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$ NASTRAN input file created by the MSC MSC.Nastran input file
$ translator ( MD Patran 15.0.022 ) on April     15, 2008 at 12:52:32.
$ Direct Text Input for Nastran System Cell Section
$ Direct Text Input for File Management Section
$ Linear Static Analysis, Database
SOL 101
$ Direct Text Input for Executive Control
CEND
TITLE = MD Nastran job created on 15-Apr-08 at 12:52:08
ECHO = NONE
$ Direct Text Input for Global Case Control Data
SUBCASE 1
   TITLE=This is a default subcase.
   SPC = 2
   LOAD = 2
   DISPLACEMENT(SORT1,REAL)=ALL
   SPCFORCES(SORT1,REAL)=ALL
   STRESS(SORT1,REAL,VONMISES,BILIN)=ALL
$ Direct Text Input for this Subcase
SUBCASE 3
$ Subcase name : torue conventional
   SUBTITLE=torue_conventional
   SPC = 2
   LOAD = 8
   DISPLACEMENT(SORT1,REAL)=ALL
   SPCFORCES(SORT1,REAL)=ALL
   STRESS(SORT1,REAL,VONMISES,BILIN)=ALL
$ Direct Text Input for this Subcase
BEGIN BULK
PARAM    POST    -1
PARAM   PRTMAXIM YES
$ Direct Text Input for Bulk Data
$ Elements and Element Properties for region : solid_mat
PSOLID   1       1       0
$ Pset: "solid_mat" will be imported as: "psolid.1"
CHEXA    1       1       20      19      17      18      9       8
         6       7
CHEXA    2       1       19      14      13      17      8       5
         4       6
CHEXA    3       1       18      17      11      12      7       6
         2       3
CHEXA    4       1       17      13      10      11      6       4
         1       2
CHEXA    5       1       36      35      32      34      33      31
         29      30
CHEXA    6       1       33      31      29      30      20      19
         17      18
CHEXA    7       1       35      28      27      32      31      26
         25      29
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CHEXA    8       1       31      26      25      29      19      14
         13      17
CHEXA    9       1       34      32      23      24      30      29
         21      22
CHEXA    10      1       30      29      21      22      18      17
         11      12
CHEXA    11      1       32      27      16      23      29      25
         15      21
CHEXA    12      1       29      25      15      21      17      13
         10      11
$ Referenced Material Records
$ Material Record : steel
$ Description of Material : Date: 15-Apr-08          Time: 11:27:17
MAT1     1      3.+8            .33     7.8-4
$ Nodes of the Entire Model
GRID     1               3.      6.      20.
GRID     2               1.5     6.      20.
GRID     3                0.     6.      20.
GRID     4               3.      3.      20.
GRID     5               3.       0.     20.
GRID     6               1.5     3.      20.
GRID     7                0.     3.      20.
GRID     8               1.5      0.     20.
GRID     9                0.      0.     20.
GRID     10              3.      6.      10.
GRID     11              1.5     6.      10.
GRID     12               0.     6.      10.
GRID     13              3.      3.      10.
GRID     14              3.       0.     10.
GRID     15              3.      6.      6.
GRID     16              3.      6.       0.
GRID     17              1.5     3.      10.
GRID     18               0.     3.      10.
GRID     19              1.5      0.     10.
GRID     20               0.      0.     10.
GRID     21              1.5     6.      6.
GRID     22               0.     6.      6.
GRID     23              1.5     6.       0.
GRID     24               0.     6.       0.
GRID     25              3.      3.      6.
GRID     26              3.       0.     6.
GRID     27              3.      3.       0.
GRID     28              3.       0.      0.
GRID     29              1.5     3.      6.
GRID     30               0.     3.      6.
GRID     31              1.5      0.     6.
GRID     32              1.5     3.       0.
GRID     33               0.      0.     6.
GRID     34               0.     3.       0.
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GRID     35             1.5      0.      0.
GRID     36              0.      0.      0.
$ Loads for Load Case : Default
SPCADD   2       7       9
LOAD     2      1.      1.       4      1.       6
$ Displacement Constraints of Load Set : middle_point_fix
SPC1     7       123     32
$ Displacement Constraints of Load Set : six_inch from_wall
SPC1     9       12456   15      21      22      25      26      29
         30      31      33
$ Loads for Load Case : torue_conventional
LOAD     8      1.      1.       7      1.       9
$ Nodal Forces of Load Set : torque simulated 1
FORCE    4       5       0      42249.6 .707107 .707107  0.
$ Nodal Forces of Load Set : torque simulated 2
FORCE    6       3       0      42249.6 -.707107-.707107 0.
$ Nodal Forces of Load Set : torque
FORCE    7       6       0       0.     .57735  .57735  .57735
$ Nodal Forces of Load Set : torque
MOMENT   9       6       0      566853.  0.      0.     1.
$ Referenced Coordinate Frames
ENDDATA e457ab30
```