

October 11, 1996
G-1151-SJA-96-629

Document Control Desk
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Reference: a) Boeing Letter G-1151-RSO-92-365 dated August 31, 1992; R. S. Orr to the NRC Operations Center
b) NRC Letter Docket No. 99901227 dated August 12, 1992; L. J. Norrholm to R. S. Orr; Subject: Response to 10 CFR 21 Inquiry

BOEING

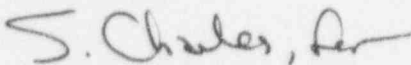
Dear Sir or Madam:

In accordance with the reference correspondence and 10 CFR 21, Boeing is sending the NRC the attached error notice(s) received from our former software suppliers. Because of unknown current addresses, the following former customers were not notified:

Reactor Controls, Inc.
Echo Energy Consultants, Inc.
Nuclear Applications and Systems Analysis Company (Japan)
Nuclear Power Services
Tenera Engineering Services
Gibbs & Hill, Inc.
Holtec International

Error notices have been sent to our other former customers.

Very truly yours,



Sandra J. Andrews
Nuclear Administrator
Phone: (206) 865-6248
FAX: (206) 865-4851
Mail Stop: 7A-33, or
e-mail: Sandra.Andrews@PSS.Boeing.com

Enclosure(s): ANSYS Class3 Error Reports 96-33, 96-34, 96-35, 96-36, 96-37 and 96-38.
ANSYS QA Notice QA96-06
ANSYS Class3 Error Reports 92-25R1, 93-03R1, 93-33R1, 94-68R2, 95-27R1, 95-39R1 and 95-49R1
Revised Class3 Error Report Summary for Rev 5.1
ANSYS Class3 Error Reports 96-39, 96-40 and 96-41
ANSYS QA Notices QA96-07 and QA96-08
Class3 Error Report Summary for Rev 5.2 and Release 5.3

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ANSYS, Inc.
201 Johnson Road
Houston, PA 15342-1300

Telephone 412.746.3304
Facsimile 412.746.9494

August 12, 1996

OCT 11 1996
CONTRACTS

Dear Class3 Error Recipient:

Enclosed you will find ANSYS Class3 Error Reports 96-33, 96-34, 96-35, 96-36, 96-37 and 96-38.

Also enclosed is ANSYS QA Notice QA96-06 which has been issued to clarify the program documentation on the operation of the KUSE command. Some past Class3 errors incorrectly suggested that using KUSE,-1 was a way to avoid the errors reported. The reports affected by this have been revised and are also enclosed as 92-25 R1, 93-03 R1, 93-33 R1, and 94-68 R2.

Finally, attached are Class3 Error Reports 95-27 R1, 95-39 R1 and 95-49 R1. These reports have been revised and reissued to update the versions containing the errors and corrections.

I have also attached a newly revised Class3 Error Summary Report for Rev. 5.1. An error appeared in the report dated 5/31/96. Please discard that copy and use the enclosed.

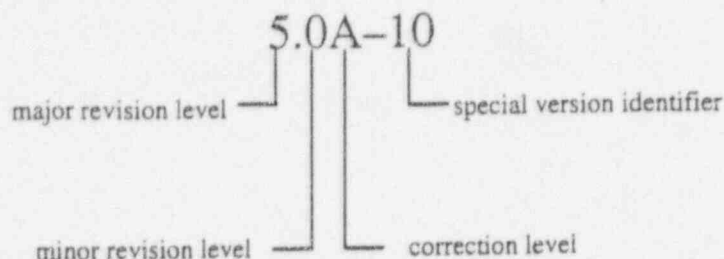
Sincerely,

ANSYS, Inc.

William J. Bryan
Quality Assurance Manager

ANSYS Revision Identifier Description

ANSYS revision identifiers consist of a major revision level, a minor revision level, a correction level, and occasionally a special version level. An example of how this is constructed is shown below:



Major revision level changes indicate that new features have been added to the program and that some level of program architecture change and/or file structure has occurred. Minor revision level changes also indicate that new features have been added to the program, but files are upwardly compatible. All known error fixes are included in both minor and major revisions. Changes to the correction level indicate that it is primarily an error correction release. Special version identifiers indicate that one or more additional minor changes have been made to the program, normally to circumvent an error. Special versions are not general releases to all ANSYS licensees, since they typically represent errors occurring only on one system, a subset of our customers who have specific graphics devices, etc.

The ANSYS revision identifier(s) shown under "corrected in" on the front side of this Class3 Error Report indicates the first possible revision that could contain the correction. A major program change needed to fix an error can dictate that the next minor or major revision will contain the fix rather than the next correction level. For example, when errors were being reported while Rev. 4.3A was the latest production version, most Class3 error reports indicated that 4.3B was the "corrected in" revision. Others requiring significant code restructuring were reported as fixed in 4.4. Rev. 4.3B was never released, but Rev. 4.4 contained all error corrections noted as fixed in 4.3B.

An identifier indicated under "corrected in" does not guarantee that a general release of that revision of ANSYS will occur. It does indicate that the correction is known and implemented in the coding that would be part of that general release.

Equivalent Product Identifiers

The ANSYS family of component products occasionally undergoes name changes between revisions and/or changes in the functionality of derived products (such as ANSYS-PC/LINEAR). To minimize the potential for confusion in these areas, the important product name equivalences (similar program functionality and error content) are listed below.

ANSYS/ED	contains all errors shown for	the full ANSYS product, starting at Rev. 5.0, and beyond, unless otherwise noted.
PC/LINEAR	is equivalent to	WS/LINEAR at Rev. 4.4A, and ANSYS/LINEAR starting at Rev. 5.0 and ANSYS/LinearPlus starting at Rev. 5.0A.
PC/THERMAL	is equivalent to	WS/THERMAL at Rev. 4.4A, and ANSYS/THERMAL starting at Rev. 5.0.
PREPOST	contains relevant errors shown for	the full ANSYS product, for included pre- and postprocessing functionality
PC/MACNETIC	is equivalent to	ANSYS/Emag starting at Rev. 5.0A

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-33

KEYWORDS:

ASUM

VSUM

DESCRIPTION OF ERROR:

The ASUM and VSUM commands may produce erroneous results due to poor tessellation (tessellation is a triangular "mesh" of the surface used for visualizing it) of the model surface. We have observed this behavior when there is a sharp change in angle for the model boundary.

FIRST INCORRECT VERSION(S):*

Rev. 5.0
Component Products Rev. 5.0A

CORRECTED IN:*

Release 5.3
Component Products Release 5.3

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

In order to ascertain the quality of tessellation (and thus the quality of the ASUM or VSUM results) for an area or volume, check the areas and volumes from ASUM and VSUM commands with respect to the total finite element areas and volumes (in POST1, use commands ETABLE,,VOLU and SSUM) resulting from an acceptable mesh of that entity.

COMMENTS:

1. The corrected version gives accurate results for a valid tessellation even if its quality is poor.

2. If the tessellation is invalid, but cannot be distinguished from the plot of areas or volumes, the corrected version calculates the best approximation and issues the following warning message:

Poor tessellation for area "area number" resulted in poor surface area approximation. Better area measure can be obtained from the elements of a refined mesh.

AUTHOR/CORRECTOR:

Hasan Ahmad
Hasan Ahmad

DATE: August 7, 1996

REVIEWED BY QA:

William J. Bryan
William J. Bryan

DATE: August 7, 1996

APPROVAL:

John A. Swanson
John A. Swanson

DATE: August 7, 1996

*If a product name is not included in the "first incorrect version", the full ANSYS program is implied. For products not listed, this error does not apply, but see the reverse side for equivalent product designations.

Unless noted otherwise, this error report also applies to all revisions after the first incorrect one and prior to the corrected revision. All revisions after "corrected in" are corrected. Manual corrections are included in on-line documentation as appropriate. Please see the reverse side of this sheet for additional information on ANSYS revision identifiers.

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-34

KEYWORDS: APDL ARNODE

DESCRIPTION OF ERROR:

The ANSYS Parametric Design Language (APDL) function ARNODE does not return the correct area for mid-side node quadrilaterals which have been reduced to triangles by duplicating nodes K, L, and O. The calculated area is low by 9/11ths. SHELL93 is such an element.

FIRST INCORRECT VERSION(S):*

Rev. 5.1
Component Products Rev. 5.2

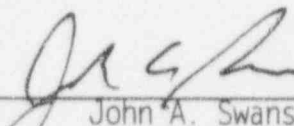
CORRECTED IN:*

Release 5.3
Components Products Rev. 5.3

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:


COMMENTS:

AUTHOR/CORRECTOR:


John A. Swanson

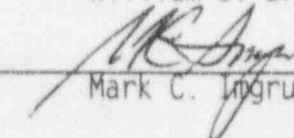
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


Mark C. Ingrund

DATE: August 7, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-35

KEYWORDS: EMAG ELEM53 PLANE53 CIRCUIT

DESCRIPTION OF ERROR:

For circuit-fed axisymmetric massive conductor elements (PLANE53, KEYOPT(1)=4), the calculation of JS in the SMISC record and JT in the NMISC record are incorrect. This will lead to an incorrect calculation of total current (CURR2D command macro), power loss (POWERH command macro), and the coupled-field joule heat generation rate input (LDREAD command).

FIRST INCORRECT VERSION(S):*

Rev. 5.2
ANSYS/Emag Rev. 5.2

CORRECTED IN:*

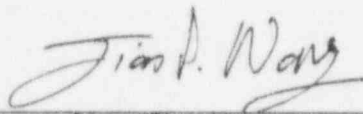
Release 5.3
ANSYS/Emag Release 5.3

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

The sign on the source current density (JS) is incorrect. This leads to an incorrect calculation of the total current density (JT). Use the ETABLE command in POST1 to store values of JT, JS and JE. Change the sign of the JS results (SADD command), and then recalculate JT ($JT = JS + JE$).

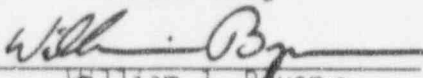
COMMENTS:

AUTHOR/CORRECTOR:


Jian-She Wang

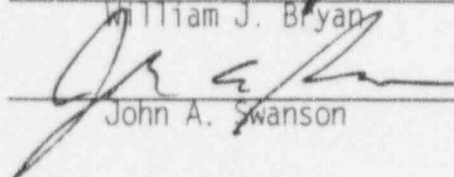
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-36

KEYWORDS: FLOTRAN ELEM141 ELEM142 RESULTS FILE DENSITY

DESCRIPTION OF ERROR:

In flow analyses, for nodes on solid material (MAT>1) elements that are connected only to solid material nodes, using elements FLUID141 and FLUID142, documentation fails to specify that the quantity stored in the results file position for density is actually the product of the density and the specific heat.

FIRST INCORRECT VERSION(S):*

CORRECTED IN:*

Rev. 5.1
ANSYS/FLOTRAN Rev. 5.1

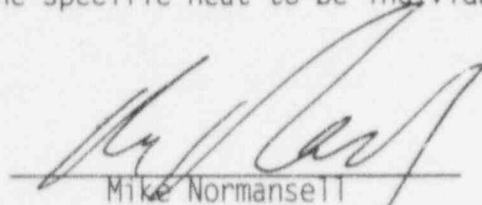
Release 5.3 User's Guide

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

COMMENTS:

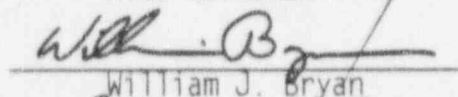
The method of storing solid material property information in the results file for FLUID141 and 142 elements may be changed in the next release to allow the density and the specific heat to be individually displayed during post processing.

AUTHOR/CORRECTOR:


Mike Normansell

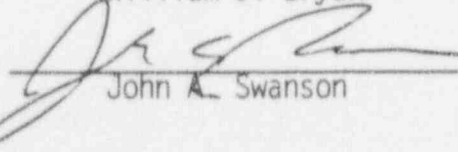
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-37

KEYWORDS: SFA BOUNDARY CONDITIONS SOLID MODEL TRANSFER

DESCRIPTION OF ERROR:

If a keypoint number is equal to or greater than 1024, boundary conditions applied to the surface of a 3-D solid model volume (SFA command) may not transfer to the underlying elements correctly.

FIRST INCORRECT VERSION(S):*

Rev. 5.2

CORRECTED IN:*

Release 5.3

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

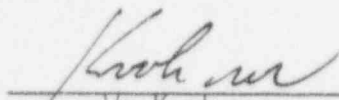
Verify that all area surface loads (SFA) have transferred correctly (by listing or plotting), or use element surface load specifications (SFE command).

COMMENTS:

Solid model surface loads are transferred by the SFTRAN or SBCTAN commands or they are transferred automatically when the SOLVE command is executed.

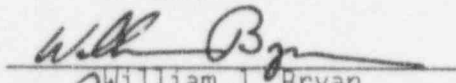
In all error cases that we have seen, no loads have transferred; we believe this to be the most likely manifestation of the error.

AUTHOR/CORRECTOR:


Wa Kwok

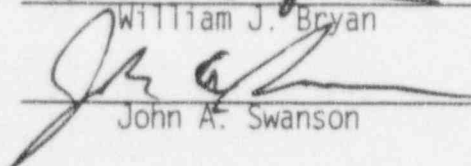
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-38

KEYWORDS: *SOLID MODELING* *BOOLEAN* *SUBTRACT* *ASBL*

DESCRIPTION OF ERROR:

The "SEPO" field of the solid modeling boolean command "ASBL" does not always produce separate areas. It may produce areas with separate lines which share common keypoints.

In most cases this error is obvious. However, there may be rare instances where the error could lead to unanticipated results if validation of boundary conditions and loads is bypassed before solution by the user.

