6.564E+01	1.553E+02
767	-2.912E+01	0.000E+00	-1.636E+02	6.722E+01	1.511E+02
768	-2.600E+01	0.000E+00	-1.536E+02	6.382E+01	1.424E+02
769	-2.760E+01	0.000E+00	-1.427E+02	5.753E+01	1.311E+02
770	-2.103E+01	0.000E+00	-1.420E+02	6.050E+01	1.328E+02
771	-1.765E+01	0.000E+00	-1.330E+02	5.766E+01	1.251E+02
772	-1.973E+01	0.000E+00	-1.213E+02	5.078E+01	1.127E+02
774	-1.538E+01	0.000E+00	-1.266E+02	5.559E+01	1.196E+02
775	-1.535E+01	0.000E+00	-1.245E+02	5.460E+01	1.176E+02
776	-2.120E+01	0.000E+00	-1.077E+02	4.323E+01	9.879E+01
777	-3.243E+01	0.000E+00	-1.075E+02	3.753E+01	9.550E+01
778	-2.708E+01	0.000E+00	-1.112E+02	4.208E+01	1.005E+02
779	-2.394E+01	0.000E+00	-1.207E+02	4.836E+01	1.106E+02
780	-4.142E+01	0.000E+00	-1.412E+02	4.987E+01	1.257E+02
781	-3.563E+01	0.000E+00	-1.405E+02	5.244E+01	1.265E+02
782	-4.409E+01	0.000E+00	-1.642E+02	6.004E+01	1.472E+02
783	-5.888E+01	0.000E+00	-2.011E+02	7.109E+01	1.790E+02
784	-4.992E+01	0.000E+00	-1.823E+02	6.619E+01	1.632E+02
785	-5.497E+01	0.000E+00	-1.993E+02	7.216E+01	1.783E+02
786	-8.286E+00	0.000E+00	-2.747E+02	1.332E+02	2.706E+02
787	-8.618E+01	0.000E+00	-2.806E+02	9.723E+01	2.490E+02
788	-7.003E+01	0.000E+00	-2.671E+02	9.852E+01	2.398E+02
789	-3.087E+01	0.000E+00	-2.560E+02	1.126E+02	2.421E+02
790	-7.296E+01	0.000E+00	-2.611E+02	9.408E+01	2.334E+02
792	-6.466E+01	0.000E+00	-2.461E+02	9.073E+01	2.210E+02
794	-5.975E+01	0.000E+00	-2.217E+02	8.096E+01	1.986E+02
795	-5.142E+01	0.000E+00	-2.154E+02	8.199E+01	1.949E+02
796	-8.486E+01	0.000E+00	-2.850E+02	1.000E+02	2.534E+02
797	-6.755E+01	0.000E+00	-2.414E+02	8.691E+01	2.157E+02

Table B.2 (continued)

Page 8

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
798	-5.920E+01	0.000E+00	-2.312E+02	8.602E+01	2.081E+02
799	-1.697E+01	0.000E+00	-1.969E+02	8.998E+01	1.890E+02
803	-1.974E+01	0.000E+00	-1.861E+02	8.318E+01	1.770E+02
804	-4.492E+01	0.000E+00	-1.889E+02	7.200E+01	1.709E+02
805	-5.854E+01	0.000E+00	-2.112E+02	7.632E+01	1.888E+02
806	-3.449E+01	0.000E+00	-2.050E+02	8.527E+01	1.901E+02
808	-7.209E+01	0.000E+00	-2.450E+02	8.644E+01	2.181E+02
809	-8.974E+01	0.000E+00	-3.037E+02	1.070E+02	2.702E+02
810	-7.433E+01	0.000E+00	-2.685E+02	9.710E+01	2.401E+02
811	-5.979E+01	0.000E+00	-2.492E+02	9.470E+01	2.253E+02
812	3.498E-01	0.000E+00	-2.431E+02	1.217E+02	2.432E+02
813	-1.893E-02	0.000E+00	-2.246E+02	1.123E+02	2.246E+02
814	-2.007E+00	0.000E+00	-2.083E+02	1.031E+02	2.073E+02
815	-4.272E+01	0.000E+00	-2.290E+02	9.315E+01	2.109E+02
816	-1.877E+01	0.000E+00	-2.258E+02	1.035E+02	2.170E+02
817	-2.143E+01	0.000E+00	-2.413E+02	1.099E+02	2.313E+02
818	-3.837E+01	0.000E+00	-2.390E+02	1.003E+02	2.223E+02
819	6.599E+01	0.000E+00	-9.541E+00	3.777E+01	7.124E+01
820	5.011E+01	0.000E+00	-3.211E+01	4.111E+01	7.177E+01
821	2.809E+01	0.000E+00	-6.508E+01	4.659E+01	8.279E+01
822	8.804E+00	0.000E+00	-1.040E+02	5.641E+01	1.087E+02
823	8.462E-01	0.000E+00	-1.431E+02	7.197E+01	1.435E+02
824	6.560E+00	0.000E+00	-1.738E+02	9.019E+01	1.772E+02
825	7.885E+01	0.000E+00	-1.826E+01	4.855E+01	8.939E+01
826	7.345E+01	0.000E+00	-3.175E+01	5.260E+01	9.346E+01
827	7.523E+01	0.000E+00	1.419E+01	3.052E+01	6.923E+01
828	5.788E+01	0.000E+00	-3.658E+01	4.723E+01	8.250E+01
829	5.448E+01	0.000E+00	-4.110E+01	4.779E+01	8.305E+01
830	9.736E+01	0.000E+00	2.828E+01	3.454E+01	8.675E+01
831	3.501E+01	0.000E+00	-7.070E+01	5.286E+01	9.327E+01
832	3.792E+01	0.000E+00	-6.534E+01	5.163E+01	9.047E+01
833	4.475E+01	0.000E+00	-3.498E+01	3.987E+01	6.922E+01
834	1.912E+01	0.000E+00	-1.157E+02	6.742E+01	1.264E+02
835	3.237E+01	0.000E+00	-1.037E+02	6.806E+01	1.232E+02
836	2.629E+01	0.000E+00	-7.668E+01	5.149E+01	9.267E+01
837	1.197E+01	0.000E+00	-1.585E+02	8.522E+01	1.648E+02
838	3.111E+01	0.000E+00	-1.416E+02	8.633E+01	1.594E+02
839	1.353E+01	0.000E+00	-1.162E+02	6.488E+01	1.236E+02
840	1.244E+01	0.000E+00	-1.870E+02	9.971E+01	1.935E+02
841	2.747E+01	0.000E+00	-1.661E+02	9.676E+01	1.814E+02
842	2.042E+00	0.000E+00	-1.471E+02	7.459E+01	1.482E+02
847	6.722E+01	0.000E+00	-4.966E+00	3.609E+01	6.984E+01
848	6.125E+01	0.000E+00	-1.754E+01	3.939E+01	7.164E+01
849	4.565E+01	0.000E+00	-4.674E+01	4.619E+01	8.001E+01
850	3.305E+01	0.000E+00	-7.947E+01	5.626E+01	1.002E+02
851	2.385E+01	0.000E+00	-1.112E+02	6.754E+01	1.249E+02
852	1.298E+01	0.000E+00	-1.359E+02	7.442E+01	1.428E+02
853	6.652E+01	0.000E+00	-3.981E+00	3.525E+01	6.860E+01
854	5.350E+01	0.000E+00	-1.151E+01	3.250E+01	6.008E+01

Table B.2 (continued)

Page 9

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
855	3.003E+01	0.000E+00	-3.070E+01	3.036E+01	5.259E+01
856	1.487E+01	0.000E+00	-6.445E+01	3.966E+01	7.303E+01
857	8.576E+00	0.000E+00	-1.255E+02	6.705E+01	1.300E+02
858	-2.190E+01	0.000E+00	-8.870E+01	3.340E+01	8.003E+01
859	-5.001E+01	0.000E+00	-1.745E+02	6.225E+01	1.557E+02
860	-5.689E+00	0.000E+00	-1.565E+02	7.542E+01	1.538E+02
861	7.567E+01	0.000E+00	3.360E+00	3.616E+01	7.405E+01
862	6.488E+01	0.000E+00	-5.850E+00	3.536E+01	6.799E+01
863	3.536E+01	0.000E+00	-3.146E+01	3.341E+01	5.790E+01
864	2.000E+01	0.000E+00	-7.328E+01	4.664E+01	8.506E+01
865	1.166E+01	0.000E+00	-1.212E+02	6.645E+01	1.275E+02
866	-2.212E+01	0.000E+00	-1.296E+02	5.375E+01	1.201E+02
867	-3.526E+01	0.000E+00	-1.583E+02	6.154E+01	1.440E+02
868	-6.544E+01	0.000E+00	-2.237E+02	7.915E+01	1.992E+02
869	-7.992E+01	0.000E+00	-2.661E+02	9.311E+01	2.365E+02
870	-8.810E+01	0.000E+00	-2.989E+02	1.054E+02	2.661E+02
871	7.888E+00	0.000E+00	-1.634E+02	8.564E+01	1.675E+02
872	2.057E+00	0.000E+00	-1.954E+02	9.873E+01	1.964E+02
873	3.242E+00	0.000E+00	-1.555E+02	7.937E+01	1.571E+02
874	-1.124E+01	0.000E+00	-1.779E+02	8.331E+01	1.725E+02
875	-3.089E+01	0.000E+00	-1.917E+02	8.040E+01	1.783E+02
876	7.574E-01	0.000E+00	-2.613E+02	1.310E+02	2.617E+02
877	-9.084E+01	0.000E+00	-3.031E+02	1.061E+02	2.694E+02
878	-5.278E+01	0.000E+00	-2.522E+02	9.973E+01	2.304E+02
879	-4.888E+01	0.000E+00	-2.576E+02	1.043E+02	2.369E+02
880	-4.157E+01	0.000E+00	-1.833E+02	7.084E+01	1.664E+02
881	-4.343E+01	0.000E+00	-1.925E+02	7.454E+01	1.749E+02
882	6.407E+01	0.000E+00	-4.326E+00	3.420E+01	6.634E+01
883	7.992E+01	0.000E+00	-1.792E+01	4.892E+01	9.023E+01
884	8.342E+01	0.000E+00	-2.698E+01	5.520E+01	9.969E+01
885	7.349E+01	0.000E+00	-4.134E+00	3.881E+01	7.564E+01
886	7.966E+01	0.000E+00	2.133E+01	2.917E+01	7.142E+01
887	6.393E+01	0.000E+00	-1.606E+01	4.000E+01	7.329E+01
888	9.890E+01	0.000E+00	-1.979E+01	5.935E+01	1.101E+02
889	6.962E+01	0.000E+00	-1.921E+01	4.441E+01	8.095E+01
890	7.786E+01	0.000E+00	1.327E+01	3.230E+01	7.214E+01
891	6.044E+01	0.000E+00	-1.990E+01	4.017E+01	7.247E+01
892	9.100E+01	0.000E+00	-2.379E+01	5.740E+01	1.049E+02
893	6.419E+01	0.000E+00	-1.988E+01	4.204E+01	7.610E+01
894	7.015E+01	0.000E+00	8.988E+00	3.058E+01	6.612E+01
895	5.255E+01	0.000E+00	-2.497E+01	3.876E+01	6.853E+01
896	8.012E+01	0.000E+00	-3.105E+01	5.558E+01	9.935E+01
897	5.882E+01	0.000E+00	-2.341E+01	4.112E+01	7.338E+01
898	6.797E+01	0.000E+00	6.571E+00	3.070E+01	6.493E+01
899	4.448E+01	0.000E+00	-3.326E+01	3.887E+01	6.756E+01
900	6.665E+01	0.000E+00	-4.238E+01	5.452E+01	9.521E+01
901	5.323E+01	0.000E+00	-2.947E+01	4.135E+01	7.260E+01
902	7.190E+01	0.000E+00	-1.937E+00	3.692E+01	7.289E+01
903	3.569E+01	0.000E+00	-4.448E+01	4.009E+01	6.957E+01

Table B.2 (continued)

Page 10

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
904	5.305E+01	0.000E+00	-5.839E+01	5.572E+01	9.655E+01
905	4.686E+01	0.000E+00	-3.970E+01	4.328E+01	7.504E+01
906	6.026E+01	0.000E+00	-2.057E+01	4.042E+01	7.276E+01
907	2.803E+01	0.000E+00	-5.884E+01	4.344E+01	7.679E+01
908	4.129E+01	0.000E+00	-7.913E+01	6.021E+01	1.060E+02
909	4.107E+01	0.000E+00	-5.273E+01	4.690E+01	8.144E+01
910	4.734E+01	0.000E+00	-3.927E+01	4.330E+01	7.511E+01
911	2.182E+01	0.000E+00	-7.513E+01	4.848E+01	8.810E+01
912	3.184E+01	0.000E+00	-1.039E+02	6.787E+01	1.230E+02
913	3.693E+01	0.000E+00	-6.788E+01	5.241E+01	9.208E+01
914	3.784E+01	0.000E+00	-5.752E+01	4.768E+01	8.317E+01
915	1.830E+01	0.000E+00	-9.416E+01	5.623E+01	1.045E+02
916	2.537E+01	0.000E+00	-1.294E+02	7.738E+01	1.438E+02
917	3.368E+01	0.000E+00	-8.387E+01	5.877E+01	1.048E+02
918	3.085E+01	0.000E+00	-7.547E+01	5.316E+01	9.474E+01
919	1.502E+01	0.000E+00	-1.107E+02	6.287E+01	1.189E+02
920	2.094E+01	0.000E+00	-1.553E+02	8.814E+01	1.668E+02
921	3.186E+01	0.000E+00	-1.003E+02	6.608E+01	1.195E+02
922	2.490E+01	0.000E+00	-9.293E+01	5.892E+01	1.076E+02
923	1.560E+01	0.000E+00	-1.294E+02	7.248E+01	1.378E+02
924	1.858E+01	0.000E+00	-1.767E+02	9.762E+01	1.866E+02
925	2.841E+01	0.000E+00	-1.147E+02	7.157E+01	1.313E+02
926	1.955E+01	0.000E+00	-1.097E+02	6.464E+01	1.207E+02
927	1.481E+01	0.000E+00	-1.415E+02	7.816E+01	1.495E+02
928	1.770E+01	0.000E+00	-1.956E+02	1.067E+02	2.050E+02
929	2.562E+01	0.000E+00	-1.280E+02	7.683E+01	1.426E+02
930	1.356E+01	0.000E+00	-1.240E+02	6.877E+01	1.313E+02
931	1.795E+01	0.000E+00	-1.548E+02	8.636E+01	1.645E+02
932	1.815E+01	0.000E+00	-2.065E+02	1.123E+02	2.161E+02
933	1.975E+01	0.000E+00	-1.375E+02	7.862E+01	1.484E+02
934	7.304E+00	0.000E+00	-1.368E+02	7.204E+01	1.406E+02
935	5.610E+01	0.000E+00	-2.037E+01	3.823E+01	6.859E+01
936	6.609E+01	0.000E+00	-2.823E+01	4.716E+01	8.385E+01
937	6.693E+01	0.000E+00	-3.296E+01	4.994E+01	8.816E+01
938	6.325E+01	0.000E+00	-9.799E+00	3.653E+01	6.868E+01
939	7.265E+01	0.000E+00	1.062E+01	3.102E+01	6.796E+01
940	3.971E+01	0.000E+00	-4.698E+01	4.335E+01	7.517E+01
941	4.593E+01	0.000E+00	-5.179E+01	4.886E+01	8.467E+01
942	4.511E+01	0.000E+00	-5.130E+01	4.821E+01	8.355E+01
943	5.393E+01	0.000E+00	-3.211E+01	4.302E+01	7.531E+01
944	5.862E+01	0.000E+00	-1.306E+01	3.584E+01	6.612E+01
945	1.938E+01	0.000E+00	-7.898E+01	4.918E+01	9.024E+01
946	2.914E+01	0.000E+00	-8.890E+01	5.902E+01	1.065E+02
947	3.169E+01	0.000E+00	-8.698E+01	5.934E+01	1.064E+02
948	3.861E+01	0.000E+00	-6.339E+01	5.100E+01	8.920E+01
949	3.515E+01	0.000E+00	-5.611E+01	4.563E+01	7.972E+01
950	5.206E+00	0.000E+00	-1.134E+02	5.931E+01	1.161E+02
951	2.019E+01	0.000E+00	-1.307E+02	7.545E+01	1.419E+02
952	2.716E+01	0.000E+00	-1.299E+02	7.851E+01	1.454E+02

Table B.2 (continued)

Page 11

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
953	2.862E+01	0.000E+00	-9.632E+01	6.247E+01	1.134E+02
954	2.116E+01	0.000E+00	-9.595E+01	5.856E+01	1.081E+02
955	4.817E+00	0.000E+00	-1.461E+02	7.546E+01	1.486E+02
956	1.849E+01	0.000E+00	-1.652E+02	9.183E+01	1.751E+02
957	2.419E+01	0.000E+00	-1.639E+02	9.402E+01	1.772E+02
958	1.918E+01	0.000E+00	-1.250E+02	7.208E+01	1.356E+02
959	9.663E+00	0.000E+00	-1.309E+02	7.028E+01	1.360E+02
960	-2.546E+00	0.000E+00	-1.558E+02	7.664E+01	1.546E+02
964	-1.665E+01	0.000E+00	-1.404E+02	6.185E+01	1.328E+02
965	2.600E+01	0.000E+00	-5.768E+01	4.184E+01	7.418E+01
966	4.597E+01	0.000E+00	-1.079E+02	7.694E+01	1.368E+02
967	4.915E+01	0.000E+00	-1.517E+02	1.004E+02	1.813E+02
968	3.884E+01	0.000E+00	-1.802E+02	1.095E+02	2.024E+02
969	2.181E+01	0.000E+00	-1.877E+02	1.048E+02	1.995E+02
970	2.020E+01	0.000E+00	-7.103E+01	4.562E+01	8.300E+01
971	9.234E+00	0.000E+00	-1.225E+02	6.587E+01	1.274E+02
972	-1.865E+01	0.000E+00	-1.418E+02	6.157E+01	1.334E+02
973	2.928E+01	0.000E+00	-1.093E+02	6.930E+01	1.265E+02
974	4.211E+00	0.000E+00	-1.312E+02	6.772E+01	1.334E+02
975	-2.377E+01	0.000E+00	-1.555E+02	6.588E+01	1.451E+02
976	3.073E+01	0.000E+00	-1.495E+02	9.014E+01	1.670E+02
977	3.645E+00	0.000E+00	-1.465E+02	7.505E+01	1.483E+02
978	-2.601E+01	0.000E+00	-1.681E+02	7.103E+01	1.567E+02
979	2.573E+01	0.000E+00	-1.807E+02	1.032E+02	1.949E+02
980	9.916E+00	0.000E+00	-1.633E+02	8.660E+01	1.685E+02
981	-2.090E+01	0.000E+00	-1.733E+02	7.622E+01	1.639E+02
982	1.819E+01	0.000E+00	-1.947E+02	1.064E+02	2.044E+02
983	1.952E+01	0.000E+00	-1.724E+02	9.598E+01	1.830E+02
984	-9.833E+00	0.000E+00	-1.657E+02	7.793E+01	1.610E+02
985	-1.575E+01	0.000E+00	-1.537E+02	6.898E+01	1.465E+02
986	-2.012E+01	0.000E+00	-1.559E+02	6.791E+01	1.469E+02
987	-2.087E+01	0.000E+00	-1.578E+02	6.848E+01	1.485E+02
988	-1.399E+01	0.000E+00	-1.571E+02	7.154E+01	1.506E+02
989	-8.887E-01	0.000E+00	-1.506E+02	7.484E+01	1.501E+02
990	1.148E+01	0.000E+00	-3.228E+01	2.188E+01	3.930E+01
991	1.206E+01	0.000E+00	-6.069E+01	3.638E+01	6.754E+01
992	1.231E+01	0.000E+00	-1.133E+02	6.280E+01	1.199E+02
993	-1.379E+01	0.000E+00	-1.528E+02	6.951E+01	1.464E+02
995	-3.053E+00	0.000E+00	-5.513E+01	2.604E+01	5.367E+01
996	2.785E+01	0.000E+00	-7.037E+01	4.911E+01	8.767E+01
997	-9.233E+00	0.000E+00	-1.511E+02	7.095E+01	1.467E+02
998	-1.864E+01	0.000E+00	-1.536E+02	6.749E+01	1.452E+02
999	6.250E+00	0.000E+00	-6.910E+01	3.767E+01	7.242E+01
1000	2.988E+01	0.000E+00	-8.137E+01	5.563E+01	9.973E+01
1001	-1.104E+01	0.000E+00	-1.494E+02	6.917E+01	1.442E+02
1002	-1.994E+01	0.000E+00	-1.555E+02	6.781E+01	1.466E+02
1003	1.394E+01	0.000E+00	-8.584E+01	4.989E+01	9.360E+01
1004	3.182E+01	0.000E+00	-9.752E+01	6.467E+01	1.167E+02
1005	-1.375E+01	0.000E+00	-1.503E+02	6.827E+01	1.439E+02

Table B.2 (continued)

Page 12

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1006	-2.280E+01	0.000E+00	-1.583E+02	6.777E+01	1.483E+02
1007	2.049E+01	0.000E+00	-1.027E+02	6.162E+01	1.144E+02
1008	3.300E+01	0.000E+00	-1.168E+02	7.488E+01	1.363E+02
1009	-1.577E+01	0.000E+00	-1.490E+02	6.663E+01	1.418E+02
1010	-2.506E+01	0.000E+00	-1.611E+02	6.800E+01	1.501E+02
1011	2.505E+01	0.000E+00	-1.199E+02	7.249E+01	1.342E+02
1012	3.293E+01	0.000E+00	-1.380E+02	8.547E+01	1.571E+02
1013	-1.732E+01	0.000E+00	-1.499E+02	6.629E+01	1.420E+02
1014	-2.701E+01	0.000E+00	-1.638E+02	6.837E+01	1.521E+02
1015	2.724E+01	0.000E+00	-1.347E+02	8.099E+01	1.502E+02
1016	3.185E+01	0.000E+00	-1.584E+02	9.510E+01	1.765E+02
1017	-1.601E+01	0.000E+00	-1.500E+02	6.699E+01	1.427E+02
1018	-2.681E+01	0.000E+00	-1.651E+02	6.914E+01	1.535E+02
1019	2.789E+01	0.000E+00	-1.474E+02	8.764E+01	1.631E+02
1020	2.978E+01	0.000E+00	-1.783E+02	1.040E+02	1.949E+02
1021	-1.323E+01	0.000E+00	-1.512E+02	6.900E+01	1.451E+02
1022	-2.509E+01	0.000E+00	-1.655E+02	7.021E+01	1.545E+02
1023	2.707E+01	0.000E+00	-1.571E+02	9.210E+01	1.723E+02
1024	2.723E+01	0.000E+00	-1.936E+02	1.104E+02	2.085E+02
1025	-7.670E+00	0.000E+00	-1.515E+02	7.193E+01	1.478E+02
1026	-2.081E+01	0.000E+00	-1.636E+02	7.138E+01	1.542E+02
1027	2.467E+01	0.000E+00	-1.619E+02	9.328E+01	1.755E+02
1028	2.442E+01	0.000E+00	-2.065E+02	1.154E+02	2.197E+02
1029	-7.888E-01	0.000E+00	-1.515E+02	7.537E+01	1.511E+02
1030	-1.490E+01	0.000E+00	-1.599E+02	7.250E+01	1.530E+02
1031	2.283E+01	0.000E+00	-1.646E+02	9.370E+01	1.771E+02
1032	2.178E+01	0.000E+00	-2.118E+02	1.168E+02	2.235E+02
1033	6.387E+00	0.000E+00	-1.490E+02	7.771E+01	1.523E+02
1034	-7.513E+00	0.000E+00	-1.542E+02	7.333E+01	1.506E+02
1035	1.906E+01	0.000E+00	-1.599E+02	8.948E+01	1.702E+02
1036	1.959E+01	0.000E+00	-2.136E+02	1.166E+02	2.241E+02
1037	1.422E+01	0.000E+00	-1.452E+02	7.970E+01	1.528E+02
1038	-2.788E-02	0.000E+00	-1.463E+02	7.316E+01	1.463E+02
1039	4.034E+01	0.000E+00	-8.038E+01	6.036E+01	1.064E+02
1040	2.409E+01	0.000E+00	-9.045E+01	5.727E+01	1.046E+02
1041	7.331E+00	0.000E+00	-1.212E+02	6.426E+01	1.250E+02
1042	-1.769E+01	0.000E+00	-1.545E+02	6.839E+01	1.464E+02
1043	-2.071E+01	0.000E+00	-1.499E+02	6.459E+01	1.407E+02
1044	5.294E+01	0.000E+00	-1.259E+02	8.944E+01	1.591E+02
1045	3.191E+01	0.000E+00	-1.282E+02	8.007E+01	1.468E+02
1046	3.154E+00	0.000E+00	-1.375E+02	7.032E+01	1.391E+02
1047	-2.103E+01	0.000E+00	-1.566E+02	6.781E+01	1.473E+02
1048	-2.554E+01	0.000E+00	-1.633E+02	6.887E+01	1.521E+02
1049	4.962E+01	0.000E+00	-1.596E+02	1.046E+02	1.893E+02
1050	3.246E+01	0.000E+00	-1.616E+02	9.701E+01	1.800E+02
1051	4.670E+00	0.000E+00	-1.588E+02	8.173E+01	1.612E+02
1052	-1.800E+01	0.000E+00	-1.577E+02	6.988E+01	1.496E+02
1053	-2.329E+01	0.000E+00	-1.719E+02	7.432E+01	1.616E+02
1054	3.507E+01	0.000E+00	-1.747E+02	1.049E+02	1.946E+02

Table B.2 (continued)

Page 13

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1055	2.796E+01	0.000E+00	-1.818E+02	1.049E+02	1.973E+02
1056	1.114E+01	0.000E+00	-1.761E+02	9.360E+01	1.819E+02
1057	-7.392E+00	0.000E+00	-1.547E+02	7.365E+01	1.511E+02
1058	-1.517E+01	0.000E+00	-1.691E+02	7.697E+01	1.621E+02
1059	1.715E+01	0.000E+00	-1.691E+02	9.312E+01	1.783E+02
1060	2.207E+01	0.000E+00	-1.834E+02	1.027E+02	1.954E+02
1061	1.876E+01	0.000E+00	-1.796E+02	9.920E+01	1.897E+02
1062	6.767E+00	0.000E+00	-1.446E+02	7.566E+01	1.481E+02
1064	8.349E+01	0.000E+00	6.700E+00	3.839E+01	8.035E+01
1065	8.232E+01	0.000E+00	1.814E+00	4.026E+01	8.143E+01
1066	8.514E+01	0.000E+00	1.366E+01	3.574E+01	7.919E+01
1067	8.130E+01	0.000E+00	1.632E+00	3.983E+01	8.049E+01
1068	7.721E+01	0.000E+00	8.529E+00	3.434E+01	7.332E+01
1069	7.210E+01	0.000E+00	-2.046E-01	3.615E+01	7.221E+01
1070	7.653E+01	0.000E+00	3.642E+00	3.644E+01	7.477E+01
1071	6.941E+01	0.000E+00	-4.114E+00	3.676E+01	7.155E+01
1072	7.448E+01	0.000E+00	-2.974E-01	3.739E+01	7.463E+01
1073	5.884E+01	0.000E+00	-8.946E+00	3.389E+01	6.378E+01
1074	5.303E+01	0.000E+00	-1.188E+01	3.246E+01	5.986E+01
1075	4.586E+01	0.000E+00	-1.692E+01	3.139E+01	5.626E+01
1076	3.967E+01	0.000E+00	-3.323E+01	3.645E+01	6.322E+01
1077	3.276E+01	0.000E+00	-3.093E+01	3.184E+01	5.516E+01
1078	3.030E+01	0.000E+00	-5.519E+01	4.274E+01	7.507E+01
1079	2.327E+01	0.000E+00	-4.986E+01	3.657E+01	6.472E+01
1080	2.336E+01	0.000E+00	-7.692E+01	5.014E+01	9.088E+01
1081	1.719E+01	0.000E+00	-6.955E+01	4.337E+01	7.955E+01
1082	1.761E+01	0.000E+00	-9.957E+01	5.859E+01	1.094E+02
1083	1.273E+01	0.000E+00	-9.730E+01	5.501E+01	1.042E+02
1084	1.295E+01	0.000E+00	-1.211E+02	6.705E+01	1.281E+02
1085	1.069E+01	0.000E+00	-1.225E+02	6.659E+01	1.282E+02
1086	7.289E+01	0.000E+00	-8.213E-01	3.686E+01	7.331E+01
1087	6.933E+01	0.000E+00	-3.660E+00	3.649E+01	7.123E+01
1088	4.912E+01	0.000E+00	-1.466E+01	3.189E+01	5.786E+01
1089	4.471E+01	0.000E+00	-1.707E+01	3.089E+01	5.526E+01
1090	2.687E+01	0.000E+00	-5.224E+01	3.955E+01	6.968E+01
1091	1.971E+01	0.000E+00	-4.962E+01	3.466E+01	6.188E+01
1092	1.589E+01	0.000E+00	-9.830E+01	5.710E+01	1.071E+02
1093	7.997E+00	0.000E+00	-9.706E+01	5.253E+01	1.013E+02
1094	9.049E+00	0.000E+00	-1.456E+02	7.730E+01	1.503E+02
1095	8.008E+00	0.000E+00	-1.399E+02	7.394E+01	1.440E+02
1096	8.292E+00	0.000E+00	-1.387E+02	7.349E+01	1.430E+02
1097	3.317E+00	0.000E+00	-1.537E+02	7.849E+01	1.553E+02
1098	8.047E+00	0.000E+00	-1.421E+02	7.510E+01	1.463E+02
1099	4.338E+00	0.000E+00	-1.590E+02	8.166E+01	1.612E+02
1100	5.679E+00	0.000E+00	-1.796E+02	9.264E+01	1.825E+02
1101	-2.973E+00	0.000E+00	-1.679E+02	8.247E+01	1.665E+02
1102	-1.059E+00	0.000E+00	-1.733E+02	8.613E+01	1.728E+02
1103	-2.846E+00	0.000E+00	-1.646E+02	8.086E+01	1.632E+02
1104	-1.056E+01	0.000E+00	-1.718E+02	8.062E+01	1.668E+02

Table B.2 (continued)

Page 14

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:20:19

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1105	-7.781E+00	0.000E+00	-1.877E+02	8.998E+01	1.840E+02
1106	-2.163E+01	0.000E+00	-1.806E+02	7.946E+01	1.708E+02
1107	-3.846E+01	0.000E+00	-1.947E+02	7.813E+01	1.786E+02
1108	-2.711E+01	0.000E+00	-1.828E+02	7.783E+01	1.708E+02
1109	-3.070E+01	0.000E+00	-1.811E+02	7.520E+01	1.679E+02
1110	-3.040E+01	0.000E+00	-1.737E+02	7.165E+01	1.607E+02
1111	-4.008E+01	0.000E+00	-1.714E+02	6.564E+01	1.553E+02
1112	-2.912E+01	0.000E+00	-1.636E+02	6.722E+01	1.511E+02
1113	-2.600E+01	0.000E+00	-1.536E+02	6.382E+01	1.424E+02
1114	-2.760E+01	0.000E+00	-1.427E+02	5.753E+01	1.311E+02
1115	-2.103E+01	0.000E+00	-1.420E+02	6.050E+01	1.328E+02
1116	-1.765E+01	0.000E+00	-1.330E+02	5.766E+01	1.251E+02
1117	-1.973E+01	0.000E+00	-1.213E+02	5.078E+01	1.127E+02
1118	-1.538E+01	0.000E+00	-1.266E+02	5.559E+01	1.196E+02
1119	-3.243E+01	0.000E+00	-1.075E+02	3.753E+01	9.550E+01
1120	-2.708E+01	0.000E+00	-1.112E+02	4.208E+01	1.005E+02
1121	-2.394E+01	0.000E+00	-1.207E+02	4.836E+01	1.106E+02
1122	-4.142E+01	0.000E+00	-1.412E+02	4.987E+01	1.257E+02
1123	-3.563E+01	0.000E+00	-1.405E+02	5.244E+01	1.265E+02
1124	-4.409E+01	0.000E+00	-1.642E+02	6.004E+01	1.472E+02
1125	-5.888E+01	0.000E+00	-2.011E+02	7.109E+01	1.790E+02
1126	-4.992E+01	0.000E+00	-1.823E+02	6.619E+01	1.632E+02
1127	-5.497E+01	0.000E+00	-1.993E+02	7.216E+01	1.783E+02
1128	-8.286E+00	0.000E+00	-2.747E+02	1.332E+02	2.706E+02
1129	-8.618E+01	0.000E+00	-2.806E+02	9.723E+01	2.490E+02
1130	-7.003E+01	0.000E+00	-2.671E+02	9.852E+01	2.398E+02
1131	-3.087E+01	0.000E+00	-2.560E+02	1.126E+02	2.421E+02
1132	-7.296E+01	0.000E+00	-2.611E+02	9.408E+01	2.334E+02
1133	-6.466E+01	0.000E+00	-2.461E+02	9.073E+01	2.210E+02
1134	-5.975E+01	0.000E+00	-2.217E+02	8.096E+01	1.986E+02
1135	-5.142E+01	0.000E+00	-2.154E+02	8.199E+01	1.949E+02
1136	-8.486E+01	0.000E+00	-2.850E+02	1.000E+02	2.534E+02
1137	-6.755E+01	0.000E+00	-2.414E+02	8.691E+01	2.157E+02
1138	-5.920E+01	0.000E+00	-2.312E+02	8.602E+01	2.081E+02
1139	-1.697E+01	0.000E+00	-1.969E+02	8.998E+01	1.890E+02
1140	-1.974E+01	0.000E+00	-1.861E+02	8.318E+01	1.770E+02
1141	-4.492E+01	0.000E+00	-1.889E+02	7.200E+01	1.709E+02
1142	-5.854E+01	0.000E+00	-2.112E+02	7.632E+01	1.888E+02
1143	-3.449E+01	0.000E+00	-2.050E+02	8.527E+01	1.901E+02
1144	-7.209E+01	0.000E+00	-2.450E+02	8.644E+01	2.181E+02
1145	-8.974E+01	0.000E+00	-3.037E+02	1.070E+02	2.702E+02
1146	-7.433E+01	0.000E+00	-2.685E+02	9.710E+01	2.401E+02
1147	-5.979E+01	0.000E+00	-2.492E+02	9.470E+01	2.253E+02
1148	3.498E-01	0.000E+00	-2.431E+02	1.217E+02	2.432E+02
1149	-1.893E-02	0.000E+00	-2.246E+02	1.123E+02	2.246E+02
1150	-2.007E+00	0.000E+00	-2.083E+02	1.031E+02	2.073E+02
1151	-4.272E+01	0.000E+00	-2.290E+02	9.315E+01	2.109E+02
1152	-1.877E+01	0.000E+00	-2.258E+02	1.035E+02	2.170E+02
1153	-2.143E+01	0.000E+00	-2.413E+02	1.099E+02	2.313E+02

Table B.2 (continued)

Page 15

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:20:19

	Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
	1154	-3.837E+01	0.000E+00	-2.390E+02	1.003E+02	2.223E+02
		327	312	327	786	786
Maximum		1.153E+02	0.000E+00	4.732E+01	1.332E+02	2.706E+02
		406	312	809	609	609
Minimum		-9.084E+01	0.000E+00	-3.037E+02	3.881E+00	1.227E+01
Average		1.387E+01	0.000E+00	-1.184E+02	6.611E+01	1.334E+02

Table B.3 Model loaded with -33.33 lb (-148.3 N) on nodes 617, 623 and 975 (displacement listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

```

Group ID      : PERMANENT GROUP1
Analysis Dataset : 4 - CASE 1,LOAD 2,DISPLACEMENTS
Report Type    : Contour
Dataset Type    : Displacements
Frame of Reference: Global
Units          : IN
Load Set       : 2
Data Component : Z-Component

```

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
312	0.000E+00	0.000E+00	-6.112E-05	-6.773E-17	2.332E-06	0.000E+00
313	0.000E+00	0.000E+00	-6.069E-05	4.925E-07	2.336E-06	0.000E+00
314	0.000E+00	0.000E+00	-5.946E-05	9.798E-07	2.349E-06	0.000E+00
315	0.000E+00	0.000E+00	-5.758E-05	1.455E-06	2.375E-06	0.000E+00
316	0.000E+00	0.000E+00	-5.530E-05	1.907E-06	2.422E-06	0.000E+00
317	0.000E+00	0.000E+00	-5.289E-05	2.318E-06	2.501E-06	0.000E+00
318	0.000E+00	0.000E+00	-5.065E-05	2.655E-06	2.633E-06	0.000E+00
325	0.000E+00	0.000E+00	-6.355E-05	-5.674E-17	2.532E-06	0.000E+00
326	0.000E+00	0.000E+00	-6.617E-05	-5.062E-17	2.695E-06	0.000E+00
327	0.000E+00	0.000E+00	-7.614E-05	-4.095E-17	3.176E-06	0.000E+00
328	0.000E+00	0.000E+00	-6.291E-05	5.607E-07	2.552E-06	0.000E+00
329	0.000E+00	0.000E+00	-6.531E-05	6.039E-07	2.724E-06	0.000E+00
330	0.000E+00	0.000E+00	-7.450E-05	6.761E-07	3.214E-06	0.000E+00
331	0.000E+00	0.000E+00	-6.109E-05	1.097E-06	2.606E-06	0.000E+00
332	0.000E+00	0.000E+00	-6.286E-05	1.173E-06	2.803E-06	0.000E+00
333	0.000E+00	0.000E+00	-6.975E-05	1.315E-06	3.318E-06	0.000E+00
334	0.000E+00	0.000E+00	-5.830E-05	1.591E-06	2.682E-06	0.000E+00
335	0.000E+00	0.000E+00	-5.912E-05	1.682E-06	2.909E-06	0.000E+00
336	0.000E+00	0.000E+00	-6.247E-05	1.890E-06	3.459E-06	0.000E+00
337	0.000E+00	0.000E+00	-5.489E-05	2.028E-06	2.763E-06	0.000E+00
338	0.000E+00	0.000E+00	-5.455E-05	2.116E-06	3.011E-06	0.000E+00
339	0.000E+00	0.000E+00	-5.351E-05	2.386E-06	3.597E-06	0.000E+00
340	0.000E+00	0.000E+00	-5.131E-05	2.403E-06	2.841E-06	0.000E+00
341	0.000E+00	0.000E+00	-4.973E-05	2.477E-06	3.086E-06	0.000E+00
342	0.000E+00	0.000E+00	-4.398E-05	2.797E-06	3.690E-06	0.000E+00
343	0.000E+00	0.000E+00	-4.799E-05	2.702E-06	2.919E-06	0.000E+00
344	0.000E+00	0.000E+00	-4.526E-05	2.766E-06	3.129E-06	0.000E+00
345	0.000E+00	0.000E+00	-3.511E-05	3.116E-06	3.727E-06	0.000E+00
360	0.000E+00	0.000E+00	-2.075E-05	1.669E-06	6.182E-06	0.000E+00
364	0.000E+00	0.000E+00	-7.095E-05	-4.457E-17	2.962E-06	0.000E+00
365	0.000E+00	0.000E+00	-6.971E-05	6.455E-07	2.986E-06	0.000E+00
366	0.000E+00	0.000E+00	-6.615E-05	1.255E-06	3.087E-06	0.000E+00
367	0.000E+00	0.000E+00	-6.069E-05	1.804E-06	3.208E-06	0.000E+00
368	0.000E+00	0.000E+00	-5.400E-05	2.282E-06	3.324E-06	0.000E+00
369	0.000E+00	0.000E+00	-4.692E-05	2.693E-06	3.408E-06	0.000E+00
370	0.000E+00	0.000E+00	-4.033E-05	3.044E-06	3.457E-06	0.000E+00
377	0.000E+00	0.000E+00	-8.827E-05	-3.667E-17	3.483E-06	0.000E+00
378	0.000E+00	0.000E+00	-8.571E-05	7.246E-07	3.534E-06	0.000E+00
379	0.000E+00	0.000E+00	-7.831E-05	1.403E-06	3.673E-06	0.000E+00
380	0.000E+00	0.000E+00	-6.690E-05	2.000E-06	3.863E-06	0.000E+00
381	0.000E+00	0.000E+00	-5.278E-05	2.494E-06	4.043E-06	0.000E+00
382	0.000E+00	0.000E+00	-3.772E-05	2.888E-06	4.108E-06	0.000E+00
383						

