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7208 RETAIN TIPS
(as of 05/09/98 at 09:21:24 EDT)

RETAIN Technical Data

May 9, 1998

IBM Confidential

PREFACE Preface

This document was edited on 05/09/98 at 09:21:32 by using the BKRETAIN package.

Technical data records obtained from the IBM RETAIN database have been sorted and categorized by type. Modification to the format of the online records has been limited to relocating the abstract to the beginning of the record. The records may have been translated to lower case if the original record was in upper case.

Special thanks to Terry Judkins in Atlanta for developing the BKRETAIN package utilized in this offering.

We also want to thank Dave Schaefer for developing the code to automate this process and sharing the code with us.

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1.0 7208 RETAIN TIPS

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1.1 Chapter 1. Service Aids and Additional Information

Subtopics

1.1.1 ADDRESSING PROBLEMS ON THE 20GB / 40GB 8MM TAPE DRIVE

Record number: H163017

Device:	D/T7208
Model:	M341
Tip key:	016
Date created:	O98/03/13
Date last altered:	A98/03/13

When 20GB tape drive fru p/n59h2835 is ordered by a CE, it is put on hold "ump code 7." Before releasing the drive is released to the field under the Emphasis Program (Tip H162792) the Chicago Support Center will first verify the address of the internal tape drive unit.

The 20GB drive has been found to be set at addresses on the D/T7025 F50 series that conflict with the CHRP address of 15, which is the address of the backplane, or set to addresses of other hard drives/ The CE should check the address of the tape drive using the AIX command "lsdev -Cs scsi" or via the front panel on the drive. Holding the eject button down on the front panel will cause the tape drive to go through a reset sequence. The Service Guide form SA37-0320-00 has the different messages on page 4. One of these messages will be the SCSI ID.

The recommended address the CE should set the SCSI address for is 5 or 6 and should not conflict with other devices in the upper bay.

SAS KEYWORDS:

D/T701X	7208	341	BACKPLANE
D/T7025/F50	D/T7025/F40	D/T7025	F50
7025	SCSIID	ADDRESSING	701X
20GB	40GB	20GB/40GB	8MM

*1.1.2 AS/400 CALL IN PROGRAM FOR TAPE DRIVES ***DISCONTINUED****

Record number: H036783

```
Device:               D/T9406
Model:                M
Tip key:              286
Date created:         O92/11/05
Date last altered:    A95/08/23
```

ROCHESTER HAS SET UP A CALL IN PROGRAM TO HELP ENGINEERING CAPTURE TIMELY FIELD DATA AND TO PROVIDE PROBLEM DETERMINATION ASSISTANCE TO CEs WITH A MINIMAL IMPACT TO CUSTOMER OPERATIONS.

THE PROGRAM IS TO START 01/04/93 AND WILL RUN INDEFINITELY. THE HOURS OF OPERATION ARE 0700 CST TO 1900 CST, M-F.

A TIF (Technical Information Facility) MESSAGE WILL BE ASSOCIATED WITH IDENTIFIED P/Ns. THE CE WILL BE REQUESTED TO CALL THE ROCHESTER PRODUCT SUPPORT CENTER WHEN ONSITE AT THE CUSTOMER LOCATION. WHEN THE CE CALLS, HE/SHE WILL BE CONNECTED WITH A SPECIALIST WHO WILL HELP WITH PROBLEM DETERMINATION AND WILL COLLECT THE NECESSARY DATA.

SAS KEYWORDS:

D/T9346	D/T9347	D/T9348	D/T7208
9406TAP	9404TAP	9402TAP	

1.1.3 CLEANING TIPS FOR THE 20GB/40GB 8MM TAPE DRIVE

Record number: H162905

```
Device:               D/T7208
Model:                M341
Tip key:              015
Date created:         O98/02/27
Date last altered:    A98/03/23
```

The 20GB/40GB 8MM tape drive needs to be cleaned at these intervals. NOTE: the LEDs mentioned below are explained on page 3 of the Service Guide form number SA37-0320-00.

Every 72 hours of tape movement when using Advanced Metal Evaporated (AME) media. The cleaning LED (Amber Disturbance LED on solid) will automatically be turned on at 72 hours of tape motion if the drive has not been cleaned. The LCD will also say "Clean Soon".

Every 10 hours of tape movement when using Metal Particle (MP) media. The cleaning LED will autmoatically be turned on at 10 hours of tape motion if the drive has not been cleaned. The LCD will also say "Clean Soon".
Once a month or when the Amber LED (Disturbance LED) indicates recording problems. The LCD will also say "Clean Soon".
or
when the LCD says "MUST CLEAN". "MUST CLEAN" is displayed when AME media is inserted into the drive after MP media is used without cleaning the drive between the MP and AME use. The AME media will be ejected and the "MUST CLEAN" message displayed.

If a cleaning cartridge that has been used the maximum number of times is inserted into a 20GB 8mm tape drive that has the cleaning LED ON, the drive will not be cleaned and the cleaning LED will stay ON. The LCD will also say "DEPLETED".

If a cleaning cartridge that has been used the maximum number of times is inserted into a 20GB 8mm tape drive that has the cleaning LED OFF, the drive will not be cleaned and the cleaning LED will remain off. The LCD will also say "DEPLETED".

The cleaning cartridge for the 20GB 8mm tape drive is p/n59h2898. This is not the same cleaning cartridge as used for the 2.3GB 8mm or the 5GB 8mm, 7GB 8mm tape drive. The cleaning cartridge for the 2.3GB,5.0GB and 7.0GB 8mm tape is p/n16g8467.

The AME data cartridge is p/n59h2678.

SAS KEYWORDS:

D/T7208/341	7208/341	7208 341	341
RS6000	20GB	40GB	20/40GB
D/T701X	701X	POWERPC	SMP
RSIC6000	59H2898	16G8467	59H2678

1.1.4 D/T7208 MODEL 12 ATTACHED TO AS/400 STAGE 2 ONLY

Record number: H003605

```
Device:               D/T9406
Model:                M
Tip key:
Date created:         O93/04/14
Date last altered:    A93/11/15
```

7208 Model 12 RPQ

V2R2 and PTFs are a PREREQUISITE for 7208 Model 12 support.