FIRST INCORRECT VERSION(S):*

Rev. 5.1
Component Products Rev. 5.1

CORRECTED IN:*

Release 5.4
Component Products Release 5.4

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

In Release 5.3, generate separate areas from unseparated areas by using the "AGEN" command after the "ASBL" command.

COMMENTS:

AUTHOR/CORRECTOR:

Yu Hua Ting
Yu-Hua Ting

DATE: August 7, 1996

REVIEWED BY QA:

William J. Bryan
William J. Bryan

DATE: August 7, 1996

APPROVAL:

John A. Swanson
John A. Swanson

DATE: August 7, 1996

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ANSYS QA NOTICE

NOTICE NO: QA96-06

SUBJECT: KUSE MATRIX REUSE

DESCRIPTION:

The program documentation has conflicting information on the operation of the KUSE command. The Theory Manual states that KUSE,-1 causes the program to reform the element matrices. The Procedures and Commands Manuals, however, state that KUSE,-1 only causes the reformulation of the triangularized stiffness matrix (using the previously formed element stiffness matrices). The program functions as reported in the Procedures and Command Manuals.

AFFECTED VERSIONS: Rev. 5.0 through Rev. 5.2
 Component Products Rev. 5.0A through Rev. 5.2

OTHER COMMENTS:

To force reformulation of the element matrices, use NLGEOM,ON or change material properties slightly, using a temperature-dependent material.

KUSE,-1 is rarely required in an analysis (only for some debugging and certain cases of error avoidance).

Several past Class3 errors (such as 94-68 R1, 93-33, 93-03, and 92-25) incorrectly suggested that using KUSE,-1 was a way to avoid the errors reported.

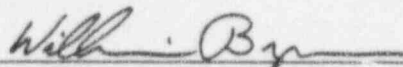
At 5.3, the program is changed to operate as the Theory Manual states.

AUTHOR:


Peter Kohnke

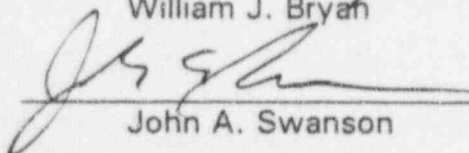
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 92-25 R1

KEYWORDS: STIF18 STIF29 STIF60 PRESSURE FLEXIBILITY

DESCRIPTION OF ERROR:

Results using STIF18 (the elastic curved pipe element) or STIF60 (the plastic curved pipe element) are incorrect if the pressure contribution to the flexibility factor is included (KEYOPT(3)=1) and:

1. the pressure (P, EP, PSF or PPRES commands) is changed between iterations;
- and 2. the element matrix is reused.

The element matrix is reused unless:

1. material properties for the element are a function of temperature (MP, MPDATA commands);
- or 2. the full Newton-Raphson option (KAY,9,1) has been used.
- ~~or 3. KUSE, 1 has not been used to force reformulation.~~

FIRST INCORRECT VERSION(S):*

Rev. 2.0
PC Products Rev. 4.3

CORRECTED IN:*

Rev. 5.0
PC Products Rev. 5.0

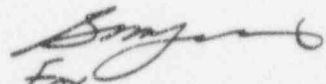
SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

~~Use KUSE, 1 to force the reformulation of the element matrices.~~

COMMENTS:

STIF18 was known as STIF29 prior to Rev. 4.3.

AUTHOR/CORRECTOR:


David L. Conover

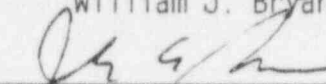
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 93-03 R1

KEYWORDS: KAN, -1 CONVECTION TBULK

DESCRIPTION OF ERROR:

If the bulk temperature is zero (TBULK=0) in a thermal convection input (e.g., CV and CVSF commands), and the convection input is removed in a later load step, the conductivity matrix of the applicable element will not be reformulated to remove the convection condition unless KSS is temperature-dependent ~~or the command KUSE, 1 has been input.~~

FIRST INCORRECT VERSION(S):*

Rev. 4.0
PC/THERMAL Rev. 4.2

CORRECTED IN:*

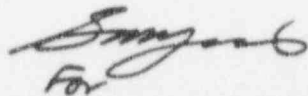
Rev. 5.0
ANSYS/THERMAL Rev. 5.0

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

- ~~1. Set KUSE, 1 to force the reformulation of all element matrices. or~~
1. Set TBULK to a small finite number (instead of zero).
or 2. Make the thermal conductivity mildly KXX temperature-dependent.

COMMENTS:

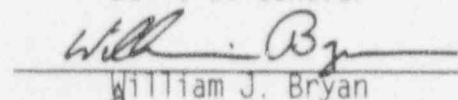
AUTHOR/CORRECTOR:


For

David L. Conover

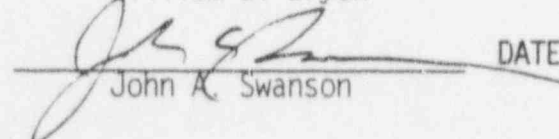
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 93-33 R1

KEYWORDS: SHELL41 ELEM41 CLOTH OPTION

DESCRIPTION OF ERROR:

The cloth option (KEYOPT(1)=2) of SHELL41 (the membrane shell element) has the following errors:

1. The elements are sometimes erroneously reported to be converged with both directions collapsed (STATUS=2) when there is actually a small amount of tension in one direction (STATUS=1). The error does not occur if Poisson's ratio (NUXY or PRXY on the MP command) is 0.0.
2. Elements with integration points that report tension in one direction and collapse in the other direction (STATUS=1) may not give correct answers. The results may incorrectly depend on the order in which the loads are applied.
3. If thermal strains are present, the results are incorrect.
4. If KEYOPT(2)=0 (include extra displacement shapes [default]), the elements may be reported to be converged when in fact they are not. This is because the element stiffness matrices are sometimes not reformed when the status changes, which can cause incorrect results.

FIRST INCORRECT VERSION(S):*

Rev. 4.0 - errors 1 & 2
Rev. 5.0 - errors 3 & 4

CORRECTED IN:*

Rev. 5.0A
Rev. 5.0A

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

For error 2, rerunning the problem with a different order of loading and achieving the same or similar results increases the reliability of having the correct solution. This assumes that there are no energy-absorbing or other legitimately path-dependent effects (such as plasticity) in the model.

~~For error 4, add the command KUSE, 1 before the first SOLVE command to force reformulation of the stiffness matrix during each iteration.~~

COMMENTS:

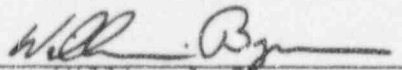
SHELL41 was referred to as STIF41 prior to Rev. 5.0.

AUTHOR/CORRECTOR:


Peter Kohnke

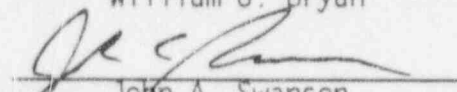
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 94-68 R2

KEYWORDS: BEAM44 ELEM44 STIFFNESS RELEASES

DESCRIPTION OF ERROR:

There are two errors when using BEAM44 (3-D tapered unsymmetric beam element) with stiffness releases.

1. All results are in error for load steps, substeps, and iterations in which the element stiffness matrix is being re-used.

Stiffness matrices are generally reused unless large deflections are active, or the materials or real constants are changing. See Section 13.3 of the Theory Manual.

2. All results are incorrect if any of the following are active:

- a. Large deflection (NLGEOM,ON)
- or b. Stress Stiffening (SSTIF,ON)
- or c. Newton-Raphson (NROPT command).

FIRST INCORRECT VERSION(S):*

Rev. 4.4
ANSYS/Linear Rev. 4.4

CORRECTED IN:*

Rev. 5.2
ANSYS/Linear Rev. 5.2

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

~~Error 1. Use KUSE, 1 to force reformulation of all element stiffness matrices.~~

Error 2. Use coincident coupled nodes (CP command) to induce the stiffness release where required.

COMMENTS:

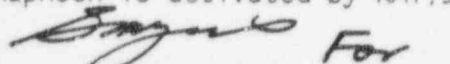
On some computer system, these errors will cause an abort.

Stiffness releases are accessed with KEYOPT(7) and KEYOPT(8) or, if using pre-Rev. 5.0 input, with KEYOPT(3) and KEYOPT(4).

For error 2, if using pre-Rev. 5.0 input:

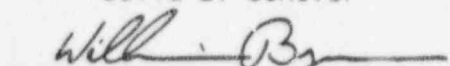
- a. Large deflection is activated by the KAY,6,1 command.
- b. Stress stiffening is activated by the KAY,8,1 command.
- c. Newton-Raphson is activated by KAY,9,n (n = 1, 2 or 3).

AUTHOR/CORRECTOR:


David L. Conover

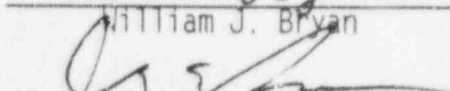
DATE: August 7, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 7, 1996

APPROVAL:


John A. Swanson

DATE: August 7, 1996

*If a product name is not included in the "first incorrect version", the full ANSYS program is implied. For products not listed, this error does not apply, but see the reverse side for equivalent product designations. Unless noted otherwise, this error report also applies to all revisions after the first incorrect one and prior to the corrected revision. All revisions after "corrected in" are corrected. Manual corrections are included in on-line documentation as appropriate. Please see the reverse side of this sheet for additional information on ANSYS revision identifiers.

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 95-37 R1

KEYWORDS: FLOTRAN FLUID142 ELEM142

DESCRIPTION OF ERROR:

Three-dimensional FLOTRAN models using FLUID142 elements solved in cylindrical coordinates (KEYOPT(3)=3) with a Z-direction acceleration (ACEL command) yield incorrect velocity and pressure solutions.

FIRST INCORRECT VERSION(S):*

CORRECTED IN:*

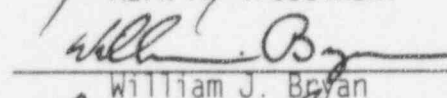
Rev. 5.1
ANSYS/Flotran Rev. 5.1

Release 5.4

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

COMMENTS:

AUTHOR/CORRECTOR:  DATE: August 8, 1996
Mark A. Troscinski

REVIEWED BY QA:  DATE: August 8, 1996
William J. Bryan

APPROVAL:  DATE: August 8, 1996
John A. Swanson

*If a product name is not included in the "first incorrect version", the full ANSYS program is implied. For products not listed, this error does not apply, but see the reverse side for equivalent product designations.

Unless noted otherwise, this error report also applies to all revisions after the first incorrect one and prior to the corrected revision. All revisions after "corrected in" are corrected. Manual corrections are included in on-line documentation as appropriate. Please see the reverse side of this sheet for additional information on ANSYS revision identifiers.

FORM SASI-QA25
DEC 19, 1988

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 95-39 R1

KEYWORDS: FLOTRAN ELEM142 FLUID142

DESCRIPTION OF ERROR:

Three-dimensional FLOTRAN models, using FLUID142 elements, solved in Cartesian coordinates (KEYOPT(3)=0, default) yield incorrect pressure solutions when solved with a rotating frame of reference (CGOMGA or OMEGA commands).

FIRST INCORRECT VERSION(S):*

Rev. 5.1
ANSYS/Flotran Rev. 5.1

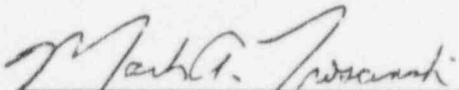
CORRECTED IN:*

Release 5.4

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

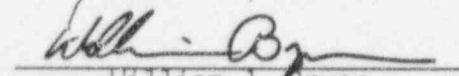
COMMENTS:

AUTHOR/CORRECTOR:


Mark A. Troschinski

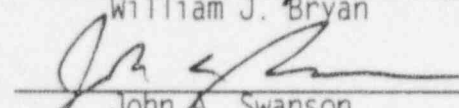
DATE: August 8, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 8, 1996

APPROVAL:


John A. Swanson

DATE: August 8, 1996

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ANSYS® CLASS3 ERROR REPORT

ERROR NO: 95-49 R1

KEYWORDS: FLOTRAN ELEM141 ELEM142

DESCRIPTION OF ERROR:

FLOTRAN models with triangular FLUID141 elements or tetrahedral FLUID142 elements which use the transient, compressible flow algorithm yield time-inaccurate velocity and pressure solutions if the flow is supersonic.

FIRST INCORRECT VERSION(S):*

CORRECTED IN:*

Rev. 5.1
ANSYS/Flotran Rev. 5.1

Release 5.4

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

Use quadrilateral FLUID141 or hexahedral FLUID142 elements instead.

COMMENTS:

AUTHOR/CORRECTOR:


Mark A. Troscinski

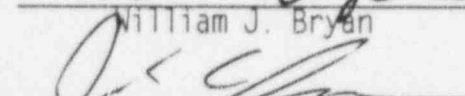
DATE: August 8, 1996

REVIEWED BY QA:


William J. Bryan

DATE: August 8, 1996

APPROVAL:


John A. Swanson

DATE: August 8, 1996

*If a product name is not included in the "first incorrect version", the full ANSYS program is implied. For products not listed, this error does not apply, but see the reverse side for equivalent product designations.

Unless noted otherwise, this error report also applies to all revisions after the first incorrect one and prior to the corrected revision. All revisions after "corrected in" are corrected. Manual corrections are included in on-line documentation as appropriate. Please see the reverse side of this sheet for additional information on ANSYS revision identifiers.