Table B.3 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
384	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
385	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
386	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
387	0.000E+00	0.000E+00	-8.206E-05	-3.828E-17	3.350E-06	0.000E+00
388	0.000E+00	0.000E+00	-7.997E-05	7.028E-07	3.394E-06	0.000E+00
389	0.000E+00	0.000E+00	-7.391E-05	1.364E-06	3.517E-06	0.000E+00
390	0.000E+00	0.000E+00	-6.459E-05	1.952E-06	3.683E-06	0.000E+00
391	0.000E+00	0.000E+00	-5.309E-05	2.449E-06	3.842E-06	0.000E+00
392	0.000E+00	0.000E+00	-4.084E-05	2.837E-06	3.926E-06	0.000E+00
393	0.000E+00	0.000E+00	-6.561E-06	8.779E-16	5.344E-06	0.000E+00
394	0.000E+00	0.000E+00	-6.440E-06	1.327E-06	5.043E-06	0.000E+00
395	0.000E+00	0.000E+00	-6.955E-06	2.368E-06	4.804E-06	0.000E+00
396	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	0.000E+00	0.000E+00	-2.404E-05	3.024E-06	3.916E-06	0.000E+00
401	0.000E+00	0.000E+00	-1.156E-05	2.663E-06	3.207E-06	0.000E+00
402	0.000E+00	0.000E+00	-2.949E-05	3.036E-06	3.904E-06	0.000E+00
403	0.000E+00	0.000E+00	-1.919E-05	2.941E-06	3.735E-06	0.000E+00
404	0.000E+00	0.000E+00	-1.277E-05	2.700E-06	3.581E-06	0.000E+00
405	0.000E+00	0.000E+00	-5.202E-07	7.578E-07	6.898E-07	0.000E+00
406	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	0.000E+00	0.000E+00	-8.983E-07	6.860E-07	1.092E-06	0.000E+00
408	0.000E+00	0.000E+00	-1.776E-07	2.912E-07	4.402E-07	0.000E+00
411	0.000E+00	0.000E+00	-6.822E-06	2.551E-06	3.931E-06	0.000E+00
412	0.000E+00	0.000E+00	-8.969E-06	2.614E-06	3.640E-06	0.000E+00
413	0.000E+00	0.000E+00	-6.095E-05	2.449E-07	2.332E-06	0.000E+00
414	0.000E+00	0.000E+00	-6.231E-05	-6.132E-17	2.432E-06	0.000E+00
415	0.000E+00	0.000E+00	-6.330E-05	2.809E-07	2.532E-06	0.000E+00
416	0.000E+00	0.000E+00	-6.484E-05	-5.330E-17	2.615E-06	0.000E+00
417	0.000E+00	0.000E+00	-6.584E-05	3.034E-07	2.696E-06	0.000E+00
418	0.000E+00	0.000E+00	-6.850E-05	-4.711E-17	2.836E-06	0.000E+00
419	0.000E+00	0.000E+00	-7.047E-05	3.245E-07	2.962E-06	0.000E+00
420	0.000E+00	0.000E+00	-7.350E-05	-4.259E-17	3.074E-06	0.000E+00
421	0.000E+00	0.000E+00	-7.550E-05	3.399E-07	3.177E-06	0.000E+00
422	0.000E+00	0.000E+00	-6.217E-05	2.675E-07	2.435E-06	0.000E+00
423	0.000E+00	0.000E+00	-6.465E-05	2.943E-07	2.623E-06	0.000E+00
424	0.000E+00	0.000E+00	-6.824E-05	3.156E-07	2.844E-06	0.000E+00
425	0.000E+00	0.000E+00	-7.314E-05	3.334E-07	3.083E-06	0.000E+00
426	0.000E+00	0.000E+00	-6.178E-05	5.326E-07	2.446E-06	0.000E+00
427	0.000E+00	0.000E+00	-6.409E-05	5.848E-07	2.641E-06	0.000E+00
428	0.000E+00	0.000E+00	-6.746E-05	6.265E-07	2.868E-06	0.000E+00
429	0.000E+00	0.000E+00	-7.206E-05	6.618E-07	3.111E-06	0.000E+00
430	0.000E+00	0.000E+00	-6.113E-05	7.937E-07	2.463E-06	0.000E+00
431	0.000E+00	0.000E+00	-6.319E-05	8.672E-07	2.672E-06	0.000E+00
432	0.000E+00	0.000E+00	-6.619E-05	9.284E-07	2.905E-06	0.000E+00
433	0.000E+00	0.000E+00	-7.030E-05	9.813E-07	3.153E-06	0.000E+00
434	0.000E+00	0.000E+00	-6.025E-05	1.048E-06	2.485E-06	0.000E+00
435	0.000E+00	0.000E+00	-6.196E-05	1.139E-06	2.710E-06	0.000E+00

Table B.3 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
436	0.000E+00	0.000E+00	-6.446E-05	1.218E-06	2.953E-06	0.000E+00
437	0.000E+00	0.000E+00	-6.792E-05	1.287E-06	3.208E-06	0.000E+00
438	0.000E+00	0.000E+00	-5.917E-05	1.295E-06	2.512E-06	0.000E+00
439	0.000E+00	0.000E+00	-6.044E-05	1.397E-06	2.756E-06	0.000E+00
440	0.000E+00	0.000E+00	-6.234E-05	1.491E-06	3.008E-06	0.000E+00
441	0.000E+00	0.000E+00	-6.497E-05	1.578E-06	3.271E-06	0.000E+00
442	0.000E+00	0.000E+00	-5.792E-05	1.531E-06	2.543E-06	0.000E+00
443	0.000E+00	0.000E+00	-5.870E-05	1.640E-06	2.803E-06	0.000E+00
444	0.000E+00	0.000E+00	-5.988E-05	1.748E-06	3.065E-06	0.000E+00
445	0.000E+00	0.000E+00	-6.156E-05	1.851E-06	3.339E-06	0.000E+00
446	0.000E+00	0.000E+00	-5.655E-05	1.757E-06	2.576E-06	0.000E+00
447	0.000E+00	0.000E+00	-5.676E-05	1.865E-06	2.852E-06	0.000E+00
448	0.000E+00	0.000E+00	-5.716E-05	1.986E-06	3.122E-06	0.000E+00
449	0.000E+00	0.000E+00	-5.777E-05	2.106E-06	3.405E-06	0.000E+00
450	0.000E+00	0.000E+00	-5.509E-05	1.970E-06	2.611E-06	0.000E+00
451	0.000E+00	0.000E+00	-5.471E-05	2.073E-06	2.897E-06	0.000E+00
452	0.000E+00	0.000E+00	-5.427E-05	2.207E-06	3.173E-06	0.000E+00
453	0.000E+00	0.000E+00	-5.374E-05	2.341E-06	3.465E-06	0.000E+00
454	0.000E+00	0.000E+00	-5.359E-05	2.170E-06	2.650E-06	0.000E+00
455	0.000E+00	0.000E+00	-5.261E-05	2.264E-06	2.938E-06	0.000E+00
456	0.000E+00	0.000E+00	-5.130E-05	2.411E-06	3.216E-06	0.000E+00
457	0.000E+00	0.000E+00	-4.959E-05	2.558E-06	3.517E-06	0.000E+00
458	0.000E+00	0.000E+00	-5.210E-05	2.353E-06	2.691E-06	0.000E+00
459	0.000E+00	0.000E+00	-5.052E-05	2.437E-06	2.973E-06	0.000E+00
460	0.000E+00	0.000E+00	-4.835E-05	2.599E-06	3.250E-06	0.000E+00
461	0.000E+00	0.000E+00	-4.546E-05	2.757E-06	3.556E-06	0.000E+00
462	0.000E+00	0.000E+00	-5.067E-05	2.517E-06	2.737E-06	0.000E+00
463	0.000E+00	0.000E+00	-4.851E-05	2.591E-06	3.003E-06	0.000E+00
464	0.000E+00	0.000E+00	-4.550E-05	2.773E-06	3.275E-06	0.000E+00
465	0.000E+00	0.000E+00	-4.146E-05	2.939E-06	3.585E-06	0.000E+00
466	0.000E+00	0.000E+00	-4.933E-05	2.659E-06	2.791E-06	0.000E+00
467	0.000E+00	0.000E+00	-4.663E-05	2.725E-06	3.031E-06	0.000E+00
468	0.000E+00	0.000E+00	-4.286E-05	2.931E-06	3.294E-06	0.000E+00
469	0.000E+00	0.000E+00	-3.773E-05	3.104E-06	3.604E-06	0.000E+00
518	0.000E+00	0.000E+00	-6.012E-05	7.328E-07	2.338E-06	0.000E+00
519	0.000E+00	0.000E+00	-6.207E-05	8.306E-07	2.569E-06	0.000E+00
520	0.000E+00	0.000E+00	-6.418E-05	8.925E-07	2.752E-06	0.000E+00
521	0.000E+00	0.000E+00	-6.806E-05	9.550E-07	3.027E-06	0.000E+00
522	0.000E+00	0.000E+00	-7.230E-05	1.001E-06	3.251E-06	0.000E+00
523	0.000E+00	0.000E+00	-5.856E-05	1.214E-06	2.355E-06	0.000E+00
524	0.000E+00	0.000E+00	-5.975E-05	1.346E-06	2.635E-06	0.000E+00
525	0.000E+00	0.000E+00	-6.107E-05	1.433E-06	2.847E-06	0.000E+00
526	0.000E+00	0.000E+00	-6.353E-05	1.535E-06	3.137E-06	0.000E+00
527	0.000E+00	0.000E+00	-6.626E-05	1.609E-06	3.378E-06	0.000E+00
528	0.000E+00	0.000E+00	-5.647E-05	1.680E-06	2.387E-06	0.000E+00
529	0.000E+00	0.000E+00	-5.664E-05	1.813E-06	2.714E-06	0.000E+00
530	0.000E+00	0.000E+00	-5.689E-05	1.904E-06	2.954E-06	0.000E+00
531	0.000E+00	0.000E+00	-5.743E-05	2.048E-06	3.259E-06	0.000E+00
532	0.000E+00	0.000E+00	-5.810E-05	2.145E-06	3.521E-06	0.000E+00

Table B.3 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
533	0.000E+00	0.000E+00	-5.412E-05	2.116E-06	2.447E-06	0.000E+00
534	0.000E+00	0.000E+00	-5.313E-05	2.221E-06	2.793E-06	0.000E+00
535	0.000E+00	0.000E+00	-5.217E-05	2.301E-06	3.044E-06	0.000E+00
536	0.000E+00	0.000E+00	-5.051E-05	2.490E-06	3.361E-06	0.000E+00
537	0.000E+00	0.000E+00	-4.881E-05	2.599E-06	3.640E-06	0.000E+00
538	0.000E+00	0.000E+00	-5.179E-05	2.498E-06	2.550E-06	0.000E+00
539	0.000E+00	0.000E+00	-4.967E-05	2.561E-06	2.870E-06	0.000E+00
540	0.000E+00	0.000E+00	-4.751E-05	2.626E-06	3.102E-06	0.000E+00
541	0.000E+00	0.000E+00	-4.365E-05	2.870E-06	3.425E-06	0.000E+00
542	0.000E+00	0.000E+00	-3.957E-05	2.967E-06	3.704E-06	0.000E+00
557	0.000E+00	0.000E+00	-2.224E-05	3.766E-06	4.015E-06	0.000E+00
562	0.000E+00	0.000E+00	-2.160E-05	3.802E-06	4.624E-06	0.000E+00
609	0.000E+00	0.000E+00	-4.631E-05	-1.772E-16	4.345E-06	0.000E+00
610	0.000E+00	0.000E+00	-4.633E-05	1.067E-06	4.227E-06	0.000E+00
611	0.000E+00	0.000E+00	-4.644E-05	1.968E-06	3.916E-06	0.000E+00
612	0.000E+00	0.000E+00	-4.678E-05	2.582E-06	3.517E-06	0.000E+00
613	0.000E+00	0.000E+00	-4.754E-05	2.868E-06	3.138E-06	0.000E+00
614	0.000E+00	0.000E+00	-4.882E-05	2.864E-06	2.840E-06	0.000E+00
615	0.000E+00	0.000E+00	-4.210E-05	-1.723E-16	4.142E-06	0.000E+00
616	0.000E+00	0.000E+00	-3.803E-05	-1.794E-16	4.035E-06	0.000E+00
617	0.000E+00	0.000E+00	-2.132E-05	-3.453E-15	6.460E-06	0.000E+00
618	0.000E+00	0.000E+00	-4.209E-05	1.076E-06	4.034E-06	0.000E+00
619	0.000E+00	0.000E+00	-3.799E-05	1.106E-06	3.933E-06	0.000E+00
621	0.000E+00	0.000E+00	-4.216E-05	1.990E-06	3.755E-06	0.000E+00
622	0.000E+00	0.000E+00	-3.796E-05	2.052E-06	3.637E-06	0.000E+00
623	0.000E+00	0.000E+00	-2.136E-05	3.040E-06	5.454E-06	0.000E+00
624	0.000E+00	0.000E+00	-4.252E-05	2.617E-06	3.437E-06	0.000E+00
625	0.000E+00	0.000E+00	-3.824E-05	2.729E-06	3.368E-06	0.000E+00
626	0.000E+00	0.000E+00	-2.121E-05	3.873E-06	4.258E-06	0.000E+00
627	0.000E+00	0.000E+00	-4.348E-05	2.899E-06	3.187E-06	0.000E+00
628	0.000E+00	0.000E+00	-3.934E-05	3.001E-06	3.224E-06	0.000E+00
629	0.000E+00	0.000E+00	-2.320E-05	3.618E-06	3.884E-06	0.000E+00
630	0.000E+00	0.000E+00	-4.531E-05	2.892E-06	3.023E-06	0.000E+00
631	0.000E+00	0.000E+00	-4.169E-05	2.965E-06	3.161E-06	0.000E+00
632	0.000E+00	0.000E+00	-2.795E-05	3.363E-06	3.759E-06	0.000E+00
633	0.000E+00	0.000E+00	-3.061E-05	7.776E-16	4.847E-06	0.000E+00
634	0.000E+00	0.000E+00	-3.042E-05	1.367E-06	4.831E-06	0.000E+00
635	0.000E+00	0.000E+00	-3.042E-05	2.457E-06	4.146E-06	0.000E+00
636	0.000E+00	0.000E+00	-3.037E-05	3.424E-06	3.712E-06	0.000E+00
637	0.000E+00	0.000E+00	-3.166E-05	3.541E-06	3.576E-06	0.000E+00
638	0.000E+00	0.000E+00	-3.505E-05	3.340E-06	3.501E-06	0.000E+00
639	0.000E+00	0.000E+00	-4.642E-05	5.437E-07	4.317E-06	0.000E+00
640	0.000E+00	0.000E+00	-4.418E-05	-1.718E-16	4.197E-06	0.000E+00
641	0.000E+00	0.000E+00	-4.224E-05	5.482E-07	4.118E-06	0.000E+00
642	0.000E+00	0.000E+00	-4.005E-05	-1.756E-16	4.061E-06	0.000E+00
643	0.000E+00	0.000E+00	-3.819E-05	5.648E-07	4.005E-06	0.000E+00
644	0.000E+00	0.000E+00	-3.449E-05	-8.420E-17	4.378E-06	0.000E+00
645	0.000E+00	0.000E+00	-3.081E-05	7.778E-07	4.838E-06	0.000E+00
646	0.000E+00	0.000E+00	-2.627E-05	4.227E-15	5.432E-06	0.000E+00

Table B.3 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
647	0.000E+00	0.000E+00	-2.143E-05	1.195E-06	6.281E-06	0.000E+00
648	0.000E+00	0.000E+00	-4.418E-05	5.402E-07	4.169E-06	0.000E+00
649	0.000E+00	0.000E+00	-4.004E-05	5.537E-07	4.033E-06	0.000E+00
650	0.000E+00	0.000E+00	-3.446E-05	6.503E-07	4.366E-06	0.000E+00
651	0.000E+00	0.000E+00	-2.608E-05	1.028E-06	5.552E-06	0.000E+00
652	0.000E+00	0.000E+00	-4.419E-05	1.059E-06	4.087E-06	0.000E+00
653	0.000E+00	0.000E+00	-4.003E-05	1.084E-06	3.955E-06	0.000E+00
654	0.000E+00	0.000E+00	-3.440E-05	1.225E-06	4.285E-06	0.000E+00
655	0.000E+00	0.000E+00	-2.589E-05	1.531E-06	5.539E-06	0.000E+00
656	0.000E+00	0.000E+00	-4.422E-05	1.536E-06	3.961E-06	0.000E+00
657	0.000E+00	0.000E+00	-4.002E-05	1.574E-06	3.829E-06	0.000E+00
658	0.000E+00	0.000E+00	-3.435E-05	1.746E-06	4.093E-06	0.000E+00
659	0.000E+00	0.000E+00	-2.600E-05	1.924E-06	5.238E-06	0.000E+00
660	0.000E+00	0.000E+00	-4.428E-05	1.955E-06	3.802E-06	0.000E+00
661	0.000E+00	0.000E+00	-4.005E-05	2.010E-06	3.679E-06	0.000E+00
662	0.000E+00	0.000E+00	-3.433E-05	2.258E-06	3.843E-06	0.000E+00
663	0.000E+00	0.000E+00	-2.615E-05	2.651E-06	4.575E-06	0.000E+00
664	0.000E+00	0.000E+00	-4.442E-05	2.301E-06	3.629E-06	0.000E+00
665	0.000E+00	0.000E+00	-4.016E-05	2.375E-06	3.525E-06	0.000E+00
666	0.000E+00	0.000E+00	-3.433E-05	2.727E-06	3.641E-06	0.000E+00
667	0.000E+00	0.000E+00	-2.599E-05	3.467E-06	4.151E-06	0.000E+00
668	0.000E+00	0.000E+00	-4.465E-05	2.566E-06	3.456E-06	0.000E+00
669	0.000E+00	0.000E+00	-4.038E-05	2.653E-06	3.390E-06	0.000E+00
670	0.000E+00	0.000E+00	-3.446E-05	3.067E-06	3.519E-06	0.000E+00
671	0.000E+00	0.000E+00	-2.594E-05	3.740E-06	3.970E-06	0.000E+00
672	0.000E+00	0.000E+00	-4.500E-05	2.746E-06	3.295E-06	0.000E+00
673	0.000E+00	0.000E+00	-4.079E-05	2.835E-06	3.280E-06	0.000E+00
674	0.000E+00	0.000E+00	-3.486E-05	3.251E-06	3.445E-06	0.000E+00
675	0.000E+00	0.000E+00	-2.640E-05	3.749E-06	3.842E-06	0.000E+00
676	0.000E+00	0.000E+00	-4.552E-05	2.847E-06	3.153E-06	0.000E+00
677	0.000E+00	0.000E+00	-4.143E-05	2.929E-06	3.197E-06	0.000E+00
678	0.000E+00	0.000E+00	-3.564E-05	3.307E-06	3.395E-06	0.000E+00
679	0.000E+00	0.000E+00	-2.748E-05	3.660E-06	3.751E-06	0.000E+00
680	0.000E+00	0.000E+00	-4.620E-05	2.877E-06	3.033E-06	0.000E+00
681	0.000E+00	0.000E+00	-4.233E-05	2.949E-06	3.136E-06	0.000E+00
682	0.000E+00	0.000E+00	-3.684E-05	3.277E-06	3.358E-06	0.000E+00
683	0.000E+00	0.000E+00	-2.920E-05	3.534E-06	3.690E-06	0.000E+00
684	0.000E+00	0.000E+00	-4.708E-05	2.848E-06	2.935E-06	0.000E+00
685	0.000E+00	0.000E+00	-4.351E-05	2.913E-06	3.092E-06	0.000E+00
686	0.000E+00	0.000E+00	-3.847E-05	3.192E-06	3.331E-06	0.000E+00
687	0.000E+00	0.000E+00	-3.152E-05	3.398E-06	3.649E-06	0.000E+00
688	0.000E+00	0.000E+00	-4.812E-05	2.771E-06	2.856E-06	0.000E+00
689	0.000E+00	0.000E+00	-4.495E-05	2.835E-06	3.059E-06	0.000E+00
690	0.000E+00	0.000E+00	-4.049E-05	3.073E-06	3.311E-06	0.000E+00
691	0.000E+00	0.000E+00	-3.439E-05	3.256E-06	3.623E-06	0.000E+00
692	0.000E+00	0.000E+00	-4.648E-05	1.546E-06	4.093E-06	0.000E+00
693	0.000E+00	0.000E+00	-4.225E-05	1.559E-06	3.912E-06	0.000E+00
694	0.000E+00	0.000E+00	-3.814E-05	1.598E-06	3.795E-06	0.000E+00
695	0.000E+00	0.000E+00	-3.069E-05	1.852E-06	4.522E-06	0.000E+00

Table B.3 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
696	0.000E+00	0.000E+00	-2.141E-05	2.069E-06	5.961E-06	0.000E+00
697	0.000E+00	0.000E+00	-4.668E-05	2.315E-06	3.723E-06	0.000E+00
698	0.000E+00	0.000E+00	-4.243E-05	2.342E-06	3.596E-06	0.000E+00
699	0.000E+00	0.000E+00	-3.822E-05	2.428E-06	3.485E-06	0.000E+00
700	0.000E+00	0.000E+00	-3.062E-05	3.038E-06	3.832E-06	0.000E+00
702	0.000E+00	0.000E+00	-4.721E-05	2.766E-06	3.321E-06	0.000E+00
703	0.000E+00	0.000E+00	-4.305E-05	2.797E-06	3.302E-06	0.000E+00
704	0.000E+00	0.000E+00	-3.884E-05	2.902E-06	3.278E-06	0.000E+00
705	0.000E+00	0.000E+00	-3.105E-05	3.533E-06	3.618E-06	0.000E+00
707	0.000E+00	0.000E+00	-4.821E-05	2.899E-06	2.975E-06	0.000E+00
708	0.000E+00	0.000E+00	-4.441E-05	2.923E-06	3.092E-06	0.000E+00
709	0.000E+00	0.000E+00	-4.052E-05	3.001E-06	3.180E-06	0.000E+00
710	0.000E+00	0.000E+00	-3.336E-05	3.450E-06	3.522E-06	0.000E+00
711	0.000E+00	0.000E+00	-2.558E-05	3.491E-06	3.795E-06	0.000E+00
712	0.000E+00	0.000E+00	-4.976E-05	2.781E-06	2.719E-06	0.000E+00
713	0.000E+00	0.000E+00	-4.666E-05	2.813E-06	2.959E-06	0.000E+00
714	0.000E+00	0.000E+00	-4.348E-05	2.872E-06	3.137E-06	0.000E+00
715	0.000E+00	0.000E+00	-3.769E-05	3.193E-06	3.467E-06	0.000E+00
716	0.000E+00	0.000E+00	-3.153E-05	3.249E-06	3.729E-06	0.000E+00
717	0.000E+00	0.000E+00	-7.906E-05	-3.946E-17	3.268E-06	0.000E+00
718	0.000E+00	0.000E+00	-8.513E-05	-3.736E-17	3.421E-06	0.000E+00
719	0.000E+00	0.000E+00	-8.125E-05	3.534E-07	3.354E-06	0.000E+00
720	0.000E+00	0.000E+00	-8.728E-05	3.635E-07	3.497E-06	0.000E+00
721	0.000E+00	0.000E+00	-7.859E-05	3.478E-07	3.279E-06	0.000E+00
722	0.000E+00	0.000E+00	-8.455E-05	3.594E-07	3.437E-06	0.000E+00
723	0.000E+00	0.000E+00	-7.719E-05	6.904E-07	3.309E-06	0.000E+00
724	0.000E+00	0.000E+00	-8.281E-05	7.141E-07	3.469E-06	0.000E+00
725	0.000E+00	0.000E+00	-7.491E-05	1.023E-06	3.359E-06	0.000E+00
726	0.000E+00	0.000E+00	-7.996E-05	1.056E-06	3.528E-06	0.000E+00
727	0.000E+00	0.000E+00	-7.180E-05	1.342E-06	3.423E-06	0.000E+00
728	0.000E+00	0.000E+00	-7.609E-05	1.384E-06	3.599E-06	0.000E+00
729	0.000E+00	0.000E+00	-6.796E-05	1.643E-06	3.498E-06	0.000E+00
730	0.000E+00	0.000E+00	-7.130E-05	1.690E-06	3.688E-06	0.000E+00
731	0.000E+00	0.000E+00	-6.350E-05	1.924E-06	3.577E-06	0.000E+00
732	0.000E+00	0.000E+00	-6.572E-05	1.977E-06	3.778E-06	0.000E+00
733	0.000E+00	0.000E+00	-5.856E-05	2.184E-06	3.655E-06	0.000E+00
734	0.000E+00	0.000E+00	-5.954E-05	2.236E-06	3.869E-06	0.000E+00
735	0.000E+00	0.000E+00	-5.328E-05	2.421E-06	3.726E-06	0.000E+00
736	0.000E+00	0.000E+00	-5.292E-05	2.473E-06	3.948E-06	0.000E+00
737	0.000E+00	0.000E+00	-4.784E-05	2.634E-06	3.782E-06	0.000E+00
738	0.000E+00	0.000E+00	-4.609E-05	2.680E-06	4.004E-06	0.000E+00
739	0.000E+00	0.000E+00	-4.241E-05	2.820E-06	3.817E-06	0.000E+00
740	0.000E+00	0.000E+00	-3.928E-05	2.857E-06	4.022E-06	0.000E+00
741	0.000E+00	0.000E+00	-7.716E-05	1.039E-06	3.440E-06	0.000E+00
742	0.000E+00	0.000E+00	-8.228E-05	1.067E-06	3.594E-06	0.000E+00
743	0.000E+00	0.000E+00	-6.944E-05	1.666E-06	3.588E-06	0.000E+00
744	0.000E+00	0.000E+00	-7.284E-05	1.706E-06	3.761E-06	0.000E+00
745	0.000E+00	0.000E+00	-5.898E-05	2.210E-06	3.757E-06	0.000E+00
746	0.000E+00	0.000E+00	-6.002E-05	2.254E-06	3.951E-06	0.000E+00

Table B.3 (continued)

Page 7

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
747	0.000E+00	0.000E+00	-4.704E-05	2.656E-06	3.888E-06	0.000E+00
748	0.000E+00	0.000E+00	-4.534E-05	2.697E-06	4.093E-06	0.000E+00
749	0.000E+00	0.000E+00	-3.084E-05	3.001E-06	4.057E-06	0.000E+00
750	0.000E+00	0.000E+00	-3.518E-05	2.966E-06	3.929E-06	0.000E+00
751	0.000E+00	0.000E+00	-3.736E-05	2.969E-06	3.831E-06	0.000E+00
752	0.000E+00	0.000E+00	-3.227E-05	3.079E-06	3.839E-06	0.000E+00
753	0.000E+00	0.000E+00	-3.301E-05	2.971E-06	4.003E-06	0.000E+00
754	0.000E+00	0.000E+00	-2.676E-05	3.009E-06	3.928E-06	0.000E+00
755	0.000E+00	0.000E+00	-1.752E-05	2.921E-06	3.646E-06	0.000E+00
756	0.000E+00	0.000E+00	-2.429E-05	3.035E-06	3.839E-06	0.000E+00
757	0.000E+00	0.000E+00	-2.087E-05	2.943E-06	3.777E-06	0.000E+00
758	0.000E+00	0.000E+00	-2.783E-05	3.149E-06	3.825E-06	0.000E+00
759	0.000E+00	0.000E+00	-2.341E-05	3.165E-06	3.810E-06	0.000E+00
760	0.000E+00	0.000E+00	-1.528E-05	2.740E-06	3.523E-06	0.000E+00
761	0.000E+00	0.000E+00	-1.888E-05	3.209E-06	3.827E-06	0.000E+00
762	0.000E+00	0.000E+00	-1.089E-05	2.670E-06	3.606E-06	0.000E+00
763	0.000E+00	0.000E+00	-1.671E-05	3.267E-06	3.900E-06	0.000E+00
764	0.000E+00	0.000E+00	-1.518E-05	3.377E-06	4.041E-06	0.000E+00
765	0.000E+00	0.000E+00	-1.369E-05	3.514E-06	4.474E-06	0.000E+00
766	0.000E+00	0.000E+00	-7.067E-06	2.606E-06	4.394E-06	0.000E+00
767	0.000E+00	0.000E+00	-1.407E-05	3.521E-06	5.023E-06	0.000E+00
768	0.000E+00	0.000E+00	-1.384E-05	3.010E-06	5.726E-06	0.000E+00
769	0.000E+00	0.000E+00	-7.070E-06	1.900E-06	5.103E-06	0.000E+00
770	0.000E+00	0.000E+00	-1.399E-05	2.194E-06	6.115E-06	0.000E+00
771	0.000E+00	0.000E+00	-1.325E-05	1.634E-06	6.179E-06	0.000E+00
772	0.000E+00	0.000E+00	-6.976E-06	7.868E-07	5.367E-06	0.000E+00
774	0.000E+00	0.000E+00	-1.392E-05	1.070E-06	6.461E-06	0.000E+00
775	0.000E+00	0.000E+00	-1.356E-05	1.481E-15	6.645E-06	0.000E+00
776	0.000E+00	0.000E+00	-1.697E-06	1.484E-16	2.993E-06	0.000E+00
777	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
778	0.000E+00	0.000E+00	-1.949E-06	4.477E-07	3.226E-06	0.000E+00
779	0.000E+00	0.000E+00	-1.662E-06	7.520E-07	2.831E-06	0.000E+00
780	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
781	0.000E+00	0.000E+00	-1.992E-06	1.194E-06	3.084E-06	0.000E+00
782	0.000E+00	0.000E+00	-1.947E-06	1.342E-06	2.931E-06	0.000E+00
783	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
784	0.000E+00	0.000E+00	-1.963E-06	1.375E-06	2.736E-06	0.000E+00
785	0.000E+00	0.000E+00	-1.864E-06	1.292E-06	2.451E-06	0.000E+00
786	0.000E+00	0.000E+00	-8.238E-08	3.186E-07	2.384E-07	0.000E+00
787	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
788	0.000E+00	0.000E+00	-2.272E-07	3.023E-07	5.720E-07	0.000E+00
789	0.000E+00	0.000E+00	-7.444E-07	6.990E-07	9.109E-07	0.000E+00
790	0.000E+00	0.000E+00	-5.203E-07	4.891E-07	9.939E-07	0.000E+00
792	0.000E+00	0.000E+00	-1.490E-06	8.717E-07	1.562E-06	0.000E+00
794	0.000E+00	0.000E+00	-2.422E-06	1.297E-06	2.338E-06	0.000E+00
795	0.000E+00	0.000E+00	-5.100E-06	1.756E-06	2.775E-06	0.000E+00
796	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
797	0.000E+00	0.000E+00	-1.240E-06	8.367E-07	1.622E-06	0.000E+00
798	0.000E+00	0.000E+00	-3.014E-06	1.302E-06	2.186E-06	0.000E+00

Table B.3 (continued)

Page 8

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
799	0.000E+00	0.000E+00	-1.052E-05	2.407E-06	3.176E-06	0.000E+00
803	0.000E+00	0.000E+00	-1.595E-05	2.846E-06	3.658E-06	0.000E+00
804	0.000E+00	0.000E+00	-7.964E-06	2.640E-06	3.769E-06	0.000E+00
805	0.000E+00	0.000E+00	-2.164E-06	1.309E-06	2.397E-06	0.000E+00
806	0.000E+00	0.000E+00	-7.785E-06	2.093E-06	2.999E-06	0.000E+00
808	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
809	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
810	0.000E+00	0.000E+00	-3.595E-07	3.889E-07	7.862E-07	0.000E+00
811	0.000E+00	0.000E+00	-1.183E-06	7.639E-07	1.335E-06	0.000E+00
812	0.000E+00	0.000E+00	-1.992E-06	1.379E-06	1.444E-06	0.000E+00
813	0.000E+00	0.000E+00	-4.408E-06	1.911E-06	2.131E-06	0.000E+00
814	0.000E+00	0.000E+00	-7.646E-06	2.343E-06	2.737E-06	0.000E+00
815	0.000E+00	0.000E+00	-3.516E-06	1.405E-06	2.148E-06	0.000E+00
816	0.000E+00	0.000E+00	-4.146E-06	1.667E-06	2.145E-06	0.000E+00
817	0.000E+00	0.000E+00	-2.102E-06	1.207E-06	1.549E-06	0.000E+00
818	0.000E+00	0.000E+00	-2.162E-06	1.150E-06	1.625E-06	0.000E+00
819	0.000E+00	0.000E+00	-6.069E-05	-4.925E-07	2.336E-06	0.000E+00
820	0.000E+00	0.000E+00	-5.946E-05	-9.798E-07	2.349E-06	0.000E+00
821	0.000E+00	0.000E+00	-5.758E-05	-1.455E-06	2.375E-06	0.000E+00
822	0.000E+00	0.000E+00	-5.530E-05	-1.907E-06	2.422E-06	0.000E+00
823	0.000E+00	0.000E+00	-5.289E-05	-2.318E-06	2.501E-06	0.000E+00
824	0.000E+00	0.000E+00	-5.065E-05	-2.655E-06	2.633E-06	0.000E+00
825	0.000E+00	0.000E+00	-6.291E-05	-5.607E-07	2.552E-06	0.000E+00
826	0.000E+00	0.000E+00	-6.531E-05	-6.039E-07	2.724E-06	0.000E+00
827	0.000E+00	0.000E+00	-7.450E-05	-6.761E-07	3.214E-06	0.000E+00
828	0.000E+00	0.000E+00	-6.109E-05	-1.097E-06	2.606E-06	0.000E+00
829	0.000E+00	0.000E+00	-6.286E-05	-1.173E-06	2.803E-06	0.000E+00
830	0.000E+00	0.000E+00	-6.975E-05	-1.315E-06	3.318E-06	0.000E+00
831	0.000E+00	0.000E+00	-5.830E-05	-1.591E-06	2.682E-06	0.000E+00
832	0.000E+00	0.000E+00	-5.912E-05	-1.682E-06	2.909E-06	0.000E+00
833	0.000E+00	0.000E+00	-6.247E-05	-1.890E-06	3.459E-06	0.000E+00
834	0.000E+00	0.000E+00	-5.489E-05	-2.028E-06	2.763E-06	0.000E+00
835	0.000E+00	0.000E+00	-5.455E-05	-2.116E-06	3.011E-06	0.000E+00
836	0.000E+00	0.000E+00	-5.351E-05	-2.386E-06	3.597E-06	0.000E+00
837	0.000E+00	0.000E+00	-5.131E-05	-2.403E-06	2.841E-06	0.000E+00
838	0.000E+00	0.000E+00	-4.973E-05	-2.477E-06	3.086E-06	0.000E+00
839	0.000E+00	0.000E+00	-4.398E-05	-2.797E-06	3.690E-06	0.000E+00
840	0.000E+00	0.000E+00	-4.799E-05	-2.702E-06	2.919E-06	0.000E+00
841	0.000E+00	0.000E+00	-4.526E-05	-2.766E-06	3.129E-06	0.000E+00
842	0.000E+00	0.000E+00	-3.511E-05	-3.116E-06	3.727E-06	0.000E+00
847	0.000E+00	0.000E+00	-6.971E-05	-6.455E-07	2.996E-06	0.000E+00
848	0.000E+00	0.000E+00	-6.615E-05	-1.255E-06	3.087E-06	0.000E+00
849	0.000E+00	0.000E+00	-6.069E-05	-1.804E-06	3.208E-06	0.000E+00
850	0.000E+00	0.000E+00	-5.400E-05	-2.282E-06	3.324E-06	0.000E+00
851	0.000E+00	0.000E+00	-4.692E-05	-2.693E-06	3.408E-06	0.000E+00
852	0.000E+00	0.000E+00	-4.033E-05	-3.044E-06	3.457E-06	0.000E+00
853	0.000E+00	0.000E+00	-8.571E-05	-7.246E-07	3.534E-06	0.000E+00
854	0.000E+00	0.000E+00	-7.831E-05	-1.403E-06	3.673E-06	0.000E+00
855	0.000E+00	0.000E+00	-6.690E-05	-2.000E-06	3.863E-06	0.000E+00

Table B.3 (continued)