The 7208 Model 12 cannot be used as the AIPL device until after the required PTFs have been installed. This means that the 7208 model 12 cannot be used to install the V2R2 base code or the PTF cumulative package.

If V2R2 needs to be installed a supported device (ie 9348) must be used. PID tapes should be ordered in this device'sformat.

If V2R2 is installed and ECS is available the PTFs for the 7208 Model 12 support indicated in the RPQ can be loaded electronically.

IF V2R2 is installed but ECS is not available a supported device (ie 9348) must be used to load the appropriate PTFs.

Once the RPQ has been installed a SAVSYS must be done using the 7208 model 12. PID tapes cannot be used for recovery since they do not contain the support for the 7208 model 12.

If the customer orders their software distribution media in the 8mm format they will need to use the 7208 model 002 or ECS to install the PTFs. Once the PTFs are installed the 7208 model 12 can be used as an AIPL device.

SAS KEYWORDS:

D/T7208M12	9406TAP	D/T7208	9406INP
9406MES	9406MISC		

1.1.5 D/T7208 MODEL 12 TO AS/400 VERSION 2 RELEASE 3

Record number: H121146

```
Device:               D/T9406
Model:                M
Tip key:
Date created:         O93/09/09
Date last altered:    A94/02/25
```

IF YOUR CUSTOMER HAS RPQ 843782 (7208 MOD 12 ON STAGE 2 SYSTEM) OR RPQ 841990 (7208 MOD 12 ON STAGE 1 SYSTEM) AND IS UPDATING SOFTWARE FROM VERSION 2 RELEASE 2 TO VERSION 2 RELEASE 3 IT WILL RECONFIGURE THE DRIVE WITH A NEW RESOURCE NAME. USER INTERVENTION WILL BE REQUIRED TO CHANGE THE DEVICE DESCRIPTOR TO POINT TO THE NEW RESOURCE NAME.
(THIS PROCEDURE WILL BE DOCUMENTED IN THE VERSION 2 RELEASE 3 MEMO TO USERS).

SAS KEYWORDS:

72O8M12	7208 MODEL 12	AS400	9406 REL230
9406MIS	9406DOC	9406TAP	9406 TAPE
9404TAP	9404 TAPE	9404MIS	9404 REL230

1.1.6 D/T7208 MODEL 2 SCSI ADDRESS SWITCHES

Record number: H093973

```
Device:               D/T7208
Model:                M
Tip key:              003
Date created:         O91/11/15
Date last altered:    A92/11/12
```

THE D/T7208 SCSI ADDRESS SWITCHES SHOULD ALL BE OFF (DOWN).
THE 3 POSITION DIP SWITCHES ARE LOCATED ON THE UPPER LEFT HAND
CORNER AT THE REAR OF REPLACEABLE TAPE DRIVE ASSEMBLY (NOT
VISIBLE FROM THE OUTSIDE COVERS OF THE D/T7208). THIS IS
VALID FOR MODEL 2 ONLY. THESE SWITCHES SHOULD REMAIN OFF
(DOWN).

SAS KEYWORDS:

D/T7208 9406MES 940XTAP 9406MISC

1.1.7 D/T7208 SCSI CABLE PARTS PROBLEM ON MODELS 002 AND 012

Record number: H136652

Device: D/T9406
Model: M
Tip key: 454
Date created: O97/02/19
Date last altered: A97/02/19

There is a problem with a small quantity of the following SCSI System-to-Device cables, that affect only the 7208-002 and 7208 - 012 devices:

Part Number
21F4980
6495268
6495269

The situation is that a different mold was used for the connector and resulted in an increase in connector length. This causes the retention method employed on the 7208 models 002 and 012 to be unusable. The way to indentify these cables, without actually attempting to connect them to the device, is to look for 'IS PAN' on the bar code label. Cables with a date code before March 1997 by manufacturer "PAN" should be suspect.

These cables can be used on all the other applicable 7208 devices, because of differences in retention.

SAS KEYWORDS:
9402TAP 9404TAP 9406TAP 9402MISC
9404MISC 9406MISC

1.1.8 D/T7208, D/T6390, D/T9427 URC 04AD, 03XX MEDIA GUIDE

Record number: H015889

```
Device:               D/T9406
Model:                M
Tip key:
Date created:         O96/06/12
Date last altered:    A96/12/19
```

If a drive posts an URC 04AD,03XX for the first time (this will cause the 8mm drive to flash the Amber LED) and the drive recovers by either depressing the blue button two quick times or by a vary-on with a reset, the drive should not be replaced. Check the media for visual damage (by flipping the lever and opening the tape guard on the data cartridge). If no visual wear is observed, mark the media as having failed with the above error. The average media life for an 8mm cartridge is 6 months to a year. Use only cleaning cartridge 16G8467, and clean on 8 hours of usage or 20GB of tape usage. If the problem persists, replace the drive.

SAS KEYWORDS:

6390	7208 M012	7208 M232	7208 M234
9427	9406	9406TAP	9406MISC
9402TAP	9404	9404TAP	9404MISC
9402	9402MISC		

1.1.9 D/T940X WITH 7208 MODEL 12 FAILS DURING AIPL DUE TO CLEANING

Record number: H123590

```
Device:               D/T9406
Model:                M
Tip key:
Date created:         O94/04/15
Date last altered:    A94/04/15
```

D/T940X USING THE 7208 MODEL 012 AS AN ALTERNATE LOAD DEVICE MAY FAIL DURING THE A-IPL WITH THE DISTRUBANCE LIGHT (CLEANING INDICATOR) ON. REFERENCE CODE SRC2621B982 WILL BE POSTED ON THE CONTROL PANEL. **FIX:** PRIOR TO THE A-IPL INSERT THE IBM CLEANING CARTRIDGE TO CORRECT THIS PROBLEM.

SAS KEYWORDS:

SRC2621B982	D/T9406	9406TAP	9406MISC
9404TAP	D/T9404	9404MISC	9402TAP
9402MISC	D/T9402	D/T7208	7208012
7208			

1.1.10 D/T9406 WILL NOT DISPLAY RACK/EIA FOR 7208 IN WRKHDWPRD

Record number: H001113

```
Device:               D/T9406
Model:                M
Tip key:
Date created:         O94/09/16
Date last altered:    A94/09/16
```

WHEN USING WRKHDWPRD ON AS/400 ALL MODELS, THE RACK AND EIA LOCATIONS CAN NOT BE INPUTED ESPECIALLY WHEN CONVERTED TO RACK MOUNT.