ANSYS 5.1 CLASS3 ERROR SUMMARY BY REPORT NUMBER

ERROR NUMBER	KEYWORD #1	KEYWORD #2	KEYWORD #3	KEYWORD #4	KEYWORD #5	KEYWORD #6	CORRECTED VERSION
94-55	POST1	ETABLE	PDEF				Rev. 5.2
94-56	SFBEAM	END LOADS	BEAM3 BEAM4	BEAM44 BEAM54	ELEM3 ELEM4	ELEM44 ELEM54	Rev. 5.2
94-57	FLUID66	ELEM66	POST1	ETABLE	CONVECTION		Rev. 5.2
94-58	SOLID MODEL	BFKDELE					Rev. 5.2
94-62	SOLID MODEL BCs	DL	LINE	AREA			Rev. 5.2
94-63	APDL	*VWRITE	ARRAY PARAMETER				Rev. 5.2
94-64	SBCLIST	SFA	CONVECTION	PRESSURE			Rev. 5.2
94-65	ELEM55	PLANE55	MASS TRANSPORT				Rev. 5.2
94-66	HARMONIC	KAN,3	KAN,6	INERTIAL LOADS	FORCES		Rev. 5.2
94-67	MAGNETICS	EMSYM					Rev. 5.2
94-68 R1	BEAM44	ELEM44	STIFFNESS	RELEASES			Rev. 5.2
94-69	MAT'L PROPERTIES	MP	MPDATA	REF TEMPERATURE	TEMP-DEPENDENT		Rev. 5.2
94-70	TRANSIENT	REDUCED	KAN,5	ACEL	ROTATED NODES		Rev. 5.2
94-71	POST1	*GET	FSUM	PLANE13	SURF19	CONTAC48	Rev. 5.2
95-01	SBCDELE	SBCLIST	EDGE PRESSURES	FLUENCES			Rev. 5.2
95-02	DOCU	SURF22	SOLID72	SOLID73	PRESSURE		5.2 User Manual
95-03	MESH	VOLUME	MIDSIDE NODES				Rev. 5.2
95-04	SURFACE STRESSES	SOLID45	SOLID62	SOLID95	MANUAL		5.2 User Manual
95-05	DOCU	LOAD	NUMCMP	NUMMRG	MATERIAL	TEMP-DEPENDENT	5.2 User Manual
95-06	MANUAL	*GET	VOLUME				5.2 User Manual
95-09	*GET	DAMPING	DMPRAT				Rev. 5.2
95-10 R1	SPECTRUM	PFACT	ROTATED NODES	COUPLED NODES	CONSTRAINT EQUA		Rev. 5.2
95-11	POST1	PRRSOL	CP				Rev. 5.2
95-12	SPECTRUM	MODE COMBINATIO	GROUPING METHOD				Rev. 5.2
95-13 R1	MODAL	PRESTRESS	LARGE DEFLECTIO	STRESS STIFFENI	LARGE DEFLECTIO		Rev. 5.2
95-14	ELEM34	ELEM71	TEMP-DEP MAT PR				Rev. 5.2
95-15	LINK34	ELEM34	FILM COEFFICIENT	SFE			Rev. 5.2
95-16	ELEM3	ELEM4	LARGE DEFLECTIO				Rev. 5.2
95-17	BOOLEAN	CUT	SUBTRACT	LCTA	ACTA	VCTA	Rev. 5.2
95-18	ELEM106	VISCO106	CENTROID RESULT				Rev. 5.2
95-19	DAMPING	UNSYMMETRIC MAT	ELEM4	ELEM16	ELEM27		Rev. 5.2
95-20	ELEM16,17,18	ELEM20,59,60	STRESS EXTREMES				Rev. 5.2
95-21 R1	ELEM17	PIPE17	THERMAL LOAD	LARGE DEFLECTIO	NEWTON-RAPHSON	BIRTH AND DEATH	Rev. 5.2
95-22	GUI	REAL CONSTANTS	ELEM46	ELEM91	ELEM99		Rev. 5.2
95-23	BFUNIF	TUNIF	LSSOLVE	LSWRITE	LSREAD	CDWRITE CDREA	Rev. 5.2
95-24	POST1	LCOPER	TOP-DOWN SUBSTR				Rev. 5.2
95-25	ELEM8	ELEM10	LINK8	LINK10	MISC RECORDS		Rev. 5.2

ANSYS 5.1 CLASS3 ERROR SUMMARY BY REPORT NUMBER

ERROR NUMBER	KEYWORD #1	KEYWORD #2	KEYWORD #3	KEYWORD #4	KEYWORD #5	KEYWORD #6	CORRECTED VERSION
95-26	DL	DA	LINE SYMMETRY	AREA SYMMETRY			Rev. 5.2
95-27	GUI	WINDOWS NT	DATA TABLES				Rev. 5.1
95-28	BKDEL	NODAL BODY FORC					Rev. 5.2
95-29	ASUM	GSUM	KSUM	VSUM			5.2 User Manual
95-30	GUI	MAGNETICS	POST1	MECH TORQUE			Rev. 5.2
95-31	ENTITY RANGE	NEGATIVE INCREM	BOUND CONDITION				Rev. 5.2
95-32	POST1	RSYS	LOCAL	CS			Rev. 5.2
95-34	SHELL63	ELEM63	MEMBRANE APPLIC	REACTION FORCES			Rev. 5.2
95-35	PCG SOLVER	LARGE STRAIN	CONSTRAINT EQUA				Rev. 5.2
95-36	COUPLED NODES	PICKING	INTERACTIVE				Rev. 5.2
95-37	FLOTRAN	FLUID142	ELEM142				Rev. 5.3
95-38	FLOTRAN	FLUID141	ELEM141				Rev. 5.2
95-39	FLOTRAN	ELEM142	FLUID142				Rev. 5.3
95-40	*GET	*VGET	ELEMENT	VOLUME	AREA		Rev. 5.2
95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN METH				Rev. 5.3
95-42	GUI	BFE	CURRENT DENSITY				Rev. 5.2 *
95-43	CONVECTIONS	ELEM19	ELEM22	ELEM67	ELEM69		Rev. 5.2 -
95-44	DOCU	APDL	CENTRX/Y/Z	ELEMENT CENTROI			5.2 User Manual
95-45	PREP7	SOLID MODEL	ASUM	VSUM			Rev. 5.2 *
95-46	PSTRES	SSTIF	GUI				Rev. 5.2
95-48	APDL	ARNODE	GET FUNCTION				Rev. 5.2
95-49	FLOTRAN	ELEM141	ELEM142				Rev. 5.3
95-50	ELEM54	BEAM54	SHEAR STRESS				Rev. 5.2
95-51	APDL	*VOPER	GATHER				Rev. 5.2
95-52	MESH	MIDSIDE NODES					Rev. 5.2
95-53	CORROSION THICK	ELEM16	ELEM17	ELEM18			Rev. 5.2
95-54	APDL	ARFACE	GET FUNCTION				Rev. 5.2
95-55	POST1	ESEL	MULTIPLE SOLUTI				Rev. 5.3
95-56	MODAL	DAMPED					Rev. 5.3
95-57	BEAM24	ELEM24					Rev. 5.3
95-58	GUI	BEAM44	REAL CONSTANTS				Rev. 5.3
95-59	SUBSPACE	RIGID					Rev. 5.3
95-61	POST1	LCASE	LCFACT				Rev. 5.3
95-62	SPECTRUM	SPRS	DSUM				Rev. 5.3
95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP			Rev. 5.3
96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL PLNSOL	Release 5.3
96-02 R1	THERMAL ANALYSI	KZZ	ORTHOTROPIC MAT	MATRIX REUSE			Release 5.3

ANSYS 5.1 CLASS3 ERROR SUMMARY BY REPORT NUMBER

ERROR NUMBER	KEYWORD #1	KEYWORD #2	KEYWORD #3	KEYWORD #4	KEYWORD #5	KEYWORD #6	CORRECTED VERSION
96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS				Release 5.3
96-04	KMODIF	BOUNDARY COND					Release 5.3
96-05	DOCU	FLUID66	ELEM66				5.3 User Manual
96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40			Release 5.3
96-08	RESTART	POST1	SET				Release 5.3
96-10	POST1	LCWRIT	LCOPER				Release 5.3
96-11	POST1	ETABLE	EMID				Release 5.3
96-13	SUBSTRUCTURES	TOTAL COMMAND					Release 5.3
96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON			Release 5.3
96-15	GP	LSWRITE	LSSOLVE				Release 5.3
96-16	IMPOSED DOF	RAMP TO ZERO					Release 5.3
96-17	MODAL ANALYSIS	LARGE DEFLECTIO					Release 5.3
96-20	THERMAL	CONVECTION	DELETE FILM COE				Release 5.3

ANSYS 5.1 CLASS3 ERROR SUMMARY

KEYWORD SORT OF ALL REVISION 5.1 CLASS3 ERRORS

Date of this report: 8/12/96

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST						VERSION CORRECTED
*GET	94-71	POST1	*GET	FSUM	PLANE13	SURF19	CONTAC48	Rev. 5.2
*GET	95-06	MANUAL	*GET	VOLUME				5.2 User Manual
*GET	95-09	*GET	DAMPING	OMPRAT				Rev. 5.2
*GET	95-40	*GET	*VGET	ELEMENT	VOLUME	AREA		Rev. 5.2
*VGET	95-40	*GET	*VGET	ELEMENT	VOLUME	AREA		Rev. 5.2
*VOPER	95-51	APDL	*VOPER	GATHER				Rev. 5.2
*VWRITE	94-63	APDL	*VWRITE	ARRAY PARAMETE				Rev. 5.2
ACEL	94-70	TRANSIENT	REDUCED	KAN,5	ACEL	ROTATED NODES		Rev. 5.2
ACTA	95-17	BOOLEAN	CUT	SUBTRACT	LCTA	ACTA	VCTA	Rev. 5.2
APDL	94-63	APDL	*VWRITE	ARRAY PARAMETE				Rev. 5.2
APDL	95-44	DOCU	APDL	CENTRX/Y/Z	ELEMENT CENTRO			5.2 User Manual
APDL	95-48	APDL	APDL	GET FUNCTION				Rev. 5.2
APDL	95-51	APDL	*VOPER	GATHER				Rev. 5.2
APDL	95-54	APDL	ARFACE	GET FUNCTION				Rev. 5.2
AREA	94-62	SOLID MODEL BCs	DL	LINE	AREA			Rev. 5.2
AREA	95-40	*GET	*VGET	ELEMENT	VOLUME	AREA		Rev. 5.2
AREA SYMMETRY	95-26	DL	DA	LINE SYMMETRY	AREA SYMMETRY			Rev. 5.2
ARFACE	95-54	APDL	ARFACE	GET FUNCTION				Rev. 5.2
ARNODE	95-48	APDL	ARNODE	GET FUNCTION				Rev. 5.2
ARRAY PARAMETERS	94-63	APDL	*VWRITE	ARRAY PARAMETE				Rev. 5.2
ASUM	95-29	ASUM	GSUM	KSUM	VSUM			5.2 User Manual
ASUM	95-45	PREP7	SOLID MODEL	ASUM	VSUM			Rev. 5.2
AUTO TIME STEP	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP			Rev. 5.3
AUX12	95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN MET				Rev. 5.3
BEAM ELEMENTS	96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS				Release 5.3
BEAM24	95-57	BEAM24	ELEM24					Rev. 5.3
BEAM3 BEAM4	94-56	SFBEAM	END LOADS	BEAM3 BEAM4	BEAM44 BEAM54	ELEM3 ELEM4	ELEM44 ELEM54	Rev. 5.2
BEAM44	94-68 R1	BEAM44	ELEM44	STIFFNESS	RELEASES			Rev. 5.2
BEAM44	95-58	GUI	BEAM44	REAL CONSTANTS				Rev. 5.3
BEAM44 BEAM54	94-56	SFBEAM	END LOADS	BEAM3 BEAM4	BEAM44 BEAM54	ELEM3 ELEM4	ELEM44 ELEM54	Rev. 5.2
BEAM54	95-50	ELEM54	BEAM54	SHEAR STRESS				Rev. 5.2
BFE	95-42	GUI	BFE	CURRENT DENSIT				Rev. 5.2
BFKDEL	95-28	BFKDEL	NODAL BODY FORC					Rev. 5.2