Page 9

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
856	0.000E+00	0.000E+00	-5.278E-05	-2.494E-06	4.043E-06	0.000E+00
857	0.000E+00	0.000E+00	-3.772E-05	-2.888E-06	4.108E-06	0.000E+00
858	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
859	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
860	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
861	0.000E+00	0.000E+00	-7.997E-05	-7.028E-07	3.394E-06	0.000E+00
862	0.000E+00	0.000E+00	-7.391E-05	-1.364E-06	3.517E-06	0.000E+00
863	0.000E+00	0.000E+00	-6.459E-05	-1.952E-06	3.683E-06	0.000E+00
864	0.000E+00	0.000E+00	-5.309E-05	-2.449E-06	3.842E-06	0.000E+00
865	0.000E+00	0.000E+00	-4.084E-05	-2.837E-06	3.926E-06	0.000E+00
866	0.000E+00	0.000E+00	-6.440E-06	-1.327E-06	5.043E-06	0.000E+00
867	0.000E+00	0.000E+00	-6.955E-06	-2.368E-06	4.804E-06	0.000E+00
868	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
869	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
870	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
871	0.000E+00	0.000E+00	-2.404E-05	-3.024E-06	3.916E-06	0.000E+00
872	0.000E+00	0.000E+00	-1.156E-05	-2.663E-06	3.207E-06	0.000E+00
873	0.000E+00	0.000E+00	-2.949E-05	-3.036E-06	3.904E-06	0.000E+00
874	0.000E+00	0.000E+00	-1.919E-05	-2.941E-06	3.735E-06	0.000E+00
875	0.000E+00	0.000E+00	-1.277E-05	-2.700E-06	3.581E-06	0.000E+00
876	0.000E+00	0.000E+00	-5.202E-07	-7.578E-07	6.898E-07	0.000E+00
877	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
878	0.000E+00	0.000E+00	-8.983E-07	-6.860E-07	1.092E-06	0.000E+00
879	0.000E+00	0.000E+00	-1.776E-07	-2.912E-07	4.402E-07	0.000E+00
880	0.000E+00	0.000E+00	-6.822E-06	-2.551E-06	3.931E-06	0.000E+00
881	0.000E+00	0.000E+00	-8.969E-06	-2.614E-06	3.640E-06	0.000E+00
882	0.000E+00	0.000E+00	-6.095E-05	-2.449E-07	2.332E-06	0.000E+00
883	0.000E+00	0.000E+00	-6.330E-05	-2.809E-07	2.532E-06	0.000E+00
884	0.000E+00	0.000E+00	-6.584E-05	-3.034E-07	2.696E-06	0.000E+00
885	0.000E+00	0.000E+00	-7.047E-05	-3.245E-07	2.962E-06	0.000E+00
886	0.000E+00	0.000E+00	-7.550E-05	-3.399E-07	3.177E-06	0.000E+00
887	0.000E+00	0.000E+00	-6.217E-05	-2.675E-07	2.435E-06	0.000E+00
888	0.000E+00	0.000E+00	-6.465E-05	-2.943E-07	2.623E-06	0.000E+00
889	0.000E+00	0.000E+00	-6.824E-05	-3.156E-07	2.844E-06	0.000E+00
890	0.000E+00	0.000E+00	-7.314E-05	-3.334E-07	3.083E-06	0.000E+00
891	0.000E+00	0.000E+00	-6.178E-05	-5.326E-07	2.446E-06	0.000E+00
892	0.000E+00	0.000E+00	-6.409E-05	-5.848E-07	2.641E-06	0.000E+00
893	0.000E+00	0.000E+00	-6.746E-05	-6.265E-07	2.868E-06	0.000E+00
894	0.000E+00	0.000E+00	-7.206E-05	-6.618E-07	3.111E-06	0.000E+00
895	0.000E+00	0.000E+00	-6.113E-05	-7.937E-07	2.463E-06	0.000E+00
896	0.000E+00	0.000E+00	-6.319E-05	-8.672E-07	2.672E-06	0.000E+00
897	0.000E+00	0.000E+00	-6.619E-05	-9.284E-07	2.905E-06	0.000E+00
898	0.000E+00	0.000E+00	-7.030E-05	-9.813E-07	3.153E-06	0.000E+00
899	0.000E+00	0.000E+00	-6.025E-05	-1.048E-06	2.485E-06	0.000E+00
900	0.000E+00	0.000E+00	-6.196E-05	-1.139E-06	2.710E-06	0.000E+00
901	0.000E+00	0.000E+00	-6.446E-05	-1.218E-06	2.953E-06	0.000E+00
902	0.000E+00	0.000E+00	-6.792E-05	-1.287E-06	3.208E-06	0.000E+00
903	0.000E+00	0.000E+00	-5.917E-05	-1.295E-06	2.512E-06	0.000E+00
904	0.000E+00	0.000E+00	-6.044E-05	-1.397E-06	2.756E-06	0.000E+00

Table B.3 (continued)

Page 10

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
905	0.000E+00	0.000E+00	-6.234E-05	-1.491E-06	3.008E-06	0.000E+00
906	0.000E+00	0.000E+00	-6.497E-05	-1.578E-06	3.271E-06	0.000E+00
907	0.000E+00	0.000E+00	-5.792E-05	-1.531E-06	2.543E-06	0.000E+00
908	0.000E+00	0.000E+00	-5.870E-05	-1.640E-06	2.803E-06	0.000E+00
909	0.000E+00	0.000E+00	-5.988E-05	-1.748E-06	3.065E-06	0.000E+00
910	0.000E+00	0.000E+00	-6.156E-05	-1.851E-06	3.339E-06	0.000E+00
911	0.000E+00	0.000E+00	-5.655E-05	-1.757E-06	2.576E-06	0.000E+00
912	0.000E+00	0.000E+00	-5.676E-05	-1.865E-06	2.852E-06	0.000E+00
913	0.000E+00	0.000E+00	-5.716E-05	-1.986E-06	3.122E-06	0.000E+00
914	0.000E+00	0.000E+00	-5.777E-05	-2.106E-06	3.405E-06	0.000E+00
915	0.000E+00	0.000E+00	-5.509E-05	-1.970E-06	2.611E-06	0.000E+00
916	0.000E+00	0.000E+00	-5.471E-05	-2.073E-06	2.897E-06	0.000E+00
917	0.000E+00	0.000E+00	-5.427E-05	-2.207E-06	3.173E-06	0.000E+00
918	0.000E+00	0.000E+00	-5.374E-05	-2.341E-06	3.465E-06	0.000E+00
919	0.000E+00	0.000E+00	-5.359E-05	-2.170E-06	2.650E-06	0.000E+00
920	0.000E+00	0.000E+00	-5.261E-05	-2.264E-06	2.938E-06	0.000E+00
921	0.000E+00	0.000E+00	-5.130E-05	-2.411E-06	3.216E-06	0.000E+00
922	0.000E+00	0.000E+00	-4.959E-05	-2.558E-06	3.517E-06	0.000E+00
923	0.000E+00	0.000E+00	-5.210E-05	-2.353E-06	2.691E-06	0.000E+00
924	0.000E+00	0.000E+00	-5.052E-05	-2.437E-06	2.973E-06	0.000E+00
925	0.000E+00	0.000E+00	-4.835E-05	-2.599E-06	3.250E-06	0.000E+00
926	0.000E+00	0.000E+00	-4.546E-05	-2.757E-06	3.556E-06	0.000E+00
927	0.000E+00	0.000E+00	-5.067E-05	-2.517E-06	2.737E-06	0.000E+00
928	0.000E+00	0.000E+00	-4.851E-05	-2.591E-06	3.003E-06	0.000E+00
929	0.000E+00	0.000E+00	-4.550E-05	-2.773E-06	3.275E-06	0.000E+00
930	0.000E+00	0.000E+00	-4.146E-05	-2.939E-06	3.585E-06	0.000E+00
931	0.000E+00	0.000E+00	-4.933E-05	-2.659E-06	2.791E-06	0.000E+00
932	0.000E+00	0.000E+00	-4.663E-05	-2.725E-06	3.031E-06	0.000E+00
933	0.000E+00	0.000E+00	-4.286E-05	-2.931E-06	3.294E-06	0.000E+00
934	0.000E+00	0.000E+00	-3.773E-05	-3.104E-06	3.604E-06	0.000E+00
935	0.000E+00	0.000E+00	-6.012E-05	-7.328E-07	2.338E-06	0.000E+00
936	0.000E+00	0.000E+00	-6.207E-05	-8.306E-07	2.569E-06	0.000E+00
937	0.000E+00	0.000E+00	-6.418E-05	-8.925E-07	2.752E-06	0.000E+00
938	0.000E+00	0.000E+00	-6.806E-05	-9.550E-07	3.027E-06	0.000E+00
939	0.000E+00	0.000E+00	-7.230E-05	-1.001E-06	3.251E-06	0.000E+00
940	0.000E+00	0.000E+00	-5.856E-05	-1.214E-06	2.355E-06	0.000E+00
941	0.000E+00	0.000E+00	-5.975E-05	-1.346E-06	2.635E-06	0.000E+00
942	0.000E+00	0.000E+00	-6.107E-05	-1.433E-06	2.847E-06	0.000E+00
943	0.000E+00	0.000E+00	-6.353E-05	-1.535E-06	3.137E-06	0.000E+00
944	0.000E+00	0.000E+00	-6.626E-05	-1.609E-06	3.378E-06	0.000E+00
945	0.000E+00	0.000E+00	-5.647E-05	-1.680E-06	2.387E-06	0.000E+00
946	0.000E+00	0.000E+00	-5.664E-05	-1.813E-06	2.714E-06	0.000E+00
947	0.000E+00	0.000E+00	-5.689E-05	-1.904E-06	2.954E-06	0.000E+00
948	0.000E+00	0.000E+00	-5.743E-05	-2.048E-06	3.259E-06	0.000E+00
949	0.000E+00	0.000E+00	-5.810E-05	-2.145E-06	3.521E-06	0.000E+00
950	0.000E+00	0.000E+00	-5.412E-05	-2.116E-06	2.447E-06	0.000E+00
951	0.000E+00	0.000E+00	-5.313E-05	-2.221E-06	2.793E-06	0.000E+00
952	0.000E+00	0.000E+00	-5.217E-05	-2.301E-06	3.044E-06	0.000E+00
953	0.000E+00	0.000E+00	-5.051E-05	-2.490E-06	3.361E-06	0.000E+00

Table B.3 (continued)

Page 11

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
954	0.000E+00	0.000E+00	-4.881E-05	-2.599E-06	3.640E-06	0.000E+00
955	0.000E+00	0.000E+00	-5.179E-05	-2.498E-06	2.550E-06	0.000E+00
956	0.000E+00	0.000E+00	-4.967E-05	-2.561E-06	2.870E-06	0.000E+00
957	0.000E+00	0.000E+00	-4.751E-05	-2.626E-06	3.102E-06	0.000E+00
958	0.000E+00	0.000E+00	-4.365E-05	-2.870E-06	3.425E-06	0.000E+00
959	0.000E+00	0.000E+00	-3.957E-05	-2.967E-06	3.704E-06	0.000E+00
960	0.000E+00	0.000E+00	-3.153E-05	-3.249E-06	3.729E-06	0.000E+00
964	0.000E+00	0.000E+00	-2.143E-05	-1.195E-06	6.281E-06	0.000E+00
965	0.000E+00	0.000E+00	-4.633E-05	-1.067E-06	4.227E-06	0.000E+00
966	0.000E+00	0.000E+00	-4.644E-05	-1.968E-06	3.916E-06	0.000E+00
967	0.000E+00	0.000E+00	-4.678E-05	-2.582E-06	3.517E-06	0.000E+00
968	0.000E+00	0.000E+00	-4.754E-05	-2.868E-06	3.138E-06	0.000E+00
969	0.000E+00	0.000E+00	-4.882E-05	-2.864E-06	2.840E-06	0.000E+00
970	0.000E+00	0.000E+00	-4.209E-05	-1.076E-06	4.034E-06	0.000E+00
971	0.000E+00	0.000E+00	-3.799E-05	-1.106E-06	3.933E-06	0.000E+00
972	0.000E+00	0.000E+00	-2.075E-05	-1.669E-06	6.182E-06	0.000E+00
973	0.000E+00	0.000E+00	-4.216E-05	-1.990E-06	3.755E-06	0.000E+00
974	0.000E+00	0.000E+00	-3.796E-05	-2.052E-06	3.637E-06	0.000E+00
975	0.000E+00	0.000E+00	-2.136E-05	-3.040E-06	5.454E-06	0.000E+00
976	0.000E+00	0.000E+00	-4.252E-05	-2.617E-06	3.437E-06	0.000E+00
977	0.000E+00	0.000E+00	-3.824E-05	-2.729E-06	3.368E-06	0.000E+00
978	0.000E+00	0.000E+00	-2.121E-05	-3.873E-06	4.258E-06	0.000E+00
979	0.000E+00	0.000E+00	-4.348E-05	-2.899E-06	3.187E-06	0.000E+00
980	0.000E+00	0.000E+00	-3.934E-05	-3.001E-06	3.224E-06	0.000E+00
981	0.000E+00	0.000E+00	-2.320E-05	-3.618E-06	3.884E-06	0.000E+00
982	0.000E+00	0.000E+00	-4.531E-05	-2.892E-06	3.023E-06	0.000E+00
983	0.000E+00	0.000E+00	-4.169E-05	-2.965E-06	3.161E-06	0.000E+00
984	0.000E+00	0.000E+00	-2.795E-05	-3.363E-06	3.759E-06	0.000E+00
985	0.000E+00	0.000E+00	-3.042E-05	-1.367E-06	4.831E-06	0.000E+00
986	0.000E+00	0.000E+00	-3.042E-05	-2.457E-06	4.146E-06	0.000E+00
987	0.000E+00	0.000E+00	-3.037E-05	-3.424E-06	3.712E-06	0.000E+00
988	0.000E+00	0.000E+00	-3.166E-05	-3.541E-06	3.576E-06	0.000E+00
989	0.000E+00	0.000E+00	-3.505E-05	-3.340E-06	3.501E-06	0.000E+00
990	0.000E+00	0.000E+00	-4.642E-05	-5.437E-07	4.317E-06	0.000E+00
991	0.000E+00	0.000E+00	-4.224E-05	-5.482E-07	4.118E-06	0.000E+00
992	0.000E+00	0.000E+00	-3.819E-05	-5.648E-07	4.005E-06	0.000E+00
993	0.000E+00	0.000E+00	-3.081E-05	-7.778E-07	4.838E-06	0.000E+00
995	0.000E+00	0.000E+00	-4.418E-05	-5.402E-07	4.169E-06	0.000E+00
996	0.000E+00	0.000E+00	-4.004E-05	-5.537E-07	4.033E-06	0.000E+00
997	0.000E+00	0.000E+00	-3.446E-05	-6.503E-07	4.366E-06	0.000E+00
998	0.000E+00	0.000E+00	-2.608E-05	-1.028E-06	5.552E-06	0.000E+00
999	0.000E+00	0.000E+00	-4.419E-05	-1.059E-06	4.087E-06	0.000E+00
1000	0.000E+00	0.000E+00	-4.003E-05	-1.084E-06	3.955E-06	0.000E+00
1001	0.000E+00	0.000E+00	-3.440E-05	-1.225E-06	4.285E-06	0.000E+00
1002	0.000E+00	0.000E+00	-2.589E-05	-1.531E-06	5.539E-06	0.000E+00
1003	0.000E+00	0.000E+00	-4.422E-05	-1.536E-06	3.961E-06	0.000E+00
1004	0.000E+00	0.000E+00	-4.002E-05	-1.574E-06	3.829E-06	0.000E+00
1005	0.000E+00	0.000E+00	-3.435E-05	-1.746E-06	4.093E-06	0.000E+00
1006	0.000E+00	0.000E+00	-2.600E-05	-1.924E-06	5.238E-06	0.000E+00

Table B.3 (continued)

Page 12

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1007	0.000E+00	0.000E+00	-4.428E-05	-1.955E-06	3.802E-06	0.000E+00
1008	0.000E+00	0.000E+00	-4.005E-05	-2.010E-06	3.679E-06	0.000E+00
1009	0.000E+00	0.000E+00	-3.433E-05	-2.258E-06	3.843E-06	0.000E+00
1010	0.000E+00	0.000E+00	-2.615E-05	-2.651E-06	4.575E-06	0.000E+00
1011	0.000E+00	0.000E+00	-4.442E-05	-2.301E-06	3.629E-06	0.000E+00
1012	0.000E+00	0.000E+00	-4.016E-05	-2.375E-06	3.525E-06	0.000E+00
1013	0.000E+00	0.000E+00	-3.433E-05	-2.727E-06	3.641E-06	0.000E+00
1014	0.000E+00	0.000E+00	-2.599E-05	-3.467E-06	4.151E-06	0.000E+00
1015	0.000E+00	0.000E+00	-4.465E-05	-2.566E-06	3.456E-06	0.000E+00
1016	0.000E+00	0.000E+00	-4.038E-05	-2.653E-06	3.390E-06	0.000E+00
1017	0.000E+00	0.000E+00	-3.446E-05	-3.067E-06	3.519E-06	0.000E+00
1018	0.000E+00	0.000E+00	-2.594E-05	-3.740E-06	3.970E-06	0.000E+00
1019	0.000E+00	0.000E+00	-4.500E-05	-2.746E-06	3.295E-06	0.000E+00
1020	0.000E+00	0.000E+00	-4.079E-05	-2.835E-06	3.280E-06	0.000E+00
1021	0.000E+00	0.000E+00	-3.486E-05	-3.251E-06	3.445E-06	0.000E+00
1022	0.000E+00	0.000E+00	-2.640E-05	-3.749E-06	3.842E-06	0.000E+00
1023	0.000E+00	0.000E+00	-4.552E-05	-2.847E-06	3.153E-06	0.000E+00
1024	0.000E+00	0.000E+00	-4.143E-05	-2.929E-06	3.197E-06	0.000E+00
1025	0.000E+00	0.000E+00	-3.564E-05	-3.307E-06	3.395E-06	0.000E+00
1026	0.000E+00	0.000E+00	-2.748E-05	-3.660E-06	3.751E-06	0.000E+00
1027	0.000E+00	0.000E+00	-4.620E-05	-2.877E-06	3.033E-06	0.000E+00
1028	0.000E+00	0.000E+00	-4.233E-05	-2.949E-06	3.136E-06	0.000E+00
1029	0.000E+00	0.000E+00	-3.684E-05	-3.277E-06	3.358E-06	0.000E+00
1030	0.000E+00	0.000E+00	-2.920E-05	-3.534E-06	3.690E-06	0.000E+00
1031	0.000E+00	0.000E+00	-4.708E-05	-2.848E-06	2.935E-06	0.000E+00
1032	0.000E+00	0.000E+00	-4.351E-05	-2.913E-06	3.092E-06	0.000E+00
1033	0.000E+00	0.000E+00	-3.847E-05	-3.192E-06	3.331E-06	0.000E+00
1034	0.000E+00	0.000E+00	-3.152E-05	-3.398E-06	3.649E-06	0.000E+00
1035	0.000E+00	0.000E+00	-4.812E-05	-2.771E-06	2.856E-06	0.000E+00
1036	0.000E+00	0.000E+00	-4.495E-05	-2.835E-06	3.059E-06	0.000E+00
1037	0.000E+00	0.000E+00	-4.049E-05	-3.073E-06	3.311E-06	0.000E+00
1038	0.000E+00	0.000E+00	-3.439E-05	-3.256E-06	3.623E-06	0.000E+00
1039	0.000E+00	0.000E+00	-4.648E-05	-1.546E-06	4.093E-06	0.000E+00
1040	0.000E+00	0.000E+00	-4.225E-05	-1.559E-06	3.912E-06	0.000E+00
1041	0.000E+00	0.000E+00	-3.814E-05	-1.598E-06	3.795E-06	0.000E+00
1042	0.000E+00	0.000E+00	-3.069E-05	-1.852E-06	4.522E-06	0.000E+00
1043	0.000E+00	0.000E+00	-2.141E-05	-2.069E-06	5.961E-06	0.000E+00
1044	0.000E+00	0.000E+00	-4.668E-05	-2.315E-06	3.723E-06	0.000E+00
1045	0.000E+00	0.000E+00	-4.243E-05	-2.342E-06	3.596E-06	0.000E+00
1046	0.000E+00	0.000E+00	-3.822E-05	-2.428E-06	3.485E-06	0.000E+00
1047	0.000E+00	0.000E+00	-3.062E-05	-3.038E-06	3.832E-06	0.000E+00
1048	0.000E+00	0.000E+00	-2.160E-05	-3.802E-06	4.624E-06	0.000E+00
1049	0.000E+00	0.000E+00	-4.721E-05	-2.766E-06	3.321E-06	0.000E+00
1050	0.000E+00	0.000E+00	-4.305E-05	-2.797E-06	3.302E-06	0.000E+00
1051	0.000E+00	0.000E+00	-3.884E-05	-2.902E-06	3.278E-06	0.000E+00
1052	0.000E+00	0.000E+00	-3.105E-05	-3.533E-06	3.618E-06	0.000E+00
1053	0.000E+00	0.000E+00	-2.224E-05	-3.766E-06	4.015E-06	0.000E+00
1054	0.000E+00	0.000E+00	-4.821E-05	-2.899E-06	2.975E-06	0.000E+00
1055	0.000E+00	0.000E+00	-4.441E-05	-2.923E-06	3.092E-06	0.000E+00

Table B.3 (continued)

Page 13

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1056	0.000E+00	0.000E+00	-4.052E-05	-3.001E-06	3.180E-06	0.000E+00
1057	0.000E+00	0.000E+00	-3.336E-05	-3.450E-06	3.522E-06	0.000E+00
1058	0.000E+00	0.000E+00	-2.558E-05	-3.491E-06	3.795E-06	0.000E+00
1059	0.000E+00	0.000E+00	-4.976E-05	-2.781E-06	2.719E-06	0.000E+00
1060	0.000E+00	0.000E+00	-4.666E-05	-2.813E-06	2.959E-06	0.000E+00
1061	0.000E+00	0.000E+00	-4.348E-05	-2.872E-06	3.137E-06	0.000E+00
1062	0.000E+00	0.000E+00	-3.769E-05	-3.193E-06	3.467E-06	0.000E+00
1064	0.000E+00	0.000E+00	-8.125E-05	-3.534E-07	3.354E-06	0.000E+00
1065	0.000E+00	0.000E+00	-8.728E-05	-3.635E-07	3.497E-06	0.000E+00
1066	0.000E+00	0.000E+00	-7.859E-05	-3.478E-07	3.279E-06	0.000E+00
1067	0.000E+00	0.000E+00	-8.455E-05	-3.594E-07	3.437E-06	0.000E+00
1068	0.000E+00	0.000E+00	-7.719E-05	-6.904E-07	3.309E-06	0.000E+00
1069	0.000E+00	0.000E+00	-8.281E-05	-7.141E-07	3.469E-06	0.000E+00
1070	0.000E+00	0.000E+00	-7.491E-05	-1.023E-06	3.359E-06	0.000E+00
1071	0.000E+00	0.000E+00	-7.996E-05	-1.056E-06	3.528E-06	0.000E+00
1072	0.000E+00	0.000E+00	-7.180E-05	-1.342E-06	3.423E-06	0.000E+00
1073	0.000E+00	0.000E+00	-7.609E-05	-1.384E-06	3.599E-06	0.000E+00
1074	0.000E+00	0.000E+00	-6.796E-05	-1.643E-06	3.498E-06	0.000E+00
1075	0.000E+00	0.000E+00	-7.130E-05	-1.690E-06	3.688E-06	0.000E+00
1076	0.000E+00	0.000E+00	-6.350E-05	-1.924E-06	3.577E-06	0.000E+00
1077	0.000E+00	0.000E+00	-6.572E-05	-1.977E-06	3.778E-06	0.000E+00
1078	0.000E+00	0.000E+00	-5.856E-05	-2.184E-06	3.655E-06	0.000E+00
1079	0.000E+00	0.000E+00	-5.954E-05	-2.236E-06	3.869E-06	0.000E+00
1080	0.000E+00	0.000E+00	-5.328E-05	-2.421E-06	3.726E-06	0.000E+00
1081	0.000E+00	0.000E+00	-5.292E-05	-2.473E-06	3.948E-06	0.000E+00
1082	0.000E+00	0.000E+00	-4.784E-05	-2.634E-06	3.782E-06	0.000E+00
1083	0.000E+00	0.000E+00	-4.609E-05	-2.680E-06	4.004E-06	0.000E+00
1084	0.000E+00	0.000E+00	-4.241E-05	-2.820E-06	3.817E-06	0.000E+00
1085	0.000E+00	0.000E+00	-3.928E-05	-2.857E-06	4.022E-06	0.000E+00
1086	0.000E+00	0.000E+00	-7.716E-05	-1.039E-06	3.440E-06	0.000E+00
1087	0.000E+00	0.000E+00	-8.228E-05	-1.067E-06	3.594E-06	0.000E+00
1088	0.000E+00	0.000E+00	-6.944E-05	-1.666E-06	3.588E-06	0.000E+00
1089	0.000E+00	0.000E+00	-7.284E-05	-1.706E-06	3.761E-06	0.000E+00
1090	0.000E+00	0.000E+00	-5.898E-05	-2.210E-06	3.757E-06	0.000E+00
1091	0.000E+00	0.000E+00	-6.002E-05	-2.254E-06	3.951E-06	0.000E+00
1092	0.000E+00	0.000E+00	-4.704E-05	-2.656E-06	3.888E-06	0.000E+00
1093	0.000E+00	0.000E+00	-4.534E-05	-2.697E-06	4.093E-06	0.000E+00
1094	0.000E+00	0.000E+00	-3.084E-05	-3.001E-06	4.057E-06	0.000E+00
1095	0.000E+00	0.000E+00	-3.518E-05	-2.966E-06	3.929E-06	0.000E+00
1096	0.000E+00	0.000E+00	-3.736E-05	-2.969E-06	3.831E-06	0.000E+00
1097	0.000E+00	0.000E+00	-3.227E-05	-3.079E-06	3.839E-06	0.000E+00
1098	0.000E+00	0.000E+00	-3.301E-05	-2.971E-06	4.003E-06	0.000E+00
1099	0.000E+00	0.000E+00	-2.676E-05	-3.009E-06	3.928E-06	0.000E+00
1100	0.000E+00	0.000E+00	-1.752E-05	-2.921E-06	3.646E-06	0.000E+00
1101	0.000E+00	0.000E+00	-2.429E-05	-3.035E-06	3.839E-06	0.000E+00
1102	0.000E+00	0.000E+00	-2.087E-05	-2.943E-06	3.777E-06	0.000E+00
1103	0.000E+00	0.000E+00	-2.783E-05	-3.149E-06	3.825E-06	0.000E+00
1104	0.000E+00	0.000E+00	-2.341E-05	-3.165E-06	3.810E-06	0.000E+00
1105	0.000E+00	0.000E+00	-1.528E-05	-2.740E-06	3.523E-06	0.000E+00

Table B.3 (continued)

Page 14

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1106	0.000E+00	0.000E+00	-1.888E-05	-3.209E-06	3.827E-06	0.000E+00
1107	0.000E+00	0.000E+00	-1.089E-05	-2.670E-06	3.606E-06	0.000E+00
1108	0.000E+00	0.000E+00	-1.671E-05	-3.267E-06	3.900E-06	0.000E+00
1109	0.000E+00	0.000E+00	-1.518E-05	-3.377E-06	4.041E-06	0.000E+00
1110	0.000E+00	0.000E+00	-1.369E-05	-3.514E-06	4.474E-06	0.000E+00
1111	0.000E+00	0.000E+00	-7.067E-06	-2.606E-06	4.394E-06	0.000E+00
1112	0.000E+00	0.000E+00	-1.407E-05	-3.521E-06	5.023E-06	0.000E+00
1113	0.000E+00	0.000E+00	-1.384E-05	-3.010E-06	5.726E-06	0.000E+00
1114	0.000E+00	0.000E+00	-7.070E-06	-1.900E-06	5.103E-06	0.000E+00
1115	0.000E+00	0.000E+00	-1.399E-05	-2.194E-06	6.115E-06	0.000E+00
1116	0.000E+00	0.000E+00	-1.325E-05	-1.634E-06	6.179E-06	0.000E+00
1117	0.000E+00	0.000E+00	-6.976E-06	-7.868E-07	5.367E-06	0.000E+00
1118	0.000E+00	0.000E+00	-1.392E-05	-1.070E-06	6.461E-06	0.000E+00
1119	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1120	0.000E+00	0.000E+00	-1.949E-06	-4.477E-07	3.226E-06	0.000E+00
1121	0.000E+00	0.000E+00	-1.662E-06	-7.520E-07	2.831E-06	0.000E+00
1122	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1123	0.000E+00	0.000E+00	-1.992E-06	-1.194E-06	3.084E-06	0.000E+00
1124	0.000E+00	0.000E+00	-1.947E-06	-1.342E-06	2.931E-06	0.000E+00
1125	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1126	0.000E+00	0.000E+00	-1.963E-06	-1.375E-06	2.736E-06	0.000E+00
1127	0.000E+00	0.000E+00	-1.864E-06	-1.292E-06	2.451E-06	0.000E+00
1128	0.000E+00	0.000E+00	-8.238E-08	-3.186E-07	2.384E-07	0.000E+00
1129	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1130	0.000E+00	0.000E+00	-2.272E-07	-3.023E-07	5.720E-07	0.000E+00
1131	0.000E+00	0.000E+00	-7.444E-07	-6.990E-07	9.109E-07	0.000E+00
1132	0.000E+00	0.000E+00	-5.203E-07	-4.891E-07	9.939E-07	0.000E+00
1133	0.000E+00	0.000E+00	-1.490E-06	-8.717E-07	1.562E-06	0.000E+00
1134	0.000E+00	0.000E+00	-2.422E-06	-1.297E-06	2.338E-06	0.000E+00
1135	0.000E+00	0.000E+00	-5.100E-06	-1.756E-06	2.775E-06	0.000E+00
1136	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1137	0.000E+00	0.000E+00	-1.240E-06	-8.367E-07	1.622E-06	0.000E+00
1138	0.000E+00	0.000E+00	-3.014E-06	-1.302E-06	2.186E-06	0.000E+00
1139	0.000E+00	0.000E+00	-1.052E-05	-2.407E-06	3.176E-06	0.000E+00
1140	0.000E+00	0.000E+00	-1.595E-05	-2.846E-06	3.658E-06	0.000E+00
1141	0.000E+00	0.000E+00	-7.964E-06	-2.640E-06	3.769E-06	0.000E+00
1142	0.000E+00	0.000E+00	-2.164E-06	-1.309E-06	2.397E-06	0.000E+00
1143	0.000E+00	0.000E+00	-7.785E-06	-2.093E-06	2.999E-06	0.000E+00
1144	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1145	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1146	0.000E+00	0.000E+00	-3.595E-07	-3.889E-07	7.862E-07	0.000E+00
1147	0.000E+00	0.000E+00	-1.183E-06	-7.639E-07	1.335E-06	0.000E+00
1148	0.000E+00	0.000E+00	-1.992E-06	-1.379E-06	1.444E-06	0.000E+00
1149	0.000E+00	0.000E+00	-4.408E-06	-1.911E-06	2.131E-06	0.000E+00
1150	0.000E+00	0.000E+00	-7.646E-06	-2.343E-06	2.737E-06	0.000E+00
1151	0.000E+00	0.000E+00	-3.516E-06	-1.405E-06	2.148E-06	0.000E+00
1152	0.000E+00	0.000E+00	-4.146E-06	-1.667E-06	2.145E-06	0.000E+00
1153	0.000E+00	0.000E+00	-2.102E-06	-1.207E-06	1.549E-06	0.000E+00
1154	0.000E+00	0.000E+00	-2.162E-06	-1.150E-06	1.625E-06	0.000E+00

Table B.3 (continued)

Page 15

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:10:18

	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
	312	312	383	626	775	312
Maximum	0.000E+00	0.000E+00	0.000E+00	3.873E-06	6.645E-06	0.000E+00
	312	312	377	978	383	312
Minimum	0.000E+00	0.000E+00	-8.827E-05	-3.873E-06	0.000E+00	0.000E+00
Average	0.000E+00	0.000E+00	-4.071E-05	-2.981E-13	3.235E-06	0.000E+00

Table B.4 Model loaded with -300 lb (-1334.4 N) on nodes 608, 611, and 966 (displacement listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:16:23

```

Group ID      : PERMANENT GROUP1
Analysis Dataset : 6 - CASE 1,LOAD 4,DISPLACEMENTS
Report Type    : Contour
Dataset Type    : Displacements
Frame of Reference: Global
Units          : IN
Load Set       : 4
Data Component : Z-Component

```

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
312	-3.728E-06	-3.811E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
313	-3.784E-06	-7.426E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
314	-3.958E-06	-1.470E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
315	-4.268E-06	-2.169E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
316	-4.751E-06	-2.829E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
317	-5.484E-06	-3.454E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
318	-6.598E-06	-4.064E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
325	-3.607E-06	-3.272E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
326	-3.576E-06	-2.814E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
327	-3.534E-06	-1.623E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
328	-3.731E-06	-5.056E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
329	-3.735E-06	-3.680E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
330	-3.672E-06	-3.245E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
331	-4.079E-06	-1.087E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
332	-4.164E-06	-8.664E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
333	-4.008E-06	-8.167E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
334	-4.582E-06	-1.187E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
335	-4.737E-06	-1.565E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
336	-4.336E-06	-1.534E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
337	-5.163E-06	-2.594E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
338	-5.297E-06	-2.435E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
339	-4.426E-06	-2.346E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
340	-5.769E-06	-3.439E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
341	-5.712E-06	-3.335E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
342	-4.151E-06	-2.910E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
343	-6.415E-06	-4.191E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
344	-5.937E-06	-4.015E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
345	-3.570E-06	-2.827E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
360	-6.818E-06	1.215E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
364	-3.574E-06	-2.228E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
365	-3.721E-06	-3.520E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
366	-4.100E-06	-8.517E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
367	-4.544E-06	-1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
368	-4.853E-06	-2.393E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
369	-4.875E-06	-3.107E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
370	-4.596E-06	-3.367E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
377	-3.471E-06	-2.005E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
378	-3.660E-06	-4.018E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
379	-4.090E-06	-3.665E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
380	-4.415E-06	-1.085E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
381	-4.235E-06	-2.006E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
382	-3.181E-06	-2.688E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
384	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
385	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
386	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
387	-3.489E-06	-9.314E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
388	-3.642E-06	-2.182E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
389	-3.995E-06	-6.514E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
390	-4.282E-06	-1.373E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
391	-4.201E-06	-2.229E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
392	-3.618E-06	-2.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
393	-3.251E-06	1.071E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
394	-2.916E-06	7.330E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
395	-2.170E-06	1.083E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
396	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	-1.648E-06	-2.336E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
401	-4.495E-07	-1.201E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
402	-2.688E-06	-2.463E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
403	-1.754E-06	-1.463E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
404	-1.310E-06	-4.331E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
405	3.404E-08	2.371E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
406	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	-5.793E-08	7.294E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
408	6.415E-09	4.522E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
411	-1.496E-06	9.043E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
412	-1.236E-06	3.714E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
413	-3.748E-06	-3.770E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
414	-3.638E-06	-3.513E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
415	-3.640E-06	-2.506E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
416	-3.584E-06	-3.026E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
417	-3.617E-06	-1.764E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
418	-3.582E-06	-2.523E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
419	-3.613E-06	-1.662E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
420	-3.556E-06	-1.929E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
421	-3.571E-06	-1.519E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
422	-3.664E-06	-2.901E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
423	-3.621E-06	-2.046E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
424	-3.622E-06	-1.688E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
425	-3.592E-06	-1.605E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
426	-3.741E-06	-5.866E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
427	-3.730E-06	-4.235E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
428	-3.737E-06	-3.578E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
429	-3.698E-06	-3.435E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
430	-3.865E-06	-8.932E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
431	-3.903E-06	-6.709E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
432	-3.916E-06	-5.815E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
433	-3.858E-06	-5.660E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
434	-4.034E-06	-1.216E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
435	-4.130E-06	-9.550E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
436	-4.143E-06	-8.556E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
437	-4.051E-06	-8.429E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
438	-4.243E-06	-1.555E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
439	-4.395E-06	-1.284E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
440	-4.398E-06	-1.181E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
441	-4.252E-06	-1.174E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
442	-4.485E-06	-1.912E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
443	-4.684E-06	-1.654E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
444	-4.654E-06	-1.560E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
445	-4.431E-06	-1.556E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
446	-4.761E-06	-2.283E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
447	-4.979E-06	-2.065E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
448	-4.893E-06	-1.976E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
449	-4.564E-06	-1.965E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
450	-5.065E-06	-2.667E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
451	-5.268E-06	-2.503E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
452	-5.087E-06	-2.414E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
453	-4.625E-06	-2.373E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
454	-5.404E-06	-3.058E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
455	-5.537E-06	-2.953E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
456	-5.226E-06	-2.841E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
457	-4.604E-06	-2.733E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
458	-5.776E-06	-3.451E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
459	-5.784E-06	-3.394E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
460	-5.291E-06	-3.225E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
461	-4.491E-06	-3.000E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
462	-6.200E-06	-3.838E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
463	-6.004E-06	-3.799E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
464	-5.291E-06	-3.523E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
465	-4.299E-06	-3.126E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
466	-6.680E-06	-4.207E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
467	-6.210E-06	-4.132E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
468	-5.228E-06	-3.689E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
469	-4.046E-06	-3.077E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
518	-3.856E-06	-1.122E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
519	-3.879E-06	-7.908E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
520	-3.922E-06	-5.978E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
521	-3.893E-06	-5.776E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
522	-3.828E-06	-5.460E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
523	-4.086E-06	-1.839E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
524	-4.311E-06	-1.431E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
525	-4.442E-06	-1.194E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
526	-4.332E-06	-1.182E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
527	-4.192E-06	-1.155E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
528	-4.468E-06	-2.516E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
529	-4.859E-06	-2.188E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
530	-5.030E-06	-1.989E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
531	-4.738E-06	-1.974E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
532	-4.431E-06	-1.949E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
533	-5.060E-06	-3.149E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
534	-5.459E-06	-3.022E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
535	-5.537E-06	-2.899E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
536	-4.926E-06	-2.790E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
537	-4.355E-06	-2.692E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
538	-5.966E-06	-3.752E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
539	-6.088E-06	-3.839E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
540	-5.867E-06	-3.732E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
541	-4.799E-06	-3.329E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
542	-3.919E-06	-2.978E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
557	-3.152E-06	1.470E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
562	-4.422E-06	1.347E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
609	-3.789E-05	-1.737E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
610	-2.284E-05	-2.306E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
611	-3.423E-05	-2.433E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
612	-1.614E-05	-6.343E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
613	-1.108E-05	-5.441E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
614	-8.324E-06	-4.702E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
615	-2.194E-05	-1.720E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
616	-1.816E-05	-3.082E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
617	-7.510E-06	4.583E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
618	-2.033E-05	3.572E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
619	-1.672E-05	1.394E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
621	-1.689E-05	-1.774E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
622	-1.300E-05	1.399E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
623	-5.187E-06	1.592E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
624	-1.144E-05	-2.396E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
625	-8.883E-06	-6.333E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
626	-3.598E-06	8.429E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
627	-8.611E-06	-4.354E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
628	-6.704E-06	-3.032E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
629	-2.847E-06	-6.024E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
630	-7.240E-06	-4.634E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
631	-6.103E-06	-4.093E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
632	-2.975E-06	-1.988E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
633	-1.202E-05	-2.539E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
634	-1.096E-05	1.486E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
635	-8.383E-06	1.766E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
636	-5.779E-06	4.962E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
637	-4.397E-06	-1.431E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
638	-4.245E-06	-2.858E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
639	-2.405E-05	-2.588E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
640	-2.605E-05	-1.531E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
641	-2.156E-05	3.513E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
642	-1.993E-05	-1.510E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
643	-1.794E-05	7.856E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
644	-1.482E-05	7.132E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
645	-1.191E-05	8.308E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
646	-9.611E-06	7.748E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
647	-7.488E-06	6.765E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
648	-2.447E-05	1.024E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
649	-1.954E-05	5.975E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
650	-1.450E-05	8.538E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
651	-9.383E-06	7.619E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
652	-2.153E-05	-1.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
653	-1.847E-05	1.007E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
654	-1.356E-05	1.516E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
655	-8.742E-06	1.376E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
656	-2.343E-05	-1.692E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
657	-1.684E-05	1.112E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
658	-1.214E-05	1.833E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
659	-7.784E-06	1.722E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
660	-2.095E-05	-2.266E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
661	-1.469E-05	8.166E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
662	-1.043E-05	1.683E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
663	-6.665E-06	1.723E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
664	-1.669E-05	-1.714E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
665	-1.227E-05	-6.603E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
666	-8.686E-06	1.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
667	-5.551E-06	1.374E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
668	-1.316E-05	-4.371E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
669	-1.009E-05	-1.379E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
670	-7.179E-06	8.168E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
671	-4.603E-06	7.320E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
672	-1.132E-05	-4.986E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
673	-8.527E-06	-2.708E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
674	-6.079E-06	-1.045E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
675	-3.921E-06	-8.877E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
676	-9.887E-06	-5.153E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
677	-7.591E-06	-3.676E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
678	-5.429E-06	-2.093E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
679	-3.546E-06	-9.498E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
680	-8.804E-06	-5.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
681	-7.024E-06	-4.203E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
682	-5.140E-06	-2.905E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
683	-3.448E-06	-1.742E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
684	-7.941E-06	-4.841E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
685	-6.669E-06	-4.400E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
686	-5.083E-06	-3.427E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
687	-3.552E-06	-2.383E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
688	-7.254E-06	-4.550E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
689	-6.418E-06	-4.352E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
690	-5.144E-06	-3.675E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
691	-3.777E-06	-2.832E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
692	-2.306E-05	-2.780E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
693	-1.911E-05	2.384E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
694	-1.521E-05	1.617E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
695	-9.926E-06	1.829E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
696	-6.193E-06	1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
697	-2.050E-05	-7.334E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
698	-1.423E-05	-9.208E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
699	-1.092E-05	5.547E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	-7.091E-06	1.282E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
702	-1.318E-05	-5.959E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
703	-9.825E-06	-3.784E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
704	-7.594E-06	-2.001E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
705	-4.980E-06	-5.006E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
707	-9.566E-06	-5.044E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
708	-7.878E-06	-4.655E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
709	-6.356E-06	-3.782E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
710	-4.267E-06	-2.291E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
711	-2.859E-06	-1.367E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
712	-7.366E-06	-4.361E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
713	-6.817E-06	-4.478E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
714	-6.049E-06	-4.180E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
715	-4.448E-06	-3.253E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
716	-3.289E-06	-2.523E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
717	-3.509E-06	-1.280E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
718	-3.477E-06	-5.720E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
719	-3.530E-06	-9.738E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
720	-3.520E-06	-6.306E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
721	-3.546E-06	-1.262E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
722	-3.520E-06	-5.194E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
723	-3.652E-06	-2.795E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
724	-3.644E-06	-1.390E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
725	-3.808E-06	-4.814E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
726	-3.824E-06	-2.902E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
727	-3.990E-06	-7.476E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
728	-4.027E-06	-5.254E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
729	-4.161E-06	-1.080E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
730	-4.208E-06	-8.479E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
731	-4.289E-06	-1.468E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
732	-4.323E-06	-1.246E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
733	-4.339E-06	-1.887E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
734	-4.325E-06	-1.689E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
735	-4.288E-06	-2.296E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
736	-4.181E-06	-2.131E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
737	-4.128E-06	-2.637E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
738	-3.863E-06	-2.523E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
739	-3.867E-06	-2.836E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
740	-3.396E-06	-2.740E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
741	-3.806E-06	-4.077E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
742	-3.857E-06	-1.715E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
743	-4.164E-06	-9.912E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
744	-4.280E-06	-7.012E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
745	-4.304E-06	-1.813E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
746	-4.397E-06	-1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 7