FIX:

USE THE WRKHDWPRD COMMAND FIND THE 7208 TAKE THE OPTION TO CHANGE. ON THE LOCATION FIELD ENTER YOUR INFOMATION MANUALLY TO REFLECT THE RACK AND EIA. EXAMPLE RACK 02 EIA 24. REMEMBER TO SAVE THE NEW INFORMATION.

SAS KEYWORDS:

```
   D/T7208           D/T9406           D/T9404           D/T940X
   7208M012          7208M002
```

1.1.11 EMPHASIS PROGRAM ON 20GB 8MM TAPE DRIVES
Record number: H162792

```
Device:               D/T701X
Model:                M
Tip key:              335
Date created:         O98/02/19
Date last altered:    A98/05/05
```

NOTE: This tape drive p/n59h2835 will be locked ASAP due to the following problem. If the error you are having is like the following, the replacement of the tape FRU is most likely not neccessary.

There has been a defect identified in the 20GB 8mm tape drive used on the RS/6000. The defect will show up when a customer attempts to write on the supported Advanced Metal Evaporated (AME) media, IBM p/n59H2678 or p/n59H2671, or the test tape p/n59H2677 after using the 2.3GB, 5GB or 7GB Metal Particle (MP) media and cleaning the tape drive with the proper IBM cleaning cartridge, IBM p/n59H2898.

The problem shows up when the customer does the following steps:

1) Uses the MP media in the 20GB 8mm tape drive. (Reading of the MP media is supported in the 20GB 8mm tape drive, the 20GB tape will not write on MP media.)
2) Cleans the tape drive with the IBM cleaning cartridge.
3) Inserts a brand new AME tape (a tape that has NEVER been written on).
4) The drive reports back to the system that the tape is write protected even though the tape is not write protected.

The 20GB tape drive microcode levels that have this defect are: 37H, 37M and 38K. To determine the tape drive level, do the following AIX command: "lscfg -vl rmtX" where X is the drive number. The Z1 field will show the tape drives microcode level.

>>>>>>>>>>>>>>>>> WORK ARROUND <<<<<<<<<<<<<<<<<<<<<<
There is a simple work around until the updated tape drive microcode is available.
If you press and hold the eject button for 10 seconds between steps 2 and 3 in the above section, this will clear the drive memory and eliminate the problem until the tape drive microcode can be updated and released.

>>>>>>>>>>> Added May/05/1998 <<<<<<<<<<<<<<<<<<<<<<
New microcode leve 38zA has been released on AIXTOOLS and the web for these problems. The WEB page is URL:
http: //www.rs6000.ibm.com/support/micro/download.html
Near the bottom is the link for the "IBM 20GB 8mm Tape Drive". A readme page can be accessed from here.

SAS KEYWORDS:

RS6000	RISC6000	20GB	40GB
20/40GB	MCODE	D/T701X	D/T7208
D/T7208/341	7208/341	MODEL341	ERROR
20GB/40GB	TAPEDRIVE	POWERPC	PPC
SMP	ENTERPRISE	D/T7017	D/T7013
D/T7015	D/T7024	D/T7025	7013
7015	7017	7024	7025
59H2835	59H2678	59H2671	59H2677
59H2898	7208 341		

1.1.12 INTERCHANGEABILITY OF IBM 8MM DATA GRADE TAPES

Record number: H027367

```
Device:               D/T7208
Model:                M
Tip key:              007
Date created:         O93/05/27
Date last altered:    A93/05/27
```

The following chart shows the interchange using the IBM 8mm data grade tape between the IBM 2.3gb 8mm drive and the IBM 5.0gb drive. The chart lists the external model type as the example but the data applies to the internal versions as well.

Tape Drive	Mode & Compression Status: 2.3gb Non Compression	2.3gb Compression	5.0gb Non Compression Capable	5.0gb Compression Capable
7208 - 001 2.3gb	R/W	No	No	No
7208 - 011 5.0gb	R/W D=20*	R	R/W D=21*	R/W D=140

```
R   = Read capable only
R/W = Read and Write Capability
No  = No capability
D   = Is the density setting required to write in the specified
      mode
*   = Use this density setting to transfer data to a non data
      compression capable drive
```

SAS KEYWORDS:

7208	7208TAPE	7015TAPE	7012TAPE
7013TAPE	7016TAPE	7012	7013
7015	7016	8MM	TAPE
5.0GB	2.3GB		

1.1.13 MATCHING THE BLUE COLOR OF 8MM DRIVE BUTTON 7208 M232 M234

Record number: H131476

Device: D/T9406
Model: M
Tip key:
Date created: O95/10/20
Date last altered: A95/10/20

Reference: PN 46G2227 8mm 5GB tape drive FRU
Reference: PN 87G4778 8mm 7GB tape drive FRU

Overview:
When exchanging 8mm tape drives in the IBM 7208 models 232 and 234 (tape subsystems), the color of the drive eject switch and the tape subsystem operator panel switch must be the same. If the colors do not match, then the tape drive bezels should be exchanged before installing the new FRU tape drive.

Background:
The recent change to the IBM BLUE color for all operator switches resulted in the possibility of mismatched switch colors on the 7208-232 and 234 tape subsystems. These tape subsystems are shipped with matching switch colors, but the color of the eject switch on a drive FRU may not match that of the original subsystem.

Actions:
The color match for all 8mm drive FRU switches must be verified before installing a replacement drive. If there is a switch color mismatch, then the front bezels of the replacement drive and the defective drive must be exchanged, before the replacement drive is installed. Do NOT remove and exchange the colored switches from the bezel assemblies. This can damage the switching mechanisms.
To exchange the front bezels, complete the following steps in order.

1) Remove the small center screw, which secures the bezel assembly on both sides of the tape drive.

2) Carefully pull the bezel assembly forward and free of the front of the tape drive.

3) Repeat the process for the second tape drive.

4) Exchange the bezel assemblies.

5) Reattach the bezels to the tape drives by reversing the removal steps.
6) When the replacement tape drive with the matching color eject switch has been installed, verify the proper functioning of the eject switch.
a) Load a tape cartridge (this takes about one minute).
b) Press the eject switch to eject the tape cartridge. .

