

ANSYS Class3 Error Report**ERROR NO:**

2013-18

Keywords:

ESURF

SOLID272

SOLID273

TARGE170

Description of Error:

Target elements TARGE170 that are created by ESURF on 4-node faces of the general axisymmetric elements SOLID272 or SOLID273 may be reversed from the correct (outward) normal direction. This may cause incorrect contact behavior.

All known incorrect cases had the SOLID272 or SOLID273 cylinder X axis aligned in the global Y or Z direction.

Typical GUI Path(s):

Preprocessor > Modeling > Create > Elements >
Surf/Contact > Surf Effect > General Surface

Other Comments:**First Incorrect Version:**

Release 12.0

Corrected In:

Release 15.0

Suggested User Action For Running on Uncorrected Version:

1. Select any elements that are incorrectly oriented.
2. Issue the ESURF,ALL,REVERSE command to reverse the normals.
3. List and/or plot the elements to verify correct normals.

Be sure to remove the ESURF,ALL,REVERSE command before running on the corrected MAPDL version, or it may flip the elements into an incorrect orientation.

Author Signature:

Stan Kelley 9/3/2013

Reviewed By QA:

Bill Bryan 9/20/2013

Approval:

Dave Conover 9/3/2013