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
747	-3.981E-06	-2.591E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
748	-3.865E-06	-2.427E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
749	-2.424E-06	-2.645E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
750	-3.192E-06	-2.740E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
751	-3.537E-06	-2.838E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
752	-3.112E-06	-2.615E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
753	-2.842E-06	-2.678E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
754	-2.231E-06	-2.368E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
755	-9.638E-07	-1.819E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
756	-2.214E-06	-2.013E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
757	-1.668E-06	-1.871E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
758	-2.719E-06	-2.229E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
759	-2.309E-06	-1.687E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
760	-1.157E-06	-1.283E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
761	-1.998E-06	-8.427E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
762	-1.254E-06	-9.224E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
763	-1.952E-06	-2.490E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
764	-2.075E-06	3.259E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
765	-2.451E-06	9.830E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
766	-1.822E-06	1.049E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
767	-3.025E-06	1.284E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
768	-3.558E-06	1.399E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
769	-2.673E-06	9.978E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
770	-4.302E-06	1.324E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
771	-4.725E-06	1.008E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
772	-3.303E-06	4.093E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
774	-5.245E-06	5.573E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
775	-5.233E-06	-5.310E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
776	-1.508E-06	-9.568E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
777	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
778	-1.582E-06	2.271E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
779	-1.342E-06	3.943E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
780	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
781	-1.256E-06	5.554E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
782	-9.807E-07	6.321E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
783	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
784	-8.160E-07	6.393E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
785	-6.434E-07	5.824E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
786	8.929E-09	3.911E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
787	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
788	-2.036E-08	5.943E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
789	-2.265E-09	4.344E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
790	-1.208E-07	1.100E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
792	-2.091E-07	1.273E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
794	-4.960E-07	4.204E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
795	-6.363E-07	1.210E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
796	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
797	-2.736E-07	2.184E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
798	-3.954E-07	1.438E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 8

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
799	-7.791E-07	-7.182E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
803	-1.525E-06	-9.514E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
804	-1.350E-06	6.935E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
805	-5.682E-07	5.192E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
806	-7.326E-07	-2.546E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
808	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
809	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
810	-6.793E-08	8.217E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
811	-1.300E-07	1.055E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
812	4.888E-08	-1.171E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
813	-1.650E-08	-3.965E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
814	-2.109E-07	-7.838E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
815	-3.117E-07	-1.115E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
816	-1.717E-07	-2.041E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
817	-5.821E-08	-3.394E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
818	-1.118E-07	-7.571E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
819	-3.784E-06	7.426E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
820	-3.958E-06	1.470E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
821	-4.268E-06	2.169E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
822	-4.751E-06	2.829E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
823	-5.484E-06	3.454E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
824	-6.598E-06	4.064E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
825	-3.731E-06	5.056E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
826	-3.735E-06	3.680E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
827	-3.672E-06	3.245E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
828	-4.079E-06	1.087E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
829	-4.164E-06	8.664E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
830	-4.008E-06	8.167E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
831	-4.582E-06	1.787E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
832	-4.737E-06	1.565E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
833	-4.336E-06	1.534E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
834	-5.163E-06	2.594E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
835	-5.297E-06	2.435E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
836	-4.426E-06	2.346E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
837	-5.769E-06	3.439E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
838	-5.712E-06	3.335E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
839	-4.151E-06	2.910E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
840	-6.415E-06	4.191E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
841	-5.937E-06	4.015E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
842	-3.570E-06	2.827E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
847	-3.721E-06	3.520E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
848	-4.100E-06	8.517E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
849	-4.544E-06	1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
850	-4.853E-06	2.393E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
851	-4.875E-06	3.107E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
852	-4.596E-06	3.367E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
853	-3.660E-06	4.018E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
854	-4.090E-06	3.665E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
855	-4.415E-06	1.085E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 9

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
856	-4.235E-06	2.006E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
857	-3.181E-06	2.688E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
858	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
859	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
860	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
861	-3.642E-06	2.182E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
862	-3.995E-06	6.514E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
863	-4.282E-06	1.373E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
864	-4.201E-06	2.229E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
865	-3.618E-06	2.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
866	-2.916E-06	-7.330E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
867	-2.170E-06	-1.083E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
868	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
869	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
870	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
871	-1.648E-06	2.336E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
872	-4.495E-07	1.201E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
873	-2.688E-06	2.463E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
874	-1.754E-06	1.463E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
875	-1.310E-06	4.331E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
876	3.404E-08	-2.371E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
877	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
878	-5.793E-08	-7.294E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
879	6.415E-09	-4.522E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
880	-1.496E-06	-9.043E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
881	-1.236E-06	-3.714E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
882	-3.748E-06	3.770E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
883	-3.640E-06	2.506E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
884	-3.617E-06	1.764E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
885	-3.613E-06	1.662E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
886	-3.571E-06	1.519E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
887	-3.664E-06	2.901E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
888	-3.621E-06	2.046E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
889	-3.622E-06	1.688E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
890	-3.592E-06	1.605E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
891	-3.741E-06	5.866E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
892	-3.730E-06	4.235E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
893	-3.737E-06	3.578E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
894	-3.698E-06	3.435E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
895	-3.865E-06	8.932E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
896	-3.903E-06	6.709E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
897	-3.916E-06	5.815E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
898	-3.858E-06	5.660E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
899	-4.034E-06	1.216E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	-4.130E-06	9.550E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
901	-4.143E-06	8.556E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
902	-4.051E-06	8.429E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
903	-4.243E-06	1.555E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
904	-4.395E-06	1.284E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 10

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
905	-4.398E-06	1.181E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
906	-4.252E-06	1.174E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
907	-4.485E-06	1.912E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
908	-4.684E-06	1.654E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
909	-4.654E-06	1.560E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
910	-4.431E-06	1.556E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
911	-4.761E-06	2.283E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
912	-4.979E-06	2.065E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
913	-4.893E-06	1.976E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
914	-4.564E-06	1.965E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
915	-5.065E-06	2.667E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
916	-5.268E-06	2.503E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
917	-5.087E-06	2.414E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
918	-4.625E-06	2.373E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
919	-5.404E-06	3.058E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
920	-5.537E-06	2.953E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
921	-5.226E-06	2.841E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
922	-4.604E-06	2.733E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
923	-5.776E-06	3.451E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
924	-5.784E-06	3.394E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
925	-5.291E-06	3.225E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
926	-4.491E-06	3.000E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
927	-6.200E-06	3.838E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
928	-6.004E-06	3.799E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
929	-5.291E-06	3.523E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
930	-4.299E-06	3.126E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
931	-6.680E-06	4.207E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
932	-6.210E-06	4.132E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
933	-5.228E-06	3.689E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
934	-4.046E-06	3.077E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
935	-3.856E-06	1.122E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
936	-3.879E-06	7.908E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
937	-3.922E-06	5.978E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
938	-3.893E-06	5.776E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
939	-3.828E-06	5.460E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
940	-4.086E-06	1.839E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
941	-4.311E-06	1.431E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
942	-4.442E-06	1.194E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
943	-4.332E-06	1.182E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
944	-4.192E-06	1.155E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
945	-4.468E-06	2.516E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
946	-4.859E-06	2.188E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
947	-5.030E-06	1.989E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
948	-4.738E-06	1.974E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
949	-4.431E-06	1.949E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
950	-5.060E-06	3.149E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
951	-5.459E-06	3.022E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
952	-5.537E-06	2.899E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
953	-4.926E-06	2.790E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 11

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
954	-4.355E-06	2.692E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
955	-5.966E-06	3.752E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
956	-6.088E-06	3.839E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
957	-5.867E-06	3.732E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
958	-4.799E-06	3.329E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
959	-3.919E-06	2.978E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
960	-3.289E-06	2.523E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
964	-7.488E-06	-6.765E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
965	-2.284E-05	2.306E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
966	-3.423E-05	2.433E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
967	-1.614E-05	6.343E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
968	-1.108E-05	5.441E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
969	-8.324E-06	4.702E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
970	-2.033E-05	-3.572E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
971	-1.672E-05	-1.394E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
972	-6.818E-06	-1.215E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
973	-1.689E-05	1.774E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
974	-1.300E-05	-1.399E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
975	-5.187E-06	-1.592E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
976	-1.144E-05	2.396E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
977	-8.883E-06	6.333E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
978	-3.598E-06	-8.429E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
979	-8.611E-06	4.354E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
980	-6.704E-06	3.032E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
981	-2.847E-06	6.024E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
982	-7.240E-06	4.634E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
983	-6.103E-06	4.093E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
984	-2.975E-06	1.988E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
985	-1.096E-05	-1.486E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
986	-8.383E-06	-1.766E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
987	-5.779E-06	-4.962E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
988	-4.397E-06	1.431E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
989	-4.245E-06	2.858E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
990	-2.405E-05	2.588E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
991	-2.156E-05	-3.513E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
992	-1.794E-05	-7.856E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
993	-1.191E-05	-8.308E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
995	-2.447E-05	-1.024E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
996	-1.954E-05	-5.975E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
997	-1.450E-05	-8.538E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
998	-9.383E-06	-7.619E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
999	-2.153E-05	1.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	-1.847E-05	-1.007E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1001	-1.356E-05	-1.516E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1002	-8.742E-06	-1.376E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1003	-2.343E-05	1.692E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1004	-1.684E-05	-1.112E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1005	-1.214E-05	-1.833E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1006	-7.784E-06	-1.722E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 12

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1007	-2.095E-05	2.266E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1008	-1.469E-05	-8.166E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1009	-1.043E-05	-1.683E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1010	-6.665E-06	-1.723E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1011	-1.669E-05	1.714E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1012	-1.227E-05	6.603E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1013	-8.686E-06	-1.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1014	-5.551E-06	-1.374E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1015	-1.316E-05	4.371E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1016	-1.009E-05	1.379E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1017	-7.179E-06	-8.168E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1018	-4.603E-06	-7.320E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1019	-1.132E-05	4.986E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1020	-8.527E-06	2.708E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1021	-6.079E-06	1.045E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1022	-3.921E-06	8.877E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1023	-9.887E-06	5.153E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1024	-7.591E-06	3.676E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1025	-5.429E-06	2.093E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1026	-3.546E-06	9.498E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1027	-8.804E-06	5.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1028	-7.024E-06	4.203E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1029	-5.140E-06	2.905E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1030	-3.448E-06	1.742E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1031	-7.941E-06	4.841E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1032	-6.669E-06	4.400E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1033	-5.083E-06	3.427E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1034	-3.552E-06	2.383E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1035	-7.254E-06	4.550E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1036	-6.418E-06	4.352E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1037	-5.144E-06	3.675E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1038	-3.777E-06	2.832E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1039	-2.306E-05	2.780E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1040	-1.911E-05	-2.384E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1041	-1.521E-05	-1.617E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1042	-9.926E-06	-1.829E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1043	-6.193E-06	-1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1044	-2.050E-05	7.334E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1045	-1.423E-05	9.208E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1046	-1.092E-05	-5.547E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1047	-7.091E-06	-1.282E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1048	-4.422E-06	-1.347E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1049	-1.318E-05	5.959E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1050	-9.825E-06	3.784E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1051	-7.594E-06	2.001E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1052	-4.980E-06	5.006E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1053	-3.152E-06	-1.470E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1054	-9.566E-06	5.044E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1055	-7.878E-06	4.655E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 13

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1056	-6.356E-06	3.782E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1057	-4.267E-06	2.291E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1058	-2.859E-06	1.367E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1059	-7.366E-06	4.361E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1060	-6.817E-06	4.478E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1061	-6.049E-06	4.180E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1062	-4.448E-06	3.253E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1064	-3.530E-06	9.738E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1065	-3.520E-06	6.306E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1066	-3.546E-06	1.262E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1067	-3.520E-06	5.194E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1068	-3.652E-06	2.795E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1069	-3.644E-06	1.390E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1070	-3.808E-06	4.814E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1071	-3.824E-06	2.902E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1072	-3.990E-06	7.476E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1073	-4.027E-06	5.254E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1074	-4.161E-06	1.080E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1075	-4.208E-06	8.479E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1076	-4.289E-06	1.468E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1077	-4.323E-06	1.246E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1078	-4.339E-06	1.887E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1079	-4.325E-06	1.689E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1080	-4.288E-06	2.296E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1081	-4.181E-06	2.131E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1082	-4.128E-06	2.637E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1083	-3.863E-06	2.523E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1084	-3.867E-06	2.836E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1085	-3.396E-06	2.740E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1086	-3.806E-06	4.077E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1087	-3.857E-06	1.715E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1088	-4.164E-06	9.912E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1089	-4.280E-06	7.012E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1090	-4.304E-06	1.813E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1091	-4.397E-06	1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1092	-3.981E-06	2.591E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1093	-3.865E-06	2.427E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1094	-2.424E-06	2.645E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1095	-3.192E-06	2.740E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1096	-3.537E-06	2.838E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1097	-3.112E-06	2.615E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1098	-2.842E-06	2.678E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1099	-2.231E-06	2.368E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	-9.638E-07	1.819E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1101	-2.214E-06	2.013E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1102	-1.668E-06	1.871E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1103	-2.719E-06	2.229E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1104	-2.309E-06	1.687E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1105	-1.157E-06	1.283E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 14

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:16:23

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1106	-1.998E-06	8.427E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1107	-1.254E-06	9.224E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1108	-1.952E-06	2.490E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1109	-2.075E-06	-3.259E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1110	-2.451E-06	-9.830E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1111	-1.822E-06	-1.049E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1112	-3.025E-06	-1.284E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1113	-3.558E-06	-1.399E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1114	-2.673E-06	-9.978E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1115	-4.302E-06	-1.324E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1116	-4.725E-06	-1.008E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1117	-3.303E-06	-4.093E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1118	-5.245E-06	-5.573E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1119	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1120	-1.582E-06	-2.271E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1121	-1.342E-06	-3.943E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1122	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1123	-1.256E-06	-5.554E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1124	-9.807E-07	-6.321E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1125	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1126	-8.160E-07	-6.393E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1127	-6.434E-07	-5.824E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1128	8.929E-09	-3.911E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1129	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1130	-2.036E-08	-5.943E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1131	-2.265E-09	-4.344E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1132	-1.208E-07	-1.100E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1133	-2.091E-07	-1.273E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1134	-4.960E-07	-4.204E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1135	-6.363E-07	-1.210E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1136	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1137	-2.736E-07	-2.184E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1138	-3.954E-07	-1.438E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1139	-7.791E-07	7.182E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1140	-1.525E-06	9.514E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1141	-1.350E-06	-6.935E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1142	-5.682E-07	-5.192E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1143	-7.326E-07	2.546E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1144	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1145	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1146	-6.793E-08	-8.217E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1147	-1.300E-07	-1.055E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1148	4.888E-08	1.171E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1149	-1.650E-08	3.965E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1150	-2.109E-07	7.838E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1151	-3.117E-07	1.115E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1152	-1.717E-07	2.041E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1153	-5.821E-08	3.394E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1154	-1.118E-07	7.571E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.4 (continued)

Page 15

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:16:23

	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
	812	1044	312	312	312	312
Maximum	4.888E-08	7.334E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	609	697	312	312	312	312
Minimum	-3.789E-05	-7.334E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Average	-5.548E-06	1.774E-13	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.5 Model loaded with -300 lb (-1334.4 N) on nodes 609, 611, and 966 (stress listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:29:11

Group ID : PERMANENT GROUP1
Analysis Dataset : 10 - CASE 1, LOAD 4, STRESSES
Report Type : Contour Units : IN
Dataset Type : Stress Load Set : 4
Frame of Reference: Global Data Component: Von Mises
Surface Type : Top

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
312	-3.569E+00	0.000E+00	-2.948E+01	1.296E+01	2.787E+01
313	-3.188E+00	0.000E+00	-2.709E+01	1.195E+01	2.564E+01
314	-1.985E+00	0.000E+00	-2.011E+01	9.064E+00	1.920E+01
315	6.561E-01	0.000E+00	-9.546E+00	5.101E+00	9.890E+00
316	1.026E+01	0.000E+00	-1.113E+00	5.687E+00	1.086E+01
317	2.977E+01	0.000E+00	2.834E+00	1.347E+01	2.846E+01
318	5.633E+01	0.000E+00	6.923E+00	2.470E+01	5.321E+01
325	-2.921E+00	0.000E+00	-1.509E+01	6.087E+00	1.387E+01
326	-2.508E+00	0.000E+00	-8.777E+00	3.134E+00	7.830E+00
327	-4.809E-01	0.000E+00	-4.280E+00	1.900E+00	4.061E+00
328	-2.099E+00	0.000E+00	-1.433E+01	6.113E+00	1.340E+01
329	-1.009E+00	0.000E+00	-9.220E+00	4.105E+00	8.759E+00
330	2.675E-01	0.000E+00	-4.909E+00	2.588E+00	5.048E+00
331	4.515E-01	0.000E+00	-1.220E+01	6.325E+00	1.243E+01
332	2.456E+00	0.000E+00	-9.582E+00	6.019E+00	1.102E+01
333	1.793E+00	0.000E+00	-6.080E+00	3.936E+00	7.147E+00
334	4.951E+00	0.000E+00	-9.171E+00	7.061E+00	1.241E+01
335	6.874E+00	0.000E+00	-9.037E+00	7.956E+00	1.382E+01
336	3.484E+00	0.000E+00	-7.181E+00	5.333E+00	9.420E+00
337	1.159E+01	0.000E+00	-5.734E+00	8.662E+00	1.529E+01
338	1.177E+01	0.000E+00	-7.433E+00	9.601E+00	1.677E+01
339	4.955E+00	0.000E+00	-7.822E+00	6.389E+00	1.116E+01
340	2.037E+01	0.000E+00	-2.133E+00	1.125E+01	2.151E+01
341	1.683E+01	0.000E+00	-5.030E+00	1.093E+01	1.983E+01
342	5.753E+00	0.000E+00	-7.672E+00	6.712E+00	1.167E+01
343	3.095E+01	0.000E+00	1.587E+00	1.468E+01	3.019E+01
344	2.134E+01	0.000E+00	-2.531E+00	1.194E+01	2.271E+01
345	6.723E+00	0.000E+00	-8.025E+00	7.374E+00	1.279E+01
360	-1.482E+00	0.000E+00	-6.093E+01	2.972E+01	6.020E+01
364	-1.344E+00	0.000E+00	-6.094E+00	2.375E+00	5.545E+00
365	6.467E-02	0.000E+00	-6.949E+00	3.507E+00	6.982E+00
366	2.897E+00	0.000E+00	-8.154E+00	5.525E+00	9.925E+00
367	6.095E+00	0.000E+00	-8.749E+00	7.422E+00	1.292E+01
368	9.117E+00	0.000E+00	-8.452E+00	8.784E+00	1.522E+01
369	1.164E+01	0.000E+00	-7.458E+00	9.547E+00	1.667E+01
370	1.354E+01	0.000E+00	-6.893E+00	1.022E+01	1.801E+01
377	1.072E-01	0.000E+00	-1.894E-02	6.305E-02	1.178E-01
378	1.405E-01	0.000E+00	-6.288E-01	3.846E-01	7.095E-01
379	1.595E-01	0.000E+00	-2.336E+00	1.248E+00	2.420E+00
380	1.844E-01	0.000E+00	-5.040E+00	2.612E+00	5.135E+00
381	2.406E-01	0.000E+00	-8.608E+00	4.425E+00	8.731E+00
382	-2.876E-01	0.000E+00	-1.449E+01	7.099E+00	1.434E+01

Table B.5 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
383	-1.260E+01	0.000E+00	-4.259E+01	1.499E+01	3.789E+01
384	-1.165E+01	0.000E+00	-3.951E+01	1.393E+01	3.517E+01
385	-9.357E+00	0.000E+00	-3.297E+01	1.181E+01	2.943E+01
386	5.298E-01	0.000E+00	-9.624E-01	7.461E-01	1.310E+00
387	-1.529E-01	0.000E+00	-2.183E+00	1.015E+00	2.110E+00
388	1.249E-01	0.000E+00	-2.727E+00	1.426E+00	2.792E+00
389	6.474E-01	0.000E+00	-4.030E+00	2.339E+00	4.390E+00
390	1.214E+00	0.000E+00	-5.842E+00	3.528E+00	6.535E+00
391	1.828E+00	0.000E+00	-7.989E+00	4.909E+00	9.043E+00
392	1.745E+00	0.000E+00	-9.239E+00	5.492E+00	1.022E+01
393	-5.909E+00	0.000E+00	-4.974E+01	2.192E+01	4.707E+01
394	-5.684E+00	0.000E+00	-4.586E+01	2.009E+01	4.330E+01
395	-5.566E+00	0.000E+00	-3.543E+01	1.493E+01	3.301E+01
396	-5.487E+00	0.000E+00	-2.139E+01	7.951E+00	1.924E+01
397	-3.085E+00	0.000E+00	-1.197E+01	4.444E+00	1.077E+01
398	-1.419E+00	0.000E+00	-5.778E+00	2.179E+00	5.215E+00
399	1.781E-01	0.000E+00	-1.098E+01	5.581E+00	1.107E+01
401	1.291E+00	0.000E+00	-3.366E+00	2.329E+00	4.165E+00
402	2.304E+00	0.000E+00	-9.114E+00	5.709E+00	1.046E+01
403	1.939E+00	0.000E+00	-8.989E+00	5.464E+00	1.010E+01
404	-5.801E-01	0.000E+00	-8.788E+00	4.104E+00	8.512E+00
405	1.802E+00	0.000E+00	2.400E-01	7.811E-01	1.695E+00
406	-2.899E-02	0.000E+00	-2.534E+00	1.253E+00	2.520E+00
407	-5.572E-01	0.000E+00	-1.964E+00	7.035E-01	1.753E+00
408	3.176E-01	0.000E+00	-1.136E+00	7.267E-01	1.324E+00
411	-6.012E+00	0.000E+00	-2.144E+01	7.715E+00	1.916E+01
412	-6.813E+00	0.000E+00	-1.238E+01	2.784E+00	1.074E+01
413	-3.021E+00	0.000E+00	-2.836E+01	1.267E+01	2.698E+01
414	-2.198E+00	0.000E+00	-1.926E+01	8.529E+00	1.826E+01
415	-2.560E+00	0.000E+00	-1.464E+01	6.039E+00	1.354E+01
416	-2.408E+00	0.000E+00	-1.094E+01	4.267E+00	9.958E+00
417	-2.019E+00	0.000E+00	-8.798E+00	3.389E+00	7.982E+00
418	-2.075E+00	0.000E+00	-7.173E+00	2.549E+00	6.393E+00
419	-9.195E-01	0.000E+00	-6.303E+00	2.692E+00	5.897E+00
420	-7.911E-01	0.000E+00	-5.078E+00	2.143E+00	4.732E+00
421	-2.307E-01	0.000E+00	-4.393E+00	2.081E+00	4.283E+00
422	-1.949E+00	0.000E+00	-1.897E+01	8.509E+00	1.807E+01
423	-2.106E+00	0.000E+00	-1.091E+01	4.402E+00	1.002E+01
424	-1.576E+00	0.000E+00	-7.493E+00	2.958E+00	6.843E+00
425	-4.845E-01	0.000E+00	-5.324E+00	2.420E+00	5.099E+00
426	-1.723E+00	0.000E+00	-1.782E+01	8.051E+00	1.703E+01
427	-1.456E+00	0.000E+00	-1.070E+01	4.623E+00	1.005E+01
428	-3.368E-01	0.000E+00	-8.119E+00	3.891E+00	7.956E+00
429	2.978E-01	0.000E+00	-5.852E+00	3.075E+00	6.006E+00
430	-9.935E-01	0.000E+00	-1.615E+01	7.577E+00	1.568E+01
431	-2.884E-01	0.000E+00	-1.037E+01	5.043E+00	1.023E+01
432	1.271E+00	0.000E+00	-8.771E+00	5.021E+00	9.471E+00
433	1.307E+00	0.000E+00	-6.487E+00	3.897E+00	7.230E+00
434	-1.176E-01	0.000E+00	-1.380E+01	6.843E+00	1.374E+01

Table B.5 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
435	1.213E+00	0.000E+00	-9.864E+00	5.539E+00	1.052E+01
436	3.162E+00	0.000E+00	-9.286E+00	6.224E+00	1.121E+01
437	2.477E+00	0.000E+00	-7.102E+00	4.789E+00	8.611E+00
438	1.363E+00	0.000E+00	-1.113E+01	6.249E+00	1.187E+01
439	3.062E+00	0.000E+00	-9.159E+00	6.111E+00	1.101E+01
440	5.098E+00	0.000E+00	-9.548E+00	7.323E+00	1.288E+01
441	3.652E+00	0.000E+00	-7.601E+00	5.626E+00	9.943E+00
442	3.515E+00	0.000E+00	-8.317E+00	5.916E+00	1.052E+01
443	5.251E+00	0.000E+00	-8.289E+00	6.770E+00	1.182E+01
444	7.208E+00	0.000E+00	-9.606E+00	8.407E+00	1.461E+01
445	4.887E+00	0.000E+00	-8.009E+00	6.448E+00	1.128E+01
446	6.678E+00	0.000E+00	-5.715E+00	6.197E+00	1.074E+01
447	7.629E+00	0.000E+00	-7.215E+00	7.422E+00	1.286E+01
448	9.192E+00	0.000E+00	-9.327E+00	9.259E+00	1.604E+01
449	5.999E+00	0.000E+00	-8.173E+00	7.086E+00	1.232E+01
450	1.115E+01	0.000E+00	-3.518E+00	7.331E+00	1.326E+01
451	1.036E+01	0.000E+00	-6.007E+00	8.185E+00	1.434E+01
452	1.129E+01	0.000E+00	-8.877E+00	1.008E+01	1.751E+01
453	7.030E+00	0.000E+00	-8.203E+00	7.616E+00	1.321E+01
454	1.668E+01	0.000E+00	-1.704E+00	9.193E+00	1.760E+01
455	1.315E+01	0.000E+00	-4.672E+00	8.912E+00	1.601E+01
456	1.314E+01	0.000E+00	-8.132E+00	1.064E+01	1.859E+01
457	7.835E+00	0.000E+00	-7.912E+00	7.874E+00	1.364E+01
458	2.338E+01	0.000E+00	5.143E-02	1.166E+01	2.335E+01
459	1.628E+01	0.000E+00	-3.233E+00	9.759E+00	1.812E+01
460	1.509E+01	0.000E+00	-7.410E+00	1.125E+01	1.986E+01
461	8.555E+00	0.000E+00	-7.651E+00	8.103E+00	1.404E+01
462	3.097E+01	0.000E+00	1.478E+00	1.475E+01	3.026E+01
463	1.928E+01	0.000E+00	-1.825E+00	1.055E+01	2.025E+01
464	1.668E+01	0.000E+00	-6.622E+00	1.165E+01	2.080E+01
465	9.284E+00	0.000E+00	-7.393E+00	8.339E+00	1.447E+01
466	3.953E+01	0.000E+00	3.294E+00	1.812E+01	3.799E+01
467	2.241E+01	0.000E+00	-3.294E-01	1.137E+01	2.258E+01
468	1.811E+01	0.000E+00	-6.146E+00	1.213E+01	2.184E+01
469	9.895E+00	0.000E+00	-7.613E+00	8.754E+00	1.521E+01
518	-2.324E+00	0.000E+00	-2.370E+01	1.069E+01	2.263E+01
519	-9.286E-01	0.000E+00	-1.320E+01	6.135E+00	1.276E+01
520	6.021E-01	0.000E+00	-9.388E+00	4.995E+00	9.703E+00
521	1.396E+00	0.000E+00	-7.551E+00	4.473E+00	8.337E+00
522	1.012E+00	0.000E+00	-5.423E+00	3.217E+00	5.993E+00
523	-7.346E-01	0.000E+00	-1.486E+01	7.063E+00	1.451E+01
524	2.494E+00	0.000E+00	-1.065E+01	6.570E+00	1.209E+01
525	4.549E+00	0.000E+00	-9.392E+00	6.970E+00	1.231E+01
526	4.450E+00	0.000E+00	-8.528E+00	6.489E+00	1.142E+01
527	2.637E+00	0.000E+00	-6.627E+00	4.632E+00	8.267E+00
528	3.910E+00	0.000E+00	-4.346E+00	4.128E+00	7.152E+00
529	7.927E+00	0.000E+00	-7.489E+00	7.708E+00	1.335E+01
530	9.148E+00	0.000E+00	-8.387E+00	8.767E+00	1.519E+01
531	7.588E+00	0.000E+00	-8.721E+00	8.154E+00	1.414E+01

Table B.5 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
532	4.258E+00	0.000E+00	-7.595E+00	5.927E+00	1.040E+01
533	1.886E+01	0.000E+00	6.866E-01	9.089E+00	1.853E+01
534	1.546E+01	0.000E+00	-4.110E+00	9.785E+00	1.787E+01
535	1.404E+01	0.000E+00	-6.427E+00	1.023E+01	1.813E+01
536	1.034E+01	0.000E+00	-8.018E+00	9.181E+00	1.594E+01
537	5.373E+00	0.000E+00	-7.851E+00	6.612E+00	1.152E+01
538	4.141E+01	0.000E+00	4.064E+00	1.867E+01	3.953E+01
539	2.495E+01	0.000E+00	-6.551E-01	1.280E+01	2.528E+01
540	1.884E+01	0.000E+00	-4.015E+00	1.143E+01	2.113E+01
541	1.264E+01	0.000E+00	-7.105E+00	9.872E+00	1.732E+01
542	6.255E+00	0.000E+00	-7.685E+00	6.970E+00	1.209E+01
557	-6.828E+00	0.000E+00	-1.209E+01	2.633E+00	1.050E+01
562	-4.980E+00	0.000E+00	-3.399E+01	1.451E+01	3.180E+01
609	-3.930E+02	0.000E+00	-8.649E+02	2.359E+02	7.500E+02
610	-4.964E+00	0.000E+00	-7.343E+01	3.423E+01	7.108E+01
611	-2.615E+02	0.000E+00	-7.419E+02	2.402E+02	6.518E+02
612	2.378E+02	0.000E+00	2.867E+01	1.046E+02	2.249E+02
613	1.423E+02	0.000E+00	2.090E+01	6.069E+01	1.331E+02
614	9.168E+01	0.000E+00	1.229E+01	3.969E+01	8.619E+01
615	-3.772E+01	0.000E+00	-1.932E+02	7.772E+01	1.773E+02
616	4.312E+00	0.000E+00	-1.112E+02	5.774E+01	1.134E+02
617	-1.040E+00	0.000E+00	-6.693E+01	3.294E+01	6.641E+01
618	-2.536E-01	0.000E+00	-7.808E+01	3.891E+01	7.796E+01
619	6.390E+00	0.000E+00	-9.970E+01	5.305E+01	1.030E+02
621	-3.638E+00	0.000E+00	-1.461E+02	7.124E+01	1.443E+02
622	9.177E+00	0.000E+00	-7.094E+01	4.006E+01	7.594E+01
623	-3.339E+00	0.000E+00	-4.426E+01	2.046E+01	4.269E+01
624	3.783E+01	0.000E+00	4.161E+00	1.684E+01	3.593E+01
625	8.580E+00	0.000E+00	-2.219E+01	1.538E+01	2.750E+01
626	-6.295E+00	0.000E+00	-2.339E+01	8.548E+00	2.096E+01
627	4.523E+01	0.000E+00	1.051E+01	1.736E+01	4.100E+01
628	1.234E+01	0.000E+00	2.579E+00	4.882E+00	1.128E+01
629	-3.357E+00	0.000E+00	-9.031E+00	2.837E+00	7.906E+00
630	4.171E+01	0.000E+00	5.533E+00	1.809E+01	3.924E+01
631	2.234E+01	0.000E+00	-4.817E-01	1.141E+01	2.258E+01
632	5.564E+00	0.000E+00	-9.067E+00	7.316E+00	1.279E+01
633	1.810E+00	0.000E+00	-9.187E+01	4.684E+01	9.279E+01
634	1.430E+00	0.000E+00	-8.298E+01	4.220E+01	8.370E+01
635	-1.791E-01	0.000E+00	-5.808E+01	2.895E+01	5.799E+01
636	-3.043E+00	0.000E+00	-2.543E+01	1.119E+01	2.405E+01
637	5.335E-01	0.000E+00	-6.164E+00	3.349E+00	6.447E+00
638	1.197E+01	0.000E+00	-7.054E+00	9.510E+00	1.665E+01
639	1.236E+02	0.000E+00	-6.332E+01	9.347E+01	1.647E+02
640	-8.725E+01	0.000E+00	-4.838E+02	1.983E+02	4.466E+02
641	-2.756E+01	0.000E+00	-1.611E+02	6.675E+01	1.492E+02
642	-2.242E+00	0.000E+00	-1.141E+02	5.593E+01	1.130E+02
643	5.050E+00	0.000E+00	-1.075E+02	5.628E+01	1.101E+02
644	1.810E+00	0.000E+00	-1.085E+02	5.515E+01	1.094E+02
645	1.270E+00	0.000E+00	-9.036E+01	4.581E+01	9.100E+01