SAS KEYWORDS:
D/T7208 D/T9406TAP D/T7208M232 D/T7208M234
D/T9404TAP

1.1.14 MEDIA KIT P/N59F3907 CAN NOT BE ORDERED USE COMPONET PARTS

Record number: H123764

```
Device:              D/T9406
Model:               M
Tip key:
Date created:        O94/04/29
Date last altered:   A94/04/29
```

WHEN TRYING TO ORDER THE MEDIA KIT P/N59F3907 YOU MUST USE THE FOLLOWING COMPONET PARTS THAT MAKE UP THE KIT.

```
21F8593 CLEANING CARTRIDGE
21F8577 TEST TAPE
21F8595 BLANK TAPE
```

SAS KEYWORDS:

D/T7208	9406MISC	9406TAP	9404TAP
9402TAP	7208M02	7208M12	7208
9402MISC	9404MISC		

1.1.15 NEW 8MM CLEANING CARTRIDGE P/N 16G8467

Record number: H13398 Number of altered copies: 2

```
Device:              D/T7208
Model:               M
Tip key:             009
Date created:        O95/07/10
Date last altered:   A95/07/11
```

IBM has released a new 8mm tape drive cleaning cartridge, P/N 16G8467. The new cartridge is for use in:

```
-the 2.3GB 8mm tape drive
-the 5GB 8mm tape drive
-the 7GB 8mm tape drive

This part will eventually replace the existing 8mm tape drive
cleaning cartridge, P/N 21F8593.

The advantages of the new 8mm tape drive cleaning cartridge, P/N
16G8467 are:

 -It is a "mildly" abrasive cleaning cartridge that should be
  used as the standard cleaning cartridge for the IBM 8mm tape
  drives.
 -It can remove "brown stain" from the heads of the tape drive.
 -It will not damage the drive and will often clean the drive so
  drive replacement will NOT be necessary where the drive had
  previously experienced I/O errors from "dirty" tape drive
  heads.
 -The cartridge is available from Mechanicsburg today and will
  be available for customer purchase through normal channels
  shortly.

NOTE:  The new cleaning cartridge requires the 5GB 8mm tape drive
       to be at a microcode level of 6S0 or higher. The 5GB tape
       drive has been shipping from the factory at this level for
       over a year.
       To upgrade the customer to a level that supports this new
       cleaning cartridge, all you have to do is download the
       ECA 155 package from the AIXTOOLS disk or call IBM Chicago
       Support Center and they will ship you the latest microcode
       for the 5GB 8mm tape drive.

       The 2.3GB 8mm tape drive and the 7GB tape drive are
       already at a microcode level that supports this new
       cleaning cartridge.

SAS KEYWORDS:
   RS/6000           RISC/6000         RISC SYSTEM       7006
   7009              7011              7012              7013
   7015              7018              7020              7030
   8MM               CARTRIDGE         CLEANING          2.3GB
   5GB               7GB               ECA155            ECA 155
   6S0               16G8467           BROWN STAIN       HEAD
   HEADS             AIXTOOLS          MICROCODE         TAPE
   9334              TAPE BOX          ABRASIVE
```

1.1.16 RISC SYSTEM/6000 TOOLS

Record number: H033639

Device: D/T701X
Model: M
Tip key: 045
Date created: O91/01/04
Date last altered: A95/03/13

SOME DISK DRIVES AND OTHER DEVICES ON RISC SYSTEM/6000 USE TORX HEAD SCREWS. A SET OF TORX BITS CAN BE ORDERED UNDER P/N93F2830.
THE KIT INCLUDES THE 1/4" HEX ADAPT AND LISTED BITS T7-T25.
THE ADAPTER AND BITS CANNOT BE ORDERED SEPARATELY.

1/4" HEX ADAPT	P/N39F8395
T7	P/N39F8396
T8	P/N39F8397
T9	P/N39F8398
T10	P/N39F8399
T15	P/N39F8400
T20	P/N39F8401
T25	P/N39F8402

KIT DOES NOT INCLUDE DRIVER OR 4" EXTENSION

4" EXTENSION	P/N6431952
DRIVER	P/N1650840

SAS KEYWORDS:

D/T7013	D/T7015	D/T7016	D/T7203
D/T7208	701X	7013	7015
7016	7203	7208	701XMISC
7013MISC	7015MISC	7016MISC	7203MISC
7208MISC	RS6000	RS/6000	

1.1.17 RISC SYSTEM/6000 USERS OF 8MM TAPE DRIVES

Record number: H127149

```
Device:              D/T7208
Model:               M
Tip key:             008
Date created:        O95/04/14
Date last altered:   A95/06/21
```

Users of 8MM tape drives need to make sure the media they are using is compatible with the 8MM tape drive. This record is intended for reference to RISC System/6000 users. Following is a table of drives and the proper media to use:

Type 8MM Drive	IBM Media Recommended		Other Length Media That is OK to Use
2.3GB	21f8595	112M	15M, 54M, NOT 160m
5GB	21f8595	112M	15M, 54M, NOT 160m
7GB	87G1601	160M	15M, 54M, 112M

NOTE: The 5GB 8MM tape drive will reject the 160M media when inserted.
The 2.3GB 8MM tape drive will accept the 160M media when inserted BUT may have unpredictable results on some operations such as, the TCTL 'erase' command which could take up to 9 hours to complete and will NOT complete successfully.
Additionally, the 7GB drive is designed for the 'thinner' 160M tapes and will 'stress' the tape less than the older 2.3GB drives.

SAS KEYWORDS:

701X	7011	7012	7013
7016	7018	7006	7009
701X TAPE	701XTAPE	RS/6000	RISC
RS6000	RS/6000	7208	2.3GB
5GB	7GB	MEDIA	15M
54M	112M	160M	8MM
TAPE DRIVE	LENGTH	7020TAPE	7020
7011TAPE	7012TAPE	7013TAPE	7016TAPE
7018TAPE	7006TAPE	7009TAPE	

1.1.18 RISC/6000 SMIT SETUP TIPS

Record number: H064558

```
Device:              D/T7208
Model:               M
Tip key:             006
Date created:        O93/05/05
Date last altered:   A93/05/13
```

IMPORTANT TAPE INFORMATION Recently we are seen a number of problems with tape drives that are easily avoidable by doing the following:

To display the SMIT congifuration, have the customer sigon on as root or superuser. At the command line type "smit" and press enter. At the System Management screen select "devices". At the Devices screen select "tape drive". At the Tape Drive pop up screen select the tape drive(s) and compare the listed options to those noted below.