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST						VERSION CORRECTED
BFKDELE	94-58	SOLID MODEL	BFKDELE					Rev. 5.2
BFUNIF	95-23	BFUNIF	TUNIF	LSSOLVE	LSWRITE	LSREAD	CDWRITE CDRE	Rev. 5.2
BIRTH AND DEATH	95-21 R1	ELEM17	PIPE17	THERMAL LOAD	LARGE DEFLECTI	NEWTON-RAPHSON	BIRTH AND DEAT	Rev. 5.2
BOOLEAN	95-17	BOOLEAN	CUT	SUBTRACT	LCTA	ACTA	VCTA	Rev. 5.2
BOUND CONDITIONS	95-31	ENTITY RANGE	NEGATIVE INCREM	BOUND CONDITIO				Rev. 5.2
BOUNDARY COND	96-04	KMODIF	BOUNDARY COND					Release 5.3
CDWRITE CREAD	95-23	BFUNIF	TUNIF	LSSOLVE	LSWRITE	LSREAD	CDWRITE CDRE	Rev. 5.2
CENTROID RESULTS	95-18	ELEM106	VISCO106	CENTROID RESUL				Rev. 5.2
CENTRX/Y/Z	95-44	DOCU	APDL	CENTRX/Y/Z	ELEMENT CENTRO			5.2 User Manual
COMBIN40	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40			Release 5.3
CONSTRAINT EQUAT	95-10 R1	SPECTRUM	PFACT	ROTATED NODES	COUPLED NODES	CONSTRAINT EQU		Rev. 5.2
CONSTRAINT EQUAT	95-35	PCG SOLVER	LARGE STRAIN	CONSTRAINT EQU				Rev. 5.2
CONTAC48	94-71	POST1	*GET	FSUM	PLANE13	SURF19	CONTAC48	Rev. 5.2
CONVECTION	94-57	FLUID66	ELEM66	POST1	ETABLE	CONVECTION		Rev. 5.2
CONVECTION	94-64	SBCLIST	SFA	CONVECTION	PRESSURE			Rev. 5.2
CONVECTION	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP			Rev. 5.3
CONVECTION	96-20	THERMAL	CONVECTION	DELETE FILM CO				Release 5.3
CONVECTIONS	95-43	CONVECTIONS	ELEM19	ELEM22	ELEM67	ELEM69		Rev. 5.2
CORROSION THICK	95-53	CORROSION THICK	ELEM16	ELEM17	ELEM18			Rev. 5.2
COUPLED NODES	95-10 R1	SPECTRUM	PFACT	ROTATED NODES	COUPLED NODES	CONSTRAINT EQU		Rev. 5.2
COUPLED NODES	95-36	COUPLED NODES	PICKING	INTERACTIVE				Rev. 5.2
CP	95-11	POST1	PRRSOL	CP				Rev. 5.2
CS	95-32	POST1	RSYS	LOCAL	CS			Rev. 5.2
CURRENT DENSITY	95-42	GUI	BFE	CURRENT DENSIT				Rev. 5.2
CUT	95-17	BOCLEAN	CUT	SUBTRACT	LCTA	ACTA	VCTA	Rev. 5.2
DA	95-26	DL	DA	LINE SYMMETRY	AREA SYMMETRY			Rev. 5.2
DAMPED	95-56	MODAL	DAMPED					Rev. 5.3
DAMPING	95-09	*GET	DAMPING	DMPRAT				Rev. 5.2
DAMPING	95-19	DAMPING	UNSYMMETRIC MAT	ELEM4	ELEM16	ELEM27		Rev. 5.2
DATA TABLES	95-27	GUI	WINDOWS NT	DATA TABLES				Rev. 5.1
DELETE FILM COEF	96-20	THERMAL	CONVECTION	DELETE FILM CO				Release 5.3
DL	94-62	SOLID MODEL BCs	DL	LINE	AREA			Rev. 5.2
DL	95-26	DL	DA	LINE SYMMETRY	AREA SYMMETRY			Rev. 5.2
DMPRAT	95-09	*GET	DAMPING	DMPRAT				Rev. 5.2
DOCU	95-02	DOCU	SURF22	SOLID72	SOLID73	PRESSURE		5.2 User Manual
DOCU	95-05	DOCU	LOAD	NUMCMP	NUMMRG	MATERIAL	TEMP-DEPENDENT	5.2 User Manual
DOCU	95-44	DOCU	APDL	CENTRX/Y/Z	ELEMENT CENTRO			5.2 User Manual
DOCU	96-05	DOCU	FLUID66	ELEM66				5.3 User Manual

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST						VERSION CORRECTED
DSUM	95-62	SPECTRUM	SPRS	DSUM				Rev. 5.3
EDGE PRESSURES	95-01	SBCDELE	SBCLIST	EDGE PRESSURES	FLUENCES			Rev. 5.2
ELEM10	95-25	ELEM8	ELEM10	LINK8	LINK10	MISC RECORDS		Rev. 5.2
ELEM106	95-18	ELEM106	VISCO106	CENTROID RESUL				Rev. 5.2
ELEM141	95-38	FLOTRAN	FLUID141	ELEM141				Rev. 5.2
ELEM141	95-49	FLOTRAN	ELEM141	ELEM142				Rev. 5.3
ELEM142	95-37	FLOTRAN	FLUID142	ELEM142				Rev. 5.3
ELEM142	95-39	FLOTRAN	ELEM142	FLUID142				Rev. 5.3
ELEM142	95-49	FLOTRAN	ELEM141	ELEM142				Rev. 5.3
ELEM16	95-19	DAMPING	UNSYMMETRIC MAT	ELEM4	ELEM16	ELEM27		Rev. 5.2
ELEM16	95-53	CORROSION THICK	ELEM16	ELEM17	ELEM18			Rev. 5.2
ELEM16,17,18	95-20	ELEM16,17,18	ELEM20,59,60	STRESS EXTREME				Rev. 5.2
ELEM17	95-21 R1	ELEM17	PIPE17	THERMAL LOAD	LARGE DEFLECTI	NEWTON-RAPHSON BIRTH AND DEAT		Rev. 5.2
ELEM17	95-53	CORROSION THICK	ELEM16	ELEM17	ELEM18			Rev. 5.2
ELEM18	95-53	CORROSION THICK	ELEM16	ELEM17	ELEM18			Rev. 5.2
ELEM19	95-43	CONVECTIONS	ELEM19	ELEM22	ELEM67	ELEM69		Rev. 5.2
ELEM20,59,60	95-20	ELEM16,17,18	ELEM20,59,60	STRESS EXTREME				Rev. 5.2
ELEM22	95-43	CONVECTIONS	ELEM19	ELEM22	ELEM67	ELEM69		Rev. 5.2
ELEM24	95-57	BEAM24	ELEM24					Rev. 5.3
ELEM27	95-19	DAMPING	UNSYMMETRIC MAT	ELEM4	ELEM16	ELEM27		Rev. 5.2
ELEM3	95-16	ELEM3	ELEM4	LARGE DEFLECTI				Rev. 5.2
ELEM3 ELEM4	94-56	SFBEAM	END LOADS	BEAM3 BEAM4	BEAM44	BEAM54	ELEM3 ELEM4 ELEM44 ELEM54	Rev. 5.2
ELEM34	95-14	ELEM34	ELEM71	TEMP-DEP MAT P				Rev. 5.2
ELEM34	95-15	LINK34	ELEM34	FILM COEFFICIE SFE				Rev. 5.2
ELEM4	95-16	ELEM3	ELEM4	LARGE DEFLECTI				Rev. 5.2
ELEM4	95-19	DAMPING	UNSYMMETRIC MAT	ELEM4	ELEM16	ELEM27		Rev. 5.2
ELEM40	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40			Release 5.3
ELEM44	94-68 R1	BEAM44	ELEM44	STIFFNESS	RELEASES			Rev. 5.2
ELEM44 ELEM54	94-56	SFBEAM	END LOADS	BEAM3 BEAM4	BEAM44	BEAM54	ELEM3 ELEM4 ELEM44 ELEM54	Rev. 5.2
ELEM46	95-22	GUI	REAL CONSTANTS	ELEM46	ELEM91	ELEM99		Rev. 5.2
ELEM54	95-50	ELEM54	BEAM54	SHEAR STRFSS				Rev. 5.2
ELEM55	94-65	ELEM55	PLANE55	MASS TRANSPORT				Rev. 5.2
ELEM63	95-34	SHELL63	ELEM63	MEMBRANE APPLI	REACTION FORCE			Rev. 5.2
ELEM63	96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON			Release 5.3
ELEM66	94-57	FLUID66	ELEM66	POST1	ETABLE	CONVECTION		Rev. 5.2
ELEM66	96-05	DOCU	FLUID66	ELEM66				5.3 User Manual
ELEM67	95-43	CONVECTIONS	ELEM19	ELEM22	ELEM67	ELEM69		Rev. 5.2
ELEM69	95-43	CONVECTIONS	ELEM19	ELEM22	ELEM67	ELEM69		Rev. 5.2

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST										VERSION CORRECTED
ELEM71	95-14	ELEM34	ELEM71	TEMP-DEP MAT P							Rev. 5.2	
ELEM8	95-25	ELEM8	ELEM10	LINK8	LINK10	MISC RECORDS					Rev. 5.2	
ELEM91	95-22	GUI	REAL CONSTANTS	ELEM46	ELEM91	ELEM99					Rev. 5.2	
ELEM99	95-22	GUI	REAL CONSTANTS	ELEM46	ELEM91	ELEM99					Rev. 5.2	
ELEMENT	95-40	*GET	*VGET	ELEMENT	VOLUME	AREA					Rev. 5.2	
ELEMENT CENTROID	95-44	DOCU	APDL	CENTRX/Y/Z	ELEMENT CENTRO						5.2 User Manual	
EMID	96-11	POST1	ETABLE	EMID								Release 5.3
EMSYM	94-67	MAGNETICS	EMSYM									Rev. 5.2
END LOADS	94-56	SFBEAM	END LOADS	BEAM3	BEAM4	BEAM44	BEAM54	ELEM3	ELEM4	ELEM44	ELEM54	Rev. 5.2
ENTITY RANGE	95-31	ENTITY RANGE	NEGATIVE INCREM	BOUND CONDITIO								Rev. 5.2
ESEL	95-55	POST1	ESEL	MULTIPLE SOLUT								Rev. 5.3
ETABLE	94-55	POST1	ETABLE	PDEF								Rev. 5.2
ETABLE	94-57	FLUID66	ELEM66	POST1	ETABLE	CONVECTION					Rev. 5.2	
ETABLE	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE			PRNSOL	PLNSOL	Release 5.3	
ETABLE	96-11	POST1	ETABLE	EMID								Release 5.3
FILM COEFFICIENT	95-15	LINK34	ELEM34	FILM COEFFICIE SFE								Rev. 5.2
FLOTRAN	95-37	FLOTRAN	FLUID142	ELEM142								Rev. 5.3 *
FLOTRAN	95-38	FLOTRAN	FLUID141	ELEM141								Rev. 5.2 *
FLOTRAN	95-39	FLOTRAN	ELEM142	FLUID142								Rev. 5.3
FLOTRAN	95-49	FLOTRAN	ELEM141	ELEM142								Rev. 5.3 *
FLUENCES	95-01	SBCDELE	SBCLIST	EDGE PRESSURES FLUENCES								Rev. 5.2
FLUID141	95-38	FLOTRAN	FLUID141	ELEM141								Rev. 5.2
FLUID142	95-37	FLOTRAN	FLUID142	ELEM142								Rev. 5.3
FLUID142	95-39	FLOTRAN	ELEM142	FLUID142								Rev. 5.3
FLUID66	94-57	FLUID66	ELEM66	POST1	ETABLE	CONVECTION					Rev. 5.2	
FLUID66	96-05	DOCU	FLUID66	ELEM66								5.3 User Manual
FORCES	94-66	HARMONIC	KAN.3	KAN.6	INERTIAL LOADS			FORCES			Rev. 5.2	
FSUM	94-71	POST1	*GET	FSUM	PLANE13	SURF19			CONTAC48		Rev. 5.2	
GATHER	95-51	APDL	*VOPER	GATHER								Rev. 5.2
GET FUNCTION	95-48	APDL	ARNODE	GET FUNCTION								Rev. 5.2
GET FUNCTION	95-54	APDL	ARFACE	GET FUNCTION								Rev. 5.2
GP	96-15	GP	LSWRITE	LSSOLVE								Release 5.3
GROUPING METHOD	95-12	SPECTRUM	MODE COMBINATIO	GROUPING METHO								Rev. 5.2
GSUM	95-29	ASUM	GSUM	KSUM	VSUM							5.2 User Manual
GUI	95-22	GUI	REAL CONSTANTS	ELEM46	ELEM91	ELEM99						Rev. 5.2
GUI	95-27	GUI	WINDOWS NT	DATA TABLES								Rev. 5.1
GUI	95-30	GUI	MAGNETICS	POST1	MECH TORQUE							Rev. 5.2
GUI	95-42	GUI	BFE	CURRENT DENSIT								Rev. 5.2

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST				VERSION CORRECTED
GUI	95-46	PSTRES	SSTIF	GUI		Rev. 5.2
GUI	95-58	GUI	BEAM44	REAL CONSTANTS		Rev. 5.3
HARMONIC	94-66	HARMONIC	KAN.3	KAN.6	INERTIAL LOADS FORCES	Rev. 5.2
IMPOSED DOF	96-16	IMPOSED DOF	RAMP TO ZERO			Release 5.3
INERTIAL LOADS	94-66	HARMONIC	KAN.3	KAN.6	INERTIAL LOADS FORCES	Rev. 5.2
INTERACTIVE	95-36	COUPLED NODES	PICKING	INTERACTIVE		Rev. 5.2
KAN.3	94-66	HARMONIC	KAN.3	KAN.6	INERTIAL LOADS FORCES	Rev. 5.2
KAN.5	94-70	TRANSIENT	REDUCED	KAN.5	ACEL ROTATED NODES	Rev. 5.2
KAN.6	94-66	HARMONIC	KAN.3	KAN.6	INERTIAL LOADS FORCES	Rev. 5.2
KMODIF	96-04	KMODIF	BOUNDARY COND			Release 5.3
KSUM	95-29	ASUM	GSUM	KSUM	VSUM	5.2 User Manual
KZZ	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE	Release 5.3
LARGE DEFLECTION	95-13 R1	MODAL	PRESTRESS	LARGE DEFLECTI	STRESS STIFFEN LARGE DEFLECTI	Rev. 5.2
LARGE DEFLECTION	95-16	ELEM3	ELEM4	LARGE DEFLECTI		Rev. 5.2
LARGE DEFLECTION	95-21 R1	ELEM17	PIPE17	THERMAL LOAD	LARGE DEFLECTI NEWTON-RAPHSON BIRTH AND DEAT	Rev. 5.2
LARGE DEFLECTION	96-17	MODAL ANALYSIS	LARGE DEFLECTIO			Release 5.3
LARGE STRAIN	95-35	PCG SOLVER	LARGE STRAIN	CONSTRAINT EQU		Rev. 5.2
LCASE	95-61	POST1	LCASE	LCFACT		Rev. 5.3
LCFACT	95-61	POST1	LCASE	LCFACT		Rev. 5.3
LCOPER	95-24	POST1	LCOPER	TOP-DOWN SUBST		Rev. 5.2
LCOPER	96-10	POST1	LCWRIT	LCOPER		Release 5.3
LCTA	95-17	BOOLEAN	CUT	SUBTRACT	LCTA ACTA VCTA	Rev. 5.2
LCWRIT	96-10	POST1	LCWRIT	LCOPER		Release 5.3
LINE	94-62	SOLID MODEL BCs	DL	LINE	AREA	Rev. 5.2
LINE SYMMETRY	95-26	DL	DA	LINE SYMMETRY	AREA SYMMETRY	Rev. 5.2
LINK10	95-25	ELEM8	ELEM10	LINK8	LINK10 MISC RECORDS	Rev. 5.2
LINK34	95-15	LINK34	ELEM34	FILM COEFFICIE	SFE	Rev. 5.2
LINK8	95-25	ELEM8	ELEM10	LINK8	LINK10 MISC RECORDS	Rev. 5.2
LOAD	95-05	DOCU	LOAD	NUMCMP	NUMMRG MATERIAL TEMP-DEPENDENT	5.2 User Manual
LOCAL	95-32	POST1	RSYS	LOCAL	CS	Rev. 5.2
LSREAD	95-23	BFUNIF	TUNIF	LSSOLVE	LSWRITE LSREAD CDWRITE CORE	Rev. 5.2
LSSOLVE	95-23	BFUNIF	TUNIF	LSSOLVE	LSWRITE LSREAD CDWRITE CORE	Rev. 5.2
LSSOLVE	96-15	GP	LSWRITE	LSSOLVE		Release 5.3
LSWRITE	95-23	BFUNIF	TUNIF	LSSOLVE	LSWRITE LSREAD CDWRITE CORE	Rev. 5.2
LSWRITE	96-15	GP	LSWRITE	LSSOLVE		Release 5.3
MAGNETICS	94-67	MAGNETICS	EMSYM			Rev. 5.2
MAGNETICS	95-30	GUI	MAGNETICS	POST1	MECH TORQUE	Rev. 5.2
MANUAL	95-04	SURFACE STRESSES	SOLID45	SOLID62	SOLID95 MANUAL	5.2 User Manual