Table B.5 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
YOEK3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
646	-2.865E-01	0.000E+00	-7.995E+01	3.983E+01	7.981E+01
647	-1.687E+00	0.000E+00	-6.637E+01	3.234E+01	6.554E+01
648	7.860E-01	0.000E+00	-1.177E+02	5.926E+01	1.181E+02
649	-1.044E-01	0.000E+00	-1.069E+02	5.339E+01	1.068E+02
650	1.943E+00	0.000E+00	-1.059E+02	5.393E+01	1.069E+02
651	-4.848E-01	0.000E+00	-7.865E+01	3.908E+01	7.841E+01
652	-6.691E+01	0.000E+00	-1.132E+02	2.315E+01	9.857E+01
653	3.413E+00	0.000E+00	-9.644E+01	4.993E+01	9.819E+01
654	2.154E+00	0.000E+00	-9.793E+01	5.004E+01	9.903E+01
655	-7.590E-01	0.000E+00	-7.241E+01	3.583E+01	7.203E+01
656	6.608E+01	0.000E+00	-1.311E+02	9.858E+01	1.738E+02
657	6.345E+00	0.000E+00	-9.077E+01	4.856E+01	9.410E+01
658	2.194E+00	0.000E+00	-8.558E+01	4.389E+01	8.670E+01
659	-1.550E+00	0.000E+00	-6.383E+01	3.114E+01	6.307E+01
660	-1.645E+01	0.000E+00	-4.060E+02	1.948E+02	3.981E+02
661	1.057E+01	0.000E+00	-7.737E+01	4.397E+01	8.316E+01
662	2.020E+00	0.000E+00	-6.828E+01	3.515E+01	6.931E+01
663	-2.528E+00	0.000E+00	-5.150E+01	2.449E+01	5.029E+01
664	4.968E+01	0.000E+00	-3.556E+01	4.262E+01	7.416E+01
665	1.545E+01	0.000E+00	-5.047E+01	3.296E+01	5.972E+01
666	1.601E+00	0.000E+00	-4.745E+01	2.452E+01	4.827E+01
667	-3.943E+00	0.000E+00	-3.832E+01	1.719E+01	3.651E+01
668	4.143E+01	0.000E+00	1.885E+00	1.977E+01	4.052E+01
669	1.918E+01	0.000E+00	-1.536E+01	1.727E+01	2.998E+01
670	6.726E-01	0.000E+00	-2.607E+01	1.337E+01	2.641E+01
671	-5.378E+00	0.000E+00	-2.460E+01	9.610E+00	2.240E+01
672	7.352E+01	0.000E+00	9.457E+00	3.203E+01	6.927E+01
673	1.628E+01	0.000E+00	6.538E+00	4.873E+00	1.419E+01
674	-9.144E-01	0.000E+00	-7.717E+00	3.401E+00	7.302E+00
675	-6.426E+00	0.000E+00	-1.274E+01	3.155E+00	1.103E+01
676	7.502E+01	0.000E+00	9.925E+00	3.255E+01	7.058E+01
677	2.125E+01	0.000E+00	6.352E+00	7.447E+00	1.889E+01
678	5.501E+00	0.000E+00	-3.043E+00	4.272E+00	7.501E+00
679	-2.161E+00	0.000E+00	-8.259E+00	3.049E+00	7.419E+00
680	6.830E+01	0.000E+00	7.682E+00	3.031E+01	6.480E+01
681	2.588E+01	0.000E+00	4.156E+00	1.086E+01	2.407E+01
682	1.346E+01	0.000E+00	-4.426E+00	8.941E+00	1.613E+01
683	4.439E+00	0.000E+00	-8.531E+00	6.485E+00	1.142E+01
684	5.867E+01	0.000E+00	6.614E+00	2.603E+01	5.566E+01
685	2.647E+01	0.000E+00	2.524E+00	1.197E+01	2.530E+01
686	1.735E+01	0.000E+00	-5.328E+00	1.134E+01	2.053E+01
687	8.267E+00	0.000E+00	-8.409E+00	8.338E+00	1.444E+01
688	4.888E+01	0.000E+00	4.543E+00	2.217E+01	4.678E+01
689	2.486E+01	0.000E+00	9.998E-01	1.193E+01	2.438E+01
690	1.847E+01	0.000E+00	-5.671E+00	1.207E+01	2.187E+01
691	9.831E+00	0.000E+00	-7.985E+00	8.908E+00	1.546E+01
692	8.167E+01	0.000E+00	-2.484E+02	1.651E+02	2.978E+02
693	-1.579E+01	0.000E+00	-1.612E+02	7.272E+01	1.539E+02
694	7.810E+00	0.000E+00	-8.794E+01	4.788E+01	9.210E+01

Table B.5 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
695	3.893E-01	0.000E+00	-7.281E+01	3.660E+01	7.301E+01
696	-2.589E+00	0.000E+00	-5.446E+01	2.594E+01	5.321E+01
697	3.222E+02	0.000E+00	1.314E+02	9.539E+01	2.806E+02
698	2.539E+01	0.000E+00	-7.565E+01	5.052E+01	9.104E+01
699	9.261E+00	0.000E+00	-4.725E+01	2.825E+01	5.249E+01
700	-1.827E+00	0.000E+00	-4.208E+01	2.012E+01	4.119E+01
702	1.811E+02	0.000E+00	3.205E+01	7.453E+01	1.674E+02
703	3.490E+01	0.000E+00	1.152E+01	1.169E+01	3.080E+01
704	5.778E+00	0.000E+00	-1.538E+00	3.658E+00	6.681E+00
705	-4.626E+00	0.000E+00	-1.113E+01	3.250E+00	9.682E+00
707	1.119E+02	0.000E+00	1.421E+01	4.887E+01	1.056E+02
708	4.395E+01	0.000E+00	6.793E+00	1.858E+01	4.098E+01
709	1.886E+01	0.000E+00	6.896E-02	9.395E+00	1.883E+01
710	7.918E+00	0.000E+00	-6.972E+00	7.445E+00	1.290E+01
711	1.866E+00	0.000E+00	-9.215E+00	5.540E+00	1.028E+01
712	7.142E+01	0.000E+00	8.124E+00	3.165E+01	6.773E+01
713	3.563E+01	0.000E+00	2.877E+00	1.637E+01	3.428E+01
714	2.207E+01	0.000E+00	-1.910E+00	1.199E+01	2.309E+01
715	1.350E+01	0.000E+00	-7.086E+00	1.029E+01	1.811E+01
716	6.816E+00	0.000E+00	-8.557E+00	7.687E+00	1.334E+01
717	-2.249E-01	0.000E+00	-3.123E+00	1.449E+00	3.017E+00
718	-6.204E-02	0.000E+00	-1.014E+00	4.758E-01	9.842E-01
719	-1.176E-02	0.000E+00	-2.241E+00	1.115E+00	2.235E+00
720	1.779E-01	0.000E+00	-6.946E-02	1.237E-01	2.210E-01
721	-7.168E-02	0.000E+00	-3.294E+00	1.611E+00	3.259E+00
722	8.715E-04	0.000E+00	-1.176E+00	5.883E-01	1.176E+00
723	2.459E-01	0.000E+00	-3.698E+00	1.972E+00	3.827E+00
724	4.892E-02	0.000E+00	-1.571E+00	8.100E-01	1.596E+00
725	6.984E-01	0.000E+00	-4.267E+00	2.483E+00	4.656E+00
726	1.641E-01	0.000E+00	-2.216E+00	1.190E+00	2.302E+00
727	1.175E+00	0.000E+00	-4.930E+00	3.052E+00	5.610E+00
728	2.284E-01	0.000E+00	-3.057E+00	1.643E+00	3.178E+00
729	1.682E+00	0.000E+00	-5.638E+00	3.660E+00	6.640E+00
730	3.611E-01	0.000E+00	-4.105E+00	2.233E+00	4.297E+00
731	2.180E+00	0.000E+00	-6.413E+00	4.297E+00	7.737E+00
732	4.361E-01	0.000E+00	-5.347E+00	2.892E+00	5.578E+00
733	2.681E+00	0.000E+00	-7.140E+00	4.911E+00	8.793E+00
734	5.804E-01	0.000E+00	-6.759E+00	3.670E+00	7.067E+00
735	3.081E+00	0.000E+00	-7.814E+00	5.447E+00	9.727E+00
736	6.679E-01	0.000E+00	-8.500E+00	4.584E+00	8.853E+00
737	3.256E+00	0.000E+00	-8.159E+00	5.708E+00	1.019E+01
738	7.114E-01	0.000E+00	-1.010E+01	5.407E+00	1.048E+01
739	3.315E+00	0.000E+00	-8.283E+00	5.799E+00	1.035E+01
740	7.255E-01	0.000E+00	-1.107E+01	5.897E+00	1.145E+01
741	4.263E-01	0.000E+00	-3.232E+00	1.829E+00	3.465E+00
742	1.979E-01	0.000E+00	-1.249E+00	7.237E-01	1.359E+00
743	9.603E-01	0.000E+00	-4.833E+00	2.897E+00	5.378E+00
744	2.183E-01	0.000E+00	-3.507E+00	1.862E+00	3.621E+00
745	1.510E+00	0.000E+00	-6.934E+00	4.222E+00	7.799E+00

Table B.5 (continued)

Page 7

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
746	2.351E-01	0.000E+00	-6.709E+00	3.472E+00	6.830E+00
747	1.818E+00	0.000E+00	-8.899E+00	5.358E+00	9.933E+00
748	-4.376E-02	0.000E+00	-1.203E+01	5.991E+00	1.200E+01
749	-1.115E-01	0.000E+00	-1.374E+01	6.816E+00	1.369E+01
750	1.972E+00	0.000E+00	-9.259E+00	5.615E+00	1.039E+01
751	3.731E+00	0.000E+00	-8.262E+00	5.996E+00	1.063E+01
752	4.088E+00	0.000E+00	-8.613E+00	6.351E+00	1.123E+01
753	8.419E-01	0.000E+00	-1.085E+01	5.845E+00	1.129E+01
754	9.339E-01	0.000E+00	-9.695E+00	5.314E+00	1.019E+01
755	5.992E-01	0.000E+00	-7.065E+00	3.832E+00	7.383E+00
756	2.531E+00	0.000E+00	-8.861E+00	5.696E+00	1.036E+01
757	9.552E-01	0.000E+00	-8.284E+00	4.620E+00	8.801E+00
758	4.288E+00	0.000E+00	-9.037E+00	6.662E+00	1.178E+01
759	2.688E+00	0.000E+00	-9.324E+00	6.006E+00	1.092E+01
760	9.413E-01	0.000E+00	-6.876E+00	3.909E+00	7.392E+00
761	5.525E-01	0.000E+00	-9.375E+00	4.964E+00	9.663E+00
762	-3.731E+00	0.000E+00	-8.967E+00	2.618E+00	7.802E+00
763	-3.872E+00	0.000E+00	-9.649E+00	2.889E+00	8.410E+00
764	-7.080E+00	0.000E+00	-1.315E+01	3.035E+00	1.140E+01
765	-6.084E+00	0.000E+00	-1.982E+01	6.870E+00	1.759E+01
766	-6.039E+00	0.000E+00	-2.857E+01	1.127E+01	2.608E+01
767	-5.337E+00	0.000E+00	-3.014E+01	1.240E+01	2.786E+01
768	-4.220E+00	0.000E+00	-3.824E+01	1.701E+01	3.632E+01
769	-5.839E+00	0.000E+00	-4.229E+01	1.823E+01	3.969E+01
770	-3.860E+00	0.000E+00	-4.642E+01	2.128E+01	4.461E+01
771	-3.178E+00	0.000E+00	-5.121E+01	2.401E+01	4.969E+01
772	-6.334E+00	0.000E+00	-4.983E+01	2.175E+01	4.698E+01
774	-3.477E+00	0.000E+00	-5.566E+01	2.609E+01	5.400E+01
775	-3.002E+00	0.000E+00	-5.585E+01	2.642E+01	5.441E+01
776	-8.832E+00	0.000E+00	-4.440E+01	1.778E+01	4.071E+01
777	-1.341E+01	0.000E+00	-4.556E+01	1.608E+01	4.055E+01
778	-9.549E+00	0.000E+00	-4.623E+01	1.834E+01	4.227E+01
779	-8.346E+00	0.000E+00	-4.113E+01	1.639E+01	3.766E+01
780	-1.150E+01	0.000E+00	-3.918E+01	1.384E+01	3.489E+01
781	-8.126E+00	0.000E+00	-3.960E+01	1.574E+01	3.623E+01
782	-6.878E+00	0.000E+00	-3.328E+01	1.320E+01	3.043E+01
783	-7.378E+00	0.000E+00	-2.737E+01	9.996E+00	2.453E+01
784	-6.404E+00	0.000E+00	-2.733E+01	1.046E+01	2.476E+01
785	-5.937E+00	0.000E+00	-2.151E+01	7.787E+00	1.924E+01
786	7.782E-01	0.000E+00	-4.210E-01	5.996E-01	1.054E+00
787	5.452E-01	0.000E+00	-1.262E+00	9.037E-01	1.606E+00
788	-1.065E-01	0.000E+00	-2.433E+00	1.163E+00	2.382E+00
789	-8.691E-02	0.000E+00	-7.809E-01	3.470E-01	7.412E-01
790	-1.560E+00	0.000E+00	-5.303E+00	1.871E+00	4.720E+00
792	-1.558E+00	0.000E+00	-5.324E+00	1.883E+00	4.741E+00
794	-4.701E+00	0.000E+00	-1.067E+01	2.984E+00	9.261E+00
795	-3.171E+00	0.000E+00	-7.399E+00	2.114E+00	6.430E+00
796	-2.180E+00	0.000E+00	-8.700E+00	3.260E+00	7.840E+00
797	-3.432E+00	0.000E+00	-8.036E+00	2.302E+00	6.984E+00

Table B.5 (continued)

Page 8

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
798	-2.385E+00	0.000E+00	-5.998E+00	1.807E+00	5.231E+00
799	1.626E-01	0.000E+00	-5.277E+00	2.720E+00	5.360E+00
803	1.081E+00	0.000E+00	-9.052E+00	5.067E+00	9.638E+00
804	-6.664E+00	0.000E+00	-1.638E+01	4.858E+00	1.427E+01
805	-5.318E+00	0.000E+00	-1.569E+01	5.188E+00	1.382E+01
806	-9.987E-01	0.000E+00	-5.960E+00	2.481E+00	5.529E+00
808	-4.089E+00	0.000E+00	-1.602E+01	5.965E+00	1.442E+01
809	-8.001E-01	0.000E+00	-4.143E+00	1.671E+00	3.806E+00
810	-6.550E-01	0.000E+00	-3.793E+00	1.569E+00	3.512E+00
811	-1.264E+00	0.000E+00	-3.731E+00	1.234E+00	3.287E+00
812	1.975E+00	0.000E+00	3.516E-01	8.117E-01	1.825E+00
813	8.177E-01	0.000E+00	-6.106E-01	7.142E-01	1.241E+00
814	3.327E-01	0.000E+00	-2.104E+00	1.218E+00	2.289E+00
815	-8.659E-01	0.000E+00	-3.515E+00	1.324E+00	3.172E+00
816	-1.356E-01	0.000E+00	-2.214E+00	1.039E+00	2.149E+00
817	-1.212E-01	0.000E+00	-4.976E-01	1.882E-01	4.494E-01
818	-3.501E-01	0.000E+00	-1.836E+00	7.430E-01	1.688E+00
819	-3.188E+00	0.000E+00	-2.709E+01	1.195E+01	2.564E+01
820	-1.985E+00	0.000E+00	-2.011E+01	9.064E+00	1.920E+01
821	6.561E-01	0.000E+00	-9.546E+00	5.101E+00	9.890E+00
822	1.026E+01	0.000E+00	-1.113E+00	5.687E+00	1.086E+01
823	2.977E+01	0.000E+00	2.834E+00	1.347E+01	2.846E+01
824	5.633E+01	0.000E+00	6.923E+00	2.470E+01	5.321E+01
825	-2.099E+00	0.000E+00	-1.433E+01	6.113E+00	1.340E+01
826	-1.009E+00	0.000E+00	-9.220E+00	4.105E+00	8.759E+00
827	2.675E-01	0.000E+00	-4.909E+00	2.588E+00	5.048E+00
828	4.515E-01	0.000E+00	-1.220E+01	6.325E+00	1.243E+01
829	2.456E+00	0.000E+00	-9.582E+00	6.019E+00	1.102E+01
830	1.793E+00	0.000E+00	-6.080E+00	3.936E+00	7.147E+00
831	4.951E+00	0.000E+00	-9.171E+00	7.061E+00	1.241E+01
832	6.874E+00	0.000E+00	-9.037E+00	7.956E+00	1.382E+01
833	3.484E+00	0.000E+00	-7.181E+00	5.333E+00	9.420E+00
834	1.159E+01	0.000E+00	-5.734E+00	8.662E+00	1.529E+01
835	1.177E+01	0.000E+00	-7.433E+00	9.601E+00	1.677E+01
836	4.955E+00	0.000E+00	-7.822E+00	6.389E+00	1.116E+01
837	2.037E+01	0.000E+00	-2.133E+00	1.125E+01	2.151E+01
838	1.683E+01	0.000E+00	-5.030E+00	1.093E+01	1.983E+01
839	5.753E+00	0.000E+00	-7.672E+00	6.712E+00	1.167E+01
840	3.095E+01	0.000E+00	1.587E+00	1.468E+01	3.019E+01
841	2.134E+01	0.000E+00	-2.531E+00	1.194E+01	2.271E+01
842	6.723E+00	0.000E+00	-8.025E+00	7.374E+00	1.279E+01
847	6.467E-02	0.000E+00	-6.949E+00	3.507E+00	6.982E+00
848	2.897E+00	0.000E+00	-8.154E+00	5.525E+00	9.925E+00
849	6.095E+00	0.000E+00	-8.749E+00	7.422E+00	1.292E+01
850	9.117E+00	0.000E+00	-8.452E+00	8.784E+00	1.522E+01
851	1.164E+01	0.000E+00	-7.458E+00	9.547E+00	1.667E+01
852	1.354E+01	0.000E+00	-6.893E+00	1.022E+01	1.801E+01
853	1.405E-01	0.000E+00	-6.288E-01	3.846E-01	7.095E-01
854	1.595E-01	0.000E+00	-2.336E+00	1.248E+00	2.420E+00

Table B.5 (continued)

Page 9

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
855	1.844E-01	0.000E+00	-5.040E+00	2.612E+00	5.135E+00
856	2.406E-01	0.000E+00	-8.608E+00	4.425E+00	8.731E+00
857	-2.876E-01	0.000E+00	-1.449E+01	7.099E+00	1.434E+01
858	-1.165E+01	0.000E+00	-3.951E+01	1.393E+01	3.517E+01
859	-9.357E+00	0.000E+00	-3.297E+01	1.181E+01	2.943E+01
860	5.298E-01	0.000E+00	-9.624E-01	7.461E-01	1.310E+00
861	1.249E-01	0.000E+00	-2.727E+00	1.426E+00	2.792E+00
862	6.474E-01	0.000E+00	-4.030E+00	2.339E+00	4.390E+00
863	1.214E+00	0.000E+00	-5.842E+00	3.528E+00	6.535E+00
864	1.828E+00	0.000E+00	-7.989E+00	4.909E+00	9.043E+00
865	1.745E+00	0.000E+00	-9.239E+00	5.492E+00	1.022E+01
866	-5.684E+00	0.000E+00	-4.586E+01	2.009E+01	4.330E+01
867	-5.566E+00	0.000E+00	-3.543E+01	1.493E+01	3.301E+01
868	-5.487E+00	0.000E+00	-2.139E+01	7.951E+00	1.924E+01
869	-3.085E+00	0.000E+00	-1.197E+01	4.444E+00	1.077E+01
870	-1.419E+00	0.000E+00	-5.778E+00	2.179E+00	5.215E+00
871	1.781E-01	0.000E+00	-1.098E+01	5.581E+00	1.107E+01
872	1.291E+00	0.000E+00	-3.366E+00	2.329E+00	4.165E+00
873	2.304E+00	0.000E+00	-9.114E+00	5.709E+00	1.046E+01
874	1.939E+00	0.000E+00	-8.989E+00	5.464E+00	1.010E+01
875	-5.801E-01	0.000E+00	-8.788E+00	4.104E+00	8.512E+00
876	1.802E+00	0.000E+00	2.400E-01	7.811E-01	1.695E+00
877	-2.899E-02	0.000E+00	-2.534E+00	1.253E+00	2.520E+00
878	-5.572E-01	0.000E+00	-1.964E+00	7.035E-01	1.753E+00
879	3.176E-01	0.000E+00	-1.136E+00	7.267E-01	1.324E+00
880	-6.012E+00	0.000E+00	-2.144E+01	7.715E+00	1.916E+01
881	-6.813E+00	0.000E+00	-1.238E+01	2.784E+00	1.074E+01
882	-3.021E+00	0.000E+00	-2.836E+01	1.267E+01	2.698E+01
883	-2.560E+00	0.000E+00	-1.464E+01	6.039E+00	1.354E+01
884	-2.019E+00	0.000E+00	-8.798E+00	3.389E+00	7.982E+00
885	-9.195E-01	0.000E+00	-6.303E+00	2.692E+00	5.897E+00
886	-2.307E-01	0.000E+00	-4.393E+00	2.081E+00	4.283E+00
887	-1.949E+00	0.000E+00	-1.897E+01	8.509E+00	1.807E+01
888	-2.106E+00	0.000E+00	-1.091E+01	4.402E+00	1.002E+01
889	-1.576E+00	0.000E+00	-7.493E+00	2.958E+00	6.843E+00
890	-4.845E-01	0.000E+00	-5.324E+00	2.420E+00	5.099E+00
891	-1.723E+00	0.000E+00	-1.782E+01	8.051E+00	1.703E+01
892	-1.456E+00	0.000E+00	-1.070E+01	4.623E+00	1.005E+01
893	-3.368E-01	0.000E+00	-8.119E+00	3.891E+00	7.956E+00
894	2.978E-01	0.000E+00	-5.852E+00	3.075E+00	6.006E+00
895	-9.935E-01	0.000E+00	-1.615E+01	7.577E+00	1.568E+01
896	-2.884E-01	0.000E+00	-1.037E+01	5.043E+00	1.023E+01
897	1.271E+00	0.000E+00	-8.771E+00	5.021E+00	9.471E+00
898	1.307E+00	0.000E+00	-6.487E+00	3.897E+00	7.230E+00
899	-1.176E-01	0.000E+00	-1.380E+01	6.843E+00	1.374E+01
900	1.213E+00	0.000E+00	-9.864E+00	5.539E+00	1.052E+01
901	3.162E+00	0.000E+00	-9.286E+00	6.224E+00	1.121E+01
902	2.477E+00	0.000E+00	-7.102E+00	4.789E+00	8.611E+00
903	1.363E+00	0.000E+00	-1.113E+01	6.249E+00	1.187E+01

Table B.5 (continued)

Page 10

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
904	3.062E+00	0.000E+00	-9.159E+00	6.111E+00	1.101E+01
905	5.098E+00	0.000E+00	-9.548E+00	7.323E+00	1.288E+01
906	3.652E+00	0.000E+00	-7.601E+00	5.626E+00	9.943E+00
907	3.515E+00	0.000E+00	-8.317E+00	5.916E+00	1.052E+01
908	5.251E+00	0.000E+00	-8.289E+00	6.770E+00	1.182E+01
909	7.208E+00	0.000E+00	-9.606E+00	8.407E+00	1.461E+01
910	4.887E+00	0.000E+00	-8.009E+00	6.448E+00	1.128E+01
911	6.678E+00	0.000E+00	-5.715E+00	6.197E+00	1.074E+01
912	7.629E+00	0.000E+00	-7.215E+00	7.422E+00	1.286E+01
913	9.192E+00	0.000E+00	-9.327E+00	9.259E+00	1.604E+01
914	5.999E+00	0.000E+00	-8.173E+00	7.086E+00	1.232E+01
915	1.115E+01	0.000E+00	-3.518E+00	7.331E+00	1.326E+01
916	1.036E+01	0.000E+00	-6.007E+00	8.185E+00	1.434E+01
917	1.129E+01	0.000E+00	-8.877E+00	1.008E+01	1.751E+01
918	7.030E+00	0.000E+00	-8.203E+00	7.616E+00	1.321E+01
919	1.668E+01	0.000E+00	-1.704E+00	9.193E+00	1.760E+01
920	1.315E+01	0.000E+00	-4.672E+00	8.912E+00	1.601E+01
921	1.314E+01	0.000E+00	-8.132E+00	1.064E+01	1.859E+01
922	7.835E+00	0.000E+00	-7.912E+00	7.874E+00	1.364E+01
923	2.338E+01	0.000E+00	5.143E-02	1.166E+01	2.335E+01
924	1.628E+01	0.000E+00	-3.233E+00	9.759E+00	1.812E+01
925	1.509E+01	0.000E+00	-7.410E+00	1.125E+01	1.986E+01
926	8.555E+00	0.000E+00	-7.651E+00	8.103E+00	1.404E+01
927	3.097E+01	0.000E+00	1.478E+00	1.475E+01	3.026E+01
928	1.928E+01	0.000E+00	-1.825E+00	1.055E+01	2.025E+01
929	1.668E+01	0.000E+00	-6.622E+00	1.165E+01	2.080E+01
930	9.284E+00	0.000E+00	-7.393E+00	8.339E+00	1.447E+01
931	3.953E+01	0.000E+00	3.294E+00	1.812E+01	3.799E+01
932	2.241E+01	0.000E+00	-3.294E-01	1.137E+01	2.258E+01
933	1.811E+01	0.000E+00	-6.146E+00	1.213E+01	2.184E+01
934	9.895E+00	0.000E+00	-7.613E+00	8.754E+00	1.521E+01
935	-2.324E+00	0.000E+00	-2.370E+01	1.069E+01	2.263E+01
936	-9.286E-01	0.000E+00	-1.320E+01	6.135E+00	1.276E+01
937	6.021E-01	0.000E+00	-9.388E+00	4.995E+00	9.703E+00
938	1.396E+00	0.000E+00	-7.551E+00	4.473E+00	8.337E+00
939	1.012E+00	0.000E+00	-5.423E+00	3.217E+00	5.993E+00
940	-7.346E-01	0.000E+00	-1.486E+01	7.063E+00	1.451E+01
941	2.494E+00	0.000E+00	-1.065E+01	6.570E+00	1.209E+01
942	4.549E+00	0.000E+00	-9.392E+00	6.970E+00	1.231E+01
943	4.450E+00	0.000E+00	-8.528E+00	6.489E+00	1.142E+01
944	2.637E+00	0.000E+00	-6.627E+00	4.632E+00	8.267E+00
945	3.910E+00	0.000E+00	-4.346E+00	4.128E+00	7.152E+00
946	7.927E+00	0.000E+00	-7.489E+00	7.708E+00	1.335E+01
947	9.148E+00	0.000E+00	-8.387E+00	8.767E+00	1.519E+01
948	7.588E+00	0.000E+00	-8.721E+00	8.154E+00	1.414E+01
949	4.258E+00	0.000E+00	-7.595E+00	5.927E+00	1.040E+01
950	1.886E+01	0.000E+00	6.866E-01	9.089E+00	1.853E+01
951	1.546E+01	0.000E+00	-4.110E+00	9.785E+00	1.787E+01
952	1.404E+01	0.000E+00	-6.427E+00	1.023E+01	1.813E+01

Table B.5 (continued)

Page 11

SDRC I-DEAS 4.0: Pre/Post Processing
Y0KE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
953	1.034E+01	0.000E+00	-8.018E+00	9.181E+00	1.594E+01
954	5.373E+00	0.000E+00	-7.851E+00	6.612E+00	1.152E+01
955	4.141E+01	0.000E+00	4.064E+00	1.867E+01	3.953E+01
956	2.495E+01	0.000E+00	-6.551E-01	1.280E+01	2.528E+01
957	1.884E+01	0.000E+00	-4.015E+00	1.143E+01	2.113E+01
958	1.264E+01	0.000E+00	-7.105E+00	9.872E+00	1.732E+01
959	6.255E+00	0.000E+00	-7.685E+00	6.970E+00	1.209E+01
960	6.816E+00	0.000E+00	-8.557E+00	7.687E+00	1.334E+01
964	-1.687E+00	0.000E+00	-6.637E+01	3.234E+01	6.554E+01
965	-4.964E+00	0.000E+00	-7.343E+01	3.423E+01	7.108E+01
966	-2.615E+02	0.000E+00	-7.419E+02	2.402E+02	6.518E+02
967	2.378E+02	0.000E+00	2.867E+01	1.046E+02	2.249E+02
968	1.423E+02	0.000E+00	2.090E+01	6.069E+01	1.331E+02
969	9.168E+01	0.000E+00	1.229E+01	3.969E+01	8.619E+01
970	-2.536E-01	0.000E+00	-7.808E+01	3.891E+01	7.796E+01
971	6.390E+00	0.000E+00	-9.970E+01	5.305E+01	1.030E+02
972	-1.482E+00	0.000E+00	-6.093E+01	2.972E+01	6.020E+01
973	-3.638E+00	0.000E+00	-1.461E+02	7.124E+01	1.443E+02
974	9.177E+00	0.000E+00	-7.094E+01	4.006E+01	7.594E+01
975	-3.339E+00	0.000E+00	-4.426E+01	2.046E+01	4.269E+01
976	3.783E+01	0.000E+00	4.161E+00	1.684E+01	3.593E+01
977	8.580E+00	0.000E+00	-2.219E+01	1.538E+01	2.750E+01
978	-6.295E+00	0.000E+00	-2.339E+01	8.548E+00	2.096E+01
979	4.523E+01	0.000E+00	1.051E+01	1.736E+01	4.100E+01
980	1.234E+01	0.000E+00	2.579E+00	4.882E+00	1.128E+01
981	-3.357E+00	0.000E+00	-9.031E+00	2.837E+00	7.906E+00
982	4.171E+01	0.000E+00	5.533E+00	1.809E+01	3.924E+01
983	2.234E+01	0.000E+00	-4.817E-01	1.141E+01	2.258E+01
984	5.564E+00	0.000E+00	-9.067E+00	7.316E+00	1.279E+01
985	1.430E+00	0.000E+00	-8.298E+01	4.220E+01	8.370E+01
986	-1.791E-01	0.000E+00	-5.808E+01	2.895E+01	5.799E+01
987	-3.043E+00	0.000E+00	-2.543E+01	1.119E+01	2.405E+01
988	5.335E-01	0.000E+00	-6.164E+00	3.349E+00	6.447E+00
989	1.197E+01	0.000E+00	-7.054E+00	9.510E+00	1.665E+01
990	1.236E+02	0.000E+00	-6.332E+01	9.347E+01	1.647E+02
991	-2.756E+01	0.000E+00	-1.611E+02	6.675E+01	1.492E+02
992	5.050E+00	0.000E+00	-1.075E+02	5.628E+01	1.101E+02
993	1.270E+00	0.000E+00	-9.036E+01	4.581E+01	9.100E+01
995	7.860E-01	0.000E+00	-1.177E+02	5.926E+01	1.181E+02
996	-1.044E-01	0.000E+00	-1.069E+02	5.339E+01	1.068E+02
997	1.943E+00	0.000E+00	-1.059E+02	5.393E+01	1.069E+02
998	-4.848E-01	0.000E+00	-7.865E+01	3.908E+01	7.841E+01
999	-6.691E+01	0.000E+00	-1.132E+02	2.315E+01	9.857E+01
1000	3.413E+00	0.000E+00	-9.644E+01	4.993E+01	9.819E+01
1001	2.154E+00	0.000E+00	-9.793E+01	5.004E+01	9.903E+01
1002	-7.590E-01	0.000E+00	-7.241E+01	3.583E+01	7.203E+01
1003	6.608E+01	0.000E+00	-1.311E+02	9.858E+01	1.738E+02
1004	6.345E+00	0.000E+00	-9.077E+01	4.856E+01	9.410E+01
1005	2.194E+00	0.000E+00	-8.558E+01	4.389E+01	8.670E+01

Table B.5 (continued)

Page 12

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1006	-1.550E+00	0.000E+00	-6.383E+01	3.114E+01	6.307E+01
1007	-1.645E+01	0.000E+00	-4.060E+02	1.948E+02	3.981E+02
1008	1.057E+01	0.000E+00	-7.737E+01	4.397E+01	8.316E+01
1009	2.020E+00	0.000E+00	-6.828E+01	3.515E+01	6.931E+01
1010	-2.528E+00	0.000E+00	-5.150E+01	2.449E+01	5.029E+01
1011	4.968E+01	0.000E+00	-3.556E+01	4.262E+01	7.416E+01
1012	1.545E+01	0.000E+00	-5.047E+01	3.296E+01	5.972E+01
1013	1.601E+00	0.000E+00	-4.745E+01	2.452E+01	4.827E+01
1014	-3.943E+00	0.000E+00	-3.832E+01	1.719E+01	3.651E+01
1015	4.143E+01	0.000E+00	1.885E+00	1.977E+01	4.052E+01
1016	1.918E+01	0.000E+00	-1.536E+01	1.727E+01	2.998E+01
1017	6.726E-01	0.000E+00	-2.607E+01	1.337E+01	2.641E+01
1018	-5.378E+00	0.000E+00	-2.460E+01	9.610E+00	2.240E+01
1019	7.352E+01	0.000E+00	9.457E+00	3.203E+01	6.927E+01
1020	1.628E+01	0.000E+00	6.538E+00	4.873E+00	1.419E+01
1021	-9.144E-01	0.000E+00	-7.717E+00	3.401E+00	7.302E+00
1022	-6.426E+00	0.000E+00	-1.274E+01	3.155E+00	1.103E+01
1023	7.502E+01	0.000E+00	9.925E+00	3.255E+01	7.058E+01
1024	2.125E+01	0.000E+00	6.352E+00	7.447E+00	1.889E+01
1025	5.501E+00	0.000E+00	-3.043E+00	4.272E+00	7.501E+00
1026	-2.161E+00	0.000E+00	-8.259E+00	3.049E+00	7.419E+00
1027	6.830E+01	0.000E+00	7.682E+00	3.031E+01	6.480E+01
1028	2.588E+01	0.000E+00	4.156E+00	1.086E+01	2.407E+01
1029	1.346E+01	0.000E+00	-4.426E+00	8.941E+00	1.613E+01
1030	4.439E+00	0.000E+00	-8.531E+00	6.485E+00	1.142E+01
1031	5.867E+01	0.000E+00	6.614E+00	2.603E+01	5.566E+01
1032	2.647E+01	0.000E+00	2.524E+00	1.197E+01	2.530E+01
1033	1.735E+01	0.000E+00	-5.328E+00	1.134E+01	2.053E+01
1034	8.267E+00	0.000E+00	-8.409E+00	8.338E+00	1.444E+01
1035	4.888E+01	0.000E+00	4.543E+00	2.217E+01	4.678E+01
1036	2.486E+01	0.000E+00	9.998E-01	1.193E+01	2.438E+01
1037	1.847E+01	0.000E+00	-5.671E+00	1.207E+01	2.187E+01
1038	9.831E+00	0.000E+00	-7.985E+00	8.908E+00	1.546E+01
1039	8.167E+01	0.000E+00	-2.484E+02	1.651E+02	2.978E+02
1040	-1.579E+01	0.000E+00	-1.612E+02	7.272E+01	1.539E+02
1041	7.810E+00	0.000E+00	-8.794E+01	4.788E+01	9.210E+01
1042	3.893E-01	0.000E+00	-7.281E+01	3.660E+01	7.301E+01
1043	-2.589E+00	0.000E+00	-5.446E+01	2.594E+01	5.321E+01
1044	3.222E+02	0.000E+00	1.314E+02	9.539E+01	2.806E+02
1045	2.539E+01	0.000E+00	-7.565E+01	5.052E+01	9.104E+01
1046	9.261E+00	0.000E+00	-4.725E+01	2.825E+01	5.249E+01
1047	-1.827E+00	0.000E+00	-4.208E+01	2.012E+01	4.119E+01
1048	-4.980E+00	0.000E+00	-3.399E+01	1.451E+01	3.180E+01
1049	1.811E+02	0.000E+00	3.205E+01	7.453E+01	1.674E+02
1050	3.490E+01	0.000E+00	1.152E+01	1.169E+01	3.080E+01
1051	5.778E+00	0.000E+00	-1.538E+00	3.658E+00	6.681E+00
1052	-4.626E+00	0.000E+00	-1.113E+01	3.250E+00	9.682E+00
1053	-6.828E+00	0.000E+00	-1.209E+01	2.633E+00	1.050E+01
1054	1.119E+02	0.000E+00	1.421E+01	4.887E+01	1.056E+02

Table B.5 (continued)

Page 13

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1055	4.395E+01	0.000E+00	6.793E+00	1.858E+01	4.098E+01
1056	1.886E+01	0.000E+00	6.896E-02	9.395E+00	1.883E+01
1057	7.918E+00	0.000E+00	-6.972E+00	7.445E+00	1.290E+01
1058	1.866E+00	0.000E+00	-9.215E+00	5.540E+00	1.028E+01
1059	7.142E+01	0.000E+00	8.124E+00	3.165E+01	6.773E+01
1060	3.563E+01	0.000E+00	2.877E+00	1.637E+01	3.428E+01
1061	2.207E+01	0.000E+00	-1.910E+00	1.199E+01	2.309E+01
1062	1.350E+01	0.000E+00	-7.086E+00	1.029E+01	1.811E+01
1064	-1.176E-02	0.000E+00	-2.241E+00	1.115E+00	2.235E+00
1065	1.779E-01	0.000E+00	-6.946E-02	1.237E-01	2.210E-01
1066	-7.168E-02	0.000E+00	-3.294E+00	1.611E+00	3.259E+00
1067	8.715E-04	0.000E+00	-1.176E+00	5.883E-01	1.176E+00
1068	2.459E-01	0.000E+00	-3.698E+00	1.972E+00	3.827E+00
1069	4.892E-02	0.000E+00	-1.571E+00	8.100E-01	1.596E+00
1070	6.984E-01	0.000E+00	-4.267E+00	2.483E+00	4.656E+00
1071	1.641E-01	0.000E+00	-2.216E+00	1.190E+00	2.302E+00
1072	1.175E+00	0.000E+00	-4.930E+00	3.052E+00	5.610E+00
1073	2.284E-01	0.000E+00	-3.057E+00	1.643E+00	3.178E+00
1074	1.682E+00	0.000E+00	-5.638E+00	3.660E+00	6.640E+00
1075	3.611E-01	0.000E+00	-4.105E+00	2.233E+00	4.297E+00
1076	2.180E+00	0.000E+00	-6.413E+00	4.297E+00	7.737E+00
1077	4.361E-01	0.000E+00	-5.347E+00	2.892E+00	5.578E+00
1078	2.681E+00	0.000E+00	-7.140E+00	4.911E+00	8.793E+00
1079	5.804E-01	0.000E+00	-6.759E+00	3.670E+00	7.067E+00
1080	3.081E+00	0.000E+00	-7.814E+00	5.447E+00	9.727E+00
1081	6.679E-01	0.000E+00	-8.500E+00	4.584E+00	8.853E+00
1082	3.256E+00	0.000E+00	-8.159E+00	5.708E+00	1.019E+01
1083	7.114E-01	0.000E+00	-1.010E+01	5.407E+00	1.048E+01
1084	3.315E+00	0.000E+00	-8.283E+00	5.799E+00	1.035E+01
1085	7.255E-01	0.000E+00	-1.107E+01	5.897E+00	1.145E+01
1086	4.263E-01	0.000E+00	-3.232E+00	1.829E+00	3.465E+00
1087	1.979E-01	0.000E+00	-1.249E+00	7.237E-01	1.359E+00
1088	9.603E-01	0.000E+00	-4.833E+00	2.897E+00	5.378E+00
1089	2.183E-01	0.000E+00	-3.507E+00	1.862E+00	3.621E+00
1090	1.510E+00	0.000E+00	-6.934E+00	4.222E+00	7.799E+00
1091	2.351E-01	0.000E+00	-6.709E+00	3.472E+00	6.830E+00
1092	1.818E+00	0.000E+00	-8.899E+00	5.358E+00	9.933E+00
1093	-4.376E-02	0.000E+00	-1.203E+01	5.991E+00	1.200E+01
1094	-1.115E-01	0.000E+00	-1.374E+01	6.816E+00	1.369E+01
1095	1.972E+00	0.000E+00	-9.259E+00	5.615E+00	1.039E+01
1096	3.731E+00	0.000E+00	-8.262E+00	5.996E+00	1.063E+01
1097	4.088E+00	0.000E+00	-8.613E+00	6.351E+00	1.123E+01
1098	8.419E-01	0.000E+00	-1.085E+01	5.845E+00	1.129E+01
1099	9.339E-01	0.000E+00	-9.695E+00	5.314E+00	1.019E+01
1100	5.992E-01	0.000E+00	-7.065E+00	3.832E+00	7.383E+00
1101	2.531E+00	0.000E+00	-8.861E+00	5.696E+00	1.036E+01
1102	9.552E-01	0.000E+00	-8.284E+00	4.620E+00	8.801E+00
1103	4.288E+00	0.000E+00	-9.037E+00	6.662E+00	1.178E+01
1104	2.688E+00	0.000E+00	-9.324E+00	6.006E+00	1.092E+01

