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* * * * * * * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * * * * * * *
* *                                   * *
* *                                   * *
* *                                   * *
* *                                   * *
* *       N X   N a s t r a n         * *
* *                                   * *
* *         VERSION -   8.0           * *
* *                                   * *
* *          MAY 18, 2011             * *
* *                                   * *
```

```
                        kupplungversuch_sim1-solution_1
                 * *                             * *
                 * *Intel64 Family 6 Model 23 Steppi * *
                 * *                             * *
                 * *Intel(R) Core(TM)2 Quad CPU Q900 * *
                 * *                             * *
                 * *            Windows 7        * *
                 * *                             * *
                 * *       Compiled for X86-64   * *
                 * *                             * *
                 * * * * * * * * * * * * * * * * * * * *
                 * * * * * * * * * * * * * * * * * * * *
1

                       Welcome to NX Nastran
                       -------------------------


 This "news" information can be turned off by setting "news=no" in the runtime
 configuration (RC) file.  The "news" keyword can be set in the system RC file
 for global, or multi-user control, and in a local file for local control.
 Individual jobs can be controlled by setting news to yes or no on the command
 line.
1
FEBRUARY  21, 2013  NX NASTRAN  5/18/11   PAGE     1


0        N A S T R A N    F I L E    A N D    S Y S T E M    P A R A M E T E R
 E C H O
0




     NASTRAN BUFFSIZE=8193 $(C:/PROGRAM FILES/SIEMENS/NX
8.0/NXNASTRAN/CONF/NAST8.RCF
     NASTRAN DIAGA=128 DIAGB=0 $(C:/PROGRAM FILES/SIEMENS/NX
8.0/NXNASTRAN/CONF/NAST8
     NASTRAN SYSTEM(442)=1 $(COMMAND LINE[6])

     NASTRAN REAL=1069023232 $(PROGRAM DEFAULT)

     $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

     $*

     $*                      NX V8.0.0.25 TRANSLATOR

     $*                      FOR NX NASTRAN VERSION 8.0

     $*

     $*               FEM FILE:
     $*               SIM FILE:
     $*          ANALYSIS TYPE: STRUCTURAL

     $*          SOLUTION NAME: SOLUTION 1

     $*          SOLUTION TYPE: ADVNL 601,106

     $*

     $*     SOLVER INPUT FILE:
     $*          CREATION DATE: 21-FEB-2013

     $*          CREATION TIME: 08:30:28

     $*               HOSTNAME: CHRISTOPHLAPTOP
```

```
     $*      NASTRAN LICENSE: DESKTOP BUNDLE
     $*
     $*                UNITS: MM (MILLI-NEWTON)
     $*                      ... LENGTH : MM
     $*                      ... TIME   : SEC
     $*                      ... MASS   : KILOGRAM (KG)
     $*                      ... TEMPERATURE : DEG CELSIUS
     $*                      ... FORCE  : MILLI-NEWTON
     $*                      ... THERMAL ENERGY : MN-MM (MICRO-JOULE)
     $*
     $* WICHTIGER HINWEIS:
     $*     DIESER TITEL WURDE VON NX ERSTELLT, UND DIE |NDERUNG DIESER
INFORMATIONEN
     $*     BEEINTR|CHTIG U. U. DIE NACHBEARBEITUNG VON ERGEBNISSEN IN NX.
     $*
     $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
     $*
     $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
     $*
     $* FILE MANAGEMENT
     $*
     $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
     $*
     ASSIGN OUTPUT2='advnlin.op2',UNIT=21
     $*
     $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
     $*
     $* EXECUTIVE CONTROL
     $*
     $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
     $*
1
FEBRUARY  21, 2013  NX NASTRAN  5/18/11   PAGE     2

0        N A S T R A N    E X E C U T I V E    C O N T R O L    E C H O
0
```

```
     ID,NASTRAN,KUPPLUNGVERSUCH_SIM1-SOLUTION_1

     SOL 601,106

 solution 601 with 106
     CEND

1
FEBRUARY  21, 2013  NX NASTRAN  5/18/11   PAGE     3


0

0                                        C A S E    C O N T R O L    E C H O

                 COMMAND

                 COUNT

                  1      $*

                  2      $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

                  3      $*

                  4      $* CASE CONTROL

                  5      $*

                  6      $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

                  7      $*

                  8      ECHO = NONE

                  9      BCSET = 100

                 10      TEMP(INIT) = 200

                 11      TSTEP = 100

                 12      OUTPUT

                 13      BCRESULTS(TRACTION,FORCE,PLOT) = ALL

                 14      DISPLACEMENT(PLOT,REAL) = ALL

                 15      NLSTRESS(PLOT) = ALL

                 16      SPCFORCES(PLOT,REAL) = ALL

                 17      STRESS(PLOT,REAL,VONMISES,CENTER) = ALL

                 18      $*  NX STEP: SUBCASE - NONLINEAR IMPLICIT

                 19      SUBCASE 1

                 20      LABEL = SUBCASE - NONLINEAR IMPLICIT

                 21      DLOAD = 301

                 22      SPC = 6
```

```
                 23      $*

                 24      $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

                 25      $*

                 26      $* BULK DATA

                 27      $*

                 28      $*$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

                 29      $*

                 30      BEGIN BULK

0                            INPUT BULK DATA ENTRY COUNT =  101495
0                       TOTAL COUNT=    101456
1
FEBRUARY  21, 2013  NX NASTRAN  5/18/11   PAGE     4


0

0
0
0
```

M O D E L S U M M A R Y

```
                                  NUMBER OF GRID     POINTS   =    14022

                                  NUMBER OF CTETRA   ELEMENTS =    61989

 *** USER INFORMATION MESSAGE 4109 (OUTPX2)
     THE LABEL IS NXNADINA FOR FORTRAN UNIT 21
     (MAXIMUM SIZE OF FORTRAN RECORDS WRITTEN =        7 WORDS.)
     (NUMBER OF FORTRAN RECORDS WRITTEN =        8 RECORDS.)
     (TOTAL DATA WRITTEN FOR TAPE LABEL =       17 WORDS.)
 *** USER INFORMATION MESSAGE 4114 (OUTPX2)
     DATA BLOCK CASECC   WRITTEN ON FORTRAN UNIT 21, TRL =
                  101                 1                 0               600
             0                 0                 0
     (MAXIMUM POSSIBLE FORTRAN RECORD SIZE =    16386 WORDS.)
     (MAXIMUM SIZE OF FORTRAN RECORDS WRITTEN =      600 WORDS.)
     (NUMBER OF FORTRAN RECORDS WRITTEN =       19 RECORDS.)
     (TOTAL DATA WRITTEN FOR DATA BLOCK =      624 WORDS.)
 *** USER INFORMATION MESSAGE 4114 (OUTPX2)
     DATA BLOCK IBULK    WRITTEN ON FORTRAN UNIT 21, TRL =
                  102                 1                 0                 0
             0                 0                 0
     (MAXIMUM POSSIBLE FORTRAN RECORD SIZE =    16386 WORDS.)
     (MAXIMUM SIZE OF FORTRAN RECORDS WRITTEN =       20 WORDS.)
     (NUMBER OF FORTRAN RECORDS WRITTEN =   507289 RECORDS.)
     (TOTAL DATA WRITTEN FOR DATA BLOCK =  2434941 WORDS.)
1
FEBRUARY  21, 2013  NX NASTRAN  5/18/11   PAGE     5


0

0
```

```
 *** USER INFORMATION MESSAGE 4114 (OUTPX2)
     DATA BLOCK MPT      WRITTEN ON FORTRAN UNIT 21, TRL =
                  104             34816                 0                 0
            0                 0                 0
     (MAXIMUM POSSIBLE FORTRAN RECORD SIZE =    16386 WORDS.)
     (MAXIMUM SIZE OF FORTRAN RECORDS WRITTEN =       15 WORDS.)
     (NUMBER OF FORTRAN RECORDS WRITTEN =       29 RECORDS.)
     (TOTAL DATA WRITTEN FOR DATA BLOCK =       64 WORDS.)
 *** USER INFORMATION MESSAGE 4110 (OUTPX2)
                                 END-OF-DATA SIMULATION ON FORTRAN UNIT 21
                                 (MAXIMUM SIZE OF FORTRAN RECORDS WRITTEN =
1 WORDS.)
                                       (NUMBER OF FORTRAN RECORDS WRITTEN =
1 RECORDS.)
                                       (TOTAL DATA WRITTEN FOR EOF MARKER =
1 WORDS.)
 ^^^SOLUTION MONITOR FLAG =          1
 ^^^HICORE MEMORY =   26214404
 ^^^REAL MEMORY IN WORDS =  1069023232
 ^^^MEMORY PASSED TO ADINA IN MB           100
 ^^^OPTION FLAG GIVEN TO ADINA           1
 *** ISHELL PROGRAM 'NXNA' STARTED ***
 *** ADVANCED NONLINEAR ANALYSIS ***
 *** START SOL 601 ***
 *** TEMPORARY FILES tmpadvnlin.* WILL BE CREATED DURING ANALYSIS RUN ***
 *** PROCESS NASTRAN DATA ***
 *** ADNAST (04/06/11 16:53) ***
 *** Allocating 256 MB of memory ...