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST				VERSION CORRECTED
MANUAL	95-06	MANUAL	*GET	VOLUME		5.2 User Manual
MASS TRANSPORT	94-65	ELEM55	PLANE55	MASS TRANSPORT		Rev. 5.2
MAT'L PROPERTIES	94-69	MAT'L PROPERTIES	MP	MPDATA	REF TEMPERATUR	TEMP-DEPENDENT
MATERIAL	95-05	DOCU	LOAD	NUMCMP	NUMMRG	MATERIAL
MATERIAL PROP	96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS		TEMP-DEPENDENT
MATRIX REUSE	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE	
MECH TORQUE	95-30	GUI	MAGNETICS	POST1	MECH TORQUE	
MEMBRANE APPLICA	95-34	SHELL63	ELEM63	MEMBRANE APPLI	REACTION FORCE	
MESH	95-03	MESH	VOLUME	MIDSIDE NODES		
MESH	95-52	MESH	MIDSIDE NODES			
MIDSIDE NODES	95-03	MESH	VOLUME	MIDSIDE NODES		
MIDSIDE NODES	95-52	MESH	MIDSIDE NODES			
MISC RECORDS	95-25	ELEM8	ELEM10	LINK8	LINK10	MISC RECORDS
MODAL	95-13 R1	MODAL	PRESTRESS	LARGE DEFLECTI	STRESS STIFFEN	LARGE DEFLECTI
MODAL	95-56	MODAL	DAMPED			
MODAL ANALYSIS	95-12	MODAL ANALYSIS	LARGE DEFLECTIO			
MODE COMBINATION	95-12	SPECTRUM	MODE COMBINATIO	GROUPING METHO		
MP	94-69	MAT'L PROPERTIES	MP	MPDATA	REF TEMPERATUR	TEMP-DEPENDENT
MPDATA	94-69	MAT'L PROPERTIES	MP	MPDATA	REF TEMPERATUR	TEMP-DEPENDENT
MULTIPLE SOLUTIO	95-55	POST1	ESEL	MULTIPLE SOLUT		
NEGATIVE INCREME	95-31	ENTITY RANGE	NEGATIVE INCREM	BOUND CONDITIO		
NEWTON-RAPHSON	95-21 R1	ELEM17	PIPE17	THERMAL LOAD	LARGE DEFLECTI	NEWTON-RAPHSON
NEWTON-RAPHSON	96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON	
NODAL BODY FORCE	95-28	BFKDEL	NODAL BODY FORC			
NON-HIDDEN METHO	95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN MET		
NONLINEAR	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE
NUMCMP	95-05	DOCU	LOAD	NUMCMP	NUMMRG	MATERIAL
NUMMRG	95-05	DOCU	LOAD	NUMCMP	NUMMRG	MATERIAL
ORTHOTROPIC MATL	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE	
PCG SOLVER	95-35	PCG SOLVER	LARGE STRAIN	CONSTRAINT EQU		
PDEF	94-55	POST1	ETABLE	PDEF		
PDEF	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE
PFACT	95-10 R1	SPECTRUM	PFACT	ROTATED NODES	COUPLED NODES	CONSTRAINT EQU
PICKING	95-36	COUPLED NODES	PICKING	INTERACTIVE		
PIPE ELEMENTS	96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS		
PIPE17	95-21 R1	ELEM17	PIPE17	THERMAL LOAD	LARGE DEFLECTI	NEWTON-RAPHSON
PLANE13	94-71	POST1	*GET	FSLM	PLANE13	SURF19
PLANE55	94-65	ELEM55	PLANE55	MASS TRANSPORT		CONTAC48

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST						VERSION CORRECTED
POST1	94-55	POST1	ETABLE	PDEF				Rev. 5.2
POST1	94-57	FLUID66	ELEM66	POST1	ETABLE	CONVECTION		Rev. 5.2
POST1	94-71	POST1	*GET	FSUM	PLANE13	SURF19	CONTAC48	Rev. 5.2
POST1	95-11	POST1	PRRSOL	CP				Rev. 5.2
POST1	95-24	POST1	LCOPER	TOP-DOWN SUBST				Rev. 5.2
POST1	95-30	GUI	MAGNETICS	POST1	MECH TORQUE			Rev. 5.2
POST1	95-32	POST1	RSYS	LOCAL	CS			Rev. 5.2
POST1	95-55	POST1	ESEI	MULTIPLE SOLUT				Rev. 5.3
POST1	95-61	POST1	LCASE	LCFACT				Rev. 5.3
POST1	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL PLNSOL	Release 5.3
POST1	96-08	RESTART	POST1	SET				Release 5.3
POST1	96-10	POST1	LCWRIT	LCOPER				Release 5.3
POST1	96-11	POST1	ETABLE	EMID				Release 5.3
PREP7	95-45	PREP7	SOLID MODEL	ASUM	VSUM			Rev. 5.2
PRESSURE	94-64	SBCLIST	SFA	CONVECTION	PRESSURE			Rev. 5.2
PRESSURE	95-02	DOCU	SURF22	SOLID72	SOLID73	PRESSURE		5.2 User Manual
PRESTRESS	95-13 R1	MODAL	PRESTRESS	LARGE DEFLECTI	STRESS STIFFEN	LARGE DEFLECTI		Rev. 5.2
PRNSOL PLNSOL	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL PLNSOL	Release 5.3
PRRSOL	95-11	POST1	PRRSOL	CP				Rev. 5.2
PSTRES	95-46	PSTRES	SSTIF	GUI				Rev. 5.2
RAD VIEW FACTORS	95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN MET				Rev. 5.3
RAMP TO ZERO	96-16	IMPOSED DOF	RAMP TO ZERO					Release 5.3
RAMPED B.C.	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP			Rev. 5.3
REACTION FORCES	95-34	SHELL63	ELEM63	MEMBRANE APPLI	REACTION FORCE			Rev. 5.2
REAL CONSTANTS	95-22	GUI	REAL CONSTANTS	ELEM46	ELEM91	ELEM99		Rev. 5.2
REAL CONSTANTS	95-58	GUI	BEAM44	REAL CONSTANTS				Rev. 5.3
REDUCED	94-70	TRANSIENT	REDUCED	KAN.5	ACEL	ROTATED NODES		Rev. 5.2
REF TEMPERATURE	94-69	MAT'L PROPERTIES	MP	MPDATA	REF TEMPERATUR	TEMP-DEPENDENT		Rev. 5.2
RELEASES	94-68 R1	BEAM44	ELEM44	STIFFNESS	RELEASES			Rev. 5.2
RESTART	96-08	RESTART	POST1	SET				Release 5.3
RIGID	95-59	SUBSPACE	RIGID					Rev. 5.3
ROTATED NODES	94-70	TRANSIENT	REDUCED	KAN.5	ACEL	ROTATED NODES		Rev. 5.2
ROTATED NODES	95-10 R1	SPECTRUM	PFACT	ROTATED NODES	COUPLED NODES	CONSTRAINT EQU		Rev. 5.2
RSYS	95-32	POST1	RSYS	LOCAL	CS			Rev. 5.2
SBCELE	95-01	SBCELE	SBCLIST	EDGE PRESSURES	FLUENCES			Rev. 5.2
SBCLIST	94-64	SBCLIST	SFA	CONVECTION	PRESSURE			Rev. 5.2
SBCLIST	95-01	SBCELE	SBCLIST	EDGE PRESSURES	FLUENCES			Rev. 5.2
SET	96-08	RESTART	POST1	SET				Release 5.3

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST										VERSION CORRECTED
SFA	94-64	SBCLIST	SFA	CONVECTION	PRESSURE							Rev. 5.2
SFBEAM	94-56	SFBEAM	END LOADS	BEAM3 BEAM4	BEAM44 BEAM54	ELEM3 ELEM4	ELEM44 ELEM54					Rev. 5.2
SFE	95-15	LINK34	ELEM34	FILM COEFFICIE	SFE							Rev. 5.2
SHEAR STRESS	95-50	ELEM54	BEAM54	SHEAR STRESS								Rev. 5.2
SHELL	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL PLNSOL					Release 5.3
SHELL63	95-34	SHELL63	ELEM63	MEMBRANE APPLI	REACTION FORCE							Rev. 5.2
SHELL63	96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON							Release 5.3
SOLID MODEL	94-58	SOLID MODEL	BFKDELE									Rev. 5.2
SOLID MODEL	95-45	PREP7	SOLID MODEL	ASUM	VSUM							Rev. 5.2
SOLID MODEL BCS	94-62	SOLID MODEL BCS	DL	LINE	AREA							Rev. 5.2
SOLID45	95-04	SURFACE STRESSES	SOLID45	SOLID62	SOLID95	MANUAL						5.2 User Manual
SOLID62	95-04	SURFACE STRESSES	SOLID45	SOLID62	SOLID95	MANUAL						5.2 User Manual
SOLID72	95-02	DOCU	SURF22	SOLID72	SOLID73	PRESSURE						5.2 User Manual
SOLID73	95-02	DOCU	SURF22	SOLID72	SOLID73	PRESSURE						5.2 User Manual
SOLID95	95-04	SURFACE STRESSES	SOLID45	SOLID62	SOLID95	MANUAL						5.2 User Manual
SPECTRUM	95-10 R1	SPECTRUM	PFACT	ROTATED NODES	COUPLED NODES	CONSTRAINT EQU						Rev. 5.2
SPECTRUM	95-12	SPECTRUM	MODE COMBINATIO	GROUPING METHO								Rev. 5.2
SPECTRUM	95-62	SPECTRUM	SPRS	DSUM								Rev. 5.3
SPRS	95-62	SPECTRUM	SPRS	DSUM								Rev. 5.3
SSTIF	95-46	PSTRES	SSTIF	GUI								Rev. 5.2
STIFFNESS	94-68 R1	BEAM44	ELEM44	STIFFNESS	RELEASES							Rev. 5.2
STRESS EXTREMES	95-20	ELEM16.17.18	ELEM20.59.60	STRESS EXTREME								Rev. 5.2
STRESS STIFFENIN	95-13 R1	MODAL	PRESTRESS	LARGE DEFLECTI	STRESS STIFFEN	LARGE DEFLECTI						Rev. 5.2
SUBSPACE	95-59	SUBSPACE	RIGID									Rev. 5.3
SUBSTRUCTURES	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40							Release 5.3
SUBSTRUCTURES	96-13	SUBSTRUCTURES	TOTAL COMMAND									Release 5.3
SUBTRACT	95-17	BOOLEAN	CUT	SUBTRACT	LCTA	ACTA	VCTA					Rev. 5.2
SUPERELEMENTS	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40							Release 5.3
SURF19	94-71	POST1	*GET	FSUM	PLANE13	SURF19	CONTAC48					Rev. 5.2
SURF22	95-02	DOCU	SURF22	SOLID72	SOLID73	PRESSURE						5.2 User Manual
SURFACE STRESSES	95-04	SURFACE STRESSES	SOLID45	SOLID62	SOLID95	MANUAL						5.2 User Manual
TEMP-DEP MAT PRO	95-14	ELEM34	ELEM71	TEMP-DEP MAT P								Rev. 5.2
TEMP-DEPENDENT	94-69	MAT'L PROPERTIES	MP	MPDATA	REF TEMPERATUR	TEMP-DEPENDENT						Rev. 5.2
TEMP-DEPENDENT	95-05	DOCU	LOAD	NUMCMP	NUMMRG	MATERIAL	TEMP-DEPENDENT					5.2 User Manual
THERMAL	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP							Rev. 5.3
THERMAL	96-20	THERMAL	CONVECTION	DELETE FILM CO								Release 5.3
THERMAL ANALYSIS	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE							Release 5.3
THERMAL LOAD	95-21 R1	ELEM17	PIPE17	THERMAL LOAD	LARGE DEFLECTI	NEWTON-RAPHSON	BIRTH AND DEAT					Rev. 5.2

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST						VERSION CORRECTED
THERMAL LOAD	96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON			Release 5.3
TOP-DOWN SUBSTRU	95-24	POST1	LCOPER	TOP-DOWN SUBST				Rev. 5.2
TOTAL COMMAND	96-13	SUBSTRUCTURES	TOTAL COMMAND					Release 5.3
TRANSIENT	94-70	TRANSIENT	REDUCED	KAN,5	ACEL	ROTATED NODES		Rev. 5.2
TUNIF	95-23	BFUNIF	TUNIF	LSSOLVE	LSWRITE	LSREAD	CDWRITE CDRE	Rev. 5.2
UNSYMMETRIC MATR	95-19	DAMPING	UNSYMMETRIC MAT	ELEM4	ELEM16	ELEM27		Rev. 5.2
VCTA	95-17	BOOLEAN	CUT	SUBTRACT	LCTA	ACTA	VCTA	Rev. 5.2
VISCO106	95-18	ELEM106	VISCO106	CENTROID RESUL				Rev. 5.2
VOLUME	95-03	MESH	VOLUME	MIDSIDE NODES				Rev. 5.2
VOLUME	95-06	MANJAL	*GET	VOLUME				5.2 User Manual
VOLUME	95-40	*GET	*VGET	ELEMENT	VOLUME	AREA		Rev. 5.2
VSUM	95-29	ASUM	GSUM	KSUM	VSUM			5.2 User Manual
VSUM	95-45	PREP7	SOLID MODEL	ASUM	VSUM			Rev. 5.2
WINDOWS NT	95-27	GUI	WINDOWS NT	DATA TABLES				Rev. 5.1



ANSYS, Inc.
201 Johnson Road
Houston, PA 15342-1300

Telephone 412.746.3304
Facsimile 412.746.9494

OCT 03 1996
CONTRACTS

September 23, 1996

Dear Class3 Error Recipient:

Attached you will find ANSYS Class3 Error Reports 96-39, 96-40 and 96-41. Also, included are ANSYS QA Notices QA96-07 and QA96-08.