-Use Device BUFFERS = YES. If the customer sets the option to NO then the 1/4" or 8mm drive must write every block of data to the tape as it is received. This can increase the time required for a back-up by 3 or 4 times the time it should take. In addition, this greatly decreases the life of the media and the drive. These are Streaming devices no Start-Stop devices.
-Use Block Size = 1024, or mulitple of, for the 2.3gb 8mm drive. Thie will increase the amount of data that cn be put on a single tape. The 2.3gb drive stores data in 1024 byte blocks and will pad any block less than 1024 to the 1024 size with pad characters not user data. The user will see faster backup times and tape wear will be reduced.

CAUTION: Some user applications and some AIX applications require a blocksize of 512 bytes.

The 5gb 8mm tape drive data storage capacity is not effected by the block size. The 5gb 8mm drive does not use pad characters and is able to efficiently use any block

SAS KEYWORDS:

701X	7208	701XSETUP	7208SETUP
701XTAPE	7208TAPE	7207TAPE	

1.1.19 SOLID AMBER LIGHT AFTER CLEANING CARTRIDGE INSERTED.

Record number: H135193

```
Device:              D/T7208
Model:               M
Tip key:             013
Date created:        O96/11/04
Date last altered:   A97/11/17
```

If the amber light comes on solid after the cleaning cartridge is inserted in a 6390, 7208 012, 7208 222, 7208 232, 7208 234, or 9427 tape drive:
DO NOT REPLACE THE DRIVE. Instead, rapidly press the eject button 2 times, this will reset the drive and should clear the amber light.
The problem is that the cleaning cartridge is used up and needs to be replaced. Ensure the Customer replaces their cleaning cartridge with a new mildly abrasive cleaning cartridge such as IBM P/N 16G8467.

SAS KEYWORDS:

D/T6390	D/T7208-232	D/T7208-234	D/T9427
9402TAP	9404TAP	9406TAP	8MM
D/T7208 - 012	D/T7208-222		

1.1.20 7009, 720X AND 7013 FILTER ENCLOSURES FOR TAPE DRIVES

Record number: H133960

```
Device:              D/T7208
Model:               M
Tip key:             012
Date created:        O96/09/13
Date last altered:   A96/09/15
```

This record provides information about tape drive filtered enclosures. Some customer environments are not suitable for tape drive use. Site preparation for the system and the tape drives is a customer responsibility. Air Quality of the location where the system and the tape drive are to be used is also a customer responsibility. IBM has designed and made available low cost filter enclosures that have been effective at many customer sites in filtering out particles that damage tapes and tape drives. Customers experiencing tape backup failure and tape drive damage caused by the customer environment should consider installing a filter enclosure as a possible solution to the customer environmental problem.

The following are the current RPQs available:

Machine Type	RPQ	Approximate List Price
7009	8A0983	$ 450
7206/7207/7208	8A0869	$ 450
7013(520 thru 590)	8A0788	$1,145

NOTE: These RPQs require a 115 volt outlet to power the internal fan in the filter enclosure.

Customers with system models that do not have a filter enclosure listed should consider purchasing the tape drive in its external 720x enclosure and using the RPQ 8A0869.

If these RPQs are not available in your country, you may want to submit an RPQ request for your requirements.

SAS KEYWORDS:

RS/6000	RISC 6000	RISC6000	RISC SYSTEM
AIX	RS6000	D/T7013	7206
7207	7208	7009	7013
MOD520	MOD530	MOD540	MOD550
MOD560	MOD570	MOD580	MOD590
RPQ	8A0869	8A0983	8A0788
720X	ENCLOSURE	TAPE DRIVE	DUST BARN
AIR QUALITY	BACKUP	TAPE	8MM
4MM			

1.1.21 7208 PART ORDERING INFORMATION FOR MODEL 1 AND 2

Record number: H091825

```
  Device:               D/T7208
  Model:                M
  Tip key:              001
  Date created:         O91/09/11
  Date last altered:    A93/05/05

THERE ARE TWO MODELS OF THE 7208 (8MM TAPE DRIVE) AVAILABLE.
MODEL 1 ATTACHES TO THE RS/6000 SYSTEM. MODEL 2 ATTACHES TO
THE APPLICATION SYSTEM/400 (AS/400). MODELS 1 AND 2 ARE NOT
INTERCHANGEABLE. CE'S SHOULD ORDER THE CORRECT FRU PART NUMBER
USING THE APPROPRIATE DOCUMENTATION:
       MODEL 1   SA23-2640    INSTALLATION AND SERVICE GUIDE
       MODEL 2   SA23-2676    INSTALLATION AND SERVICE GUIDE

NOTE:  MODEL 1 (8MM FRU) IS P/N31G9487
      MODEL 2 (8MM FRU) IS P/N46G2260

* Model 2 also is marked on the top cover with "AS/400-Dif."

SAS KEYWORDS:
   D/T7208           7208              AIX               RISC6000
   RS6000            D/T701X           7208TAPE          701X7208
   RS/6000           701X              7208DOC           7208MISC
   701XTAPE          701XDOC           701XMISC          7208PART
   701XPART          9406TAP
```

1.1.22 8MM CARTRIDGE IS STUCK OR WON'T UNLOAD FROM DRIVE

Record number: H131136

```
Device:               D/T9406
Model:                M
Tip key:              392
Date created:         O95/10/06
Date last altered:    A95/10/06
```

For 8mm 5 gigabyte and 7 gigabyte tape drives with stuck tape. Push the blue eject button on the tape drive. If the cartridge attempts to unload but stops and reloads into the drive this may be cause by too many labels or loose labels on the top of the tape cartridge. Labels on top of the tape cartridge can lift the tape drive door and cause it to interfere with the cartridge transport mechanism. It is recommended that a maximum of two labels be placed on top of the tape cartridge. These labels should be located in the recessed area on top of the tape cartridge.
(Also note: Do not place labels or tape over the sense holes in the bottom of the tape cartridge. The bottom surface of the tape cartridge must contact mounting points in the tape drive. This is to insure proper loading of the tape cartridge and thus proper tape motion through the tape drive.) A

SAS KEYWORDS:

D/T7208	D/T7208232	D/T7208002	D/T7208234
D/T7208222	D/T9427	D/T6390	FC6390
6390	9406TAP		

1.1.23 8MM TAPE - INFO ON MEDIA, CLEANING, AND PERFORMANCE
Record number: H095815

```
Device:               D/T7208
Model:                M
Tip key:              002
Date created:         O91/10/17
Date last altered:    A97/04/21
```

This tip provides some general information about the 8mm tape drive and the media and cleaning schedule necessary to keep it running reliably.