     *** Reading Nastran data ...


     ***WARNING: No element connection for node 1 directions 4, 5, 6
     ***WARNING: Similar warning suppressed for 13566 other nodes.
     ***WARNING: Nodal degrees of freedom without element
                 connection have been fixed for data input file.
     *** ADINA data input file tmpadvnlin.dat successfully created.

 *** EXECUTE SOLUTION ***
 PID=3280
 Checked out NX Nastran license feature nx_nas_advnlin_dsk.
 Initializing ... Stage 1
 Allocating 32.0 MB of memory ...


        ***************************************************************
        *                                                             *
        *    P R O G R A M   N X   N A S T R A N   S O L   6 0 1      *
        *                                                             *
        ***************************************************************


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```

```
      COMPUTER VERSION:   Windows 64-BIT VERSION


      NOTE: ELEMENT GROUP NUMBERS ARE EQUIVALENT TO
            ELEMENT PID NUMBERS

Initializing ... Stage 2
Initial ADINA memory allocation  -    32.0 mb  (or    4.0 mw)
Starting Solution Process ...


         ************************************************************
         *                                                          *
         *          THIS IS A NONLINEAR   STATIC SOLUTION           *
         *                                                          *
         ************************************************************

                     ***   MEMORY REALLOCATION   ***
  REQUESTED MEMORY FROM THE SYSTEM...=      32.0 mb    (       4.0 mw)

Re-allocating 36.6 MB of memory ...

*** W A R N I N G ***

CONTACT GROUP NUMBER=       100

SOME CONTACT NODES BELONG TO MORE THAN ONE CONTACTOR SURFACE.
THIS MAY RESULT IN OVER-CONSTRAINING (ESPECIALLY WITH FRICTION).
USE A COMPLIANCE FACTOR TO AVOID OVER-CONSTRAINING.

      1. Node=     13222 belongs to surface         1 and surface         7
      2. Node=     13168 belongs to surface         1 and surface         7
      3. Node=     13169 belongs to surface         1 and surface         7
      4. Node=     13201 belongs to surface         1 and surface         7
      5. Node=     13435 belongs to surface         1 and surface         7
      6. Node=     13196 belongs to surface         1 and surface         7
      7. Node=     13233 belongs to surface         1 and surface         7
      8. Node=     13234 belongs to surface         1 and surface         7
      9. Node=     13220 belongs to surface         1 and surface         7
     10. Node=     13438 belongs to surface         1 and surface         7
     ...
     41. A total of       31 similar messages suppressed for surface         1
     42. Node=      3915 belongs to surface         3 and surface         7
     43. Node=      3910 belongs to surface         3 and surface         7
     44. Node=      3681 belongs to surface         3 and surface         7
     45. Node=      4354 belongs to surface         3 and surface         7
     46. Node=      3678 belongs to surface         3 and surface         7
     47. Node=      3679 belongs to surface         3 and surface         7
     48. Node=      3680 belongs to surface         3 and surface         7
     49. Node=      3919 belongs to surface         3 and surface         7
     50. Node=      3920 belongs to surface         3 and surface         7
     51. Node=      4356 belongs to surface         3 and surface         7
     ...
     73. A total of       22 similar messages suppressed for surface         3

                     ***   MEMORY REALLOCATION   ***
  REQUESTED MEMORY FROM THE SYSTEM...=      64.0 mb    (       8.0 mw)

Re-allocating 68.7 MB of memory ...

                     ***   MEMORY REALLOCATION   ***
  REQUESTED MEMORY FROM THE SYSTEM...=      72.0 mb    (       9.0 mw)

Re-allocating 79.1 MB of memory ...

PROGRAM SOL601, build date: 04.11.2011    *** NO HEADING DEFINED ***
```

```
 S O L U T I O N   B Y   S P A R S E   S O L V E R


 TOTAL SYSTEM DATA

     TOTAL NUMBER OF EQUATIONS . . . . . . . . . .(NEQ)  =     53979

     NUMBER OF EQUATIONS EXCLUDING CONTACT . . . (NEQI)  =     40701

     NUMBER OF CONTACT EQUATIONS . . . . . . . . (NCEQ)  =     13278

     NUMBER OF NON-ZERO MATRIX TERMS. . . . . . . (NZC)  =   1023010

     MEMORY AVAILABLE FOR STORAGE (in megawords) . . . . =         9

     NUMBER OF PROCESSORS USED. . . . . . . . . (NPROC)  =         1

 Re-allocating 421.0 MB of memory ...


       M E M O R Y     R E Q U I R E M E N T   (in words)

  ALLOCATED MEMORY BY THE PROGRAM (MSTORE)              =            52630803
  ESTIMATED MEMORY FOR IN-CORE STORAGE .......(IOPTIM=3)=            52630703
  ESTIMATED MEMORY FOR K-MATRIX IN-CORE ONLY..(IOPTIM=2)=             9939575
  NOTE: WHEN SPARSE SOLVER IS USED - ADDITIONAL MEMORY
        IS REQUIRED - PLEASE SEE BELOW INFORMATION
        RELATED TO SPARSE SOLVERS.

  MAXIMUM REQUESTED (TEMPORARY) MEMORY (in words)...... =            52630703

     IN-CORE STORAGE FLAG . . . . . . . . . . . (IOPTIM)  =         3


                      ***   MEMORY REALLOCATION   ***
   REQUESTED MEMORY FROM THE SYSTEM...=     432.0 mb    (      54.0 mw)

 Re-allocating 437.5 MB of memory ...

 ******************************************************************************
 Allocated memory for storage of model data . . :     437.5 mb
 Memory used for storage of model data. . . . . :     437.5 mb

 ******************************************************************************

 Contact group        100 has       67 initially touching contactor nodes
                    *** WARNING NO. A3   ***
 Contact group     100 has     1395 initially penetrating contactor nodes
 Maximum penetration: 0.1098667E+02

 NOTE:
 Nodes can be initially in contact either by design or due to finite element
discretization or due to
 a modeling error. Therefore, please check the contact surface definitions
(especially in the case of
 a gross overlap). Also check the orientation of all contact surfaces
```