QA Notice QA96-07 is being issued to alert Silicon Graphics IRIX 6.2 Operating System users of a Silicon Graphics Operating System bug, which may cause incorrect results when running the ANSYS program.

QA Notice QA96-08 is being issued to clarify the documentation for midside node generation.

For your convenience, also enclosed are Class3 Error Report Summaries for Revision 5.2 and Release 5.3, sorted both by Class3 Error Number and by keyword.

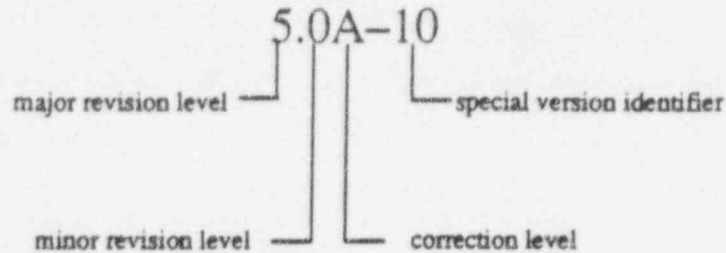
Sincerely,

ANSYS, INC.

William J. Bryan
Quality Assurance Manager

ANSYS Revision Identifier Description

ANSYS revision identifiers consist of a major revision level, a minor revision level, a correction level, and occasionally a special version level. An example of how this is constructed is shown below:



Major revision level changes indicate that new features have been added to the program, that some level of program architecture change and/or file structure has occurred. Minor revision level changes indicate that new features have been added to the program, but files are upwardly compatible. All known error fixes are included in both minor and major revisions. Changes to the correction level indicate that it is primarily an error correction release. Special version identifiers indicate that one or more additional minor changes have been made to the program, normally to circumvent an error. Special versions are not general releases to all ANSYS licensees, since they typically represent errors occurring only on one system, a subset of our customers who have specific graphics devices, etc.

The ANSYS revision identifier(s) shown under "corrected in" on the front side of this Class3 Error Report indicates the first possible revision that could contain the correction. A major program change needed to fix an error can dictate that the next minor or major revision will contain the fix rather than the next correction level. For example, when errors were being reported while Rev. 4.3A was the latest production version, most Class3 error reports indicated that 4.3B was the "corrected in" revision. Others requiring significant code restructuring were reported as fixed in 4.4. Rev. 4.3B was never released, but Rev. 4.4 contained all error corrections noted as fixed in 4.3B.

An identifier indicated under "corrected in" does not guarantee that a general release of that revision of ANSYS will occur. It does indicate that the correction is known and implemented in the coding that would be part of that general release.

Equivalent Product Identifiers

The ANSYS family of products occasionally undergoes name changes between revisions and/or changes in the functionality of derived products (such as ANSYS-PC/LINEAR). To minimize the potential for confusion in these areas, the important product name equivalences (similar program functionality and error content) are listed below.

ANSYS/ED	contains all errors shown for	the full ANSYS product, starting at Rev. 5.0, and beyond, unless otherwise noted.
PC/LINEAR	is equivalent to	WS/LINEAR at Rev. 4.4A, and ANSYS/LINEAR starting at Rev. 5.0.
PC/THERMAL	is equivalent to	WS/THERMAL at Rev. 4.4A, and ANSYS/THERMAL starting at Rev. 5.0.
PREPOST	contains relevant errors shown for	the full ANSYS product, for included pre- and postprocessing functionality

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-39

KEYWORDS: APDL ARFACE *GET

DESCRIPTION OF ERROR:

The ANSYS Parametric Design Language *GET function ARFACE(E) may produce incorrect results for triangular element faces.

FIRST INCORRECT VERSION(S):*

Rev. 5.1
Component Products Rev. 5.1

CORRECTED IN:*

Release 5.4

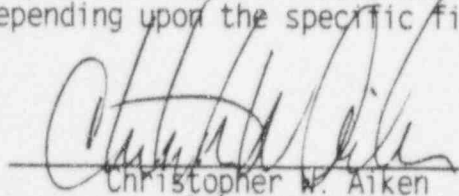
SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

Use the *GET function of AREAND(N1,N2,N3) instead. The use of the AREAND function is documented in the Commands Manual at the end of the *GET documentation.

COMMENTS:

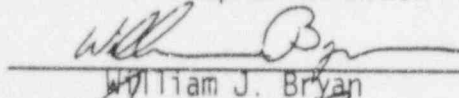
This error is due to an uninitialized variable. ARFACE(E) has been observed to either produce incorrect results, abort out of the program, or work correctly, depending upon the specific finite element model and/or the computer system.

AUTHOR/CORRECTOR:


Christopher W. Aiken

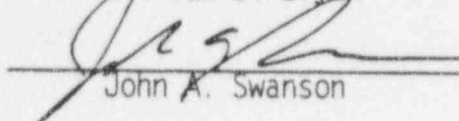
DATE: September 11, 1996

REVIEWED BY QA:


William J. Bryan

DATE: September 11, 1996

APPROVAL:


John A. Swanson

DATE: September 11, 1996

*If a product name is not included in the "first incorrect version", the full ANSYS program is implied. For products not listed, this error does not apply, but see the reverse side for equivalent product designations.

Unless noted otherwise, this error report also applies to all revisions after the first incorrect one and prior to the corrected revision. All revisions after "corrected in" are corrected. Manual corrections are included in on-line documentation as appropriate. Please see the reverse side of this sheet for additional information on ANSYS revision identifiers.

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-40

KEYWORDS: PREP7 PIPE16 VALVE BUNIF

DESCRIPTION OF ERROR:

If the VALVE command of the PREP7 piping module is used to insert one or more valve (PIPE16) elements in a piping run and the elements connected to the valve element do not have element temperatures specified, then element temperatures of 0.0 degrees will erroneously be assigned to the PIPE16 valve elements. Any uniform temperature specified using the BFUNIF command will not be used in the solution for these elements.

FIRST INCORRECT VERSION(S):*

Rev. 5.0
ANSYS/LinearPlus Rev. 5.2

CORRECTED IN:*

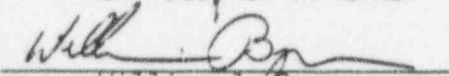
Release 5.4

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

Before the solution, use the BFELIST command to list any temperatures assigned to the PIPE16 elements and issue a BFDELE to delete any erroneous temperatures for the affected PIPE16 valve elements.

COMMENTS:

AUTHOR/CORRECTOR:  DATE: September 20, 1996
Christopher W. Aiken

REVIEWED BY QA:  DATE: September 20, 1996
William J. Bryan

APPROVAL:  DATE: September 20, 1996
John A. Swanson

*If a product name is not included in the "first incorrect version", the full ANSYS program is implied. For products not listed, this error does not apply, but see the reverse side for equivalent product designations.

Unless noted otherwise, this error report also applies to all revisions after the first incorrect one and prior to the corrected revision. All revisions after "corrected in" are corrected. Manual corrections are included in on-line documentation as appropriate. Please see the reverse side of this sheet for additional information on ANSYS revision identifiers.

ANSYS® CLASS3 ERROR REPORT

ERROR NO: 96-41

KEYWORDS: ELEM150 SHELL150 ELEMENT VOLUME ETABLE *GET

DESCRIPTION OF ERROR:

The element volume for SHELL150 is obtained from the ETABLE command in POST1 or the *GET for element volume after a solution is incorrect

FIRST INCORRECT VERSION(S):*

Rev. 5.2
Component Products Rev. 5.2

CORRECTED IN:*

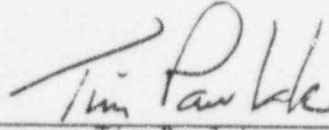
Release 5.4

SUGGESTED USER ACTION FOR RUNNING ON UNCORRECTED VERSION:

Multiply the reported number by the shell thickness to obtain a correct value of volume. This suggestion is valid for elements with constant thickness.

COMMENTS:

AUTHOR/CORRECTOR:


Tim Pawlak

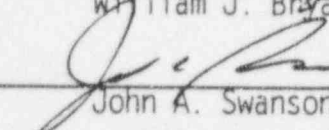
DATE: September 20, 1996

REVIEWED BY QA:


William J. Bryan

DATE: September 20, 1996

APPROVAL:


John A. Swanson

DATE: September 20, 1996

*If a product name is not included in the "first incorrect version", the full ANSYS program is implied. For products not listed, this error does not apply, but see the reverse side for equivalent product designations.

Unless noted otherwise, this error report also applies to all revisions after the first incorrect one and prior to the corrected revision. All revisions after "corrected in" are corrected. Manual corrections are included in on-line documentation as appropriate. Please see the reverse side of this sheet for additional information on ANSYS revision identifiers.

ANSYS QA NOTICE

NOTICE NO: QA96-07

SUBJECT: *SYSTEM* *SILICON GRAPHICS* *IRIX 6.2*

DESCRIPTION:

The Silicon Graphics IRIX 6.2 operating system contains a bug that affects proper execution of ANSYS owing to a formatting error for numerical output. The IRIX 6.2 Patch 1457 contains a bug fix that fully corrects this problem. The effect of this error is that some numbers printed by the ANSYS program on platforms with this operating system version are too small (by a factor of 10). For example, a number that should be 100000, appears as 10000.

Although this bug is not a bug in the ANSYS program, we are notifying our customers due to the incorrect results it can produce using the ANSYS program.

AFFECTED VERSIONS: Silicon Graphics IRIX 6.2 Operating System
(any ANSYS versions run at this level)

CORRECTED IN:

Patch 1457 can be obtained via the SGI patch server. See the SGI Web Page at <http://www.sgi.com>. Patch 1457 is also available on the ANSYS Web Page at <http://www.ansys.com> in the Services and Support area. Where customers do not have Internet access, SGI Service Engineers can be called upon to install the patch at 1-800-800-4SGI.

SUGGESTED USER ACTION: Customers must obtain this corrective patch from SGI to remedy this error.

AUTHOR: John H. Fortna DATE: September 20, 1996
John Fortna

REVIEWED BY QA: William J. Bryan DATE: September 20, 1996

APPROVAL: John A. Swanson DATE: September 20, 1996

ANSYS QA NOTICE

NOTICE NO: QA96-08

SUBJECT: DIRECT MODEL GENERATION ELEMENTS MIDSIDE NODES

DESCRIPTION: The ANSYS program documentation regarding geometric locations for midside nodes is potentially confusing. For some higher order (midside node) elements (such as PLANE2, PLANE82, SOLID95, etc.), the ANSYS Elements Manual contains statements similar to the following:

Midside nodes may be removed (with a zero node number) to form a pattern compatible with other element types. The geometric locations of midside nodes are automatically calculated, if not supplied.

The following clarification is provided to reduce the potential for confusion and/or misinterpretation regarding the program behavior that this statement describes.

When defining midside node elements using the direct generation method (i.e., the E, EN, etc. commands), midside nodes are created and located according to the following:

Some higher order elements permit the removal of midside nodes. For such elements, if a zero value (or blank) is used for a midside node when the element is defined, the corresponding midside node is REMOVED from the element. As a result, some or all of the quadratic terms (depending on the number of removed midside nodes) in the element's shape functions are ignored, thus forcing the element edge(s) to be and remain straight. This is typically done to compatibly connect higher order (midside node) elements to lower order (non-midside node) elements. In the extreme case of an element with all of its midside nodes removed, the element will use linear shape functions, thus producing results comparable to the analogous lower order (non-midside node) element type with extra displacement shapes suppressed.

When defining a higher order element, if a node number is used for a midside node and that node has not yet been defined (N, NGEN, FILL, NSYM, etc.), then the node will be automatically defined and given a geometric location that is the calculated mid-point (linearly interpolated in Cartesian coordinates) between its respective corner nodes. Nodal rotations for such nodes will also be automatically calculated by linearly interpolating between the nodal rotation angles of the corner nodes. This allows the user to create midside node elements without explicitly defining the geometric locations for midside nodes that are located midway between the corner nodes.