The 8mm drive operates in a free air environment at very high densities. Many features were included to assure reliability and performance. There are several things that also need to be considered to maintain superior performance and data integrity. They include using data grade media such as IBM p/n21F8595 and regular drive cleaning using IBM P/N 16G8467.

The IBM media is digitally tested to insure superior performance in a data storage environment. If other media is used, it must meet the ANSI X3B5/89-054 Digital Computer Tape Cartridge Standard. If other media is used, and the customer is experiencing read/write problems, it is recommended that IBM Data tapes be used before the drive is replaced.

Video grade media is NOT recommended as it may vary widely in quality and standards. In general, video grade media, does not meet the standards required by the 8mm drive. This tape may be unreliable and may cause permanent damage to the 8mm drive.

The IBM cleaning cartridge p/n16G8467, was specifically designed to be used with this 8mm drive. The cleaning cartridge cleans the read and write heads and removes tape path debris. We recommend cleaning after every 30 hours of tape motion (30 gigabytes of data transfer). In extreme environments, cleaning the heads as often as once every 5 hours of tape motion (or 5 gigabytes of data transfer) may be necessary. Following this program will result in a cleaner drive with no negative side effects and will assure continuing drive performance.

The IBM cleaning cartridge will clean the 2.3GB 8mm drive 12 times or the 5GB 8mm drive 22 times or the 7GB 8mm drive 22 times before needing to be replaced. If all of the tape appears to be on the right hand reel, the cleaning cartridge is used up. If you continue to use this cartridge, it will not clean the drive but there will be no indication that the cleaning did not take place. The exception to this is on the 5GB 8mm drive and on the 7GB 8mm drive if the "cleaning required" indicator was on prior to inserting the cleaning cartridge. The "cleaning required" indicator will NOT go off if the cleaning cartridge is used up. If the cleaning cartridge is NOT used up and the "cleaning required" indicator is on, the indicator will be turned OFF after successful cleaning on the 5GB and 7GB 8mm tape drives.
The 5GB 8mm tape drive must be at microcode level of 6S0A or higher for the cleaning cartridge P/N16G8467 to work. The 2.3GB and the 7GB tape drives have no microcode dependency.

The AIX command:

```
   lscfg -vl rmtX       <-- where X is the rmt id
```

will display the tape drive vital product data. In this data the Z1 or FW field will sho the tape drive microcode level.

If for some reason the 6S0A level of microcode is not available on the 5GB 8mm tape drive, then use cleaning cartridge P/N21F8593 until the microcode can be upgraded.

Starting with microcode level 7Y0A, if a cleaning cartridge that is used up (exceeded its recommended number of usages) is inserted into the 5GB or 7GB 8mm tape drives, the amber cleaning LED will be turned on, even if it was off previously, indicating the tape drive needs to be cleaned. The only way to turn off the cleaing LED is to use an approved cleaning cartridge that is not used up.

If the dirt is allowed to accumulate, the drive will perform more re-writes and re-reads. This additional drive activity reduces the performance of the system. A dirty tape drive in some cases may cause media errors. These errors occur sporadically and are usually not repeatable. The performance and reliability of the 8mm tape drive can be enhanced by regular drive cleaning.

Some video cleaning cartridges and wet cleaning processes will damage the 8mm tape drive. An 8mm tape drive may be permanently damaged with one(1) use of an unsupported cleaning process. The 8mm tape drives must only be cleaned with the approved cleaning cartridge.

To Summarize:

1. Use good DATA grade media
   -- IBM P/N21F8595 for the 2.3GB, 5GB or 7GB (112meter)
   -- IBM P/N87g1603 can be used in the 7GB ONLY (160meter)

2. Clean drives regularly
   -- IBM P/N16G8467
    Cartridge provides 12 cleanings in the 2.3GB drive
    Cartridge provides 22 cleanings in the 5GB or 7GB drive

3. On the 5GB drives only use the older style cleaning cartridge, IBM P/N21F8593 until you can get the 5GB tape drive updated to a microcode level of 6S0A or higher as this cartridge is not as effective in cleaning as is the newer cartridge IBM P/N16G8467.

4. DO NOT use Video grade media!!!!!!

SAS KEYWORDS:

7208	7208MOD011	7208 MODEL11	701X
7006	7009	7011	7012
7013	7015	7016	7018
7020	7030MISC	7248	RS/6000
RS6000	RISC SYSTEM	RISC6000	RISC 6000
CLEANINGS	5GB	7GB	2.3GB
TAPE	DRIVE	CLEANING	VIDEO
CARTRIDGE	21F8595	16G8467	MICROCODE
PERFORMANCE	7208 MODEL 011	7208 MOD001	7012G30
7013J30	7015R30	SMP	SP2
9076	701X	RISC6000	RS6000

1.1.24 8MM TAPE BACKUPS ABORTED WITH "UNDETERMINED TAPE ERROR"

Record number: H093079

```
Device:               D/T701X
Model:                M
Tip key:              085
Date created:         O91/11/21
Date last altered:    A92/02/04
```

If 8mm tape backups are intermittently aborting with an "undetermined tape error", and the diagnostics run successfully, check errpt for an "09" in byte 23 of the TAPE ERROR sense data. See below for an example:

```
                                                        **|**
SENSE DATA                                               V
0600 0000 0816 4B18 2000 0000 0000 0000 0200 0400 0000 0900 00..
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 00..
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 00..
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 00..
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 01A1 00..
```

The workaround is to set the block size for the 8mm to 1024.