(especially the target surfaces).

```
 TIMING INFORMATION FOR THE SOLUTION OF EQUATIONS FOR THE FIRST STEP

 TIME AT ENTERING THE EQUATION SOLVER  . . =     13.18


 ***************************************************************************
 *                                                                         *
 *          <<<<< SPARSE SOLVER INFORMATION >>>>>                          *
 *                                                                         *
 * NUMBER OF NON-ZERO TERMS IN FACTORIZED MATRIX......=            19420831  *
 * MEMORY USED BY THE SOLVER (in words)...............=            20612184  *
 * TOTAL MEMORY USED BY THE PROGRAM (in words)........=            75296420  *
 *              << IN-CORE SOLUTION >>                                     *
 ***************************************************************************


 Memory used by the in-core sparse solver. . :     164.9 mb
 Total memory used by the program. . . . . . :     602.4 mb


 TIME AT THE END OF SOLUTION OF EQUATIONS  =     22.71


  STEP NUMBER =         1     ( TIME STEP = 0.20000E+00   SOLUTION TIME =
0.20000E+00 )
 DIAG ELEMENT (WITH MAX ABS VALUE) OF THE FACTORIZED MATRIX =    0.65174E+10
NODE =      9985     DOF = X-TRANSLATION
 DIAG ELEMENT (WITH MIN ABS VALUE) OF THE FACTORIZED MATRIX =    0.23726E+06
NODE =      9836     DOF = Y-TRANSLATION


 METHOD  STEP-NUMBER  SUBINCREMENT    TIME STEP    SOLUTION TIME   INITIAL
ENERGY
 *ATS*          1          1       0.200000E+00     0.200000E+00
0.473444E+05


 I N T E R M E D I A T E   P R I N T O U T   D U R I N G   E Q U I L I B R I U M
  I T E R A T I O N S


          OUT-OF-         NORM OF
CONVERGENCE RATIOS  CONVERGENCE RATIOS   OUT-OF-BALANCE LOAD
          BALANCE     OUT-OF-BALANCE        NORM OF INCREMENTAL         FOR
OUT-OF-BALANCE    FOR INCREMENTAL    VECTOR CALCULATION
          ENERGY      FORCE    MOMENT      DISP.      ROTN.    CFORCE
ENERGY     FORCE    DISP.     CFORCE      BETA      RATIO
                    NODE-DOF   NODE-DOF   NODE-DOF   NODE-DOF   CFNORM
     MOMENT   ROTN.                (ITERNS)
                   MAX VALUE  MAX VALUE  MAX VALUE  MAX VALUE

COMPARE WITH        COMPARE WITH
                                                                          ETOL
      RTOL     DTOL      RCTOL

1.00E-03 (NOT USED)(NOT USED) 5.00E-02

 ITE=  0  4.73E+04  8.00E+04   0.00E+00   6.44E+01   0.00E+00  4.63E+09
1.00E+00  1.00E+00  8.03E+00  4.63E+11
                     12347-Z        0-F    14006-X        0-F  0.00E+00
    0.00E+00  0.00E+00
                    3.10E+03   0.00E+00  -1.20E+00   0.00E+00
```

```
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1564E+00

 ITE=  1  1.34E+09  2.86E+09   0.00E+00   1.01E+02   0.00E+00  7.76E+08
2.83E+00  3.57E+04  1.00E+00  1.38E+00  1.00E+00  1.75E+05
                     10002-X        0-F    13613-Y        0-F  5.63E+08
    0.00E+00  0.00E+00               ( 1)
                    5.22E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1668E+00

 ITE=  2 -7.82E+08  2.70E+09   0.00E+00   6.48E+00   0.00E+00  1.18E+09
-1.65E+00  3.37E+04  6.43E-02  9.42E-01  1.00E+00 -3.12E-01
                     14006-X        0-F    13936-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                    5.64E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4462E-01

 ITE=  3 -7.17E+07  2.47E+09   0.00E+00   3.61E+00   0.00E+00  8.96E+08
-1.51E-01  3.09E+04  3.58E-02  7.14E-01  1.00E+00  1.13E+00
                     14006-X        0-F    14005-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                    5.45E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2372E-01

 ITE=  4 -2.92E+08  2.33E+09   0.00E+00   2.46E+00   0.00E+00  8.59E+08
-6.18E-01  2.92E+04  2.44E-02  6.08E-01  1.00E+00 -5.82E+00
                     14006-X        0-F    14004-X        0-F  1.41E+09
    0.00E+00  0.00E+00               ( 1)
                    5.12E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1810E-01

 ITE=  5  6.56E+08  2.34E+09   0.00E+00   2.38E+00   0.00E+00  6.80E+08
1.39E+00  2.93E+04  2.36E-02  4.40E-01  1.00E+00  3.22E-02
                     13930-X        0-F    13935-X        0-F  1.55E+09
    0.00E+00  0.00E+00               ( 1)
                    5.08E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2612E-01

 ITE=  6  5.11E+08  2.26E+09   0.00E+00   2.86E+00   0.00E+00  1.11E+09
1.08E+00  2.83E+04  2.84E-02  6.35E-01  1.00E+00  5.78E-01
                      9958-X        0-F    13933-X        0-F  1.75E+09
    0.00E+00  0.00E+00               ( 1)
                    4.92E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.3350E-01

 ITE=  7  3.68E+08  2.16E+09   0.00E+00   6.93E+00   0.00E+00  1.23E+09
7.78E-01  2.70E+04  6.87E-02  7.36E-01  1.00E+00  9.57E-01
                     14009-X        0-F    13933-X        0-F  1.67E+09
    0.00E+00  0.00E+00               ( 1)
                    4.47E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1083E+00

 ITE=  8  1.92E+09  2.15E+09   0.00E+00   6.82E+00   0.00E+00  1.23E+09
4.06E+00  2.69E+04  6.77E-02  6.64E-01  1.00E+00  2.77E+00
                     14002-X        0-F    14009-X        0-F  1.86E+09
    0.00E+00  0.00E+00               ( 1)
                   -5.18E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.9234E-01

 ITE=  9 -1.30E+08  1.82E+09   0.00E+00   4.33E+00   0.00E+00  1.48E+09
-2.74E-01  2.27E+04  4.30E-02  1.06E+00  1.00E+00  3.89E-02
                     13939-X        0-F    14010-X        0-F  1.39E+09
    0.00E+00  0.00E+00               ( 1)
                    4.89E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4182E-01

 ITE= 10  1.34E+09  1.95E+09   0.00E+00   5.93E+00   0.00E+00  1.42E+09
2.83E+00  2.43E+04  5.88E-02  8.37E-01  1.00E+00 -4.35E+00
                     14002-X        0-F    14002-X        0-F  1.70E+09
```

```
    0.00E+00  0.00E+00              ( 1)
                   -5.36E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.7958E-01

 ITE= 11  4.08E+08  1.72E+09   0.00E+00   3.48E+00   0.00E+00  1.15E+09
8.62E-01  2.16E+04  3.45E-02  7.33E-01  1.00E+00  4.62E-01
                     13939-X        0-F    13939-X        0-F  1.57E+09
    0.00E+00  0.00E+00              ( 1)
                    4.07E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.3877E-01

 ITE= 12  7.63E+08  1.57E+09   0.00E+00   5.35E+00   0.00E+00  8.70E+08
1.61E+00  1.96E+04  5.31E-02  6.84E-01  1.00E+00  1.76E-01
                      9965-X        0-F    13939-X        0-F  1.27E+09
    0.00E+00  0.00E+00              ( 1)
                   -3.66E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1069E+00

 ITE= 13  3.62E+08  1.48E+09   0.00E+00   2.38E+00   0.00E+00  7.60E+08
7.65E-01  1.85E+04  2.36E-02  6.04E-01  1.00E+00  9.47E-01
                     13939-X        0-F    14009-X        0-F  1.26E+09
    0.00E+00  0.00E+00              ( 1)
                    3.54E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.3656E-01

 ITE= 14  3.58E+08  1.40E+09   0.00E+00   4.81E+00   0.00E+00  6.23E+08
7.57E-01  1.76E+04  4.77E-02  5.31E-01  1.00E+00  9.49E-01
                     13939-X        0-F    14006-Z        0-F  1.18E+09
    0.00E+00  0.00E+00              ( 1)
                    3.44E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.6597E-01

 ITE= 15  4.82E+08  1.25E+09   0.00E+00   6.82E+00   0.00E+00  7.78E+08
1.02E+00  1.57E+04  6.77E-02  7.42E-01  1.00E+00  1.05E-01
                      9965-X        0-F    14010-X        0-F  1.05E+09
    0.00E+00  0.00E+00              ( 1)
                   -2.79E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1041E+00


 RESTART FOR AUTOMATIC-TIME-STEPPING AFTER ITERATION   15


      ITERATION LIMIT HAS BEEN REACHED, ITEMAX =   15

      DISPLACEMENTS WERE SCALED DOWN DUE TO LIMITING DISPLACEMENT FEATURE


      REFERENCE CONVERGENCE NORMS USED:  DISPLACEMENT = 1.008E+02,  FORCE =
7.996E+04