Table B.5 (continued)

Page 14

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:29:11

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1105	9.413E-01	0.000E+00	-6.876E+00	3.909E+00	7.392E+00
1106	5.525E-01	0.000E+00	-9.375E+00	4.964E+00	9.663E+00
1107	-3.731E+00	0.000E+00	-8.967E+00	2.618E+00	7.802E+00
1108	-3.872E+00	0.000E+00	-9.649E+00	2.889E+00	8.410E+00
1109	-7.080E+00	0.000E+00	-1.315E+01	3.035E+00	1.140E+01
1110	-6.084E+00	0.000E+00	-1.982E+01	6.870E+00	1.759E+01
1111	-6.039E+00	0.000E+00	-2.857E+01	1.127E+01	2.608E+01
1112	-5.337E+00	0.000E+00	-3.014E+01	1.240E+01	2.786E+01
1113	-4.220E+00	0.000E+00	-3.824E+01	1.701E+01	3.632E+01
1114	-5.839E+00	0.000E+00	-4.229E+01	1.823E+01	3.969E+01
1115	-3.860E+00	0.000E+00	-4.642E+01	2.128E+01	4.461E+01
1116	-3.178E+00	0.000E+00	-5.121E+01	2.401E+01	4.969E+01
1117	-6.334E+00	0.000E+00	-4.983E+01	2.175E+01	4.698E+01
1118	-3.477E+00	0.000E+00	-5.566E+01	2.609E+01	5.400E+01
1119	-1.341E+01	0.000E+00	-4.556E+01	1.608E+01	4.055E+01
1120	-9.549E+00	0.000E+00	-4.623E+01	1.834E+01	4.227E+01
1121	-8.346E+00	0.000E+00	-4.113E+01	1.639E+01	3.766E+01
1122	-1.150E+01	0.000E+00	-3.918E+01	1.384E+01	3.489E+01
1123	-8.126E+00	0.000E+00	-3.960E+01	1.574E+01	3.623E+01
1124	-6.878E+00	0.000E+00	-3.328E+01	1.320E+01	3.043E+01
1125	-7.378E+00	0.000E+00	-2.737E+01	9.996E+00	2.453E+01
1126	-6.404E+00	0.000E+00	-2.733E+01	1.046E+01	2.476E+01
1127	-5.937E+00	0.000E+00	-2.151E+01	7.787E+00	1.924E+01
1128	7.782E-01	0.000E+00	-4.210E-01	5.996E-01	1.054E+00
1129	5.452E-01	0.000E+00	-1.262E+00	9.037E-01	1.606E+00
1130	-1.065E-01	0.000E+00	-2.433E+00	1.163E+00	2.382E+00
1131	-8.691E-02	0.000E+00	-7.809E-01	3.470E-01	7.412E-01
1132	-1.560E+00	0.000E+00	-5.303E+00	1.871E+00	4.720E+00
1133	-1.558E+00	0.000E+00	-5.324E+00	1.883E+00	4.741E+00
1134	-4.701E+00	0.000E+00	-1.067E+01	2.984E+00	9.261E+00
1135	-3.171E+00	0.000E+00	-7.399E+00	2.114E+00	6.430E+00
1136	-2.180E+00	0.000E+00	-8.700E+00	3.260E+00	7.840E+00
1137	-3.432E+00	0.000E+00	-8.036E+00	2.302E+00	6.984E+00
1138	-2.385E+00	0.000E+00	-5.998E+00	1.807E+00	5.231E+00
1139	1.626E-01	0.000E+00	-5.277E+00	2.720E+00	5.360E+00
1140	1.081E+00	0.000E+00	-9.052E+00	5.067E+00	9.638E+00
1141	-6.664E+00	0.000E+00	-1.638E+01	4.858E+00	1.427E+01
1142	-5.318E+00	0.000E+00	-1.569E+01	5.188E+00	1.382E+01
1143	-9.987E-01	0.000E+00	-5.960E+00	2.481E+00	5.529E+00
1144	-4.089E+00	0.000E+00	-1.602E+01	5.965E+00	1.442E+01
1145	-8.001E-01	0.000E+00	-4.143E+00	1.671E+00	3.806E+00
1146	-6.550E-01	0.000E+00	-3.793E+00	1.569E+00	3.512E+00
1147	-1.264E+00	0.000E+00	-3.731E+00	1.234E+00	3.287E+00
1148	1.975E+00	0.000E+00	3.516E-01	8.117E-01	1.825E+00
1149	8.177E-01	0.000E+00	-6.106E-01	7.142E-01	1.241E+00
1150	3.327E-01	0.000E+00	-2.104E+00	1.218E+00	2.289E+00
1151	-8.659E-01	0.000E+00	-3.515E+00	1.324E+00	3.172E+00
1152	-1.356E-01	0.000E+00	-2.214E+00	1.039E+00	2.149E+00
1153	-1.212E-01	0.000E+00	-4.976E-01	1.882E-01	4.494E-01

Table B.5 (continued)

Page 15

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:29:11

	Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
	1154	-3.501E-01	0.000E+00	-1.836E+00	7.430E-01	1.688E+00
		697	312	697	611	609
Maximum		3.222E+02	0.000E+00	1.314E+02	2.402E+02	7.500E+02
		609	312	609	377	377
Minimum		-3.930E+02	0.000E+00	-8.649E+02	6.305E-02	1.178E-01
Average		7.392E+00	0.000E+00	-2.404E+01	1.572E+01	3.307E+01

Table B.6 Model loaded with 300 lb (1334.4 N) on nodes 312, 314 and 820 (displacement listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:13:49

```

Group ID      : PERMANENT GROUP1
Analysis Dataset : 5 - CASE 1,LOAD 3,DISPLACEMENTS
Report Type    : Contour          Units          : IN
Dataset Type   : Displacements     Load Set      : 3
Frame of Reference: Global         Data Component: Z-Component

```

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
312	5.917E-05	3.435E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
313	4.359E-05	-3.166E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
314	5.345E-05	-4.059E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
315	3.304E-05	-8.554E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
316	2.513E-05	-7.987E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
317	1.932E-05	-7.304E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
318	1.461E-05	-6.469E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
325	4.342E-05	-5.797E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
326	3.990E-05	-1.072E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
327	3.226E-05	-7.018E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
328	4.103E-05	2.263E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
329	3.750E-05	1.712E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
330	3.017E-05	2.349E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
331	3.546E-05	-6.079E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
332	3.129E-05	1.467E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
333	2.487E-05	2.819E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
334	2.718E-05	-3.825E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
335	2.396E-05	-1.514E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
336	1.863E-05	8.642E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
337	2.143E-05	-6.713E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
338	1.872E-05	-5.153E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
339	1.355E-05	-2.365E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
340	1.742E-05	-7.574E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
341	1.563E-05	-7.084E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
342	1.033E-05	-4.995E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
343	1.431E-05	-7.086E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
344	1.348E-05	-7.058E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
345	8.451E-06	-5.816E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
360	2.120E-06	-1.472E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
364	3.502E-05	-8.877E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
365	3.285E-05	2.016E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
366	2.735E-05	2.146E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
367	2.095E-05	-1.156E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
368	1.591E-05	-3.402E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
369	1.278E-05	-5.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
370	1.085E-05	-6.336E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
377	2.961E-05	-5.046E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
378	2.696E-05	4.941E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
379	2.040E-05	6.859E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
380	1.313E-05	4.734E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
381	8.067E-06	1.061E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
382	5.990E-06	-4.067E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
384	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
385	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
386	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
387	3.064E-05	-5.501E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
388	2.837E-05	3.324E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
389	2.266E-05	4.375E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
390	1.607E-05	2.424E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
391	1.093E-05	-1.288E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
392	8.003E-06	-4.493E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
393	9.096E-07	-4.178E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
394	1.068E-06	5.875E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
395	1.541E-06	-1.354E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
396	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	4.929E-06	-5.369E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
401	3.712E-06	-4.727E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
402	6.266E-06	-5.480E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
403	4.811E-06	-4.775E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
404	3.741E-06	-3.288E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
405	1.245E-06	-1.866E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
406	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	9.100E-07	-1.337E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
408	4.803E-07	-7.672E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
411	2.011E-06	-6.775E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
412	2.848E-06	-1.777E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
413	4.519E-05	-3.040E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
414	4.744E-05	-1.917E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
415	4.284E-05	3.014E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
416	4.151E-05	-9.604E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
417	3.942E-05	9.812E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
418	3.710E-05	-9.708E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
419	3.458E-05	1.138E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
420	3.345E-05	-7.871E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
421	3.181E-05	1.297E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
422	4.568E-05	8.671E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
423	4.090E-05	6.968E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
424	3.652E-05	1.092E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
425	3.291E-05	1.208E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
426	4.221E-05	-1.409E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
427	3.917E-05	1.138E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
428	3.483E-05	1.902E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
429	3.135E-05	2.145E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
430	4.327E-05	-2.282E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
431	3.652E-05	1.148E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
432	3.223E-05	2.214E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
433	2.895E-05	2.603E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
434	3.970E-05	-1.131E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
435	3.306E-05	6.095E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
436	2.903E-05	1.858E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
437	2.601E-05	2.439E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
438	3.417E-05	-2.986E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
439	2.916E-05	-6.727E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
440	2.559E-05	8.475E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
441	2.284E-05	1.661E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
442	2.925E-05	-6.051E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
443	2.542E-05	-2.496E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
444	2.232E-05	-6.919E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
445	1.976E-05	3.702E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
446	2.599E-05	-7.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
447	2.233E-05	-4.395E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
448	1.948E-05	-2.451E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
449	1.700E-05	-1.213E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
450	2.313E-05	-7.592E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
451	1.995E-05	-5.912E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
452	1.722E-05	-4.130E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
453	1.471E-05	-2.840E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
454	2.066E-05	-7.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
455	1.806E-05	-6.896E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
456	1.548E-05	-5.475E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
457	1.290E-05	-4.275E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
458	1.846E-05	-7.702E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
459	1.651E-05	-7.391E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
460	1.414E-05	-6.359E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
461	1.152E-05	-5.336E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
462	1.651E-05	-7.428E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
463	1.517E-05	-7.450E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
464	1.307E-05	-6.751E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
465	1.046E-05	-5.934E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
466	1.472E-05	-6.963E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
467	1.397E-05	-7.134E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
468	1.215E-05	-6.679E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
469	9.612E-06	-6.047E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
518	4.318E-05	-4.079E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
519	3.888E-05	-9.083E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
520	3.489E-05	1.891E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
521	3.049E-05	2.379E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
522	2.789E-05	2.859E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
523	3.869E-05	-9.318E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
524	3.145E-05	-1.918E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
525	2.764E-05	2.089E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
526	2.419E-05	1.236E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
527	2.181E-05	2.058E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
528	2.876E-05	-8.388E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
529	2.411E-05	-5.708E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
530	2.110E-05	-3.515E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
531	1.827E-05	-1.804E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
532	1.596E-05	-7.555E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
533	2.214E-05	-7.643E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
534	1.936E-05	-7.374E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
535	1.707E-05	-6.426E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
536	1.423E-05	-4.835E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
537	1.182E-05	-3.891E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
538	1.685E-05	-6.868E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
539	1.584E-05	-7.472E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
540	1.456E-05	-7.310E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
541	1.181E-05	-6.322E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
542	9.376E-06	-5.677E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
557	5.027E-06	-2.292E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
562	3.632E-06	-8.784E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
609	3.137E-06	-9.085E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
610	3.411E-06	-1.065E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
611	4.254E-06	-2.152E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
612	5.721E-06	-3.268E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
613	7.886E-06	-4.393E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
614	1.083E-05	-5.481E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
615	2.960E-06	-1.263E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
616	2.867E-06	-3.657E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
617	1.811E-06	4.431E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
618	3.406E-06	-4.724E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
619	3.389E-06	-1.177E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
621	4.687E-06	-1.214E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
622	4.851E-06	-6.477E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
623	2.983E-06	-4.208E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
624	6.632E-06	-2.394E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
625	6.953E-06	-1.846E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
626	4.248E-06	-1.496E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
627	8.999E-06	-3.987E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
628	9.283E-06	-3.659E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
629	5.671E-06	-3.173E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
630	1.157E-05	-5.713E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
631	1.149E-05	-5.646E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
632	7.056E-06	-4.910E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
633	2.452E-06	-3.156E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
634	2.885E-06	-4.940E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
635	4.083E-06	-5.345E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
636	5.773E-06	-1.709E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
637	7.597E-06	-3.473E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
638	9.283E-06	-5.295E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
639	3.212E-06	-5.425E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
640	3.012E-06	-7.169E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
641	3.074E-06	-2.257E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
642	2.915E-06	-1.521E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
643	3.006E-06	-3.491E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
644	2.701E-06	3.595E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
645	2.582E-06	3.468E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
646	2.149E-06	7.980E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
647	1.919E-06	1.794E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
648	3.110E-06	-3.255E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
649	3.040E-06	-1.086E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
650	2.824E-06	-6.888E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
651	2.243E-06	1.243E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
652	3.405E-06	-6.755E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
653	3.412E-06	-2.632E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
654	3.186E-06	-7.439E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
655	2.521E-06	-3.208E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
656	3.890E-06	-1.068E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
657	4.012E-06	-5.102E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
658	3.768E-06	-2.499E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
659	2.966E-06	-1.820E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
660	4.557E-06	-1.527E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
661	4.816E-06	-8.794E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
662	4.531E-06	-5.839E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
663	3.554E-06	-4.851E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
664	5.397E-06	-2.057E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
665	5.786E-06	-1.401E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
666	5.442E-06	-1.090E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
667	4.254E-06	-9.598E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
668	6.386E-06	-2.673E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
669	6.882E-06	-2.072E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
670	6.436E-06	-1.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
671	5.026E-06	-1.618E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
672	7.517E-06	-3.359E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
673	8.052E-06	-2.889E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
674	7.478E-06	-2.627E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
675	5.834E-06	-2.426E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
676	8.757E-06	-4.106E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
677	9.261E-06	-3.804E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
678	8.502E-06	-3.582E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
679	6.635E-06	-3.338E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
680	1.011E-05	-4.880E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
681	1.046E-05	-4.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
682	9.493E-06	-4.564E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
683	7.412E-06	-4.264E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
684	1.154E-05	-5.645E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
685	1.165E-05	-5.704E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
686	1.041E-05	-5.482E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
687	8.146E-06	-5.104E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
688	1.308E-05	-6.357E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
689	1.280E-05	-6.525E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
690	1.129E-05	-6.224E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
691	8.868E-06	-5.739E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
692	3.751E-06	-1.635E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
693	3.946E-06	-8.142E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
694	4.024E-06	-3.188E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
695	3.429E-06	-2.187E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
696	2.529E-06	-1.495E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
697	4.876E-06	-2.743E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
698	5.577E-06	-1.767E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
699	5.855E-06	-1.169E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	4.928E-06	-1.038E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
702	6.663E-06	-3.857E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
703	7.760E-06	-3.167E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
704	8.131E-06	-2.703E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
705	6.744E-06	-2.549E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
707	9.202E-06	-4.945E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
708	1.026E-05	-4.865E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
709	1.044E-05	-4.679E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
710	8.534E-06	-4.436E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
711	6.454E-06	-4.105E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
712	1.257E-05	-5.964E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
713	1.292E-05	-6.473E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
714	1.254E-05	-6.485E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
715	1.015E-05	-5.987E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
716	7.820E-06	-5.553E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
717	3.135E-05	-6.268E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
718	3.008E-05	-5.049E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
719	3.012E-05	1.793E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
720	2.898E-05	2.627E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
721	3.080E-05	1.532E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
722	2.945E-05	2.207E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
723	2.919E-05	2.768E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
724	2.764E-05	4.039E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
725	2.675E-05	3.475E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
726	2.490E-05	5.195E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
727	2.374E-05	3.501E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
728	2.156E-05	5.481E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
729	2.051E-05	2.835E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
730	1.802E-05	4.866E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
731	1.737E-05	1.574E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
732	1.467E-05	3.464E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
733	1.457E-05	-7.416E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
734	1.179E-05	1.516E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
735	1.225E-05	-1.843E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
736	9.552E-06	-6.501E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
737	1.046E-05	-3.472E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
738	7.974E-06	-2.693E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
739	9.140E-06	-4.725E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
740	6.953E-06	-4.282E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
741	2.589E-05	4.146E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
742	2.409E-05	6.254E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
743	1.942E-05	3.642E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
744	1.680E-05	6.086E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
745	1.336E-05	5.764E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
746	1.040E-05	2.432E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 7

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
747	9.339E-06	-3.130E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
748	6.863E-06	-2.293E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
749	5.427E-06	-5.017E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
750	7.099E-06	-5.248E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
751	8.184E-06	-5.434E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
752	7.295E-06	-5.626E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
753	6.154E-06	-5.110E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
754	5.443E-06	-5.388E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
755	4.378E-06	-5.222E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
756	5.563E-06	-5.284E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
757	4.777E-06	-5.207E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
758	6.613E-06	-5.408E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
759	5.854E-06	-4.861E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
760	4.056E-06	-4.698E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
761	5.027E-06	-3.730E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
762	3.343E-06	-2.527E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
763	4.486E-06	-2.885E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
764	3.927E-06	-2.078E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
765	3.119E-06	-1.083E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
766	1.806E-06	-3.687E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
767	2.713E-06	-6.186E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
768	2.275E-06	-2.745E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
769	1.312E-06	9.439E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
770	1.929E-06	-6.369E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
771	1.602E-06	3.196E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
772	9.887E-07	4.229E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
774	1.461E-06	3.537E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
775	1.368E-06	-5.095E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
776	4.490E-07	-3.911E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
777	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
778	5.053E-07	3.368E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
779	5.290E-07	4.523E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
780	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
781	6.774E-07	4.612E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
782	7.846E-07	-3.010E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
783	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
784	8.992E-07	-1.482E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
785	9.898E-07	-3.091E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
786	7.180E-07	-1.113E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
787	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
788	4.481E-07	-6.548E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
789	1.009E-06	-1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
790	5.994E-07	-6.857E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
792	1.055E-06	-1.261E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
794	1.314E-06	-8.810E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
795	2.093E-06	-1.959E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
796	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
797	9.371E-07	-8.333E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
798	1.545E-06	-1.632E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 8

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
799	3.290E-06	-3.991E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
803	4.323E-06	-4.088E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
804	2.468E-06	-1.175E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
805	1.174E-06	-5.712E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
806	2.740E-06	-3.006E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
808	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
809	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
810	5.110E-07	-6.672E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
811	9.683E-07	-1.288E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
812	1.935E-06	-2.784E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
813	2.585E-06	-3.563E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
814	3.150E-06	-4.184E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
815	1.745E-06	-2.235E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
816	2.196E-06	-3.015E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
817	1.620E-06	-2.349E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
818	1.507E-06	-2.133E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
819	4.359E-05	3.166E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
820	5.345E-05	4.059E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
821	3.304E-05	8.554E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
822	2.513E-05	7.987E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
823	1.932E-05	7.304E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
824	1.461E-05	6.469E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
825	4.103E-05	-2.263E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
826	3.750E-05	-1.712E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
827	3.017E-05	-2.349E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
828	3.546E-05	6.079E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
829	3.129E-05	-1.467E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
830	2.487E-05	-2.819E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
831	2.718E-05	3.825E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
832	2.396E-05	1.514E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
833	1.863E-05	-8.642E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
834	2.143E-05	6.713E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
835	1.872E-05	5.153E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
836	1.355E-05	2.365E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
837	1.742E-05	7.574E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
838	1.563E-05	7.084E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
839	1.033E-05	4.995E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
840	1.431E-05	7.086E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
841	1.348E-05	7.058E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
842	8.451E-06	5.816E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
847	3.285E-05	-2.016E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
848	2.735E-05	-2.146E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
849	2.095E-05	1.156E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
850	1.591E-05	3.402E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
851	1.278E-05	5.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
852	1.085E-05	6.336E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
853	2.696E-05	-4.941E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
854	2.040E-05	-6.859E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
855	1.313E-05	-4.734E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 9

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
856	8.067E-06	-1.061E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
857	5.990E-06	4.067E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
858	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
859	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
860	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
861	2.837E-05	-3.324E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
862	2.266E-05	-4.375E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
863	1.607E-05	-2.424E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
864	1.093E-05	1.288E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
865	8.003E-06	4.493E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
866	1.068E-06	-5.875E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
867	1.541E-06	1.354E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
868	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
869	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
870	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
871	4.929E-06	5.369E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
872	3.712E-06	4.727E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
873	6.266E-06	5.480E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
874	4.811E-06	4.775E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
875	3.741E-06	3.288E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
876	1.245E-06	1.866E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
877	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
878	9.100E-07	1.337E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
879	4.803E-07	7.672E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
880	2.011E-06	6.775E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
881	2.848E-06	1.777E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
882	4.519E-05	3.040E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
883	4.284E-05	-3.014E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
884	3.942E-05	-9.812E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
885	3.458E-05	-1.138E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
886	3.181E-05	-1.297E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
887	4.568E-05	-8.671E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
888	4.090E-05	-6.968E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
889	3.652E-05	-1.092E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
890	3.291E-05	-1.208E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
891	4.221E-05	1.409E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
892	3.917E-05	-1.138E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
893	3.483E-05	-1.902E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
894	3.135E-05	-2.145E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
895	4.327E-05	2.282E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
896	3.652E-05	-1.148E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
897	3.223E-05	-2.214E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
898	2.895E-05	-2.603E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
899	3.970E-05	1.131E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	3.306E-05	-6.095E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
901	2.903E-05	-1.858E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
902	2.601E-05	-2.439E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
903	3.417E-05	2.986E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
904	2.916E-05	6.727E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 10

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
905	2.559E-05	-8.475E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
906	2.284E-05	-1.661E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
907	2.925E-05	6.051E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
908	2.542E-05	2.496E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
909	2.232E-05	6.919E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
910	1.976E-05	-3.702E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
911	2.599E-05	7.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
912	2.233E-05	4.395E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
913	1.948E-05	2.451E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
914	1.700E-05	1.213E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
915	2.313E-05	7.592E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
916	1.995E-05	5.912E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
917	1.722E-05	4.130E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
918	1.471E-05	2.840E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
919	2.066E-05	7.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
920	1.806E-05	6.896E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
921	1.548E-05	5.475E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
922	1.290E-05	4.275E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
923	1.846E-05	7.702E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
924	1.651E-05	7.391E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
925	1.414E-05	6.359E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
926	1.152E-05	5.336E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
927	1.651E-05	7.428E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
928	1.517E-05	7.450E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
929	1.307E-05	6.751E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
930	1.046E-05	5.934E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
931	1.472E-05	6.963E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
932	1.397E-05	7.134E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
933	1.215E-05	6.679E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
934	9.612E-06	6.047E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
935	4.318E-05	4.079E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
936	3.888E-05	9.083E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
937	3.489E-05	-1.891E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
938	3.049E-05	-2.379E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
939	2.789E-05	-2.859E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
940	3.869E-05	9.318E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
941	3.145E-05	1.918E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
942	2.764E-05	-2.089E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
943	2.419E-05	-1.236E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
944	2.181E-05	-2.058E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
945	2.876E-05	8.388E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
946	2.411E-05	5.708E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
947	2.110E-05	3.515E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
948	1.827E-05	1.804E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
949	1.596E-05	7.555E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
950	2.214E-05	7.643E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
951	1.936E-05	7.374E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
952	1.707E-05	6.426E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
953	1.423E-05	4.835E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 11

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
954	1.182E-05	3.891E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
955	1.685E-05	6.868E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
956	1.584E-05	7.472E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
957	1.456E-05	7.310E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
958	1.181E-05	6.322E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
959	9.376E-06	5.677E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
960	7.820E-06	5.553E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
964	1.919E-06	-1.794E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
965	3.411E-06	1.065E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
966	4.254E-06	2.152E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
967	5.721E-06	3.268E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
968	7.886E-06	4.393E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
969	1.083E-05	5.481E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
970	3.406E-06	4.724E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
971	3.389E-06	1.177E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
972	2.120E-06	1.472E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
973	4.687E-06	1.214E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
974	4.851E-06	6.477E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
975	2.983E-06	4.208E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
976	6.632E-06	2.394E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
977	6.953E-06	1.846E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
978	4.248E-06	1.496E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
979	8.999E-06	3.987E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
980	9.283E-06	3.659E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
981	5.671E-06	3.173E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
982	1.157E-05	5.713E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
983	1.149E-05	5.646E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
984	7.056E-06	4.910E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
985	2.885E-06	4.940E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
986	4.083E-06	5.345E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
987	5.773E-06	1.709E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
988	7.597E-06	3.473E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
989	9.283E-06	5.295E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
990	3.212E-06	5.425E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
991	3.074E-06	2.257E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
992	3.006E-06	3.491E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
993	2.582E-06	-3.468E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
995	3.110E-06	3.255E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
996	3.040E-06	1.086E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
997	2.824E-06	6.888E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
998	2.243E-06	-1.243E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
999	3.405E-06	6.755E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	3.412E-06	2.632E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1001	3.186E-06	7.439E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1002	2.521E-06	3.208E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1003	3.890E-06	1.068E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1004	4.012E-06	5.102E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1005	3.768E-06	2.499E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1006	2.966E-06	1.820E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 12

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1007	4.557E-06	1.527E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1008	4.816E-06	8.794E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1009	4.531E-06	5.839E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1010	3.554E-06	4.851E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1011	5.397E-06	2.057E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1012	5.786E-06	1.401E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1013	5.442E-06	1.090E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1014	4.254E-06	9.598E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1015	6.386E-06	2.673E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1016	6.882E-06	2.072E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1017	6.436E-06	1.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1018	5.026E-06	1.618E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1019	7.517E-06	3.359E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1020	8.052E-06	2.889E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1021	7.478E-06	2.627E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1022	5.834E-06	2.426E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1023	8.757E-06	4.106E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1024	9.261E-06	3.804E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1025	8.502E-06	3.582E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1026	6.635E-06	3.338E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1027	1.011E-05	4.880E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1028	1.046E-05	4.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1029	9.493E-06	4.564E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1030	7.412E-06	4.264E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1031	1.154E-05	5.645E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1032	1.165E-05	5.704E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1033	1.041E-05	5.482E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1034	8.146E-06	5.104E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1035	1.308E-05	6.357E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1036	1.280E-05	6.525E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1037	1.129E-05	6.224E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1038	8.868E-06	5.739E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1039	3.751E-06	1.635E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1040	3.946E-06	8.142E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1041	4.024E-06	3.188E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1042	3.429E-06	2.187E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1043	2.529E-06	1.495E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1044	4.876E-06	2.743E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1045	5.577E-06	1.767E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1046	5.855E-06	1.169E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1047	4.928E-06	1.038E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1048	3.632E-06	8.784E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1049	6.663E-06	3.857E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1050	7.760E-06	3.167E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1051	8.131E-06	2.703E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1052	6.744E-06	2.549E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1053	5.027E-06	2.292E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1054	9.202E-06	4.945E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1055	1.026E-05	4.865E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 13

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1056	1.044E-05	4.679E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1057	8.534E-06	4.436E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1058	6.454E-06	4.105E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1059	1.257E-05	5.964E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1060	1.292E-05	6.473E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1061	1.254E-05	6.485E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1062	1.015E-05	5.987E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1064	3.012E-05	-1.793E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1065	2.898E-05	-2.627E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1066	3.080E-05	-1.532E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1067	2.945E-05	-2.207E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1068	2.919E-05	-2.768E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1069	2.764E-05	-4.039E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1070	2.675E-05	-3.475E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1071	2.490E-05	-5.195E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1072	2.374E-05	-3.501E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1073	2.156E-05	-5.481E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1074	2.051E-05	-2.835E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1075	1.802E-05	-4.866E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1076	1.737E-05	-1.574E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1077	1.467E-05	-3.464E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1078	1.457E-05	7.416E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1079	1.179E-05	-1.516E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1080	1.225E-05	1.843E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1081	9.552E-06	6.501E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1082	1.046E-05	3.472E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1083	7.974E-06	2.693E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1084	9.140E-06	4.725E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1085	6.953E-06	4.282E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1086	2.589E-05	-4.146E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1087	2.409E-05	-6.254E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1088	1.942E-05	-3.642E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1089	1.680E-05	-6.086E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1090	1.336E-05	-5.764E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1091	1.040E-05	-2.432E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1092	9.339E-06	3.130E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1093	6.863E-06	2.293E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1094	5.427E-06	5.017E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1095	7.099E-06	5.248E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1096	8.184E-06	5.434E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1097	7.295E-06	5.626E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1098	6.154E-06	5.110E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1099	5.443E-06	5.388E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	4.378E-06	5.222E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1101	5.563E-06	5.284E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1102	4.777E-06	5.207E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1103	6.613E-06	5.408E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1104	5.854E-06	4.861E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1105	4.056E-06	4.698E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 14

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:13:49

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
1106	5.027E-06	3.730E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1107	3.343E-06	2.527E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1108	4.486E-06	2.885E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1109	3.927E-06	2.078E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1110	3.119E-06	1.083E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1111	1.806E-06	3.687E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1112	2.713E-06	6.186E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1113	2.275E-06	2.745E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1114	1.312E-06	-9.439E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1115	1.929E-06	6.369E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1116	1.602E-06	-3.196E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1117	9.887E-07	-4.229E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1118	1.461E-06	-3.537E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1119	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1120	5.053E-07	-3.368E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1121	5.290E-07	-4.523E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1122	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1123	6.774E-07	-4.612E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1124	7.846E-07	3.010E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1125	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1126	8.992E-07	1.482E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1127	9.898E-07	3.091E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1128	7.180E-07	1.113E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1129	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1130	4.481E-07	6.548E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1131	1.009E-06	1.561E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1132	5.994E-07	6.857E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1133	1.055E-06	1.261E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1134	1.314E-06	8.810E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1135	2.093E-06	1.959E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1136	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1137	9.371E-07	8.333E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1138	1.545E-06	1.632E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1139	3.290E-06	3.991E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1140	4.323E-06	4.088E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1141	2.468E-06	1.175E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1142	1.174E-06	5.712E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1143	2.740E-06	3.006E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1144	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1145	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1146	5.110E-07	6.672E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1147	9.683E-07	1.288E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1148	1.935E-06	2.784E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1149	2.585E-06	3.563E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1150	3.150E-06	4.184E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1151	1.745E-06	2.235E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1152	2.196E-06	3.015E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1153	1.620E-06	2.349E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1154	1.507E-06	2.133E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.6 (continued)

Page 15

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:13:49

	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
	312	940	312	312	312	312
Maximum	5.917E-05	9.318E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	383	523	312	312	312	312
Minimum	0.000E+00	-9.318E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Average	1.309E-05	1.137E-14	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table B.7 Model loaded with 300 lb (-1334.4 N) on nodes 312, 314 and 318 (displacement listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:26:05

Group ID : PERMANENT GROUP1
Analysis Dataset : 9 - CASE 1,LOAD 3,STRESSES
Report Type : Contour Units : IN
Dataset Type : Stress Load Set : 3
Frame of Reference: Global Data Component: Von Mises
Surface Type : Top

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
312	-4.275E+02	0.000E+00	-8.691E+02	2.208E+02	7.527E+02
313	-2.768E+01	0.000E+00	-7.423E+01	2.327E+01	6.497E+01
314	-2.487E+02	0.000E+00	-7.382E+02	2.447E+02	6.506E+02
315	2.964E+02	0.000E+00	3.676E+01	1.298E+02	2.798E+02
316	2.395E+02	0.000E+00	3.303E+01	1.032E+02	2.248E+02
317	2.082E+02	0.000E+00	2.627E+01	9.096E+01	1.964E+02
318	1.687E+02	0.000E+00	2.012E+01	7.428E+01	1.596E+02
325	-3.864E+01	0.000E+00	-1.880E+02	7.468E+01	1.720E+02
326	1.884E+01	0.000E+00	-9.284E+01	5.584E+01	1.035E+02
327	2.774E+01	0.000E+00	-2.820E+01	2.797E+01	4.845E+01
328	5.000E+00	0.000E+00	-7.225E+01	3.862E+01	7.487E+01
329	2.705E+01	0.000E+00	-8.511E+01	5.608E+01	1.014E+02
330	2.974E+01	0.000E+00	-2.711E+01	2.843E+01	4.926E+01
331	2.253E+01	0.000E+00	-1.431E+02	8.284E+01	1.556E+02
332	4.491E+01	0.000E+00	-6.515E+01	5.503E+01	9.585E+01
333	3.335E+01	0.000E+00	-2.242E+01	2.788E+01	4.861E+01
334	9.031E+01	0.000E+00	3.580E+00	4.336E+01	8.857E+01
335	5.800E+01	0.000E+00	-2.217E+01	4.009E+01	7.171E+01
336	3.423E+01	0.000E+00	-1.276E+01	2.349E+01	4.208E+01
337	1.004E+02	0.000E+00	2.668E+01	3.684E+01	9.004E+01
338	5.505E+01	0.000E+00	1.622E+01	1.941E+01	4.899E+01
339	3.078E+01	0.000E+00	-2.712E-01	1.553E+01	3.092E+01
340	1.049E+02	0.000E+00	2.331E+01	4.079E+01	9.539E+01
341	5.921E+01	0.000E+00	2.272E+01	1.824E+01	5.174E+01
342	2.902E+01	0.000E+00	7.328E+00	1.085E+01	2.614E+01
343	9.491E+01	0.000E+00	1.607E+01	3.942E+01	8.798E+01
344	6.494E+01	0.000E+00	1.326E+01	2.584E+01	5.943E+01
345	3.634E+01	0.000E+00	3.539E+00	1.640E+01	3.471E+01
360	1.644E+01	0.000E+00	2.670E+00	6.883E+00	1.528E+01
364	2.236E+01	0.000E+00	-5.824E+01	4.030E+01	7.207E+01
365	2.741E+01	0.000E+00	-5.513E+01	4.127E+01	7.281E+01
366	3.786E+01	0.000E+00	-4.330E+01	4.058E+01	7.034E+01
367	4.413E+01	0.000E+00	-2.109E+01	3.261E+01	5.765E+01
368	4.091E+01	0.000E+00	4.014E+00	1.845E+01	3.906E+01
369	3.959E+01	0.000E+00	1.548E+01	1.206E+01	3.455E+01
370	4.917E+01	0.000E+00	7.242E+00	2.097E+01	4.598E+01
377	5.084E+01	0.000E+00	-9.866E-01	2.591E+01	5.134E+01
378	4.610E+01	0.000E+00	-9.806E-01	2.354E+01	4.660E+01
379	3.373E+01	0.000E+00	-9.639E-01	1.735E+01	3.422E+01
380	1.851E+01	0.000E+00	-9.463E-01	9.729E+00	1.900E+01
381	6.271E+00	0.000E+00	-8.977E-01	3.584E+00	6.765E+00
382	2.405E+00	0.000E+00	-8.494E-01	1.627E+00	2.923E+00

Table B.7 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
Y0KE3

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
383	1.279E+01	0.000E+00	3.604E+00	4.592E+00	1.142E+01
384	1.466E+01	0.000E+00	3.574E+00	5.542E+00	1.324E+01
385	2.167E+01	0.000E+00	5.413E+00	8.130E+00	1.954E+01
386	5.271E+01	0.000E+00	1.353E+01	1.959E+01	4.741E+01
387	3.813E+01	0.000E+00	-1.024E+01	2.418E+01	4.415E+01
388	3.646E+01	0.000E+00	-9.692E+00	2.307E+01	4.215E+01
389	3.184E+01	0.000E+00	-7.954E+00	1.990E+01	3.647E+01
390	2.542E+01	0.000E+00	-4.884E+00	1.515E+01	2.818E+01
391	1.921E+01	0.000E+00	-6.708E-01	9.940E+00	1.955E+01
392	1.710E+01	0.000E+00	2.266E+00	7.416E+00	1.608E+01
393	1.331E+01	0.000E+00	4.766E+00	4.270E+00	1.168E+01
394	1.555E+01	0.000E+00	4.235E+00	5.659E+00	1.393E+01
395	2.202E+01	0.000E+00	3.087E+00	9.464E+00	2.065E+01
396	2.653E+01	0.000E+00	7.512E+00	9.508E+00	2.368E+01
397	2.946E+01	0.000E+00	8.227E+00	1.062E+01	2.633E+01
398	3.014E+01	0.000E+00	7.369E+00	1.139E+01	2.722E+01
399	9.574E+00	0.000E+00	-1.073E+00	5.323E+00	1.015E+01
401	1.914E+01	0.000E+00	-8.235E-01	9.980E+00	1.956E+01
402	2.239E+01	0.000E+00	4.763E-01	1.096E+01	2.216E+01
403	2.838E+01	0.000E+00	-1.545E+00	1.496E+01	2.919E+01
404	3.256E+01	0.000E+00	-1.847E+00	1.720E+01	3.352E+01
405	3.090E+01	0.000E+00	1.940E-01	1.535E+01	3.081E+01
406	3.313E+01	0.000E+00	7.117E+00	1.301E+01	3.020E+01
407	3.143E+01	0.000E+00	1.513E+00	1.496E+01	3.070E+01
408	3.463E+01	0.000E+00	1.442E+00	1.659E+01	3.393E+01
411	2.799E+01	0.000E+00	1.542E+00	1.322E+01	2.725E+01
412	3.123E+01	0.000E+00	-1.083E+00	1.616E+01	3.179E+01
413	1.162E+02	0.000E+00	-8.875E+01	1.025E+02	1.781E+02
414	-9.575E+01	0.000E+00	-4.808E+02	1.925E+02	4.408E+02
415	-2.451E+01	0.000E+00	-1.575E+02	6.649E+01	1.468E+02
416	6.055E+00	0.000E+00	-1.043E+02	5.517E+01	1.074E+02
417	2.118E+01	0.000E+00	-9.047E+01	5.582E+01	1.027E+02
418	1.918E+01	0.000E+00	-8.100E+01	5.009E+01	9.210E+01
419	2.334E+01	0.000E+00	-5.824E+01	4.079E+01	7.278E+01
420	2.462E+01	0.000E+00	-4.175E+01	3.318E+01	5.811E+01
421	2.818E+01	0.000E+00	-2.840E+01	2.829E+01	4.900E+01
422	1.784E+00	0.000E+00	-1.221E+02	6.196E+01	1.230E+02
423	9.828E+00	0.000E+00	-9.794E+01	5.388E+01	1.032E+02
424	2.083E+01	0.000E+00	-8.003E+01	5.043E+01	9.222E+01
425	2.538E+01	0.000E+00	-4.198E+01	3.368E+01	5.892E+01
426	-7.048E+01	0.000E+00	-1.066E+02	1.806E+01	9.391E+01
427	1.785E+01	0.000E+00	-8.851E+01	5.318E+01	9.866E+01
428	2.586E+01	0.000E+00	-7.581E+01	5.083E+01	9.152E+01
429	2.821E+01	0.000E+00	-3.995E+01	3.408E+01	5.932E+01
430	6.277E+01	0.000E+00	-1.149E+02	8.886E+01	1.561E+02
431	2.735E+01	0.000E+00	-8.474E+01	5.605E+01	1.012E+02
432	3.255E+01	0.000E+00	-6.926E+01	5.091E+01	9.006E+01
433	3.150E+01	0.000E+00	-3.750E+01	3.450E+01	5.983E+01
434	1.911E+00	0.000E+00	-3.989E+02	2.004E+02	3.999E+02