** Caution **
If the customer is doing a full system backup, he will not be able to install a "mksysb" system image if the backup was done with block size 1024. This is because the block size needs to be 512 for the install script on the diskettes to work. In this case, the customer would need to seek software assistence to workaround this side effect of the 1024 block size.
Individual files or data bases backed up with the block size set at 1024 would not be impacted by this side effect.

Other factors that are believed to increase the likelihood of an "09" failure are:

1. Dirty heads/Bad tape. Most of the "09" error log entries also have a high soft error count (retries). This can be caused by dirty heads (which should be cleaned by using the cleaning cartridge p/n21F8593) or by using less than ideal tape media (which should be replaced).

2. Backups being done during heavy system usage.

Taking action on the above two items may resolve the problem without changing to the larger block size. For more information on Block Size, refer to TDR H066069.

The fix for this problem is not expected before 1Q92.

SAS KEYWORDS:

701X	701XTAPE	701XMISC	7208
7012	7012TAPE	7012MISC	RISC
7013	7013TAPE	7013MISC	RS/6000
7015	7015TAPE	7015MISC	7016
7016TAPE	7016MISC	D/T7208	RS6000

1.1.25 8MM TAPE DRIVE PERFORMANCE/RELIABILITY CHECKLIST

Record number: H13544

Device:	D/T7208
Model:	M
Tip key:	010
Date created:	O95/08/16
Date last altered:	A95/08/17

This tip provides information about factors related to the 8MM tape drive.

MEDIA SELECTION:

Use only the tape cartridges supported by your tape drive. These must be high quality data grade media, such as the IBM data grade cartridge originally supplied with your tape drive.

Do not attempt to write on previously written software distribution tapes. Often, these tapes will not support being rewritten without modifications to the cartridge. If the cartridges are modified, it is possible to cause tape jams or tape misalignment.

MEDIA REPLACEMENT:

Cartridges which are used regularly (e.g. daily/weekly backup tapes) should be discarded after about 100 uses. Cartridges which are in use when media-related errors are reported by your backup application or are physically dropped or are exposed to extremely harsh environments should be discarded.

MEDIA STORAGE:

Protect your cartridges from particulate contamination when they're not in use. Put each cartridge in its protective case or place the cartridge in a dust-tight container desgined for tape cartridge storage. Keep your cartridges in an area where the temperature and humidity are comfortable for you and are relatively constant. Orient cartridges in storage so that their cases are on an edge (vs. flat). If cartridges are moved between areas whose temperature or humidity differ greatly, let the cartridge adapt for several hours prior to use.

CLEANING CARTRIDGE SELECTION/USAGE

Use only the cleaning cartridges supported by your tape drive. These must be high quality cartridges such as, the IBM cleaning cartridge originally supplied with your drive.
Clean your drive once a month or after every 30 hours of reading/writing activity, whichever occurs first. Note that some tape drives turn on an AMBER LED or display a message to signal that cleaning is needed. Also, some systems display a message on the console when cleaning is needed. Clean your tape drive after any media related error is encountered. Track cleaning cartridge uses on the cartridge label and discard the cartridge when fully used.

ENVIRONMENT:

Locate your tape drive at tabletop level or higher and away from sources of particulate contamination such as outside doorways, high foot traffic areas, printers and copiers. Maintain comfortable temperature and humidity (ideally 30%-40% Relative Humidity) when the tape drive is in use. Note that this may require a timing adjustment of nighttime setbacks. Minimize the amount of time cartridges spend in the drive when not in actual use.

TROUBLESHOOTING:

If a backup failure occurs, try cleaning the drive and retrying the operation with a new cartridge. Verify that the checklist recommendations are being followed by the system's operators. Look for trends, process changes, and/or environmental changes. Avoid mechanical

loading problems by placing labels only in the designated cartridge spine and top locations and assuring that they are not peeling off or more than two layers thick.
Contact your IBM CE or CSR if problems persist.

NOTE: The TAPE DRIVE PERFORMANCE/RELIABILITY CHECKLIST is based on the copyrighted "8MM PERFORMANCE/RELIABILITY CHECKLIST" by EXABYTE Corporation and is distributed free of charge with the EXABYTE Corporation's permission.

SAS KEYWORDS:

RS/6000	RISC/SYSTEM	RISC6000	RISC
701X	7006	7009	7011
7012	7013	7015	7016
7018	7020	7248	8MM
TAPE	EXABYTE	MEDIA	CLEANING
PERFORMANCE	RELIABILITY	BACKUP	CARTRIDGE
DATA	CHECKLIST	7208	JAM
7208001	7208011	7208-001	7208-011
RS6000			

1.1.26 8MM VDAT MAINTENANCE PROCEDURES AND "LOOSE" TAPE CARTRIDGES
Record number: H20699

```
Device:              D/T7208
Model:               M
Tip key:             005
Date created:        O93/03/15
Date last altered:   A93/03/23
```

Before replacing a 8mm VDAT drive; the Cleaning Cartridge should be used. It is supplied with every drive that is shipped; P/N 21F8593. It is recommended that this cartridge be used once every 30 days OR after 30 Giabytes of data transfer. For planning purposes 1 Giabyte of data is transferred every hour of continuous streaming operation.

WHEN RUNNING THE DIAGNOSTIC TESTS ON THIS DRIVE USE ONLY THE IBM SUPPLIED TEST TAPE; P/N 21F8577 OR THE IBM SUPPLIED DATA TAPE P/N 21F8595

If the customer is experiencing problems with the drive/read/write function IT IS RECOMMENDED that IBM DATA TAPES P/N 21F8595 be used prior to replacing the drive.

-- If other media is used it must meet the ANSI X3B5/89-054 standard

-- Video grade media is NOT recommended

DATA CARTRIDGE LOOSE TAPE PROBLEM:

Some 8mm tape cartridges have been found with tape that is "loose" in the cartridges. These tape cartridges can be IBM or non-IBM. If these cartridges with "loose" tape are inserted into the 8mm drive it is possible that:

1) The cartridges may become "stuck" in the drive.

2) The tape(media) may become damaged and the cartridge is EJECTED from the drive before any function is tried.
3) The tape(media) may become damaged and READ/WRTIE errors may occur during the operation.