 I T E R A T I O N   T I M E   L O G

 SOLUTION TIME (SECONDS)   . . . . . . . . . . . . . . . . . . . . . =     178.26

 PERCENT OF TIME SPENT IN LINE SEARCHING . . . . . . . . . . . . . . . . =   0.00
 PERCENT OF TIME SPENT IN LOAD VECTOR/STIFFNESS MATRIX CALCULATION . =  14.09
 PERCENT OF TIME SPENT IN SOLUTION OF EQUATIONS  . . . . . . . . . . =  85.91


 METHOD  STEP-NUMBER  SUBINCREMENT    TIME STEP    SOLUTION TIME   INITIAL
ENERGY
 *ATS*          1          1       0.100000E+00     0.100000E+00
0.239980E+05
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 I N T E R M E D I A T E   P R I N T O U T   D U R I N G   E Q U I L I B R I U M
  I T E R A T I O N S


          OUT-OF-         NORM OF
CONVERGENCE RATIOS  CONVERGENCE RATIOS   OUT-OF-BALANCE LOAD
          BALANCE     OUT-OF-BALANCE        NORM OF INCREMENTAL         FOR
OUT-OF-BALANCE    FOR INCREMENTAL    VECTOR CALCULATION
          ENERGY      FORCE    MOMENT      DISP.      ROTN.    CFORCE
ENERGY     FORCE    DISP.     CFORCE      BETA      RATIO
                   NODE-DOF   NODE-DOF   NODE-DOF   NODE-DOF   CFNORM
     MOMENT   ROTN.                (ITERNS)
                  MAX VALUE  MAX VALUE  MAX VALUE  MAX VALUE

COMPARE WITH        COMPARE WITH
                                                                                ETOL
      RTOL     DTOL      RCTOL

1.00E-03 (NOT USED)(NOT USED) 5.00E-02

 ITE=  0  2.40E+04  4.00E+04   0.00E+00   6.44E+01   0.00E+00  4.63E+09
1.00E+00  1.00E+00  8.03E+00  4.63E+11
                     12347-Z        0-F    14006-X        0-F  0.00E+00
    0.00E+00  0.00E+00
                   1.55E+03   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1564E+00

 ITE=  1  1.34E+09  2.86E+09   0.00E+00   1.01E+02   0.00E+00  7.76E+08
1.00E+00  7.15E+04  1.00E+00  1.38E+00  1.00E+00  3.46E+05
                     10002-X        0-F    13613-Y        0-F  5.63E+08
    0.00E+00  0.00E+00               ( 1)
                   5.22E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1669E+00

 ITE=  2 -7.88E+08  2.70E+09   0.00E+00   6.46E+00   0.00E+00  1.18E+09
-5.88E-01  6.75E+04  6.41E-02  9.42E-01  1.00E+00 -3.11E-01
                     14006-X        0-F    13936-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                   5.64E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4530E-01

 ITE=  3 -4.34E+07  2.47E+09   0.00E+00   3.66E+00   0.00E+00  8.96E+08
-3.24E-02  6.18E+04  3.63E-02  7.15E-01  1.00E+00  1.12E+00
                     14006-X        0-F    14005-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                   5.44E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2294E-01

 ITE=  4 -2.94E+08  2.33E+09   0.00E+00   2.27E+00   0.00E+00  8.59E+08
-2.20E-01  5.84E+04  2.25E-02  6.08E-01  1.00E+00 -1.04E+01
                     14006-X        0-F    14006-X        0-F  1.41E+09
    0.00E+00  0.00E+00               ( 1)
                   5.14E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1660E-01

 ITE=  5  1.22E+09  2.34E+09   0.00E+00   5.19E+00   0.00E+00  6.80E+08
9.09E-01  5.86E+04  5.15E-02  4.40E-01  1.00E+00  1.06E-01
                     13930-X        0-F    13935-X        0-F  1.55E+09
    0.00E+00  0.00E+00               ( 1)
                   5.10E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.7821E-01

 ITE=  6  1.88E+09  2.34E+09   0.00E+00   6.24E+00   0.00E+00  1.43E+09
1.41E+00  5.85E+04  6.19E-02  7.46E-01  1.00E+00  7.26E-01
                     14002-X        0-F    13933-X        0-F  1.92E+09
    0.00E+00  0.00E+00               ( 1)
                  -5.62E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.9558E-01
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 ITE=  7  6.04E+08  1.98E+09   0.00E+00   4.63E+00   0.00E+00  1.19E+09
4.51E-01  4.96E+04  4.59E-02  7.44E-01  1.00E+00  3.88E-01
                     14002-X        0-F    14009-X        0-F  1.59E+09
    0.00E+00  0.00E+00               ( 1)
                   -5.14E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5980E-01

 ITE=  8  1.04E+09  2.02E+09   0.00E+00   3.81E+00   0.00E+00  9.00E+08
7.75E-01  5.05E+04  3.78E-02  5.18E-01  1.00E+00  1.55E+00
                     14002-X        0-F    13939-X        0-F  1.74E+09
    0.00E+00  0.00E+00               ( 1)
                   -6.44E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5646E-01

 ITE=  9  5.91E+08  1.64E+09   0.00E+00   3.32E+00   0.00E+00  9.99E+08
4.41E-01  4.09E+04  3.29E-02  7.05E-01  1.00E+00  1.99E-01
                     14009-X        0-F    13940-X        0-F  1.42E+09
    0.00E+00  0.00E+00               ( 1)
                    2.87E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.3698E-01

 ITE= 10  4.21E+08  1.58E+09   0.00E+00   2.74E+00   0.00E+00  8.63E+07
3.14E-01  3.95E+04  2.72E-02  6.28E-02  1.00E+00  8.70E-01
                      9938-Z        0-F    13940-X        0-F  1.37E+09
    0.00E+00  0.00E+00               ( 1)
                    2.70E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.3461E-01

 ITE= 11  4.58E+08  1.55E+09   0.00E+00   3.44E+00   0.00E+00  2.25E+08
3.42E-01  3.87E+04  3.41E-02  1.67E-01  1.00E+00  9.89E-01
                      9938-Z        0-F    13940-X        0-F  1.35E+09
    0.00E+00  0.00E+00               ( 1)
                    2.67E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.8033E-01

 ITE= 12  3.88E+08  1.53E+09   0.00E+00   2.75E+00   0.00E+00  3.70E+08
2.90E-01  3.84E+04  2.73E-02  2.82E-01  1.00E+00  1.20E+00
                      9962-X        0-F    14006-X        0-F  1.31E+09
    0.00E+00  0.00E+00               ( 1)
                   -3.79E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5737E-01

 ITE= 13  9.30E+08  1.56E+09   0.00E+00   5.27E+00   0.00E+00  6.64E+08
6.94E-01  3.89E+04  5.23E-02  5.11E-01  1.00E+00  1.33E+00
                      9962-X        0-F    14006-Z        0-F  1.30E+09
    0.00E+00  0.00E+00               ( 1)
                   -3.53E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1212E+00

 ITE= 14  5.36E+07  1.29E+09   0.00E+00   3.59E+00   0.00E+00  7.09E+08
4.00E-02  3.22E+04  3.57E-02  7.25E-01  1.00E+00  8.44E-02
                      9962-X        0-F    14007-X        0-F  9.78E+08
    0.00E+00  0.00E+00               ( 1)
                   -3.02E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.7422E-01

 ITE= 15  3.87E+08  1.18E+09   0.00E+00   6.97E+00   0.00E+00  2.73E+08
2.89E-01  2.96E+04  6.91E-02  3.05E-01  1.00E+00  9.86E-01
                      9962-X        0-F     9994-X        0-F  8.95E+08
    0.00E+00  0.00E+00               ( 1)
                   -2.76E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1544E+00


 RESTART FOR AUTOMATIC-TIME-STEPPING AFTER ITERATION   15
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      ITERATION LIMIT HAS BEEN REACHED, ITEMAX =   15

      DISPLACEMENTS WERE SCALED DOWN DUE TO LIMITING DISPLACEMENT FEATURE


      REFERENCE CONVERGENCE NORMS USED:  DISPLACEMENT = 1.008E+02,  FORCE =
3.998E+04


 I T E R A T I O N   T I M E   L O G

 SOLUTION TIME (SECONDS)   . . . . . . . . . . . . . . . . . . . . =     180.70

 PERCENT OF TIME SPENT IN LINE SEARCHING . . . . . . . . . . . . . . . . =   0.00
 PERCENT OF TIME SPENT IN LOAD VECTOR/STIFFNESS MATRIX CALCULATION . =  14.39
 PERCENT OF TIME SPENT IN SOLUTION OF EQUATIONS  . . . . . . . . . . =  85.61



 METHOD  STEP-NUMBER  SUBINCREMENT    TIME STEP    SOLUTION TIME   INITIAL
ENERGY
 *ATS*          1          1       0.500000E-01     0.500000E-01
0.120804E+05


 I N T E R M E D I A T E   P R I N T O U T   D U R I N G   E Q U I L I B R I U M
  I T E R A T I O N S


          OUT-OF-         NORM OF
CONVERGENCE RATIOS  CONVERGENCE RATIOS   OUT-OF-BALANCE LOAD
          BALANCE     OUT-OF-BALANCE        NORM OF INCREMENTAL         FOR
OUT-OF-BALANCE    FOR INCREMENTAL    VECTOR CALCULATION
          ENERGY      FORCE    MOMENT      DISP.      ROTN.    CFORCE