Note that this behavior applies only to the direct model generation method. Controls regarding midside nodes in meshed models are provided in the meshing controls of the ANSYS program (ESHAPE command).

AFFECTED VERSIONS: Revision 4.0 through Release 5.3
Component Products Revision 4.3 through Release 5.3

COMMENTS: In Release 5.4, documentation regarding direct generation and midside node elements will be clarified.

AUTHOR: 
Kenneth G. Podaszewski **DATE:** September 20, 1996

REVIEWED BY QA: 
William J. Bryan **DATE:** September 20, 1996

APPROVAL: 
John A. Swanson **DATE:** September 20, 1996

ANSYS 5.2 CLASS3 ERROR SUMMARY BY REPORT NUMBER

ERROR NUMBER	KEYWORD #1	KEYWORD #2	KEYWORD #3	KEYWORD #4	KEYWORD #5	KEYWORD #6	CORRECTED VERSION
95-37 R1	FLOTRAN	FLUID142	ELEM142				Release 5.4
95-39 R1	FLOTRAN	ELEM142	FLUID142				Release 5.4
95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN METH				Rev. 5.3
95-49 R1	FLOTRAN	ELEM141	ELEM142				Release 5.4
95-55 R1	POST1	ESEL	MULTIPLE SOLUTI				5.3 User Manual
95-56	MODAL	DAMPED					Rev. 5.3
95-57	BEAM24	ELEM24					Rev. 5.3
95-58	GUI	BEAM44	REAL CONSTANTS				Rev. 5.3
95-59	SUBSPACE	RIGID					Rev. 5.3
95-60	GRAPHICS	POST1	SET	POWERGRAPHICS	SYSTEM		Rev. 5.3
95-61	POST1	LCASE	LCFACT				Rev. 5.3
95-62	SPECTRUM	SPRS	DSUM				Rev. 5.3
95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP			Rev. 5.3
96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL PLNSOL	Release 5.3
96-02 R1	THERMAL ANALYSI	KZZ	ORTHOTROPIC MAT	MATRIX REUSE			Release 5.3
96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS				Release 5.3
96-04	KMODIF	BOUNDARY COND					Release 5.3
96-05	DOCU	FLUID66	ELEM66				5.3 User Manual
96-06	GRAPHICS	POST1	PRNSOL	PLNSOL			Release 5.3
96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40			Release 5.3
96-08	RESTART	POST1	SET				Release 5.3
96-09	THERMAL PHASE C	PARALLEL PROCES					Release 5.3
96-10	POST1	LCWRIT	LCOPER				Release 5.3
96-11	POST1	CTABLE	EMID				Release 5.3
96-12	SOLID97	SOLID62	ELEM97	ELEM62	RESISTIVITY	ESYS	Release 5.3
96-13	SUBSTRUCTURES	TOTAL COMMAND					Release 5.3
96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON			Release 5.3
96-15	GP	LSWRITE	LSSOLVE				Release 5.3
96-16	IMPOSED DOF	RAMP TO ZERO					Release 5.3
96-17	MODAL ANALYSIS	LARGE DEFLECTIO					Release 5.3
96-19	P-METHOD	PCONV	NODE COMPONENT				Release 5.3
96-20	THERMAL	CONVECTION	DELETE FILM COE				Release 5.3
96-21	TRANSIENT	DAMPING	MULTI-FIELD				Release 5.3
96-22	KGEN	KSYM	KTRA	KSEL	KSLL	KSLN	Release 5.3
96-23	PLANE78	MODE>0	HFLUX				Release 5.3
96-24	POST1	HARMONIC	IMAGINARY SOLUT				Release 5.3
96-25	ELEM34	CONVECTION LINK	KEYOPT(3)=2	SFE			Release 5.3

ANSYS 5.2 CLASS3 ERROR SUMMARY BY REPORT NUMBER

ERROR NUMBER	KEYWORD #1	KEYWORD #2	KEYWORD #3	KEYWORD #4	KEYWORD #5	KEYWORD #6	CORRECTED VERSION
96-26	SHELL63	KEYOPT(3)=2	ALLMAN ROTATION	BUCKLING	STRESS STIFFENI		Release 5.3
96-27	LCOMB	NUMSTR					Release 5.3
96-28	ELEM142	FLUID142	FLOTRAN	TETRAHEDRON	SF SFE	HEAT TRANSFER	Release 5.3
96-29	BOOLEAN	SUBTRACT	MESH				Release 5.3
96-30	GCGEN	CONTACT	ELEM48				Release 5.3
96-31	FLUID66	ELEM66	HGEN	KBC,0			Release 5.3
96-32	PMETHOD	SHELL150	PRESSURE				Release 5.3
96-33	ASUM	VSUM					Release 5.3
96-34	APDL	ARNODE					Release 5.3
96-35	EMAG	ELEM53	PLANE53	CIRCUIT			Release 5.3
96-36	FLOTRAN	ELEMENT141	ELEMENT142	RESULTS FILE	DENSITY		5.3 User Manual
96-37	SFA	BOUNDARY CONDIT	SOLID MODEL	TRANSFER			Release 5.3
96-38	SOLID MODELLING	BOOLEAN	SUBTRACT	ASBL			Release 5.4
96-39	APDL	ARFACE	*GET				Release 5.4
96-40	PREP7	PIPE16	VALVE	BUNIF			Release 5.4
96-41	ELEM150	SHELL150	ELEMENT VOLUME	ETABLE	*GET		Release 5.4

ANSYS 5.2 CLASS3 ERROR SUMMARY

KEYWORD SORT OF ALL REVISION 5.2 CLASS3 ERRORS

Date of this report: 9/24/96

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST				VERSION CORRECTED
*GET	96-39	APDL	ARFACE	*GET		Release 5.4
*GET	96-41	ELEM150	SHELL150	ELEMENT VOLUME ETABLE	*GET	Release 5.4
ALLMAN ROTATION	96-26	SHELL63	KEYOPT(3)=2	ALLMAN ROTATIO BUCKLING	STRESS STIFFEN	Release 5.3
APDL	96-34	APDL	ARNODE			Release 5.3
APDL	96-39	APDL	ARFACE	*GET		Release 5.4
ARFACE	96-39	APDL	ARFACE	*GET		Release 5.4
ARNODE	96-34	APDL	ARNODE			Release 5.3
ASBL	96-38	SOLID MODELLING	BOOLEAN	SUBTRACT	ASBL	Release 5.4
ASUM	96-33	ASUM	VSUM			Release 5.3
AUTO TIME STEP	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP	Rev. 5.3
AUX12	95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN MET		Rev. 5.3
BEAM ELEMENTS	96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS		Release 5.3
BEAM24	95-57	BEAM24	ELEM24			Rev. 5.3
BEAM44	95-58	GUI	BEAM44	REAL CONSTANTS		Rev. 5.3
BOOLEAN	96-29	BOOLEAN	SUBTRACT	MESH		Release 5.3
BOOLEAN	96-38	SOLID MODELLING	BOOLEAN	SUBTRACT	ASBL	Release 5.4
BOUNDARY COND	96-04	KMODIF	BOUNDARY COND			Release 5.3
BOUNDARY CONDITI	96-37	SFA	BOUNDARY CONDIT	SOLID MODEL	TRANSFER	Release 5.3
BUCKLING	96-26	SHELL63	KEYOPT(3)=2	ALLMAN ROTATIO BUCKLING	STRESS STIFFEN	Release 5.3
BUNIF	96-40	PREP7	PIPE16	VALVE	BUNIF	Release 5.4
CIRCUIT	96-35	EMAG	ELEM53	PLANE53	CIRCUIT	Release 5.3
COMBIN40	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40	Release 5.3
CONTACT	96-30	GCGEN	CONTACT	ELEM48		Release 5.3
CONVECTION	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP	Rev. 5.3
CONVECTION	96-20	THERMAL	CONVECTION	DELETE FILM CO		Release 5.3
CONVECTION LINK	96-25	ELEM34	CONVECTION LINK	KEYOPT(3)=2	SFE	Release 5.3
DAMPED	95-56	MODAL	DAMPED			Rev. 5.3
DAMPING	96-21	TRANSIENT	DAMPING	MULTI-FIELD		Release 5.3
DELETE FILM COEF	96-20	THERMAL	CONVECTION	DELETE FILM CO		Release 5.3
DENSITY	96-36	FLOTRAN	ELEMENT141	ELEMENT142	RESULTS FILE DENSITY	5.3 User Manual
DOCU	96-05	DOCU	FLUID66	ELEM66		5.3 User Manual
DSUM	95-62	SPECTRUM	SPRS	DSUM		Rev. 5.3
ELEM141	95-49 R1	FLOTRAN	ELEM141	ELEM142		Release 5.4

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST						VERSION CORRECTED
ELEM142	95-37 R1	FLOTRAN	FLUID142	ELEM142				Release 5.4
ELEM142	95-39 R1	FLOTRAN	ELEM142	FLUID142				Release 5.4
ELEM142	95-49 R1	FLOTRAN	ELEM141	ELEM142				Release 5.4
ELEM142	96-28	ELEM142	FLUID142	FLOTRAN	TETRAHEDRON	SF	SFE	HEAT TRANSFER
ELEM150	96-41	ELEM150	SHELL150	ELEMENT VOLUME	ETABLE	*GET		
ELEM24	95-57	BEAM24	ELEM24					
ELEM34	96-25	ELEM34	CONVECTION LINK	KEYOPT(3)=2	SFE			
ELEM40	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40			
ELEM48	96-30	GCGEN	CONTACT	ELEM48				
ELEM53	96-35	EMAG	ELEM53	PLANE53	CIRCUIT			
ELEM62	96-12	SOLID97	SOLID62	ELEM97	ELEM62	RESISTIVITY	ESYS	
ELEM63	96-14	SHELL63	ELEM62	THERMAL LOAD	NEWTON-RAPHSON			
ELEM66	96-05	DOCU	FLUID66	ELEM66				
ELEM66	96-31	FLUID66	ELEM66	HGEN	KBC,0			
ELEM97	96-12	SOLID97	SOLID62	ELEM97	ELEM62	RESISTIVITY	ESYS	
ELEMENT VOLUME	96-41	ELEM150	SHELL150	ELEMENT VOLUME	ETABLE	*GET		
ELEMENT141	96-36	FLOTRAN	ELEMENT141	ELEMENT142	RESULTS FILE	DENSITY		
ELEMENT142	96-36	FLOTRAN	ELEMENT141	ELEMENT142	RESULTS FILE	DENSITY		
EMAG	96-35	EMAG	ELEM53	PLANE53	CIRCUIT			
EMID	96-11	POST1	ETABLE	EMID				
ESEL	95-55 R1	POST1	ESEL	MULTIPLE SOLUT				
ESYS	96-12	SOLID97	SOLID62	ELEM97	ELEM62	RESISTIVITY	ESYS	
ETABLE	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL	PLNSOL
ETABLE	96-11	POST1	ETABLE	EMID				
ETABLE	96-41	ELEM150	SHELL150	ELEMENT VOLUME	ETABLE	*GET		
FLOTRAN	95-37 R1	FLOTRAN	FLUID142	ELEM142				
FLOTRAN	95-39 R1	FLOTRAN	ELEM142	FLUID142				
FLOTRAN	95-49 R1	FLOTRAN	ELEM141	ELEM142				
FLOTRAN	96-26	ELEM142	FLUID142	FLOTRAN	TETRAHEDRON	SF	SFE	HEAT TRANSFER
FLOTRAN	96-36	FLOTRAN	ELEMENT141	ELEMENT142	RESULTS FILE	DENSITY		
FLUID142	95-37 R1	FLOTRAN	FLUID142	ELEM142				
FLUID142	95-39 R1	FLOTRAN	ELEM142	FLUID142				
FLUID142	96-28	ELEM142	FLUID142	FLOTRAN	TETRAHEDRON	SF	SFE	HEAT TRANSFER
FLUID66	96-05	DOCU	FLUID66	ELEM66				
FLUID66	96-31	FLUID66	ELEM66	HGEN	KBC,0			
GCGEN	96-30	GCGEN	CONTACT	ELEM48				
GP	96-15	GP	LSWRITE	LSSOLVE				
GRAPHICS	95-60	GRAPHICS	POST1	SET	POWERGRAPHICS	SYSTEM		