Table B.7 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
435	4.109E+01	0.000E+00	-7.431E+01	5.770E+01	1.013E+02
436	4.044E+01	0.000E+00	-5.835E+01	4.940E+01	8.602E+01
437	3.525E+01	0.000E+00	-3.242E+01	3.383E+01	5.862E+01
438	9.155E+01	0.000E+00	-3.801E+01	6.478E+01	1.154E+02
439	5.576E+01	0.000E+00	-5.041E+01	5.309E+01	9.199E+01
440	4.692E+01	0.000E+00	-4.300E+01	4.496E+01	7.790E+01
441	3.759E+01	0.000E+00	-2.585E+01	3.172E+01	5.525E+01
442	9.139E+01	0.000E+00	5.741E+00	4.282E+01	8.866E+01
443	6.695E+01	0.000E+00	-1.541E+01	4.118E+01	7.584E+01
444	5.092E+01	0.000E+00	-2.477E+01	3.785E+01	6.685E+01
445	3.871E+01	0.000E+00	-1.747E+01	2.809E+01	4.980E+01
446	1.306E+02	0.000E+00	1.924E+01	5.570E+01	1.222E+02
447	6.725E+01	0.000E+00	9.710E+00	2.877E+01	6.296E+01
448	5.047E+01	0.000E+00	-6.049E+00	2.826E+01	5.375E+01
449	3.768E+01	0.000E+00	-8.162E+00	2.292E+01	4.236E+01
450	1.420E+02	0.000E+00	2.102E+01	6.051E+01	1.328E+02
451	6.769E+01	0.000E+00	1.971E+01	2.399E+01	6.030E+01
452	4.730E+01	0.000E+00	9.544E+00	1.888E+01	4.333E+01
453	3.535E+01	0.000E+00	8.427E-01	1.725E+01	3.493E+01
454	1.433E+02	0.000E+00	1.860E+01	6.236E+01	1.350E+02
455	7.198E+01	0.000E+00	2.162E+01	2.518E+01	6.397E+01
456	4.485E+01	0.000E+00	1.957E+01	1.264E+01	3.895E+01
457	3.308E+01	0.000E+00	8.217E+00	1.243E+01	2.983E+01
458	1.378E+02	0.000E+00	1.798E+01	5.992E+01	1.298E+02
459	7.410E+01	0.000E+00	2.067E+01	2.671E+01	6.623E+01
460	4.738E+01	0.000E+00	2.049E+01	1.345E+01	4.116E+01
461	3.350E+01	0.000E+00	1.090E+01	1.130E+01	2.960E+01
462	1.294E+02	0.000E+00	1.490E+01	5.727E+01	1.227E+02
463	7.440E+01	0.000E+00	1.711E+01	2.865E+01	6.749E+01
464	5.297E+01	0.000E+00	1.567E+01	1.865E+01	4.713E+01
465	3.768E+01	0.000E+00	8.847E+00	1.441E+01	3.412E+01
466	1.176E+02	0.000E+00	1.330E+01	5.215E+01	1.116E+02
467	7.229E+01	0.000E+00	1.373E+01	2.928E+01	6.650E+01
468	5.740E+01	0.000E+00	9.612E+00	2.390E+01	5.325E+01
469	4.238E+01	0.000E+00	4.828E+00	1.877E+01	4.018E+01
518	7.259E+01	0.000E+00	-2.442E+02	1.584E+02	2.875E+02
519	-5.745E+00	0.000E+00	-1.519E+02	7.309E+01	1.491E+02
520	3.509E+01	0.000E+00	-7.754E+01	5.631E+01	9.982E+01
521	3.205E+01	0.000E+00	-5.107E+01	4.156E+01	7.261E+01
522	3.141E+01	0.000E+00	-2.569E+01	2.855E+01	4.953E+01
523	3.621E+02	0.000E+00	1.323E+02	1.149E+02	3.174E+02
524	6.714E+01	0.000E+00	-7.721E+01	7.217E+01	1.251E+02
525	5.278E+01	0.000E+00	-4.572E+01	4.925E+01	8.538E+01
526	4.160E+01	0.000E+00	-3.344E+01	3.752E+01	6.512E+01
527	3.402E+01	0.000E+00	-1.837E+01	2.620E+01	4.604E+01
528	2.594E+02	0.000E+00	4.147E+01	1.090E+02	2.414E+02
529	8.731E+01	0.000E+00	2.078E+01	3.326E+01	7.899E+01
530	5.689E+01	0.000E+00	6.089E-02	2.841E+01	5.685E+01
531	4.319E+01	0.000E+00	-8.107E+00	2.565E+01	4.777E+01

Table B.7 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
532	3.259E+01	0.000E+00	-6.714E+00	1.965E+01	3.641E+01
533	2.200E+02	0.000E+00	2.599E+01	9.699E+01	2.082E+02
534	1.028E+02	0.000E+00	2.436E+01	3.920E+01	9.300E+01
535	5.451E+01	0.000E+00	2.257E+01	1.597E+01	4.744E+01
536	3.808E+01	0.000E+00	1.295E+01	1.256E+01	3.354E+01
537	2.854E+01	0.000E+00	4.873E+00	1.183E+01	2.644E+01
538	1.868E+02	0.000E+00	2.036E+01	8.319E+01	1.774E+02
539	9.939E+01	0.000E+00	1.888E+01	4.026E+01	9.143E+01
540	6.200E+01	0.000E+00	1.780E+01	2.210E+01	5.529E+01
541	4.412E+01	0.000E+00	1.209E+01	1.601E+01	3.949E+01
542	3.198E+01	0.000E+00	6.216E+00	1.288E+01	2.937E+01
557	3.804E+01	0.000E+00	-3.538E+00	2.079E+01	3.992E+01
562	2.887E+01	0.000E+00	-1.753E+00	1.531E+01	2.978E+01
609	-5.468E+00	0.000E+00	-4.211E+01	1.832E+01	3.966E+01
610	-4.169E+00	0.000E+00	-3.584E+01	1.583E+01	3.395E+01
611	1.249E+00	0.000E+00	-1.818E+01	9.714E+00	1.884E+01
612	2.429E+01	0.000E+00	-2.550E+00	1.342E+01	2.566E+01
613	6.812E+01	0.000E+00	5.504E+00	3.131E+01	6.554E+01
614	1.194E+02	0.000E+00	1.302E+01	5.319E+01	1.134E+02
615	-1.174E+00	0.000E+00	-1.292E+01	5.872E+00	1.237E+01
616	4.190E+00	0.000E+00	-2.192E-01	2.205E+00	4.304E+00
617	1.298E+01	0.000E+00	4.280E+00	4.348E+00	1.145E+01
618	3.355E+00	0.000E+00	-1.293E+01	8.144E+00	1.490E+01
619	1.164E+01	0.000E+00	-4.245E+00	7.943E+00	1.425E+01
621	1.541E+01	0.000E+00	-1.152E+01	1.347E+01	2.341E+01
622	2.426E+01	0.000E+00	-7.073E+00	1.567E+01	2.847E+01
623	2.440E+01	0.000E+00	-2.259E-01	1.231E+01	2.451E+01
624	3.329E+01	0.000E+00	-7.631E+00	2.046E+01	3.769E+01
625	3.906E+01	0.000E+00	-7.167E+00	2.311E+01	4.309E+01
626	3.322E+01	0.000E+00	-3.268E+00	1.824E+01	3.497E+01
627	5.487E+01	0.000E+00	-1.166E+00	2.802E+01	5.546E+01
628	5.304E+01	0.000E+00	-3.929E+00	2.848E+01	5.511E+01
629	4.071E+01	0.000E+00	-3.966E+00	2.234E+01	4.283E+01
630	7.677E+01	0.000E+00	7.240E+00	3.477E+01	7.342E+01
631	6.264E+01	0.000E+00	3.127E+00	2.976E+01	6.114E+01
632	4.205E+01	0.000E+00	-1.630E+00	2.184E+01	4.289E+01
633	1.074E+01	0.000E+00	3.254E+00	3.744E+00	9.541E+00
634	1.637E+01	0.000E+00	9.385E-02	8.137E+00	1.632E+01
635	2.715E+01	0.000E+00	-3.791E+00	1.547E+01	2.923E+01
636	3.935E+01	0.000E+00	-6.297E+00	2.282E+01	4.285E+01
637	4.932E+01	0.000E+00	-5.997E+00	2.766E+01	5.257E+01
638	5.335E+01	0.000E+00	-1.483E+00	2.742E+01	5.411E+01
639	-4.362E+00	0.000E+00	-3.951E+01	1.758E+01	3.752E+01
640	-1.249E+00	0.000E+00	-2.089E+01	9.820E+00	2.029E+01
641	2.657E-01	0.000E+00	-1.252E+01	6.391E+00	1.265E+01
642	1.120E+00	0.000E+00	-4.854E+00	2.987E+00	5.501E+00
643	6.771E+00	0.000E+00	-1.872E+00	4.322E+00	7.876E+00
644	7.953E+00	0.000E+00	2.077E+00	2.938E+00	7.145E+00
645	1.242E+01	0.000E+00	2.165E+00	5.129E+00	1.149E+01

Table B.7 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
646	1.255E+01	0.000E+00	4.024E+00	4.264E+00	1.110E+01
647	1.393E+01	0.000E+00	3.803E+00	5.063E+00	1.247E+01
648	-4.731E-01	0.000E+00	-2.027E+01	9.899E+00	2.004E+01
649	2.809E+00	0.000E+00	-5.755E+00	4.282E+00	7.561E+00
650	1.026E+01	0.000E+00	3.280E-01	4.964E+00	1.010E+01
651	1.382E+01	0.000E+00	3.276E+00	5.273E+00	1.251E+01
652	1.177E+00	0.000E+00	-1.790E+01	9.541E+00	1.852E+01
653	6.753E+00	0.000E+00	-6.958E+00	6.856E+00	1.187E+01
654	1.512E+01	0.000E+00	-2.222E+00	8.672E+00	1.635E+01
655	1.702E+01	0.000E+00	1.700E+00	7.658E+00	1.623E+01
656	4.811E+00	0.000E+00	-1.480E+01	9.804E+00	1.770E+01
657	1.181E+01	0.000E+00	-7.796E+00	9.803E+00	1.710E+01
658	2.074E+01	0.000E+00	-4.556E+00	1.265E+01	2.335E+01
659	2.127E+01	0.000E+00	-3.343E-02	1.065E+01	2.128E+01
660	1.068E+01	0.000E+00	-1.126E+01	1.097E+01	1.901E+01
661	1.812E+01	0.000E+00	-7.950E+00	1.304E+01	2.314E+01
662	2.746E+01	0.000E+00	-6.434E+00	1.695E+01	3.118E+01
663	2.645E+01	0.000E+00	-1.831E+00	1.414E+01	2.741E+01
664	1.919E+01	0.000E+00	-7.931E+00	1.356E+01	2.415E+01
665	2.499E+01	0.000E+00	-7.516E+00	1.625E+01	2.948E+01
666	3.418E+01	0.000E+00	-7.754E+00	2.096E+01	3.864E+01
667	3.179E+01	0.000E+00	-3.374E+00	1.758E+01	3.361E+01
668	3.043E+01	0.000E+00	-4.825E+00	1.763E+01	3.311E+01
669	3.282E+01	0.000E+00	-6.265E+00	1.954E+01	3.635E+01
670	4.139E+01	0.000E+00	-8.445E+00	2.492E+01	4.620E+01
671	3.720E+01	0.000E+00	-4.746E+00	2.097E+01	3.979E+01
672	4.352E+01	0.000E+00	-1.900E+00	2.271E+01	4.450E+01
673	4.062E+01	0.000E+00	-4.478E+00	2.255E+01	4.303E+01
674	4.764E+01	0.000E+00	-8.208E+00	2.792E+01	5.223E+01
675	4.182E+01	0.000E+00	-5.354E+00	2.359E+01	4.474E+01
676	5.824E+01	0.000E+00	1.282E+00	2.848E+01	5.761E+01
677	4.873E+01	0.000E+00	-1.716E+00	2.522E+01	4.961E+01
678	5.344E+01	0.000E+00	-7.016E+00	3.023E+01	5.727E+01
679	4.555E+01	0.000E+00	-5.400E+00	2.548E+01	4.848E+01
680	7.370E+01	0.000E+00	4.026E+00	3.484E+01	7.177E+01
681	5.612E+01	0.000E+00	1.333E+00	2.739E+01	5.546E+01
682	5.730E+01	0.000E+00	-4.552E+00	3.093E+01	5.971E+01
683	4.749E+01	0.000E+00	-4.281E+00	2.588E+01	4.977E+01
684	8.919E+01	0.000E+00	7.481E+00	4.086E+01	8.570E+01
685	6.293E+01	0.000E+00	5.390E+00	2.877E+01	6.041E+01
686	5.972E+01	0.000E+00	-9.461E-01	3.033E+01	6.020E+01
687	4.786E+01	0.000E+00	-2.209E+00	2.503E+01	4.900E+01
688	1.043E+02	0.000E+00	9.843E+00	4.722E+01	9.972E+01
689	6.836E+01	0.000E+00	9.168E+00	2.960E+01	6.427E+01
690	5.961E+01	0.000E+00	3.907E+00	2.785E+01	5.776E+01
691	4.599E+01	0.000E+00	9.494E-01	2.252E+01	4.553E+01
692	-1.709E+00	0.000E+00	-2.735E+01	1.282E+01	2.653E+01
693	8.728E+00	0.000E+00	-1.221E+01	1.047E+01	1.821E+01
694	1.738E+01	0.000E+00	-5.965E+00	1.167E+01	2.101E+01

Table B.7 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
695	2.126E+01	0.000E+00	-1.947E+00	1.160E+01	2.230E+01
696	1.999E+01	0.000E+00	1.351E+00	9.319E+00	1.935E+01
697	9.380E+00	0.000E+00	-8.375E+00	8.878E+00	1.538E+01
698	2.366E+01	0.000E+00	-9.851E+00	1.676E+01	2.983E+01
699	3.117E+01	0.000E+00	-7.630E+00	1.940E+01	3.560E+01
700	3.306E+01	0.000E+00	-5.337E+00	1.920E+01	3.602E+01
702	4.426E+01	0.000E+00	1.191E+00	2.153E+01	4.367E+01
703	4.337E+01	0.000E+00	-4.944E+00	2.416E+01	4.605E+01
704	4.578E+01	0.000E+00	-6.336E+00	2.606E+01	4.925E+01
705	4.457E+01	0.000E+00	-6.704E+00	2.564E+01	4.828E+01
707	9.213E+01	0.000E+00	7.963E+00	4.208E+01	8.842E+01
708	6.516E+01	0.000E+00	2.305E+00	3.143E+01	6.404E+01
709	5.783E+01	0.000E+00	-1.381E+00	2.960E+01	5.853E+01
710	5.195E+01	0.000E+00	-4.462E+00	2.820E+01	5.432E+01
711	4.173E+01	0.000E+00	-3.542E+00	2.264E+01	4.361E+01
712	1.426E+02	0.000E+00	1.449E+01	6.404E+01	1.359E+02
713	8.523E+01	0.000E+00	1.085E+01	3.719E+01	8.035E+01
714	6.394E+01	0.000E+00	7.286E+00	2.833E+01	6.062E+01
715	5.200E+01	0.000E+00	2.284E+00	2.486E+01	5.090E+01
716	3.975E+01	0.000E+00	5.907E-01	1.958E+01	3.946E+01
717	3.307E+01	0.000E+00	-1.731E+01	2.519E+01	4.433E+01
718	4.482E+01	0.000E+00	-4.391E+00	2.460E+01	4.717E+01
719	3.793E+01	0.000E+00	-1.018E+01	2.405E+01	4.391E+01
720	5.015E+01	0.000E+00	-1.221E+00	2.569E+01	5.078E+01
721	3.292E+01	0.000E+00	-1.747E+01	2.519E+01	4.432E+01
722	4.375E+01	0.000E+00	-4.567E+00	2.416E+01	4.620E+01
723	3.304E+01	0.000E+00	-1.662E+01	2.483E+01	4.378E+01
724	4.139E+01	0.000E+00	-4.054E+00	2.272E+01	4.355E+01
725	3.266E+01	0.000E+00	-1.583E+01	2.425E+01	4.283E+01
726	3.728E+01	0.000E+00	-3.893E+00	2.058E+01	3.937E+01
727	3.219E+01	0.000E+00	-1.393E+01	2.306E+01	4.097E+01
728	3.241E+01	0.000E+00	-3.128E+00	1.777E+01	3.408E+01
729	3.092E+01	0.000E+00	-1.168E+01	2.130E+01	3.812E+01
730	2.680E+01	0.000E+00	-2.722E+00	1.476E+01	2.826E+01
731	2.925E+01	0.000E+00	-8.468E+00	1.886E+01	3.428E+01
732	2.130E+01	0.000E+00	-1.838E+00	1.157E+01	2.228E+01
733	2.694E+01	0.000E+00	-4.910E+00	1.593E+01	2.970E+01
734	1.631E+01	0.000E+00	-1.288E+00	8.797E+00	1.699E+01
735	2.449E+01	0.000E+00	-9.628E-01	1.273E+01	2.499E+01
736	1.238E+01	0.000E+00	-2.892E-01	6.335E+00	1.253E+01
737	2.264E+01	0.000E+00	2.410E+00	1.012E+01	2.154E+01
738	1.026E+01	0.000E+00	3.702E-01	4.945E+00	1.008E+01
739	2.270E+01	0.000E+00	4.137E+00	9.280E+00	2.094E+01
740	1.021E+01	0.000E+00	9.265E-01	4.641E+00	9.778E+00
741	3.452E+01	0.000E+00	-9.091E+00	2.181E+01	3.985E+01
742	4.090E+01	0.000E+00	-1.219E+00	2.106E+01	4.153E+01
743	2.857E+01	0.000E+00	-6.759E+00	1.766E+01	3.248E+01
744	2.599E+01	0.000E+00	-1.219E+00	1.360E+01	2.662E+01
745	2.171E+01	0.000E+00	-3.155E+00	1.243E+01	2.345E+01

Table B.7 (continued)

Page 7

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
746	1.114E+01	0.000E+00	-1.228E+00	6.186E+00	1.181E+01
747	1.685E+01	0.000E+00	1.092E+00	7.879E+00	1.633E+01
748	2.397E+00	0.000E+00	-1.095E+00	1.746E+00	3.093E+00
749	4.957E+00	0.000E+00	-1.182E+00	3.069E+00	5.641E+00
750	1.906E+01	0.000E+00	1.644E+00	8.710E+00	1.830E+01
751	2.515E+01	0.000E+00	3.538E+00	1.080E+01	2.358E+01
752	2.859E+01	0.000E+00	1.616E+00	1.349E+01	2.781E+01
753	1.263E+01	0.000E+00	6.463E-01	5.990E+00	1.231E+01
754	1.598E+01	0.000E+00	1.155E-01	7.934E+00	1.593E+01
755	1.484E+01	0.000E+00	-8.375E-01	7.838E+00	1.527E+01
756	2.531E+01	0.000E+00	-8.364E-01	1.308E+01	2.574E+01
757	1.948E+01	0.000E+00	-4.579E-01	9.969E+00	1.971E+01
758	3.155E+01	0.000E+00	-4.320E-01	1.599E+01	3.177E+01
759	3.353E+01	0.000E+00	-2.495E+00	1.801E+01	3.484E+01
760	2.308E+01	0.000E+00	-7.140E-01	1.190E+01	2.344E+01
761	3.515E+01	0.000E+00	-3.030E+00	1.909E+01	3.675E+01
762	3.311E+01	0.000E+00	-1.386E+00	1.725E+01	3.383E+01
763	3.554E+01	0.000E+00	-2.984E+00	1.926E+01	3.712E+01
764	3.304E+01	0.000E+00	-2.114E+00	1.758E+01	3.414E+01
765	3.040E+01	0.000E+00	-5.359E-01	1.547E+01	3.067E+01
766	2.511E+01	0.000E+00	2.290E+00	1.141E+01	2.405E+01
767	2.622E+01	0.000E+00	4.550E-01	1.288E+01	2.600E+01
768	2.253E+01	0.000E+00	1.595E+00	1.047E+01	2.177E+01
769	1.836E+01	0.000E+00	3.754E+00	7.302E+00	1.680E+01
770	1.869E+01	0.000E+00	2.743E+00	7.971E+00	1.748E+01
771	1.571E+01	0.000E+00	3.634E+00	6.038E+00	1.425E+01
772	1.398E+01	0.000E+00	4.664E+00	4.656E+00	1.232E+01
774	1.372E+01	0.000E+00	4.389E+00	4.668E+00	1.214E+01
775	1.304E+01	0.000E+00	4.650E+00	4.196E+00	1.145E+01
776	1.311E+01	0.000E+00	4.429E+00	4.339E+00	1.155E+01
777	1.430E+01	0.000E+00	3.984E+00	5.160E+00	1.279E+01
778	1.423E+01	0.000E+00	4.472E+00	4.881E+00	1.261E+01
779	1.510E+01	0.000E+00	4.245E+00	5.429E+00	1.349E+01
780	1.823E+01	0.000E+00	4.175E+00	7.029E+00	1.655E+01
781	1.829E+01	0.000E+00	4.356E+00	6.967E+00	1.655E+01
782	2.165E+01	0.000E+00	4.224E+00	8.713E+00	1.988E+01
783	2.428E+01	0.000E+00	6.524E+00	8.877E+00	2.176E+01
784	2.434E+01	0.000E+00	4.270E+00	1.004E+01	2.251E+01
785	2.646E+01	0.000E+00	3.884E+00	1.129E+01	2.475E+01
786	4.105E+01	0.000E+00	7.061E-01	2.017E+01	4.070E+01
787	3.670E+01	0.000E+00	8.141E+00	1.428E+01	3.339E+01
788	3.214E+01	0.000E+00	3.905E+00	1.412E+01	3.037E+01
789	3.303E+01	0.000E+00	9.562E-01	1.604E+01	3.256E+01
790	2.984E+01	0.000E+00	3.822E+00	1.301E+01	2.812E+01
792	2.996E+01	0.000E+00	2.804E+00	1.358E+01	2.866E+01
794	2.997E+01	0.000E+00	2.791E+00	1.359E+01	2.867E+01
795	3.143E+01	0.000E+00	8.892E-01	1.527E+01	3.099E+01
796	2.972E+01	0.000E+00	8.011E+00	1.086E+01	2.664E+01
797	2.924E+01	0.000E+00	3.041E+00	1.310E+01	2.785E+01

Table B.7 (continued)

Page 8

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
798	3.036E+01	0.000E+00	1.832E+00	1.427E+01	2.949E+01
799	2.621E+01	0.000E+00	-1.137E+00	1.367E+01	2.680E+01
803	3.121E+01	0.000E+00	-2.071E+00	1.664E+01	3.230E+01
804	3.010E+01	0.000E+00	1.420E-01	1.498E+01	3.003E+01
805	2.857E+01	0.000E+00	3.537E+00	1.252E+01	2.697E+01
806	3.042E+01	0.000E+00	-8.606E-01	1.564E+01	3.086E+01
808	2.833E+01	0.000E+00	8.115E+00	1.011E+01	2.527E+01
809	3.100E+01	0.000E+00	6.883E+00	1.206E+01	2.820E+01
810	3.090E+01	0.000E+00	4.555E+00	1.317E+01	2.890E+01
811	3.031E+01	0.000E+00	2.334E+00	1.399E+01	2.922E+01
812	2.690E+01	0.000E+00	-1.464E-01	1.352E+01	2.698E+01
813	2.371E+01	0.000E+00	-1.104E+00	1.241E+01	2.428E+01
814	2.173E+01	0.000E+00	-7.426E-01	1.123E+01	2.211E+01
815	3.011E+01	0.000E+00	6.843E-01	1.471E+01	2.977E+01
816	2.751E+01	0.000E+00	-2.942E-02	1.377E+01	2.752E+01
817	2.928E+01	0.000E+00	3.366E-01	1.447E+01	2.911E+01
818	3.116E+01	0.000E+00	4.926E-01	1.533E+01	3.091E+01
819	-2.768E+01	0.000E+00	-7.423E+01	2.327E+01	6.497E+01
820	-2.487E+02	0.000E+00	-7.382E+02	2.447E+02	6.506E+02
821	2.964E+02	0.000E+00	3.676E+01	1.298E+02	2.798E+02
822	2.395E+02	0.000E+00	3.303E+01	1.032E+02	2.248E+02
823	2.082E+02	0.000E+00	2.627E+01	9.096E+01	1.964E+02
824	1.687E+02	0.000E+00	2.012E+01	7.428E+01	1.596E+02
825	5.000E+00	0.000E+00	-7.225E+01	3.862E+01	7.487E+01
826	2.705E+01	0.000E+00	-8.511E+01	5.608E+01	1.014E+02
827	2.974E+01	0.000E+00	-2.711E+01	2.843E+01	4.926E+01
828	2.253E+01	0.000E+00	-1.431E+02	8.284E+01	1.556E+02
829	4.491E+01	0.000E+00	-6.515E+01	5.503E+01	9.585E+01
830	3.335E+01	0.000E+00	-2.242E+01	2.788E+01	4.861E+01
831	9.031E+01	0.000E+00	3.580E+00	4.336E+01	8.857E+01
832	5.800E+01	0.000E+00	-2.217E+01	4.009E+01	7.171E+01
833	3.423E+01	0.000E+00	-1.276E+01	2.349E+01	4.208E+01
834	1.004E+02	0.000E+00	2.668E+01	3.684E+01	9.004E+01
835	5.505E+01	0.000E+00	1.622E+01	1.941E+01	4.899E+01
836	3.078E+01	0.000E+00	-2.712E-01	1.553E+01	3.092E+01
837	1.049E+02	0.000E+00	2.331E+01	4.079E+01	9.539E+01
838	5.921E+01	0.000E+00	2.272E+01	1.824E+01	5.174E+01
839	2.902E+01	0.000E+00	7.328E+00	1.085E+01	2.614E+01
840	9.491E+01	0.000E+00	1.607E+01	3.942E+01	8.798E+01
841	6.494E+01	0.000E+00	1.326E+01	2.584E+01	5.943E+01
842	3.634E+01	0.000E+00	3.539E+00	1.640E+01	3.471E+01
847	2.741E+01	0.000E+00	-5.513E+01	4.127E+01	7.281E+01
848	3.786E+01	0.000E+00	-4.330E+01	4.058E+01	7.034E+01
849	4.413E+01	0.000E+00	-2.109E+01	3.261E+01	5.765E+01
850	4.091E+01	0.000E+00	4.014E+00	1.845E+01	3.906E+01
851	3.959E+01	0.000E+00	1.548E+01	1.206E+01	3.455E+01
852	4.917E+01	0.000E+00	7.242E+00	2.097E+01	4.598E+01
853	4.610E+01	0.000E+00	-9.806E-01	2.354E+01	4.660E+01
854	3.373E+01	0.000E+00	-9.639E-01	1.735E+01	3.422E+01

Table B.7 (continued)

Page 9

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
855	1.851E+01	0.000E+00	-9.463E-01	9.729E+00	1.900E+01
856	6.271E+00	0.000E+00	-8.977E-01	3.584E+00	6.765E+00
857	2.405E+00	0.000E+00	-8.494E-01	1.627E+00	2.923E+00
858	1.466E+01	0.000E+00	3.574E+00	5.542E+00	1.324E+01
859	2.167E+01	0.000E+00	5.413E+00	8.130E+00	1.954E+01
860	5.271E+01	0.000E+00	1.353E+01	1.959E+01	4.741E+01
861	3.646E+01	0.000E+00	-9.692E+00	2.307E+01	4.215E+01
862	3.184E+01	0.000E+00	-7.954E+00	1.990E+01	3.647E+01
863	2.542E+01	0.000E+00	-4.884E+00	1.515E+01	2.818E+01
864	1.921E+01	0.000E+00	-6.708E-01	9.940E+00	1.955E+01
865	1.710E+01	0.000E+00	2.266E+00	7.416E+00	1.608E+01
866	1.555E+01	0.000E+00	4.235E+00	5.659E+00	1.393E+01
867	2.202E+01	0.000E+00	3.087E+00	9.464E+00	2.065E+01
868	2.653E+01	0.000E+00	7.512E+00	9.508E+00	2.368E+01
869	2.946E+01	0.000E+00	8.227E+00	1.062E+01	2.633E+01
870	3.014E+01	0.000E+00	7.369E+00	1.139E+01	2.722E+01
871	9.574E+00	0.000E+00	-1.073E+00	5.323E+00	1.015E+01
872	1.914E+01	0.000E+00	-8.235E-01	9.980E+00	1.956E+01
873	2.239E+01	0.000E+00	4.763E-01	1.096E+01	2.216E+01
874	2.838E+01	0.000E+00	-1.545E+00	1.496E+01	2.919E+01
875	3.256E+01	0.000E+00	-1.847E+00	1.720E+01	3.352E+01
876	3.090E+01	0.000E+00	1.940E-01	1.535E+01	3.081E+01
877	3.313E+01	0.000E+00	7.117E+00	1.301E+01	3.020E+01
878	3.143E+01	0.000E+00	1.513E+00	1.496E+01	3.070E+01
879	3.463E+01	0.000E+00	1.442E+00	1.659E+01	3.393E+01
880	2.799E+01	0.000E+00	1.542E+00	1.322E+01	2.725E+01
881	3.123E+01	0.000E+00	-1.083E+00	1.616E+01	3.179E+01
882	1.162E+02	0.000E+00	-8.875E+01	1.025E+02	1.781E+02
883	-2.451E+01	0.000E+00	-1.575E+02	6.649E+01	1.468E+02
884	2.118E+01	0.000E+00	-9.047E+01	5.582E+01	1.027E+02
885	2.334E+01	0.000E+00	-5.824E+01	4.079E+01	7.278E+01
886	2.818E+01	0.000E+00	-2.840E+01	2.829E+01	4.900E+01
887	1.784E+00	0.000E+00	-1.221E+02	6.196E+01	1.230E+02
888	9.828E+00	0.000E+00	-9.794E+01	5.388E+01	1.032E+02
889	2.083E+01	0.000E+00	-8.003E+01	5.043E+01	9.222E+01
890	2.538E+01	0.000E+00	-4.198E+01	3.368E+01	5.892E+01
891	-7.048E+01	0.000E+00	-1.066E+02	1.806E+01	9.391E+01
892	1.785E+01	0.000E+00	-8.851E+01	5.318E+01	9.866E+01
893	2.586E+01	0.000E+00	-7.581E+01	5.083E+01	9.152E+01
894	2.821E+01	0.000E+00	-3.995E+01	3.408E+01	5.932E+01
895	6.277E+01	0.000E+00	-1.149E+02	8.886E+01	1.561E+02
896	2.735E+01	0.000E+00	-8.474E+01	5.605E+01	1.012E+02
897	3.255E+01	0.000E+00	-6.926E+01	5.091E+01	9.006E+01
898	3.150E+01	0.000E+00	-3.750E+01	3.450E+01	5.983E+01
899	1.911E+00	0.000E+00	-3.989E+02	2.004E+02	3.999E+02
900	4.109E+01	0.000E+00	-7.431E+01	5.770E+01	1.013E+02
901	4.044E+01	0.000E+00	-5.835E+01	4.940E+01	8.602E+01
902	3.525E+01	0.000E+00	-3.242E+01	3.383E+01	5.862E+01
903	9.155E+01	0.000E+00	-3.801E+01	6.478E+01	1.154E+02

Table B.7 (continued)

Page 10

SDRC I-DEAS 4.0: Pre/Post Processing
YOE3

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
904	5.576E+01	0.000E+00	-5.041E+01	5.309E+01	9.199E+01
905	4.692E+01	0.000E+00	-4.300E+01	4.496E+01	7.790E+01
906	3.759E+01	0.000E+00	-2.585E+01	3.172E+01	5.525E+01
907	9.139E+01	0.000E+00	5.741E+00	4.282E+01	8.866E+01
908	6.695E+01	0.000E+00	-1.541E+01	4.118E+01	7.584E+01
909	5.092E+01	0.000E+00	-2.477E+01	3.785E+01	6.685E+01
910	3.871E+01	0.000E+00	-1.747E+01	2.809E+01	4.980E+01
911	1.306E+02	0.000E+00	1.924E+01	5.570E+01	1.222E+02
912	6.725E+01	0.000E+00	9.710E+00	2.877E+01	6.296E+01
913	5.047E+01	0.000E+00	-6.049E+00	2.826E+01	5.375E+01
914	3.768E+01	0.000E+00	-8.162E+00	2.292E+01	4.236E+01
915	1.420E+02	0.000E+00	2.102E+01	6.051E+01	1.328E+02
916	6.769E+01	0.000E+00	1.971E+01	2.399E+01	6.030E+01
917	4.730E+01	0.000E+00	9.544E+00	1.888E+01	4.333E+01
918	3.535E+01	0.000E+00	8.427E-01	1.725E+01	3.493E+01
919	1.433E+02	0.000E+00	1.860E+01	6.236E+01	1.350E+02
920	7.198E+01	0.000E+00	2.162E+01	2.518E+01	6.397E+01
921	4.485E+01	0.000E+00	1.957E+01	1.264E+01	3.895E+01
922	3.308E+01	0.000E+00	8.217E+00	1.243E+01	2.983E+01
923	1.378E+02	0.000E+00	1.798E+01	5.992E+01	1.298E+02
924	7.410E+01	0.000E+00	2.067E+01	2.671E+01	6.623E+01
925	4.738E+01	0.000E+00	2.049E+01	1.345E+01	4.116E+01
926	3.350E+01	0.000E+00	1.090E+01	1.130E+01	2.960E+01
927	1.294E+02	0.000E+00	1.490E+01	5.727E+01	1.227E+02
928	7.440E+01	0.000E+00	1.711E+01	2.865E+01	6.749E+01
929	5.297E+01	0.000E+00	1.567E+01	1.865E+01	4.713E+01
930	3.768E+01	0.000E+00	8.847E+00	1.441E+01	3.412E+01
931	1.176E+02	0.000E+00	1.330E+01	5.215E+01	1.116E+02
932	7.229E+01	0.000E+00	1.373E+01	2.928E+01	6.650E+01
933	5.740E+01	0.000E+00	9.612E+00	2.390E+01	5.325E+01
934	4.238E+01	0.000E+00	4.828E+00	1.877E+01	4.018E+01
935	7.259E+01	0.000E+00	-2.442E+02	1.584E+02	2.875E+02
936	-5.745E+00	0.000E+00	-1.519E+02	7.309E+01	1.491E+02
937	3.509E+01	0.000E+00	-7.754E+01	5.631E+01	9.982E+01
938	3.205E+01	0.000E+00	-5.107E+01	4.156E+01	7.261E+01
939	3.141E+01	0.000E+00	-2.569E+01	2.855E+01	4.953E+01
940	3.621E+02	0.000E+00	1.323E+02	1.149E+02	3.174E+02
941	6.714E+01	0.000E+00	-7.721E+01	7.217E+01	1.251E+02
942	5.278E+01	0.000E+00	-4.572E+01	4.925E+01	8.538E+01
943	4.160E+01	0.000E+00	-3.344E+01	3.752E+01	6.512E+01
944	3.402E+01	0.000E+00	-1.837E+01	2.620E+01	4.604E+01
945	2.594E+02	0.000E+00	4.147E+01	1.090E+02	2.414E+02
946	8.731E+01	0.000E+00	2.078E+01	3.326E+01	7.899E+01
947	5.689E+01	0.000E+00	6.089E-02	2.841E+01	5.685E+01
948	4.319E+01	0.000E+00	-8.107E+00	2.565E+01	4.777E+01
949	3.259E+01	0.000E+00	-6.714E+00	1.965E+01	3.641E+01
950	2.200E+02	0.000E+00	2.599E+01	9.699E+01	2.082E+02
951	1.028E+02	0.000E+00	2.436E+01	3.920E+01	9.300E+01
952	5.451E+01	0.000E+00	2.257E+01	1.597E+01	4.744E+01

Table B.7 (continued)