ENERGY     FORCE    DISP.     CFORCE      BETA      RATIO
                    NODE-DOF   NODE-DOF   NODE-DOF   NODE-DOF   CFNORM
     MOMENT   ROTN.               (ITERNS)
                   MAX VALUE  MAX VALUE  MAX VALUE  MAX VALUE

COMPARE WITH        COMPARE WITH
                                                                          ETOL
      RTOL     DTOL      RCTOL

1.00E-03 (NOT USED)(NOT USED) 5.00E-02

 ITE=  0  1.21E+04  2.00E+04   0.00E+00   6.44E+01   0.00E+00  4.63E+09
1.00E+00  1.00E+00  8.03E+00  4.63E+11
                     12347-Z        0-F    14006-X        0-F  0.00E+00
    0.00E+00  0.00E+00
                    7.74E+02   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1564E+00

 ITE=  1  1.34E+09  2.86E+09   0.00E+00   1.01E+02   0.00E+00  7.76E+08
1.00E+00  1.43E+05  1.00E+00  1.38E+00  1.00E+00  6.87E+05
                     10002-X        0-F    13613-Y        0-F  5.63E+08
    0.00E+00  0.00E+00               ( 1)
                    5.22E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1669E+00

 ITE=  2 -7.92E+08  2.70E+09   0.00E+00   6.44E+00   0.00E+00  1.18E+09
-5.91E-01  1.35E+05  6.39E-02  9.42E-01  1.00E+00 -3.11E-01
                     14006-X        0-F    13936-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                    5.64E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4568E-01

 ITE=  3 -3.19E+07  2.47E+09   0.00E+00   3.68E+00   0.00E+00  8.96E+08
-2.38E-02  1.24E+05  3.65E-02  7.15E-01  1.00E+00  1.12E+00
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                    14006-X        0-F    14005-X        0-F  1.25E+09
   0.00E+00  0.00E+00              ( 1)
                   5.43E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2232E-01

 ITE=  4 -3.02E+08  2.33E+09   0.00E+00   2.18E+00   0.00E+00  8.59E+08
-2.25E-01  1.17E+05  2.17E-02  6.09E-01  1.00E+00 -1.46E+01
                    14006-X        0-F    14006-X        0-F  1.41E+09
   0.00E+00  0.00E+00              ( 1)
                   5.16E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1535E-01

 ITE=  5  1.81E+09  2.35E+09   0.00E+00   8.45E+00   0.00E+00  6.81E+08
1.35E+00  1.18E+05  8.39E-02  4.40E-01  1.00E+00  1.63E-01
                    13930-X        0-F    13935-X        0-F  1.55E+09
   0.00E+00  0.00E+00              ( 1)
                   5.11E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1316E+00

 ITE=  6  2.20E+09  2.24E+09   0.00E+00   6.67E+00   0.00E+00  1.31E+09
1.64E+00  1.12E+05  6.61E-02  7.16E-01  1.00E+00  1.17E+00
                    13939-X        0-F    13933-X        0-F  1.84E+09
   0.00E+00  0.00E+00              ( 1)
                   5.15E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1136E+00

 ITE=  7  3.17E+08  1.76E+09   0.00E+00   4.14E+00   0.00E+00  1.45E+09
2.37E-01  8.81E+04  4.11E-02  9.50E-01  1.00E+00  2.46E-01
                     9965-X        0-F    13940-X        0-F  1.53E+09
   0.00E+00  0.00E+00              ( 1)
                  -3.51E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.3721E-01

 ITE=  8  1.03E+09  1.78E+09   0.00E+00   4.90E+00   0.00E+00  7.41E+08
7.68E-01  8.90E+04  4.86E-02  4.79E-01  1.00E+00  1.51E+00
                     9965-X        0-F    13939-X        0-F  1.55E+09
   0.00E+00  0.00E+00              ( 1)
                  -4.16E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1032E+00

 ITE=  9  2.58E+08  1.57E+09   0.00E+00   3.73E+00   0.00E+00  5.38E+08
1.92E-01  7.85E+04  3.70E-02  3.79E-01  1.00E+00  4.60E-01
                     9965-X        0-F    13930-Z        0-F  1.42E+09
   0.00E+00  0.00E+00              ( 1)
                  -3.59E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.6261E-01

 ITE= 10  8.29E+08  1.60E+09   0.00E+00   6.11E+00   0.00E+00  5.29E+08
6.19E-01  7.99E+04  6.06E-02  3.67E-01  1.00E+00  1.15E+00
                     9965-X        0-F    13939-X        0-F  1.44E+09
   0.00E+00  0.00E+00              ( 1)
                  -3.29E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1041E+00

 ITE= 11 -5.12E+07  1.37E+09   0.00E+00   2.19E+00   0.00E+00  7.39E+08
-3.82E-02  6.87E+04  2.17E-02  6.35E-01  1.00E+00  7.30E-02
                     9965-X        0-F    14007-X        0-F  1.16E+09
   0.00E+00  0.00E+00              ( 1)
                  -2.93E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1257E-01

 ITE= 12 -4.43E+07  1.36E+09   0.00E+00   2.24E+00   0.00E+00  7.86E+07
-3.30E-02  6.79E+04  2.22E-02  6.82E-02  1.00E+00  7.24E-01
                     9965-X        0-F    14009-X        0-F  1.15E+09
   0.00E+00  0.00E+00              ( 1)
                  -2.88E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1800E-01
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 ITE= 13 -5.68E+07  1.30E+09   0.00E+00   1.93E+00   0.00E+00  1.98E+08
-4.24E-02  6.52E+04  1.91E-02  1.78E-01  1.00E+00  5.29E-01
                      9965-X        0-F    14009-X        0-F  1.12E+09
    0.00E+00  0.00E+00              ( 1)
                  -2.81E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1747E-01

 ITE= 14  2.80E+08  1.27E+09   0.00E+00   4.73E+00   0.00E+00  3.48E+08
2.09E-01  6.37E+04  4.69E-02  3.33E-01  1.00E+00  1.19E+00
                      9965-X        0-F    14009-X        0-F  1.05E+09
    0.00E+00  0.00E+00              ( 1)
                  -2.74E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.7225E-01

 ITE= 15 -2.75E+07  1.19E+09   0.00E+00   3.43E+00   0.00E+00  1.04E+08
-2.05E-02  5.97E+04  3.40E-02  1.07E-01  1.00E+00  9.17E-01
                      9965-X        0-F    10008-X        0-F  9.79E+08
    0.00E+00  0.00E+00              ( 1)
                  -2.50E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5727E-01


 RESTART FOR AUTOMATIC-TIME-STEPPING AFTER ITERATION   15


      ITERATION LIMIT HAS BEEN REACHED, ITEMAX =   15

      DISPLACEMENTS WERE SCALED DOWN DUE TO LIMITING DISPLACEMENT FEATURE


      REFERENCE CONVERGENCE NORMS USED:  DISPLACEMENT = 1.008E+02,  FORCE =
1.999E+04


 I T E R A T I O N   T I M E   L O G

 SOLUTION TIME (SECONDS)   . . . . . . . . . . . . . . . . . . . . . =     181.25

 PERCENT OF TIME SPENT IN LINE SEARCHING . . . . . . . . . . . . . . . . =   0.00
 PERCENT OF TIME SPENT IN LOAD VECTOR/STIFFNESS MATRIX CALCULATION . =  14.16
 PERCENT OF TIME SPENT IN SOLUTION OF EQUATIONS  . . . . . . . . . . =  85.84


 METHOD  STEP-NUMBER  SUBINCREMENT    TIME STEP    SOLUTION TIME   INITIAL
ENERGY
 *ATS*          1          1       0.250000E-01     0.250000E-01
0.606058E+04


 I N T E R M E D I A T E   P R I N T O U T   D U R I N G   E Q U I L I B R I U M
  I T E R A T I O N S


          OUT-OF-         NORM OF
CONVERGENCE RATIOS  CONVERGENCE RATIOS   OUT-OF-BALANCE LOAD
          BALANCE     OUT-OF-BALANCE        NORM OF INCREMENTAL         FOR
OUT-OF-BALANCE    FOR INCREMENTAL    VECTOR CALCULATION
          ENERGY      FORCE    MOMENT      DISP.      ROTN.    CFORCE
ENERGY     FORCE    DISP.     CFORCE      BETA      RATIO
                   NODE-DOF   NODE-DOF   NODE-DOF   NODE-DOF   CFNORM
     MOMENT   ROTN.                (ITERNS)
                  MAX VALUE  MAX VALUE  MAX VALUE  MAX VALUE

COMPARE WITH        COMPARE WITH
                                                                          ETOL
      RTOL     DTOL      RCTOL
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1.00E-03 (NOT USED)(NOT USED) 5.00E-02

 ITE=  0  6.06E+03  1.00E+04   0.00E+00   6.44E+01   0.00E+00  4.63E+09
1.00E+00  1.00E+00  8.03E+00  4.63E+11
                     12347-Z        0-F    14006-X        0-F  0.00E+00
    0.00E+00  0.00E+00
                   3.87E+02   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1564E+00

 ITE=  1  1.34E+09  2.86E+09   0.00E+00   1.01E+02   0.00E+00  7.76E+08
1.00E+00  2.86E+05  1.00E+00  1.38E+00  1.00E+00  1.37E+06
                     10002-X        0-F    13613-Y        0-F  5.63E+08
    0.00E+00  0.00E+00               ( 1)
