

**ANSYS Class3 Error Report****ERROR NO:**

2015-02

**Keywords:**

LINEAR ANALYSIS    MPC184    DIRECT ELIMINATION METHOD    MULTIPLE  
LOAD STEPS

**Description of Error:**

Linear analyses involving MPC184 elements that use the direct elimination method ( $KEYOPT(2) = 0$ ) generate internal constraint equations. These internally generated constraint equations fail to trigger the program to reform the stiffness matrix at each load step. Without reforming the stiffness matrix, the solution may be incorrect.

**Typical GUI Path(s):****Other Comments:**

This issue only applies to MPC184 elements which use the rigid beam or link options ( $KEYOPT(1) = 0$  or  $1$ ). For MPC184 joint element options this error notice does not apply.

**First Incorrect Version:**

Release 14.0

**Corrected In:**

Release 16.0

**Suggested User Action For Running on Uncorrected Version:**

- 1) Replace the direct elimination method with the Lagrange multiplier method for the MPC184 elements (i.e., set KEYOPT(2) = 1).
- or
- 2) Turn on the nonlinear geometry key (NLGEOM,ON).

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