Page 11

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
953	3.808E+01	0.000E+00	1.295E+01	1.256E+01	3.354E+01
954	2.854E+01	0.000E+00	4.873E+00	1.183E+01	2.644E+01
955	1.868E+02	0.000E+00	2.036E+01	8.319E+01	1.774E+02
956	9.939E+01	0.000E+00	1.888E+01	4.026E+01	9.143E+01
957	6.200E+01	0.000E+00	1.780E+01	2.210E+01	5.529E+01
958	4.412E+01	0.000E+00	1.209E+01	1.601E+01	3.949E+01
959	3.198E+01	0.000E+00	6.216E+00	1.288E+01	2.937E+01
960	3.975E+01	0.000E+00	5.907E-01	1.958E+01	3.946E+01
964	1.393E+01	0.000E+00	3.803E+00	5.063E+00	1.247E+01
965	-4.169E+00	0.000E+00	-3.584E+01	1.583E+01	3.395E+01
966	1.249E+00	0.000E+00	-1.818E+01	9.714E+00	1.884E+01
967	2.429E+01	0.000E+00	-2.550E+00	1.342E+01	2.566E+01
968	6.812E+01	0.000E+00	5.504E+00	3.131E+01	6.554E+01
969	1.194E+02	0.000E+00	1.302E+01	5.319E+01	1.134E+02
970	3.355E+00	0.000E+00	-1.293E+01	8.144E+00	1.490E+01
971	1.164E+01	0.000E+00	-4.245E+00	7.943E+00	1.425E+01
972	1.644E+01	0.000E+00	2.670E+00	6.883E+00	1.528E+01
973	1.541E+01	0.000E+00	-1.152E+01	1.347E+01	2.341E+01
974	2.426E+01	0.000E+00	-7.073E+00	1.567E+01	2.847E+01
975	2.440E+01	0.000E+00	-2.259E-01	1.231E+01	2.451E+01
976	3.329E+01	0.000E+00	-7.631E+00	2.046E+01	3.769E+01
977	3.906E+01	0.000E+00	-7.167E+00	2.311E+01	4.309E+01
978	3.322E+01	0.000E+00	-3.268E+00	1.824E+01	3.497E+01
979	5.487E+01	0.000E+00	-1.166E+00	2.802E+01	5.546E+01
980	5.304E+01	0.000E+00	-3.929E+00	2.848E+01	5.511E+01
981	4.071E+01	0.000E+00	-3.966E+00	2.234E+01	4.283E+01
982	7.677E+01	0.000E+00	7.240E+00	3.477E+01	7.342E+01
983	6.264E+01	0.000E+00	3.127E+00	2.976E+01	6.114E+01
984	4.205E+01	0.000E+00	-1.630E+00	2.184E+01	4.289E+01
985	1.637E+01	0.000E+00	9.385E-02	8.137E+00	1.632E+01
986	2.715E+01	0.000E+00	-3.791E+00	1.547E+01	2.923E+01
987	3.935E+01	0.000E+00	-6.297E+00	2.282E+01	4.285E+01
988	4.932E+01	0.000E+00	-5.997E+00	2.766E+01	5.257E+01
989	5.335E+01	0.000E+00	-1.483E+00	2.742E+01	5.411E+01
990	-4.362E+00	0.000E+00	-3.951E+01	1.758E+01	3.752E+01
991	2.657E-01	0.000E+00	-1.252E+01	6.391E+00	1.265E+01
992	6.771E+00	0.000E+00	-1.872E+00	4.322E+00	7.876E+00
993	1.242E+01	0.000E+00	2.165E+00	5.129E+00	1.149E+01
995	-4.731E-01	0.000E+00	-2.027E+01	9.899E+00	2.004E+01
996	2.809E+00	0.000E+00	-5.755E+00	4.282E+00	7.561E+00
997	1.026E+01	0.000E+00	3.280E-01	4.964E+00	1.010E+01
998	1.382E+01	0.000E+00	3.276E+00	5.273E+00	1.251E+01
999	1.177E+00	0.000E+00	-1.790E+01	9.541E+00	1.852E+01
1000	6.753E+00	0.000E+00	-6.958E+00	6.856E+00	1.187E+01
1001	1.512E+01	0.000E+00	-2.222E+00	8.672E+00	1.635E+01
1002	1.702E+01	0.000E+00	1.700E+00	7.658E+00	1.623E+01
1003	4.811E+00	0.000E+00	-1.480E+01	9.804E+00	1.770E+01
1004	1.181E+01	0.000E+00	-7.796E+00	9.803E+00	1.710E+01
1005	2.074E+01	0.000E+00	-4.556E+00	1.265E+01	2.335E+01

Table B.7 (continued)

Page 12

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1006	2.127E+01	0.000E+00	-3.343E-02	1.065E+01	2.128E+01
1007	1.068E+01	0.000E+00	-1.126E+01	1.097E+01	1.901E+01
1008	1.812E+01	0.000E+00	-7.950E+00	1.304E+01	2.314E+01
1009	2.746E+01	0.000E+00	-6.434E+00	1.695E+01	3.118E+01
1010	2.645E+01	0.000E+00	-1.831E+00	1.414E+01	2.741E+01
1011	1.919E+01	0.000E+00	-7.931E+00	1.356E+01	2.415E+01
1012	2.499E+01	0.000E+00	-7.516E+00	1.625E+01	2.948E+01
1013	3.418E+01	0.000E+00	-7.754E+00	2.096E+01	3.864E+01
1014	3.179E+01	0.000E+00	-3.374E+00	1.758E+01	3.361E+01
1015	3.043E+01	0.000E+00	-4.825E+00	1.763E+01	3.311E+01
1016	3.282E+01	0.000E+00	-6.265E+00	1.954E+01	3.635E+01
1017	4.139E+01	0.000E+00	-8.445E+00	2.492E+01	4.620E+01
1018	3.720E+01	0.000E+00	-4.746E+00	2.097E+01	3.979E+01
1019	4.352E+01	0.000E+00	-1.900E+00	2.271E+01	4.450E+01
1020	4.062E+01	0.000E+00	-4.478E+00	2.255E+01	4.303E+01
1021	4.764E+01	0.000E+00	-8.208E+00	2.792E+01	5.223E+01
1022	4.182E+01	0.000E+00	-5.354E+00	2.359E+01	4.474E+01
1023	5.824E+01	0.000E+00	1.282E+00	2.848E+01	5.761E+01
1024	4.873E+01	0.000E+00	-1.716E+00	2.522E+01	4.961E+01
1025	5.344E+01	0.000E+00	-7.016E+00	3.023E+01	5.727E+01
1026	4.555E+01	0.000E+00	-5.400E+00	2.548E+01	4.848E+01
1027	7.370E+01	0.000E+00	4.026E+00	3.484E+01	7.177E+01
1028	5.612E+01	0.000E+00	1.333E+00	2.739E+01	5.546E+01
1029	5.730E+01	0.000E+00	-4.552E+00	3.093E+01	5.971E+01
1030	4.749E+01	0.000E+00	-4.281E+00	2.588E+01	4.977E+01
1031	8.919E+01	0.000E+00	7.481E+00	4.086E+01	8.570E+01
1032	6.293E+01	0.000E+00	5.390E+00	2.877E+01	6.041E+01
1033	5.972E+01	0.000E+00	-9.461E-01	3.033E+01	6.020E+01
1034	4.786E+01	0.000E+00	-2.209E+00	2.503E+01	4.900E+01
1035	1.043E+02	0.000E+00	9.843E+00	4.722E+01	9.972E+01
1036	6.836E+01	0.000E+00	9.168E+00	2.960E+01	6.427E+01
1037	5.961E+01	0.000E+00	3.907E+00	2.785E+01	5.776E+01
1038	4.599E+01	0.000E+00	9.494E-01	2.252E+01	4.553E+01
1039	-1.709E+00	0.000E+00	-2.735E+01	1.282E+01	2.653E+01
1040	8.728E+00	0.000E+00	-1.221E+01	1.047E+01	1.821E+01
1041	1.738E+01	0.000E+00	-5.965E+00	1.167E+01	2.101E+01
1042	2.126E+01	0.000E+00	-1.947E+00	1.160E+01	2.230E+01
1043	1.999E+01	0.000E+00	1.351E+00	9.319E+00	1.935E+01
1044	9.380E+00	0.000E+00	-8.375E+00	8.878E+00	1.538E+01
1045	2.366E+01	0.000E+00	-9.851E+00	1.676E+01	2.983E+01
1046	3.117E+01	0.000E+00	-7.630E+00	1.940E+01	3.560E+01
1047	3.306E+01	0.000E+00	-5.337E+00	1.920E+01	3.602E+01
1048	2.887E+01	0.000E+00	-1.753E+00	1.531E+01	2.978E+01
1049	4.426E+01	0.000E+00	1.191E+00	2.153E+01	4.367E+01
1050	4.337E+01	0.000E+00	-4.944E+00	2.416E+01	4.605E+01
1051	4.578E+01	0.000E+00	-6.336E+00	2.606E+01	4.925E+01
1052	4.457E+01	0.000E+00	-6.704E+00	2.564E+01	4.828E+01
1053	3.804E+01	0.000E+00	-3.538E+00	2.079E+01	3.992E+01
1054	9.213E+01	0.000E+00	7.963E+00	4.208E+01	8.842E+01

Table B.7 (continued)

Page 13

SDRC I-DEAS 4.0: Pre/Post Processing
YOKE3

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1055	6.516E+01	0.000E+00	2.305E+00	3.143E+01	6.404E+01
1056	5.783E+01	0.000E+00	-1.381E+00	2.960E+01	5.853E+01
1057	5.195E+01	0.000E+00	-4.462E+00	2.820E+01	5.432E+01
1058	4.173E+01	0.000E+00	-3.542E+00	2.264E+01	4.361E+01
1059	1.426E+02	0.000E+00	1.449E+01	6.404E+01	1.359E+02
1060	8.523E+01	0.000E+00	1.085E+01	3.719E+01	8.035E+01
1061	6.394E+01	0.000E+00	7.286E+00	2.833E+01	6.062E+01
1062	5.200E+01	0.000E+00	2.284E+00	2.486E+01	5.090E+01
1064	3.793E+01	0.000E+00	-1.018E+01	2.405E+01	4.391E+01
1065	5.015E+01	0.000E+00	-1.221E+00	2.569E+01	5.078E+01
1066	3.292E+01	0.000E+00	-1.747E+01	2.519E+01	4.432E+01
1067	4.375E+01	0.000E+00	-4.567E+00	2.416E+01	4.620E+01
1068	3.304E+01	0.000E+00	-1.662E+01	2.483E+01	4.378E+01
1069	4.139E+01	0.000E+00	-4.054E+00	2.272E+01	4.355E+01
1070	3.266E+01	0.000E+00	-1.583E+01	2.425E+01	4.283E+01
1071	3.728E+01	0.000E+00	-3.893E+00	2.058E+01	3.937E+01
1072	3.219E+01	0.000E+00	-1.393E+01	2.306E+01	4.097E+01
1073	3.241E+01	0.000E+00	-3.128E+00	1.777E+01	3.408E+01
1074	3.092E+01	0.000E+00	-1.168E+01	2.130E+01	3.812E+01
1075	2.680E+01	0.000E+00	-2.722E+00	1.476E+01	2.826E+01
1076	2.925E+01	0.000E+00	-8.468E+00	1.886E+01	3.428E+01
1077	2.130E+01	0.000E+00	-1.838E+00	1.157E+01	2.228E+01
1078	2.694E+01	0.000E+00	-4.910E+00	1.593E+01	2.970E+01
1079	1.631E+01	0.000E+00	-1.288E+00	8.797E+00	1.699E+01
1080	2.449E+01	0.000E+00	-9.628E-01	1.273E+01	2.499E+01
1081	1.238E+01	0.000E+00	-2.892E-01	6.335E+00	1.253E+01
1082	2.264E+01	0.000E+00	2.410E+00	1.012E+01	2.154E+01
1083	1.026E+01	0.000E+00	3.702E-01	4.945E+00	1.008E+01
1084	2.270E+01	0.000E+00	4.137E+00	9.280E+00	2.094E+01
1085	1.021E+01	0.000E+00	9.265E-01	4.641E+00	9.778E+00
1086	3.452E+01	0.000E+00	-9.091E+00	2.181E+01	3.985E+01
1087	4.090E+01	0.000E+00	-1.219E+00	2.106E+01	4.153E+01
1088	2.857E+01	0.000E+00	-6.759E+00	1.766E+01	3.248E+01
1089	2.599E+01	0.000E+00	-1.219E+00	1.360E+01	2.662E+01
1090	2.171E+01	0.000E+00	-3.155E+00	1.243E+01	2.345E+01
1091	1.114E+01	0.000E+00	-1.228E+00	6.186E+00	1.181E+01
1092	1.685E+01	0.000E+00	1.092E+00	7.879E+00	1.633E+01
1093	2.397E+00	0.000E+00	-1.095E+00	1.746E+00	3.093E+00
1094	4.957E+00	0.000E+00	-1.182E+00	3.069E+00	5.641E+00
1095	1.906E+01	0.000E+00	1.644E+00	8.710E+00	1.830E+01
1096	2.515E+01	0.000E+00	3.538E+00	1.080E+01	2.358E+01
1097	2.859E+01	0.000E+00	1.616E+00	1.349E+01	2.781E+01
1098	1.263E+01	0.000E+00	6.463E-01	5.990E+00	1.231E+01
1099	1.598E+01	0.000E+00	1.155E-01	7.934E+00	1.593E+01
1100	1.484E+01	0.000E+00	-8.375E-01	7.838E+00	1.527E+01
1101	2.531E+01	0.000E+00	-8.364E-01	1.308E+01	2.574E+01
1102	1.948E+01	0.000E+00	-4.579E-01	9.969E+00	1.971E+01
1103	3.155E+01	0.000E+00	-4.320E-01	1.599E+01	3.177E+01
1104	3.353E+01	0.000E+00	-2.495E+00	1.801E+01	3.484E+01

Table B.7 (continued)

Page 14

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1105	2.308E+01	0.000E+00	-7.140E-01	1.190E+01	2.344E+01
1106	3.515E+01	0.000E+00	-3.030E+00	1.909E+01	3.675E+01
1107	3.311E+01	0.000E+00	-1.386E+00	1.725E+01	3.383E+01
1108	3.554E+01	0.000E+00	-2.984E+00	1.926E+01	3.712E+01
1109	3.304E+01	0.000E+00	-2.114E+00	1.758E+01	3.414E+01
1110	3.040E+01	0.000E+00	-5.359E-01	1.547E+01	3.067E+01
1111	2.511E+01	0.000E+00	2.290E+00	1.141E+01	2.405E+01
1112	2.622E+01	0.000E+00	4.550E-01	1.288E+01	2.600E+01
1113	2.253E+01	0.000E+00	1.595E+00	1.047E+01	2.177E+01
1114	1.836E+01	0.000E+00	3.754E+00	7.302E+00	1.680E+01
1115	1.869E+01	0.000E+00	2.743E+00	7.971E+00	1.748E+01
1116	1.571E+01	0.000E+00	3.634E+00	6.038E+00	1.425E+01
1117	1.398E+01	0.000E+00	4.664E+00	4.656E+00	1.232E+01
1118	1.372E+01	0.000E+00	4.389E+00	4.668E+00	1.214E+01
1119	1.430E+01	0.000E+00	3.984E+00	5.160E+00	1.279E+01
1120	1.423E+01	0.000E+00	4.472E+00	4.881E+00	1.261E+01
1121	1.510E+01	0.000E+00	4.245E+00	5.429E+00	1.349E+01
1122	1.823E+01	0.000E+00	4.175E+00	7.029E+00	1.655E+01
1123	1.829E+01	0.000E+00	4.356E+00	6.967E+00	1.655E+01
1124	2.165E+01	0.000E+00	4.224E+00	8.713E+00	1.988E+01
1125	2.428E+01	0.000E+00	6.524E+00	8.877E+00	2.176E+01
1126	2.434E+01	0.000E+00	4.270E+00	1.004E+01	2.251E+01
1127	2.646E+01	0.000E+00	3.884E+00	1.129E+01	2.475E+01
1128	4.105E+01	0.000E+00	7.061E-01	2.017E+01	4.070E+01
1129	3.670E+01	0.000E+00	8.141E+00	1.428E+01	3.339E+01
1130	3.214E+01	0.000E+00	3.905E+00	1.412E+01	3.037E+01
1131	3.303E+01	0.000E+00	9.562E-01	1.604E+01	3.256E+01
1132	2.984E+01	0.000E+00	3.822E+00	1.301E+01	2.812E+01
1133	2.996E+01	0.000E+00	2.804E+00	1.358E+01	2.866E+01
1134	2.997E+01	0.000E+00	2.791E+00	1.359E+01	2.867E+01
1135	3.143E+01	0.000E+00	8.892E-01	1.527E+01	3.099E+01
1136	2.972E+01	0.000E+00	8.011E+00	1.086E+01	2.664E+01
1137	2.924E+01	0.000E+00	3.041E+00	1.310E+01	2.785E+01
1138	3.036E+01	0.000E+00	1.832E+00	1.427E+01	2.949E+01
1139	2.621E+01	0.000E+00	-1.137E+00	1.367E+01	2.680E+01
1140	3.121E+01	0.000E+00	-2.071E+00	1.664E+01	3.230E+01
1141	3.010E+01	0.000E+00	1.420E-01	1.498E+01	3.003E+01
1142	2.857E+01	0.000E+00	3.537E+00	1.252E+01	2.697E+01
1143	3.042E+01	0.000E+00	-8.606E-01	1.564E+01	3.086E+01
1144	2.833E+01	0.000E+00	8.115E+00	1.011E+01	2.527E+01
1145	3.100E+01	0.000E+00	6.883E+00	1.206E+01	2.820E+01
1146	3.090E+01	0.000E+00	4.555E+00	1.317E+01	2.890E+01
1147	3.031E+01	0.000E+00	2.334E+00	1.399E+01	2.922E+01
1148	2.690E+01	0.000E+00	-1.464E-01	1.352E+01	2.698E+01
1149	2.371E+01	0.000E+00	-1.104E+00	1.241E+01	2.428E+01
1150	2.173E+01	0.000E+00	-7.426E-01	1.123E+01	2.211E+01
1151	3.011E+01	0.000E+00	6.843E-01	1.471E+01	2.977E+01
1152	2.751E+01	0.000E+00	-2.942E-02	1.377E+01	2.752E+01
1153	2.928E+01	0.000E+00	3.366E-01	1.447E+01	2.911E+01

Table B.7 (continued)

Page 15

SDRC I-DEAS 4.0: Pre/Post Processing
YOKES

18-FEB-89 10:26:05

Node	Max Prin	Mid Prin	Min Prin	Max Shear	Von Mises
1154	3.116E+01	0.000E+00	4.926E-01	1.533E+01	3.091E+01
	523	312	523	314	312
Maximum	3.621E+02	0.000E+00	1.323E+02	2.447E+02	7.527E+02
	312	312	312	382	382
Minimum	-4.275E+02	0.000E+00	-8.691E+02	1.627E+00	2.923E+00
Average	3.909E+01	0.000E+00	-1.388E+01	2.649E+01	5.451E+01

APPENDIX C

Finite Element Analysis of Revolute Joint Slide-Frame Center Plate

- I. Model loaded with -300 lb (-1334.4N) on nodes 90, 98 and 318
(displacement listing)
- II. Model loaded with 300 lb (1334.4N) on nodes 4, 10, and 288
(displacement listing)

Table C.1 Model loaded with -300 lb (-1334.4 N) on nodes 90, 96 and 318 (displacement listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:34:40

Group ID : PERMANENT GROUP1
Analysis Dataset : 3 - CASE 1,LOAD 1,DISPLACEMENTS
Report Type : Contour Units : IN
Dataset Type : Displacements Load Set : 1
Frame of Reference: Global Data Component: X-Component

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
2	3.160E-05	-2.427E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	3.639E-05	-2.731E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	4.237E-05	-3.991E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	2.933E-05	1.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	3.377E-05	7.388E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	3.433E-05	-2.507E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8	2.365E-05	1.661E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
9	2.830E-05	2.248E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
10	3.743E-05	-4.529E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
11	1.705E-05	-8.334E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
12	2.053E-05	-3.016E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
13	2.511E-05	-7.306E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
14	1.192E-05	-4.133E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
15	1.532E-05	-6.155E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
16	1.884E-05	-7.106E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
17	8.790E-06	-6.187E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
18	1.200E-05	-7.152E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
19	1.364E-05	-6.777E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
20	6.973E-06	-6.076E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
21	9.513E-06	-6.490E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
22	9.547E-06	-5.886E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
74	3.827E-05	-3.153E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
75	3.353E-05	-2.512E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
76	3.526E-05	-6.663E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
77	3.121E-05	1.422E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
78	3.112E-05	-1.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
79	2.545E-05	1.068E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
80	2.248E-05	-4.789E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
81	1.860E-05	-1.680E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
82	1.691E-05	-6.900E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
83	1.347E-05	-4.953E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
84	1.290E-05	-7.184E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
85	1.035E-05	-6.648E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
86	9.797E-06	-6.365E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
87	8.061E-06	-6.290E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
88	4.103E-07	-2.187E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
89	4.363E-07	-2.887E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
90	5.377E-07	-2.102E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
91	6.579E-07	6.409E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
92	7.354E-07	-1.512E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
93	7.110E-07	-6.452E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
94	1.388E-06	-1.698E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
95	1.648E-06	-5.479E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.1 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:34:40

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
96	1.269E-06	-1.400E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
97	2.561E-06	-1.002E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
98	3.160E-06	-1.438E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
99	2.311E-06	-2.345E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	4.038E-06	-2.558E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
101	5.122E-06	-2.944E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
102	3.966E-06	-3.485E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
103	5.549E-06	-4.529E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
104	7.280E-06	-4.843E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
105	6.348E-06	-4.729E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
106	4.545E-07	-2.654E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
107	4.304E-07	-2.568E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
108	7.087E-07	-3.490E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
109	7.147E-07	-1.957E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
110	1.506E-06	-8.766E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
111	1.557E-06	-3.410E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
112	2.892E-06	-1.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
113	2.896E-06	-1.243E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
114	4.822E-06	-3.137E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
115	4.566E-06	-2.817E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
116	7.156E-06	-4.818E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
117	6.326E-06	-4.772E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
173	2.919E-05	-1.346E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
174	2.622E-05	4.937E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
175	1.902E-05	6.429E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
176	1.143E-05	3.518E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
177	6.739E-06	-1.661E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
178	5.572E-06	-5.593E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
179	5.057E-06	-5.892E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
180	3.012E-05	-2.009E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
181	2.761E-05	3.012E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
182	2.140E-05	3.546E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
183	1.448E-05	9.635E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
184	9.481E-06	-3.054E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
185	6.938E-06	-5.818E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
186	5.655E-06	-5.921E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
205	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
210	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
211	2.577E-07	-1.200E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
215	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
216	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
217	1.303E-06	-1.892E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
218	2.639E-06	-3.293E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
223	1.402E-07	-6.182E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
224	3.517E-07	-1.744E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
225	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
226	2.948E-07	7.115E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
227	1.595E-07	4.615E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
228	4.014E-07	7.188E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.1 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:34:40

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
229	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
230	4.030E-07	1.208E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
231	2.177E-07	8.240E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
232	5.558E-07	1.176E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
233	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
234	5.826E-07	1.297E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
235	3.133E-07	9.721E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
236	8.028E-07	9.320E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
237	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
238	8.274E-07	6.259E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
239	4.472E-07	8.006E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
240	1.153E-06	-2.562E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
241	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
242	1.158E-06	-1.415E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
243	6.378E-07	-5.619E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
244	1.594E-06	-3.079E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
246	1.614E-06	-5.415E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
247	1.010E-06	-3.408E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
248	2.148E-06	-7.674E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
249	9.108E-07	-5.400E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
250	2.182E-06	-1.160E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
251	1.558E-06	-8.591E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
252	2.775E-06	-1.444E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
253	1.553E-06	-1.274E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
254	2.826E-06	-1.989E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
255	2.179E-06	-1.651E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
256	3.472E-06	-2.292E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
257	2.280E-06	-2.308E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
258	3.506E-06	-2.976E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
259	2.875E-06	-2.652E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
260	4.163E-06	-3.279E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
261	3.105E-06	-3.492E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
262	4.179E-06	-4.030E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
263	3.599E-06	-3.756E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
264	4.850E-06	-4.298E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
265	6.335E-06	-5.458E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
266	4.892E-06	-3.572E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
267	3.359E-06	-1.726E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
268	1.987E-06	-5.058E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
269	9.998E-07	6.160E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
270	4.913E-07	5.223E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
271	5.331E-06	-5.233E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
272	3.297E-06	-3.965E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
273	4.220E-06	-4.946E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
274	4.636E-06	-5.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
275	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
276	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
277	6.689E-07	-1.160E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
278	5.835E-07	-9.046E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.1 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:34:40

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
279	7.263E-07	-6.453E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
280	1.410E-06	-1.663E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
281	6.902E-07	-7.646E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
282	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
283	2.933E-05	-1.783E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
284	3.377E-05	-7.388E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
285	3.433E-05	2.507E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
286	2.365E-05	-1.661E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
287	2.830E-05	-2.248E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
288	3.743E-05	4.529E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
289	1.705E-05	8.334E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
290	2.053E-05	3.016E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
291	2.511E-05	7.306E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
292	1.192E-05	4.133E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
293	1.532E-05	6.155E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
294	1.884E-05	7.106E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
295	8.790E-06	6.187E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
296	1.200E-05	7.152E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
297	1.364E-05	6.777E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
298	6.973E-06	6.076E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
299	9.513E-06	6.490E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	9.547E-06	5.886E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
301	3.526E-05	6.663E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
302	3.121E-05	-1.422E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
303	3.112E-05	1.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
304	2.545E-05	-1.068E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
305	2.248E-05	4.789E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
306	1.860E-05	1.680E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
307	1.691E-05	6.900E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
308	1.347E-05	4.953E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
309	1.290E-05	7.184E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
310	1.035E-05	6.648E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
311	9.797E-06	6.365E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
312	8.061E-06	6.290E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
313	6.579E-07	-6.409E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
314	7.354E-07	1.512E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
315	7.110E-07	6.452E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
316	1.388E-06	1.698E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
317	1.648E-06	5.479E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
318	1.269E-06	1.400E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
319	2.561E-06	1.002E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
320	3.160E-06	1.438E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
321	2.311E-06	2.345E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
322	4.038E-06	2.558E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
323	5.122E-06	2.944E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
324	3.966E-06	3.485E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
325	5.549E-06	4.529E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
326	7.280E-06	4.843E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
327	6.348E-06	4.729E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.1 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:34:40

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
328	7.087E-07	3.490E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
329	7.147E-07	1.957E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
330	1.506E-06	8.766E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
331	1.557E-06	3.410E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
332	2.892E-06	1.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
333	2.896E-06	1.243E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
334	4.822E-06	3.137E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
335	4.566E-06	2.817E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
336	7.156E-06	4.818E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
337	6.326E-06	4.772E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
338	2.622E-05	-4.937E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
339	1.902E-05	-6.429E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
340	1.143E-05	-3.518E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
341	6.739E-06	1.661E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
342	5.572E-06	5.593E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
343	5.057E-06	5.892E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
344	2.761E-05	-3.012E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
345	2.140E-05	-3.546E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
346	1.448E-05	-9.635E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
347	9.481E-06	3.054E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
348	6.938E-06	5.818E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
349	5.655E-06	5.921E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
350	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
351	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
352	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
353	1.303E-06	1.892E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
354	2.639E-06	3.293E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
355	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
356	2.948E-07	-7.115E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
357	1.595E-07	-4.615E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
358	4.014E-07	-7.188E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
359	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
360	4.030E-07	-1.208E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
361	2.177E-07	-8.240E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
362	5.558E-07	-1.176E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
363	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
364	5.826E-07	-1.297E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
365	3.133E-07	-9.721E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
366	8.028E-07	-9.320E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
367	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
368	8.274E-07	-6.259E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
369	4.472E-07	-8.006E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
370	1.153E-06	2.562E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
371	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
372	1.158E-06	1.415E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
373	6.378E-07	5.619E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
374	1.594E-06	3.079E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
375	1.614E-06	5.415E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
376	1.010E-06	3.408E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.1 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:34:40

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
377	2.148E-06	7.674E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
378	9.108E-07	5.400E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
379	2.182E-06	1.160E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
380	1.558E-06	8.591E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
381	2.775E-06	1.444E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
382	1.553E-06	1.274E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
383	2.826E-06	1.989E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
384	2.179E-06	1.651E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
385	3.472E-06	2.292E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
386	2.280E-06	2.308E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
387	3.506E-06	2.976E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
388	2.875E-06	2.652E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
389	4.163E-06	3.279E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
390	3.105E-06	3.492E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
391	4.179E-06	4.030E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
392	3.599E-06	3.756E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
393	4.850E-06	4.298E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
394	6.335E-06	5.458E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
395	4.892E-06	3.572E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
396	3.359E-06	1.726E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	1.987E-06	5.058E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	9.998E-07	-6.160E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	4.913E-07	-5.223E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	5.331E-06	5.233E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
401	3.297E-06	3.965E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
402	4.220E-06	4.946E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
403	4.636E-06	5.061E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
404	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
405	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
406	6.689E-07	1.160E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	5.835E-07	9.046E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
408	7.263E-07	6.453E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
409	1.410E-06	1.663E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
410	6.902E-07	7.646E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
411	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	4	291	2	2	2	2
Maximum	4.237E-05	7.306E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	205	13	2	2	2	2
Minimum	0.000E+00	-7.306E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Average	7.717E-06	-1.763E-14	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.2 Model loaded with 300 lb (1334.4 N) on nodes 4, 10, and 288 (displacement listing).

Page 1

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:36:04

Group ID : PERMANENT GROUP1
Analysis Dataset : 4 - CASE 1,LOAD 2,DISPLACEMENTS
Report Type : Contour Units : IN
Dataset Type : Displacements Load Set : 2
Frame of Reference: Global Data Component: X-Component

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
2	-8.272E-07	-3.251E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	-8.155E-07	-3.420E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	-8.983E-07	-3.420E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	-9.553E-07	-1.585E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	-9.213E-07	-2.693E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	-9.469E-07	-4.701E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8	-1.285E-06	-4.514E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
9	-1.207E-06	-6.212E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
10	-1.088E-06	-9.438E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
11	-1.676E-06	-9.422E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
12	-1.591E-06	-1.096E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
13	-1.313E-06	-1.417E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
14	-1.961E-06	-1.578E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
15	-1.981E-06	-1.666E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
16	-1.615E-06	-1.872E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
17	-2.041E-06	-2.161E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
18	-2.315E-06	-2.252E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
19	-2.008E-06	-2.293E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
20	-1.886E-06	-2.405E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
21	-2.592E-06	-2.740E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
22	-2.543E-06	-2.666E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
74	-8.355E-07	-3.447E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
75	-8.208E-07	-3.361E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
76	-9.202E-07	-3.467E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
77	-9.393E-07	-2.105E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
78	-1.154E-06	-7.446E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
79	-1.251E-06	-5.313E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
80	-1.484E-06	-1.217E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
81	-1.645E-06	-1.015E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
82	-1.853E-06	-1.744E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
83	-1.993E-06	-1.620E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
84	-2.234E-06	-2.273E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
85	-2.201E-06	-2.208E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
86	-2.652E-06	-2.747E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
87	-2.237E-06	-2.606E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
88	-5.921E-06	-5.335E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
89	-1.158E-05	-1.504E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
90	-1.789E-05	2.868E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
91	-5.284E-06	8.168E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
92	-1.028E-05	5.093E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
93	-1.070E-05	-1.314E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
94	-3.794E-06	9.200E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
95	-8.234E-06	5.572E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.2 (continued)

Page 2

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:36:04

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
96	-1.615E-05	-2.204E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
97	-2.276E-06	3.627E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
98	-4.701E-06	-1.235E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
99	-7.222E-06	-4.054E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	-1.607E-06	-1.211E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
101	-3.292E-06	-2.782E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
102	-4.795E-06	-3.338E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
103	-1.659E-06	-2.099E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
104	-2.883E-06	-3.010E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
105	-3.348E-06	-3.041E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
106	-1.359E-05	7.921E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
107	-8.201E-06	-4.067E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
108	-1.173E-05	-3.814E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
109	-7.375E-06	8.016E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
110	-1.063E-05	6.430E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
111	-5.441E-06	8.021E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
112	-5.897E-06	-2.431E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
113	-3.300E-06	-3.950E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
114	-4.082E-06	-3.311E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
115	-2.279E-06	-1.815E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
116	-3.189E-06	-3.102E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
117	-2.164E-06	-2.541E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
173	-8.423E-07	-2.935E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
174	-1.040E-06	1.395E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
175	-1.533E-06	3.259E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
176	-2.064E-06	-4.447E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
177	-2.314E-06	-1.203E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
178	-2.063E-06	-1.947E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
179	-1.124E-06	-2.122E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
180	-8.299E-07	-3.093E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
181	-9.866E-07	-3.055E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
182	-1.382E-06	-2.460E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
183	-1.821E-06	-7.345E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
184	-2.067E-06	-1.426E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
185	-1.943E-06	-2.080E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
186	-1.565E-06	-2.236E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
205	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
210	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
211	-2.567E-06	-5.152E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
215	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
216	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
217	1.656E-07	-3.345E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
218	1.088E-07	-8.634E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
223	-1.210E-06	-3.400E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
224	-4.098E-06	-6.005E-19	0.000E+00	0.000E+00	0.000E+00	0.000E+00
225	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
226	-2.483E-06	3.116E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
227	-1.168E-06	1.758E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
228	-3.978E-06	4.057E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.2 (continued)

Page 3

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:36:04

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
229	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
230	-2.252E-06	5.615E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
231	-1.050E-06	3.204E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
232	-3.627E-06	7.348E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
233	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
234	-1.908E-06	7.082E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
235	-8.775E-07	4.068E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
236	-3.123E-06	8.990E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
237	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
238	-1.520E-06	7.215E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
239	-6.792E-07	4.218E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
240	-2.525E-06	8.931E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
241	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
242	-1.164E-06	6.015E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
243	-5.153E-07	4.048E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
244	-1.963E-06	6.597E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
246	-9.084E-07	3.446E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
247	-4.485E-07	3.031E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
248	-1.502E-06	2.733E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
249	-2.338E-07	1.098E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
250	-7.742E-07	-3.038E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
251	-4.428E-07	8.655E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
252	-1.231E-06	-2.480E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
253	-2.520E-07	-1.235E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
254	-7.535E-07	-4.978E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
255	-4.712E-07	-2.771E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
256	-1.123E-06	-7.938E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
257	-2.918E-07	-5.058E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
258	-8.295E-07	-9.975E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
259	-5.434E-07	-7.283E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
260	-1.165E-06	-1.321E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
261	-3.365E-07	-1.020E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
262	-9.863E-07	-1.479E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
263	-6.775E-07	-1.233E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
264	-1.304E-06	-1.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
265	-1.815E-06	-2.347E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
266	-1.616E-06	-1.731E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
267	-1.847E-06	-5.777E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
268	-2.957E-06	6.057E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
269	-4.589E-06	9.951E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
270	-5.744E-06	4.677E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
271	-1.427E-06	-2.063E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
272	-6.066E-08	-1.243E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
273	-5.100E-07	-1.743E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
274	-1.067E-06	-1.886E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
275	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
276	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
277	1.078E-07	-1.255E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
278	6.790E-08	-8.903E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.2 (continued)

Page 4

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:36:04

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
279	-9.356E-08	-2.181E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
280	-4.406E-08	-2.419E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
281	-2.102E-08	-5.561E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
282	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
283	-9.553E-07	1.585E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
284	-9.213E-07	2.693E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
285	-9.469E-07	4.701E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
286	-1.285E-06	4.514E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
287	-1.207E-06	6.212E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
288	-1.088E-06	9.438E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
289	-1.676E-06	9.422E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
290	-1.591E-06	1.096E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
291	-1.313E-06	1.417E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
292	-1.961E-06	1.578E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
293	-1.981E-06	1.666E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
294	-1.615E-06	1.872E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
295	-2.041E-06	2.161E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
296	-2.315E-06	2.252E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
297	-2.008E-06	2.293E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
298	-1.886E-06	2.405E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
299	-2.592E-06	2.740E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	-2.543E-06	2.666E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
301	-9.202E-07	3.467E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
302	-9.393E-07	2.105E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
303	-1.154E-06	7.446E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
304	-1.251E-06	5.313E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
305	-1.484E-06	1.217E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
306	-1.645E-06	1.015E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
307	-1.853E-06	1.744E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
308	-1.993E-06	1.620E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
309	-2.234E-06	2.273E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
310	-2.201E-06	2.208E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
311	-2.652E-06	2.747E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
312	-2.237E-06	2.606E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
313	-5.284E-06	-8.168E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
314	-1.028E-05	-5.093E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
315	-1.070E-05	1.314E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
316	-3.794E-06	-9.200E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
317	-8.234E-06	-5.572E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
318	-1.615E-05	2.204E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
319	-2.276E-06	-3.627E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
320	-4.701E-06	1.235E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
321	-7.222E-06	4.054E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
322	-1.607E-06	1.211E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
323	-3.292E-06	2.782E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
324	-4.795E-06	3.338E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
325	-1.659E-06	2.099E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
326	-2.883E-06	3.010E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
327	-3.348E-06	3.041E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.2 (continued)

Page 5

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:36:04

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
328	-1.173E-05	3.814E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
329	-7.375E-06	-8.016E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
330	-1.063E-05	-6.430E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
331	-5.441E-06	-8.021E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
332	-5.897E-06	2.431E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
333	-3.300E-06	3.950E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
334	-4.082E-06	3.311E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
335	-2.279E-06	1.815E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
336	-3.189E-06	3.102E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
337	-2.164E-06	2.541E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
338	-1.040E-06	-1.395E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
339	-1.533E-06	-3.259E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
340	-2.064E-06	4.447E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
341	-2.314E-06	1.203E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
342	-2.063E-06	1.947E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
343	-1.124E-06	2.122E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
344	-9.866E-07	3.055E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
345	-1.382E-06	2.460E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
346	-1.821E-06	7.345E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
347	-2.067E-06	1.426E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
348	-1.943E-06	2.080E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
349	-1.565E-06	2.236E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
350	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
351	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
352	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
353	1.656E-07	3.345E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
354	1.088E-07	8.634E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
355	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
356	-2.483E-06	-3.116E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
357	-1.168E-06	-1.758E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
358	-3.978E-06	-4.057E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
359	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
360	-2.252E-06	-5.615E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
361	-1.050E-06	-3.204E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
362	-3.627E-06	-7.348E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
363	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
364	-1.908E-06	-7.082E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
365	-8.775E-07	-4.068E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
366	-3.123E-06	-8.990E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
367	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
368	-1.520E-06	-7.215E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
369	-6.792E-07	-4.218E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
370	-2.525E-06	-8.931E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
371	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
372	-1.164E-06	-6.015E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
373	-5.153E-07	-4.048E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
374	-1.963E-06	-6.597E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
375	-9.084E-07	-3.446E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
376	-4.485E-07	-3.031E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Table C.2 (continued)

Page 6

SDRC I-DEAS 4.0: Pre/Post Processing
NEWPLATE4

18-FEB-89 10:36:04

Node	Displ-X	Displ-Y	Displ-Z	Rot-X	Rot-Y	Rot-Z
377	-1.502E-06	-2.733E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
378	-2.338E-07	-1.098E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
379	-7.742E-07	3.038E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
380	-4.428E-07	-8.655E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
381	-1.231E-06	2.480E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
382	-2.520E-07	1.235E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
383	-7.535E-07	4.978E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
384	-4.712E-07	2.771E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
385	-1.123E-06	7.938E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
386	-2.918E-07	5.058E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
387	-8.295E-07	9.975E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
388	-5.434E-07	7.283E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
389	-1.165E-06	1.321E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
390	-3.365E-07	1.020E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
391	-9.863E-07	1.479E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
392	-6.775E-07	1.233E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
393	-1.304E-06	1.771E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
394	-1.815E-06	2.347E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
395	-1.616E-06	1.731E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
396	-1.847E-06	5.777E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
397	-2.957E-06	-6.057E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
398	-4.589E-06	-9.951E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
399	-5.744E-06	-4.677E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	-1.427E-06	2.063E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
401	-6.066E-08	1.243E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
402	-5.100E-07	1.743E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
403	-1.067E-06	1.886E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
404	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
405	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
406	1.078E-07	1.255E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
407	6.790E-08	8.903E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
408	-9.356E-08	2.181E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
409	-4.406E-08	2.419E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
410	-2.102E-08	5.561E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
411	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	217	321	2	2	2	2
Maximum	1.656E-07	4.054E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	90	99	2	2	2	2
Minimum	-1.789E-05	-4.054E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Average	-2.282E-06	-3.273E-14	0.000E+00	0.000E+00	0.000E+00	0.000E+00

**The vita has been removed from
the scanned document**