                   5.22E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1670E+00

 ITE=  2 -7.94E+08  2.70E+09   0.00E+00   6.44E+00   0.00E+00  1.18E+09
-5.92E-01  2.70E+05  6.39E-02  9.42E-01  1.00E+00 -3.11E-01
                     14006-X        0-F    13936-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                   5.64E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4590E-01

 ITE=  3 -2.87E+07  2.47E+09   0.00E+00   3.69E+00   0.00E+00  8.96E+08
-2.14E-02  2.47E+05  3.66E-02  7.15E-01  1.00E+00  1.11E+00
                     14006-X        0-F    14005-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                   5.43E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2218E-01

 ITE=  4 -3.05E+08  2.33E+09   0.00E+00   2.16E+00   0.00E+00  8.59E+08
-2.28E-01  2.34E+05  2.14E-02  6.09E-01  1.00E+00 -1.63E+01
                     14006-X        0-F    14006-X        0-F  1.41E+09
    0.00E+00  0.00E+00               ( 1)
                   5.17E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1492E-01

 ITE=  5  1.92E+09  2.35E+09   0.00E+00   9.10E+00   0.00E+00  6.81E+08
1.43E+00  2.35E+05  9.03E-02  4.40E-01  1.00E+00  1.83E-01
                     13930-X        0-F    13935-X        0-F  1.55E+09
    0.00E+00  0.00E+00               ( 1)
                   5.12E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1418E+00

 ITE=  6  2.29E+09  2.22E+09   0.00E+00   6.93E+00   0.00E+00  1.30E+09
1.71E+00  2.22E+05  6.88E-02  7.17E-01  1.00E+00  1.11E+00
                     13939-X        0-F    14006-X        0-F  1.82E+09
    0.00E+00  0.00E+00               ( 1)
                   5.06E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1165E+00

 ITE=  7 -1.03E+08  1.74E+09   0.00E+00   2.80E+00   0.00E+00  1.44E+09
-7.67E-02  1.74E+05  2.78E-02  9.53E-01  1.00E+00  2.61E-01
                      9965-X        0-F    13940-X        0-F  1.51E+09
    0.00E+00  0.00E+00               ( 1)
                  -3.60E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1205E-01

 ITE=  8  1.03E+09  1.82E+09   0.00E+00   5.36E+00   0.00E+00  5.77E+08
7.67E-01  1.82E+05  5.31E-02  3.75E-01  1.00E+00 -1.33E+00
                     13939-X        0-F     9958-X        0-F  1.54E+09
    0.00E+00  0.00E+00               ( 1)
                   4.45E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.8651E-01

 ITE=  9  5.76E+08  1.72E+09   0.00E+00   5.38E+00   0.00E+00  5.25E+08
4.30E-01  1.72E+05  5.34E-02  3.48E-01  1.00E+00  6.23E-01
                     13939-X        0-F    13939-X        0-F  1.51E+09
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    0.00E+00  0.00E+00                ( 1)
                     4.31E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1044E+00

 ITE= 10  5.16E+08  1.58E+09   0.00E+00   4.56E+00   0.00E+00  7.06E+08
3.85E-01  1.59E+05  4.53E-02  4.97E-01  1.00E+00  1.23E+00
                      9965-X        0-F    13935-X        0-F  1.42E+09
    0.00E+00  0.00E+00                ( 1)
                    -3.33E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.6474E-01

 ITE= 11  2.23E+08  1.41E+09   0.00E+00   1.73E+00   0.00E+00  6.50E+08
1.66E-01  1.41E+05  1.71E-02  5.25E-01  1.00E+00  9.30E-01
                      9965-X        0-F    14009-X        0-F  1.24E+09
    0.00E+00  0.00E+00                ( 1)
                    -3.04E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1771E-01

 ITE= 12  8.39E+07  1.39E+09   0.00E+00   3.17E+00   0.00E+00  1.11E+08
6.26E-02  1.39E+05  3.14E-02  9.08E-02  1.00E+00  1.11E+00
                      9965-X        0-F    14009-X        0-F  1.22E+09
    0.00E+00  0.00E+00                ( 1)
                    -2.97E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5375E-01

 ITE= 13  3.53E+08  1.31E+09   0.00E+00   6.01E+00   0.00E+00  6.79E+08
2.63E-01  1.31E+05  5.96E-02  6.02E-01  1.00E+00  2.18E+00
                      9965-X        0-F    13976-X        0-F  1.13E+09
    0.00E+00  0.00E+00                ( 1)
                    -2.76E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1062E+00

 ITE= 14 -6.65E+07  1.09E+09   0.00E+00   4.46E+00   0.00E+00  5.64E+08
-4.96E-02  1.09E+05  4.43E-02  6.30E-01  1.00E+00 -2.67E-02
                      9965-X        0-F    14007-X        0-F  8.94E+08
    0.00E+00  0.00E+00                ( 1)
                    -2.43E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.8258E-01

 ITE= 15 -6.95E+06  1.06E+09   0.00E+00   5.59E+00   0.00E+00  3.26E+08
-5.19E-03  1.06E+05  5.55E-02  3.67E-01  1.00E+00  2.05E-01
                      9965-X        0-F    13976-Z        0-F  8.87E+08
    0.00E+00  0.00E+00                ( 1)
                    -2.20E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5457E-01


 RESTART FOR AUTOMATIC-TIME-STEPPING AFTER ITERATION   15


      ITERATION LIMIT HAS BEEN REACHED, ITEMAX =   15

      DISPLACEMENTS WERE SCALED DOWN DUE TO LIMITING DISPLACEMENT FEATURE


      REFERENCE CONVERGENCE NORMS USED:  DISPLACEMENT = 1.008E+02,  FORCE =
9.996E+03


 I T E R A T I O N   T I M E   L O G

 SOLUTION TIME (SECONDS)   . . . . . . . . . . . . . . . . . . . . =     181.03

 PERCENT OF TIME SPENT IN LINE SEARCHING . . . . . . . . . . . . . . . . =   0.00
 PERCENT OF TIME SPENT IN LOAD VECTOR/STIFFNESS MATRIX CALCULATION . =  14.40
 PERCENT OF TIME SPENT IN SOLUTION OF EQUATIONS  . . . . . . . . . . . =  85.60
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 METHOD  STEP-NUMBER  SUBINCREMENT    TIME STEP    SOLUTION TIME   INITIAL
ENERGY
 *ATS*          1          1       0.200000E-01     0.200000E-01
0.485172E+04


 I N T E R M E D I A T E   P R I N T O U T   D U R I N G   E Q U I L I B R I U M
  I T E R A T I O N S


          OUT-OF-         NORM OF
CONVERGENCE RATIOS  CONVERGENCE RATIOS   OUT-OF-BALANCE LOAD
          BALANCE     OUT-OF-BALANCE        NORM OF INCREMENTAL         FOR
OUT-OF-BALANCE    FOR INCREMENTAL    VECTOR CALCULATION
          ENERGY      FORCE    MOMENT      DISP.      ROTN.    CFORCE
ENERGY     FORCE    DISP.     CFORCE      BETA      RATIO
                    NODE-DOF   NODE-DOF   NODE-DOF   NODE-DOF   CFNORM
     MOMENT   ROTN.               (ITERNS)
                   MAX VALUE  MAX VALUE  MAX VALUE  MAX VALUE

COMPARE WITH        COMPARE WITH
                                                                                ETOL
      RTOL     DTOL      RCTOL

1.00E-03 (NOT USED)(NOT USED) 5.00E-02

 ITE=  0  4.85E+03  8.00E+03   0.00E+00   6.44E+01   0.00E+00  4.63E+09
1.00E+00  1.00E+00  8.03E+00  4.63E+11
                     12347-Z        0-F    14006-X        0-F  0.00E+00
    0.00E+00  0.00E+00
                    3.10E+02   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1564E+00

 ITE=  1  1.34E+09  2.86E+09   0.00E+00   1.01E+02   0.00E+00  7.76E+08
1.00E+00  3.57E+05  1.00E+00  1.38E+00  1.00E+00  1.71E+06
                     10002-X        0-F    13613-Y        0-F  5.63E+08
    0.00E+00  0.00E+00               ( 1)
                    5.22E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1670E+00

 ITE=  2 -7.94E+08  2.70E+09   0.00E+00   6.44E+00   0.00E+00  1.18E+09
-5.93E-01  3.37E+05  6.39E-02  9.42E-01  1.00E+00 -3.11E-01
                     14006-X        0-F    13936-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                    5.64E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4594E-01

 ITE=  3 -2.74E+07  2.47E+09   0.00E+00   3.69E+00   0.00E+00  8.96E+08
-2.05E-02  3.09E+05  3.66E-02  7.15E-01  1.00E+00  1.11E+00
                     14006-X        0-F    14005-X        0-F  1.25E+09
    0.00E+00  0.00E+00               ( 1)
                    5.43E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2212E-01

 ITE=  4 -3.07E+08  2.33E+09   0.00E+00   2.15E+00   0.00E+00  8.59E+08
-2.29E-01  2.92E+05  2.14E-02  6.09E-01  1.00E+00 -1.72E+01
                     14006-X        0-F    14006-X        0-F  1.41E+09