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST								VERSION CORRECTED
GRAPHICS	96-06	GRAPHICS	POST1	PRNSOL	PLNSOL					Release 5.3
GUI	95-58	GUI	BEAM44	REAL CONSTANTS						Rev. 5.3
HARMONIC	96-24	POST1	HARMONIC	IMAGINARY SOLU						Release 5.3
HEAT TRANSFER	96-28	ELEM142	FLUID142	FLOTRAN	TETRAHEDRON	SF	SFE	HEAT TRANSFER		Release 5.3
HFLUX	96-23	PLANE78	MODE>0	HFLUX						Release 5.3
HGEN	96-31	FLUID66	ELEM66	HGEN	KBC,0					Release 5.3
IMAGINARY SOLUTI	96-24	POST1	HARMONIC	IMAGINARY SOLU						Release 5.3
IMPOSED DOF	96-16	IMPOSED DOF	RAMP TO ZERO							Release 5.3
KBC,0	96-31	FLUID66	ELEM66	HGEN	KBC,0					Release 5.3
KEYOPT(3)=2	96-25	ELEM34	CONVECTION LINK	KEYOPT(3)=2	SFE					Release 5.3
KEYOPT(3)=2	96-26	SHELL63	KEYOPT(3)=2	ALLMAN ROTATIO	BUCKLING			STRESS STIFFEN		Release 5.3
KGEN	96-22	KGEN	KSYM	KTRA	KSEL	KSLL		KSLN		Release 5.3
KMODIF	96-04	KMODIF	BOUNDARY COND							Release 5.3
KSEL	96-22	KGEN	KSYM	KTRA	KSEL	KSLL		KSLN		Release 5.3
KSLL	96-22	KGEN	KSYM	KTRA	KSEL	KSLL		KSLN		Release 5.3
KSLN	96-22	KGEN	KSYM	KTRA	KSEL	KSLL		KSLN		Release 5.3
KSYM	96-22	KGEN	KSYM	KTRA	KSEL	KSLL		KSLN		Release 5.3
KTRA	96-22	KGEN	KSYM	KTRA	KSEL	KSLL		KSLN		Release 5.3
KZZ	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE					Release 5.3
LARGE DEFLECTION	96-17	MODAL ANALYSIS	LARGE DEFLECTIO							Release 5.3
LCASE	95-61	POST1	LCASE	LCFACT						Rev. 5.3
LCFACT	95-61	POST1	LCASE	LCFACT						Rev. 5.3
LCOMB	96-27	LCOMB	NUMSTR							Release 5.3
LCOPER	96-27	POST1	LCWRIT	LCOPER						Release 5.3
LCWRIT	96-10	POST1	LCWRIT	LCOPER						Release 5.3
LSSOLVE	96-15	GP	LSWRITE	LSSOLVE						Release 5.3
LSWRITE	96-15	GP	LSWRITE	LSSOLVE						Release 5.3
MATERIAL PROP	96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS						Release 5.3
MATRIX REUSE	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE					Release 5.3
MESH	96-29	BOOLEAN	SUBTRACT	MESH						Release 5.3
MODAL	95-56	MODAL	DAMPED							Rev. 5.3
MODAL ANALYSIS	96-17	MODAL ANALYSIS	LARGE DEFLECTIO							Release 5.3
MODE>0	96-23	PLANE78	MODE>0	HFLUX						Release 5.3
MULTI-FIELD	96-21	TRANSIENT	DAMPING	MULTI-FIELD						Release 5.3
MULTIPLE SOLUTIO	95-55 R1	POST1	ESEL	MULTIPLE SOLUT						5.3 User Manual
NEWTON-RAPHSON	96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON					Release 5.3
NODE COMPONENT	96-19	P-METHOD	PCONV	NODE COMPONENT						Release 5.3
NON-HIDDEN METHO	95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN MET						Rev. 5.3

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST							VERSION CORRECTED
NONLINEAR	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL	PLNSOL	Release 5.3
NUMSTR	96-27	LCOMB	NUMSTR						Release 5.3
ORTHOTROPIC MATL	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE				Release 5.3
P-METHOD	96-19	P-METHOD	PCONV	NODE COMPONENT					Release 5.3
PARALLEL PROCESS	96-09	THERMAL PHASE CH	PARALLEL PROCES						Release 5.3
PCONV	96-19	P-METHOD	PCONV	NODE COMPONENT					Release 5.3
PDEF	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL	PLNSOL	Release 5.3
PIPE ELEMENTS	96-03	MATERIAL PROP	BEAM ELEMENTS	PIPE ELEMENTS					Release 5.3
PIPE16	96-40	PREP7	PIPE16	VALVE	BUNIF				Release 5.4
PLANE53	96-35	EMAG	ELEM53	PLANE53	CIRCUIT				Release 5.3
PLANE78	96-23	PLANE78	MODE>0	HFLUX					Release 5.3
PLNSOL	96-06	GRAPHICS	POST1	PRNSOL	PLNSOL				Release 5.3
PMETHOD	96-32	PMETHOD	SHELL150	PRESSURE					Release 5.3
POST1	95-55 R1	POST1	ESEL	MULTIPLE SOLUT					5.3 User Manual
POST1	95-60	GRAPHICS	POST1	SET	POWERGRAPHICS	SYSTEM			Rev. 5.3
POST1	95-61	POST1	LCASE	LCFACT					Rev. 5.3
POST1	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL	PLNSOL	Release 5.3
POST1	96-06	GRAPHICS	POST1	PRNSOL	PLNSOL				Release 5.3
POST1	96-08	RESTART	POST1	SET					Release 5.3
POST1	96-10	POST1	LCWRIT	LCOPER					Release 5.3
POST1	96-11	POST1	ETABLE	EMID					Release 5.3
POST1	96-24	POST1	HARMONIC	IMAGINARY SOLU					Release 5.3
POWERGRAPHICS	95-60	GRAPHICS	POST1	SET	POWERGRAPHICS	SYSTEM			Rev. 5.3
PREP7	96-40	PREP7	PIPE16	VALVE	BUNIF				Release 5.4
PRESSURE	96-32	PMETHOD	SHELL150	PRESSURE					Release 5.3
PRNSOL	96-06	GRAPHICS	POST1	PRNSOL	PLNSOL				Release 5.3
PRNSOL PLNSOL	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL	PLNSOL	Release 5.3
RAD VIEW FACTORS	95-41	AUX12	RAD VIEW FACTOR	NON-HIDDEN MET					Rev. 5.3
RAMP TO ZERO	96-16	IMPOSED DOF	RAMP TO ZERO						Release 5.3
RAMPED B.C.	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP				Rev. 5.3
REAL CONSTANTS	95-58	GUI	BEAM44	REAL CONSTANTS					Rev. 5.3
RESISTIVITY	96-12	SOLID97	SOLID62	ELEM97	ELEM62	RESISTIVITY	ESYS		Release 5.3
RESTART	96-08	RESTART	POST1	SET					Release 5.3
RESULTS FILE	96-36	FLOTRAN	ELEMENT141	ELEMENT142	RESULTS FILE	DENSITY			5.3 User Manual
RIGID	95-59	SUBSPACE	RIGID						Rev. 5.3
SET	95-60	GRAPHICS	POST1	SET	POWERGRAPHICS	SYSTEM			Rev. 5.3
SET	96-08	RESTART	POST1	SET					Release 5.3
SF SFE	96-28	ELEM142	FLUID142	FLOTRAN	TETRAHEDRON	SF SFE	HEAT TRANSFER		Release 5.3

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST						VERSION CORRECTED
SFA	96-37	SFA	BOUNDARY CONDIT	SOLID MODEL	TRANSFER			Release 5.3
SFE	96-25	ELEM34	CONVECTION LINK	KEYOPT(3)=2	SFE			Release 5.3
SHELL	96-01	POST1	SHELL	NONLINEAR	PDEF	ETABLE	PRNSOL PLNSOL	Release 5.3
SHELL150	96-32	PMETHOD	SHELL150	PRESSURE				Release 5.3
SHELL150	96-41	ELEM150	SHELL150	ELEMENT VOLUME	ETABLE	*GET		Release 5.4
SHELL63	96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON			Release 5.3
SHELL63	96-26	SHELL63	KEYOPT(3)=2	ALLMAN ROTATIO	BUCKLING	STRESS STIFFEN		Release 5.3
SOLID MODEL	96-37	SFA	BOUNDARY CONDIT	SOLID MODEL	TRANSFER			Release 5.3
SOLID MODELLING	96-38	SOLID MODELLING	BOOLEAN	SUBTRACT	ASBL			Release 5.4
SOLID62	96-12	SOLID97	SOLID62	ELEM97	ELEM62	RESISTIVITY	ESYS	Release 5.3
SOLID97	96-12	SOLID97	SOLID62	ELEM97	ELEM62	RESISTIVITY	ESYS	Release 5.3
SPECTRUM	95-62	SPECTRUM	SPRS	DSUM				Rev. 5.3
SPRS	95-62	SPECTRUM	SPRS	DSUM				Rev. 5.3
STRESS STIFFENIN	96-26	SHELL63	KEYOPT(3)=2	ALLMAN ROTATIO	BUCKLING	STRESS STIFFEN		Release 5.3
SUBSPACE	95-59	SUBSPACE	RIGID					Rev. 5.3
SUBSTRUCTURES	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40			Release 5.3
SUBSTRUCTURES	96-13	SUBSTRUCTURES	TOTAL COMMAND					Release 5.3
SUBTRACT	96-29	BOOLEAN	SUBTRACT	MESH				Release 5.3
SUBTRACT	96-38	SOLID MODELLING	BOOLEAN	SUBTRACT	ASBL			Release 5.4
SUPERELEMENTS	96-07	SUPERELEMENTS	SUBSTRUCTURES	COMBIN40	ELEM40			Release 5.3
SYSTEM	95-60	GRAPHICS	POST1	SET	POWERGRAPHICS	SYSTEM		Rev. 5.3
TETRAHEDRON	96-28	ELEM142	FLUID142	FLOTRAN	TETRAHEDRON	SF SFE	HEAT TRANSFER	Release 5.3
THERMAL	95-63	THERMAL	CONVECTION	RAMPED B.C.	AUTO TIME STEP			Rev. 5.3
THERMAL	96-20	THERMAL	CONVECTION	DELETE FILM CO				Release 5.3
THERMAL ANALYSIS	96-02 R1	THERMAL ANALYSIS	KZZ	ORTHOTROPIC MA	MATRIX REUSE			Release 5.3
THERMAL LOAD	96-14	SHELL63	ELEM63	THERMAL LOAD	NEWTON-RAPHSON			Release 5.3
THERMAL PHASE CH	96-09	THERMAL PHASE CH	PARALLEL PROCES					Release 5.3
TOTAL COMMAND	96-13	SUBSTRUCTURES	TOTAL COMMAND					Release 5.3
TRANSFER	96-37	SFA	BOUNDARY CONDIT	SOLID MODEL	TRANSFER			Release 5.3
TRANSIENT	96-21	TRANSIENT	DAMPING	MULTI-FIELD				Release 5.3
VALVE	96-40	PREP7	PIPE16	VALVE	BUNIF			Release 5.4
VSUM	96-33	ASUM	VSUM					Release 5.3

ANSYS 5.3 CLASS3 ERROR SUMMARY

KEYWORD SORT OF ALL REVISION 5.3 CLASS3 ERRORS

Date of this report: 9/24/96

KEYWORD	ERROR REPORT NUMBER	COMPLETE KEYWORD LIST		VERSION CORRECTED
*GET	96-39	APDL	ARFACE	Release 5.4
*GET	96-41	ELEM150	SHELL150	Release 5.4
APDL	96-39	APDL	ARFACE	Release 5.4
ARFACE	96-39	APDL	ARFACE	Release 5.4
ASBL	96-38	SOLID MODELLING	BOOLEAN	Release 5.4
BOOLEAN	96-38	SOLID MODELLING	BOOLEAN	Release 5.4
BUNIF	96-40	PREP7	PIPE16	Release 5.4
ELEM141	95-49 R1	FLOTRAN	ELEM141	Release 5.4
ELEM142	95-37 R1	FLOTRAN	FLUID142	Release 5.4
ELEM142	95-39 R1	FLOTRAN	ELEM142	Release 5.4
ELEM142	95-49 R1	FLOTRAN	ELEM141	Release 5.4
ELEM150	96-41	ELEM150	SHELL150	Release 5.4
ELEMENT VOLUME	96-41	ELEM150	SHELL150	Release 5.4
ETABLE	96-41	ELEM150	SHELL150	Release 5.4
FLOTRAN	95-37 R1	FLOTRAN	FLUID142	Release 5.4
FLOTRAN	95-39 R1	FLOTRAN	ELEM142	Release 5.4
FLOTRAN	95-49 R1	FLOTRAN	ELEM141	Release 5.4
FLUID142	95-37 R1	FLOTRAN	FLUID142	Release 5.4
FLUID142	95-39 R1	FLOTRAN	ELEM142	Release 5.4
PIPE16	96-40	PREP7	PIPE16	Release 5.4
PREP7	96-40	PREP7	PIPE16	Release 5.4
SHELL150	96-41	ELEM150	SHELL150	Release 5.4
SOLID MODELLING	96-38	SOLID MODELLING	BOOLEAN	Release 5.4
SUBTRACT	96-38	SOLID MODELLING	BOOLEAN	Release 5.4
VALVE	96-40	PREP7	PIPE16	Release 5.4
			*GET	
			ELEMENT VOLUME ETABLE	
			*GET	
			*GET	
			SUBTRACT	ASDL
			SUBTRACT	ASBL
			VALVE	BUNIF
			ELEM142	
			ELEM142	
			FLUID142	
			ELEM142	
			ELEMENT VOLUME ETABLE	*GET
			ELEMENT VOLUME ETABLE	*GET
			ELEMENT VOLUME ETABLE	*GET
			ELEM142	
			FLUID142	
			ELEM142	
			ELEM142	
			FLUID142	
			VALVE	BUNIF
			VALVE	BUNIF
			ELEMENT VOLUME ETABLE	*GET
			SUBTRACT	ASBL
			SUBTRACT	ASBL
			VALVE	BUNIF

ANSYS 5.3 CLASS3 ERROR SUMMARY BY REPORT NUMBER

ERROR NUMBER	KEYWORD #1	KEYWORD #2	KEYWORD #3	KEYWORD #4	KEYWORD #5	KEYWORD #6	CORRECTED VERSION
95-37 R1	FLOTRAN	FLUID142	ELEM142				Release 5.4
95-39 R1	FLOTRAN	ELEM142	FLUID142				Release 5.4
95-49 R1	FLOTRAN	ELEM141	ELEM142				Release 5.4
96-38	SOLID MODELLING	BOOLEAN	SUBTRACT	ASBL			Release 5.4
96-39	APDL	ARFACE	*GET				Release 5.4
96-40	PREP7	PIPE16	VALVE	BUNIF			Release 5.4
96-41	ELEM150	SHELL150	ELEMENT VOLUME	ETABLE	*GET		Release 5.4