    0.00E+00  0.00E+00               ( 1)
                    5.17E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1479E-01

 ITE=  5  2.02E+09  2.35E+09   0.00E+00   9.66E+00   0.00E+00  6.81E+08
1.50E+00  2.94E+05  9.58E-02  4.40E-01  1.00E+00  1.89E-01
                     13930-X        0-F    13935-X        0-F  1.55E+09
    0.00E+00  0.00E+00               ( 1)
                    5.12E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1507E+00
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 ITE=  6  2.13E+09  2.21E+09   0.00E+00   6.56E+00   0.00E+00  1.29E+09
1.59E+00  2.76E+05  6.51E-02  7.18E-01  1.00E+00  1.05E+00
                     13939-X        0-F    14006-X        0-F  1.80E+09
    0.00E+00  0.00E+00               ( 1)
                    4.98E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1112E+00

 ITE=  7  3.62E+08  1.74E+09   0.00E+00   3.28E+00   0.00E+00  1.43E+09
2.70E-01  2.17E+05  3.25E-02  9.50E-01  1.00E+00  2.57E-01
                      9965-X        0-F    13939-X        0-F  1.50E+09
    0.00E+00  0.00E+00               ( 1)
                   -3.71E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2679E-01

 ITE=  8  9.18E+08  1.67E+09   0.00E+00   5.45E+00   0.00E+00  8.52E+08
6.85E-01  2.08E+05  5.41E-02  6.17E-01  1.00E+00  6.63E-01
                      9994-X        0-F    14006-X        0-F  1.38E+09
    0.00E+00  0.00E+00               ( 1)
                   -3.31E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1215E+00

 ITE=  9  7.66E+08  1.59E+09   0.00E+00   6.95E+00   0.00E+00  5.52E+08
5.72E-01  1.99E+05  6.89E-02  4.08E-01  1.00E+00  1.09E+00
                     14006-Z        0-F    14007-X        0-F  1.35E+09
    0.00E+00  0.00E+00               ( 1)
                   -3.25E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1435E+00

 ITE= 10  2.38E+08  1.36E+09   0.00E+00   6.48E+00   0.00E+00  8.45E+08
1.77E-01  1.70E+05  6.42E-02  7.54E-01  1.00E+00 -5.75E-02
                      9965-X        0-F    13930-Z        0-F  1.12E+09
    0.00E+00  0.00E+00               ( 1)
                   -3.12E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2519E-01

 ITE= 11  7.77E+08  1.31E+09   0.00E+00   5.29E+00   0.00E+00  5.51E+08
5.80E-01  1.64E+05  5.25E-02  5.51E-01  1.00E+00  3.93E-01
                      9965-X        0-F    13976-Z        0-F  1.00E+09
    0.00E+00  0.00E+00               ( 1)
                   -3.02E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1173E+00

 ITE= 12  1.95E+08  1.17E+09   0.00E+00   2.91E+00   0.00E+00  5.30E+08
1.45E-01  1.46E+05  2.89E-02  5.23E-01  1.00E+00  7.88E-01
                      9965-X        0-F    13976-Z        0-F  1.01E+09
    0.00E+00  0.00E+00               ( 1)
                   -2.61E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4206E-01

 ITE= 13 -1.51E+07  1.09E+09   0.00E+00   1.77E+00   0.00E+00  5.67E+08
-1.13E-02  1.36E+05  1.75E-02  7.02E-01  1.00E+00  9.38E-02
                      9965-X        0-F    13976-Z        0-F  8.07E+08
    0.00E+00  0.00E+00               ( 1)
                   -2.49E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1410E-01

 ITE= 14  2.24E+07  1.10E+09   0.00E+00   2.31E+00   0.00E+00  2.93E+08
1.67E-02  1.38E+05  2.29E-02  3.46E-01  1.00E+00 -1.83E+00
                      9965-X        0-F    13978-Z        0-F  8.48E+08
    0.00E+00  0.00E+00               ( 1)
                   -2.45E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2057E-01

 ITE= 15  3.19E+06  1.08E+09   0.00E+00   2.14E+00   0.00E+00  2.42E+07
2.38E-03  1.35E+05  2.12E-02  2.91E-02  1.00E+00  5.89E-01
                      9965-X        0-F    13978-Z        0-F  8.33E+08
    0.00E+00  0.00E+00               ( 1)
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                    -2.39E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1067E-02


 RESTART FOR AUTOMATIC-TIME-STEPPING AFTER ITERATION   15


      ITERATION LIMIT HAS BEEN REACHED, ITEMAX =   15

      DISPLACEMENTS WERE SCALED DOWN DUE TO LIMITING DISPLACEMENT FEATURE


      REFERENCE CONVERGENCE NORMS USED:  DISPLACEMENT = 1.008E+02,  FORCE =
7.996E+03


 I T E R A T I O N   T I M E   L O G

 SOLUTION TIME (SECONDS)   . . . . . . . . . . . . . . . . . . . . =     184.54

 PERCENT OF TIME SPENT IN LINE SEARCHING . . . . . . . . . . . . . . . . =   0.00
 PERCENT OF TIME SPENT IN LOAD VECTOR/STIFFNESS MATRIX CALCULATION . =  14.23
 PERCENT OF TIME SPENT IN SOLUTION OF EQUATIONS  . . . . . . . . . . =  85.77



 METHOD  STEP-NUMBER  SUBINCREMENT    TIME STEP    SOLUTION TIME   INITIAL
ENERGY
 *ATS*          1          1       0.400000E+00     0.400000E+00
0.920833E+05


 I N T E R M E D I A T E   P R I N T O U T   D U R I N G   E Q U I L I B R I U M
  I T E R A T I O N S


          OUT-OF-         NORM OF
CONVERGENCE RATIOS  CONVERGENCE RATIOS   OUT-OF-BALANCE LOAD
          BALANCE     OUT-OF-BALANCE        NORM OF INCREMENTAL         FOR
OUT-OF-BALANCE    FOR INCREMENTAL    VECTOR CALCULATION
          ENERGY      FORCE    MOMENT      DISP.      ROTN.    CFORCE
ENERGY     FORCE    DISP.     CFORCE      BETA      RATIO
                    NODE-DOF   NODE-DOF   NODE-DOF   NODE-DOF   CFNORM
     MOMENT   ROTN.                (ITERNS)
                   MAX VALUE  MAX VALUE  MAX VALUE  MAX VALUE

COMPARE WITH        COMPARE WITH                                                    ETOL
      RTOL     DTOL      RCTOL

1.00E-03 (NOT USED)(NOT USED) 5.00E-02

 ITE=  0  9.21E+04  1.60E+05   0.00E+00   6.44E+01   0.00E+00  4.63E+09
1.00E+00  1.00E+00  8.03E+00  4.63E+11
                     12347-Z        0-F    14006-X        0-F  0.00E+00
    0.00E+00  0.00E+00
                    6.19E+03   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1564E+00

 ITE=  1  1.34E+09  2.86E+09   0.00E+00   1.01E+02   0.00E+00  7.75E+08
1.00E+00  1.79E+04  1.00E+00  1.38E+00  1.00E+00  9.00E+04
                     10002-X        0-F    13613-Y        0-F  5.63E+08
    0.00E+00  0.00E+00               ( 1)
                    5.22E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1667E+00

 ITE=  2 -7.75E+08  2.70E+09   0.00E+00   6.52E+00   0.00E+00  1.18E+09
-5.80E-01  1.69E+04  6.47E-02  9.42E-01  1.00E+00 -3.12E-01
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                    14006-X        0-F    13936-X        0-F  1.25E+09
   0.00E+00  0.00E+00              ( 1)
                   5.64E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4420E-01

 ITE=  3 -8.59E+07  2.47E+09   0.00E+00   3.59E+00   0.00E+00  8.97E+08
-6.43E-02  1.55E+04  3.56E-02  7.14E-01  1.00E+00  1.14E+00
                    14006-X        0-F    14005-X        0-F  1.26E+09
   0.00E+00  0.00E+00              ( 1)
                   5.46E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.2414E-01

 ITE=  4 -2.84E+08  2.33E+09   0.00E+00   2.47E+00   0.00E+00  8.59E+08
-2.12E-01  1.46E+04  2.46E-02  6.08E-01  1.00E+00 -4.67E+00
                    14006-X        0-F    14004-X        0-F  1.41E+09
   0.00E+00  0.00E+00              ( 1)
                   5.08E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1972E-01

 ITE=  5  4.20E+08  2.33E+09   0.00E+00   1.70E+00   0.00E+00  6.78E+08
3.14E-01  1.46E+04  1.69E-02  4.40E-01  1.00E+00  1.00E-02
                    13930-X        0-F    13935-X        0-F  1.54E+09
   0.00E+00  0.00E+00              ( 1)
                   5.06E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5347E-02

 ITE=  6  1.62E+08  2.26E+09   0.00E+00   1.92E+00   0.00E+00  7.08E+08
1.21E-01  1.42E+04  1.91E-02  4.38E-01  1.00E+00  4.01E-01
                    13930-X        0-F    13934-X        0-F  1.62E+09
   0.00E+00  0.00E+00              ( 1)
                   5.03E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.4586E-02

 ITE=  7  9.59E+08  2.30E+09   0.00E+00   5.46E+00   0.00E+00  8.79E+08
7.17E-01  1.44E+04  5.42E-02  4.80E-01  1.00E+00  2.83E+00
                    13930-X        0-F    13933-X        0-F  1.83E+09
   0.00E+00  0.00E+00              ( 1)
                   5.01E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.8362E-01

 ITE=  8  2.03E+09  2.26E+09   0.00E+00   7.51E+00   0.00E+00  1.25E+09
1.52E+00  1.41E+04  7.45E-02  6.86E-01  1.00E+00  4.87E-01
                    14002-X        0-F    13940-X        0-F  1.82E+09
   0.00E+00  0.00E+00              ( 1)
                  -5.93E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1155E+00

 ITE=  9  5.52E+07  1.91E+09   0.00E+00   5.18E+00   0.00E+00  1.37E+09
4.13E-02  1.19E+04  5.14E-02  8.46E-01  1.00E+00  2.02E-01
                    13939-X        0-F    14006-X        0-F  1.62E+09
   0.00E+00  0.00E+00              ( 1)
                   4.79E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.8656E-01

 ITE= 10  1.67E+09  1.90E+09   0.00E+00   6.78E+00   0.00E+00  1.41E+09
1.25E+00  1.19E+04  6.72E-02  8.74E-01  1.00E+00  1.14E+01
                    14002-X        0-F    14002-X        0-F  1.61E+09
   0.00E+00  0.00E+00              ( 1)
                  -5.72E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.9853E-01

 ITE= 11  4.57E+08  1.60E+09   0.00E+00   4.30E+00   0.00E+00  1.20E+09
3.42E-01  1.00E+04  4.26E-02  8.46E-01  1.00E+00  2.62E-01
                    13939-X        0-F     9965-X        0-F  1.42E+09
   0.00E+00  0.00E+00              ( 1)
                   4.08E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.5523E-01
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 ITE= 12  6.12E+08  1.62E+09   0.00E+00   3.51E+00   0.00E+00  9.36E+08
4.58E-01  1.01E+04  3.49E-02  7.42E-01  1.00E+00  4.96E-01
                     9965-X        0-F    13939-X        0-F  1.26E+09
    0.00E+00  0.00E+00              ( 1)
                  -3.67E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.8624E-01

 ITE= 13  2.05E+08  1.40E+09   0.00E+00   2.87E+00   0.00E+00  7.94E+08
1.53E-01  8.75E+03  2.85E-02  7.28E-01  1.00E+00  4.28E-01
                     9965-X        0-F    14006-X        0-F  1.09E+09
    0.00E+00  0.00E+00              ( 1)
                  -3.28E+08   0.00E+00  -1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.6357E-01

 ITE= 14  4.28E+08  1.38E+09   0.00E+00   5.25E+00   0.00E+00  6.11E+08
3.20E-01  8.66E+03  5.21E-02  5.12E-01  1.00E+00  1.55E+00
                     9965-X        0-F    13939-X        0-F  1.19E+09
    0.00E+00  0.00E+00              ( 1)
                  -3.01E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.1026E+00

 ITE= 15  2.49E+08  1.14E+09   0.00E+00   3.26E+00   0.00E+00  6.47E+08
1.86E-01  7.11E+03  3.24E-02  7.02E-01  1.00E+00 -1.02E-03
                     9965-X        0-F    13939-X        0-F  9.21E+08
    0.00E+00  0.00E+00              ( 1)
                  -2.64E+08   0.00E+00   1.20E+00   0.00E+00
 SCALING FACTOR DUE TO LIMITING DISPLACEMENTS:  0.9574E-01


 RESTART FOR AUTOMATIC-TIME-STEPPING AFTER ITERATION   15


      ITERATION LIMIT HAS BEEN REACHED, ITEMAX =   15

      DISPLACEMENTS WERE SCALED DOWN DUE TO LIMITING DISPLACEMENT FEATURE


      REFERENCE CONVERGENCE NORMS USED:  DISPLACEMENT = 1.008E+02,  FORCE =
1.599E+05


 I T E R A T I O N   T I M E   L O G

 SOLUTION TIME (SECONDS)   . . . . . . . . . . . . . . . . . . . . =     178.15

 PERCENT OF TIME SPENT IN LINE SEARCHING . . . . . . . . . . . . . . =   0.00
 PERCENT OF TIME SPENT IN LOAD VECTOR/STIFFNESS MATRIX CALCULATION . =  14.47
 PERCENT OF TIME SPENT IN SOLUTION OF EQUATIONS  . . . . . . . . . . =  85.53


     **** SOLUTION FAILED TO CONVERGE ****
     SOLUTION TIME STEP NUMBER ...........=         1
     TIME STEP SUBINCREMENT NUMBER .......=         1
     NUMBER OF ATTEMPTS MADE .............=         4
     LAST SOLUTION TIME STEP SUBINCREMENT =   0.200000E-01
     LAST CONVERGED SOLUTION TIME ........=   0.000000E+00


    96 EQUILIBRIUM ITERATIONS PERFORMED IN THIS TIME STEP TO REESTABLISH
EQUILIBRIUM
  STIFFNESS REFORMED FOR EVERY ITERATION OF THIS STEP
  NUMBER OF SUBINCREMENTS IN THIS TIME STEP =    6


    S T R E S S   C A L C U L A T I O N S
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   S U M M A T I O N   O F   R E A C T I O N S  (X,Y,Z - GLOBAL COORDINATES)

FORCE-X =  0.0000000E+00   FORCE-Y =  0.0000000E+00   FORCE-Z =  0.0000000E+00


PROGRAM SOL601, build date: 04.11.2011    *** NO HEADING DEFINED ***


 S O L U T I O N   T I M E   L O G (IN SEC)

           FOR PROBLEM

 *** NO HEADING DEFINED ***



INPUT PHASE  . . . . . . . . . . . . . . . . . . .      1.73

SUBSTRUCTURES INPUT PHASE. . . . . . . . . . . .      0.00

INITIALIZATIONS. . . . . . . . . . . . . . . . .      0.45

ASSEMBLAGE OF LINEAR STIFFNESS,EFFECTIVE STIFF-
NESS,MASS MATRICES AND LOAD VECTORS . . . . . .       5.32

FREQUENCY (OR BUCKLING) ANALYSIS . . . . . . . .      0.00

INITIAL CALCULATIONS FOR MODE SUPERPOSITION
                     ANALYSIS . . . . . . . . .       0.00

TRIANGULARIZATION OF LINEAR (EFFECTIVE)
                     STIFFNESS MATRIX  . . . . .      0.00


STEP-BY-STEP SOLUTION (         1 TIME STEPS)

  CALCULATION OF EFFECTIVE LOAD VECTORS  . . .        0.00
  UPDATING EFFECTIVE STIFFNESS MATRICES
  AND RHS VECTOR FOR NONLINEARITIES  . . . . .      154.89
  UPDATING EFFECTIVE STIFFNESS MATRIX FOR
  CENTRIFUGAL DEFORMATION DEPENDENT LOADING. .        0.00
  MODE SUPERPOSITION . . . . . . . . . . . . .        0.00
  SOLUTION OF EQUATIONS  . . . . . . . . . . .      929.04
  EQUILIBRIUM ITERATIONS (TOTAL) . . . . . . .     1084.38
  CALCULATION AND PRINTING OF DISPLACE-
  MENTS, VELOCITIES, AND ACCELERATIONS . . . .    31777.94
  CALCULATION AND PRINTING OF STRESSES . . . .        1.90
  FRACTURE MECHANICS . . . . . . . . . . . . .        0.00

                              STEP-BY-STEP TOTAL. . .    1086.59

CALCULATION AND PRINTING OF SUBSTRUCTURE
                INTERNAL RESPONSES  . . . . . . . .       0.00



T O T A L   S O L U T I O N   T I M E (SEC) . . . . .    1095.29
MEMORY USED BY THE SPARSE SOLVER=    0.0mw (    0.0mb)
TOTAL MEMORY USED BY THE PROGRAM=   54.7mw (  437.5mb)
Checked in NX Nastran license feature nx_nas_advnlin_dsk.
*** END SOL 601 ***
*** FATAL ERROR: SOL 601 DID NOT FINISH SUCCESSFULLY.
*** ADVANCED NONLINEAR EXIT CODE 0 ***
*** ISHELL PROGRAM 'NXNA' COMPLETED ***
^^^ USER FATAL MESSAGE
^^^ ERROR IN ADVANCED NONLINEAR MODULE          0
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 ^^^SOL601 FAILED
1
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0

 * * * *  D B D I C T   P R I N T  * * * *      SUBDMAP = PRTSUM  ,  DMAP
STATEMENT NO.     29



0                                   * * * *  A N A L Y S I S  S U M M A R Y  T A
B L E  * * * *
0 SEID  PEID PROJ VERS APRCH      SEMG SEMR SEKR SELG SELR MODES DYNRED SOLLIN
PVALID SOLNL LOOPID DESIGN CYCLE SENSITIVITY

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0SEID = SUPERELEMENT ID.
 PEID = PRIMARY SUPERELEMENT ID OF IMAGE SUPERELEMENT.
 PROJ = PROJECT ID NUMBER.
 VERS = VERSION ID.
 APRCH = BLANK FOR STRUCTURAL ANALYSIS.  HEAT FOR HEAT TRANSFER ANALYSIS.
 SEMG = STIFFNESS AND MASS MATRIX GENERATION STEP.
 SEMR = MASS MATRIX REDUCTION STEP (INCLUDES EIGENVALUE SOLUTION FOR MODES).
 SEKR = STIFFNESS MATRIX REDUCTION STEP.
 SELG = LOAD MATRIX GENERATION STEP.
 SELR = LOAD MATRIX REDUCTION STEP.
 MODES = T (TRUE) IF NORMAL MODES OR BUCKLING MODES CALCULATED.
 DYNRED = T (TRUE) MEANS GENERALIZED DYNAMIC AND/OR COMPONENT MODE REDUCTION
PERFORMED.
 SOLLIN = T (TRUE) IF LINEAR SOLUTION EXISTS IN DATABASE.
 PVALID = P-DISTRIBUTION ID OF P-VALUE FOR P-ELEMENTS
 LOOPID = THE LAST LOOPID VALUE USED IN THE NONLINEAR ANALYSIS.  USEFUL FOR
RESTARTS.
 SOLNL = T (TRUE) IF NONLINEAR SOLUTION EXISTS IN DATABASE.
 DESIGN CYCLE = THE LAST DESIGN CYCLE (ONLY VALID IN OPTIMIZATION).
 SENSITIVITY = SENSITIVITY MATRIX GENERATION FLAG.
1                                         * * * END OF JOB * * *
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