THE CARTRIDGES THAT HAVE THIS PROBLEM IS BELIEVED TO BE SMALL BUT BECAUSE IT IS BELIEVED THAT THE CAUSE IS DUE TO SOME SORT OF VIBRATION (USUALLY DURING SHIPMENT) THE PRESENT CORRECTIVE ACTION IS:

A) TIGHTEN THE TAPE VIA TURNING ONE OF REELS ON THE CARTRIDGE BEFORE INSERTING THE CARTRIDGE INTO THE THE 8MM DRIVE.

NOTE: THIS CORRECTIVE ACTION SHOULD ONLY HAVE TO BE DONE ONCE FOR EACH CARTRIDGE. ie: BEFORE THE 1ST TIME THE NEW CARTRIDGE IS USED.

CORRECTIVE ACTION WAS IMPLIMENTED AT THE TAPE CARTRIDGE VENDOR FOR IBM CARTRIDGES IN SEPTEMBER 1991. THIS ACTION CONSISTS OF INCREASING THE TENSION OF THE SPRING BRAKING SYSTEM WITHIN THE CARTRIDGE.

YOU CAN IDENTIFY THE NEW IBM CORRECTED TAPE CARTRIDGES VIA "DATE CODES" ON THE CARTRIDGE. THE "DATE CODE" IS STAMPED ON THE FRONT OF THE CARTRIDGE TO THE LEFT OF THE "FILE PROTECT" SWITCH.

1) THE FIFTH NUMBER FROM THE LEFT INDICATES THE YEAR OF MFG.
2) THE LAST DIGIT INDICATES THE MONTH OF MFG.
   A) THE LAST DIGIT MAY BE A LETTER, INDICATING THE MONTHS OF OCTOBER, NOVEMBER AND DECEMBER

THE FOLLOWING IS AN EXAMPLE OF THE DATE CODE:

```
DATE CODE:   4H01144
               | |-- MONTH = 4TH = APRIL
               |
               |-- YEAR = 1991
```

SAS KEYWORDS:

RS/6000	7013	7015	7016
7208	701XTAPE	7013TAPE	7015TAPE
7016TAPE	7208TAPE	701XDIAG	7013DIAG
7015DIAG	7016DIAG	7208DIAG	RS6000
701XMISC	7012MISC	7013MISC	7015MISC
7016MISC	7208MISC	D/T701X	RISC

1.2 Chapter 2. Parts Information Tips

Subtopics
1.2.1 5 PACK (8MM TAPES) NO LONGER AVAILABLE THROUGH PARTS SYSTEM

5 PACK (8MM TAPES) NO LONGER AVAILABLE THROUGH PARTS SYSTEM

1.2.1 5 PACK (8MM TAPES) NO LONGER AVAILABLE THROUGH PARTS SYSTEM

Record number: H037577

```
Device:              D/T701X
Model:               M
Part number:         P/N21F8595
Tip key:             117
Date created:        O92/05/21
Date last altered:   A92/05/21
```

THE PACKAGE OF FIVE 8MM BLANK TAPES (P/N 21F8595) HAS BEEN REMOVED FROM THE MECHANICSBURG PART SYSTEM. THIS SUPPLY ITEM CAN BE ORDERED FROM IBM'S AUTHORIZED DISTRIBUTORS OR BY PART NUMBER FROM IBM DIRECT RESPONSE MARKETING AT 1-800-426-2468.

CE'S NEEDING A BLANK TAPE FOR TEST PURPOSES ONLY SHOULD ORDER P/N 21F8575.

SAS KEYWORDS:

RS6000	RS/6000	D/T7012	D/T7013
D/T7011	D/T7015	D/T7016	D/T7018
8MM	MEDIA	D/T7208	7011
7012	7013	7015	7016
7018	RISC	RISC/6000	701XTAPE
701XPART	701XMISC		

1.3 Chapter 3. Symptom/Fix Tips

Subtopics

1.3.1 AS/400 8MM TAPE DRIVE EATS TAPE / STUCK TAPE

Record number: H064315

Device: D/T9406
Model: M
Tip key:
Date created: O96/07/02
Date last altered: A96/07/15

SYMPTOM: 8MM TAPE DRIVE EATS TAPE / STUCK TAPE
6390 / 7208 - 012 / 7208-222 / 9427-21x

PROBLEM ISOLATION AIDS:
NONE

FIX:
There is a new micro-code load (7R0) for 8mm tape drives to correct problems with the drives eating tape and/or not ejecting cartridges. The new code load is available in the form of a ptf and is down-loaded to the drive on IPL or when a reset is issued to the IOP. The tape cartridge must NOT be loaded during the IPL or IOP reset for the micro-code to update. If the tape cartridge is loaded a 3110 reference code will be logged against the device type and the micro-code will not be updated. 7R0 micro-code should be loaded to attempt to correct stuck tape and/or eats tape problem before the device is replaced. Contact Roch-PSC to get the proper ptf for device type and release level.

NOTE:
Applying this PTF will not help an already stuck tape in a drive to be ejected. The CE must manually remove an already stuck tape by following the procedure (powering off drive, taking the top cover off, turning the white gear wheel). The PTF can be applied either before or after the stuck tape is removed.

Bottom line: The PTF is not intended to remove a stuck tape...it is intended to keep stuck tape problems from occuring or recurring, the CE should manually remove the stuck tape and NOT replace the drive, apply the PTF instead and see if it happens again. If the customer does experience stuck tape/eats tape problems after the ptf is applied, the tape drive should be replaced and sent in for F/A.

SAS KEYWORDS:

9406TAP	D/T7208	D/T6390	9404TAP
9402TAP	8MMTAPE	7208012	7208222
9406MISC	9404MISC	9402MISC	D/T9427
9427TAP			

1.3.2 D/T7208 MODEL 12 DOES NOT WRITE 5.0 GB PER CARTRIDGE

Record number: H026776

```
Device:               D/T7208
Model:                M
Tip key:
Date created:         O93/04/05
Date last altered:    A93/04/05
```

SYMPTOM: After installing a 7208 Model 012 that has replaced a 7208 Model 002 or an OEM 8mm tape drive, the tape does not save at 5.0 GB per cartridge.

FIX: Ensure that the data cartridge from the 7208 Model 002 or OEM tape cartridge is reformated on the 7208 model 012. The format will be corrected to 5.0 GB.

PROBLEM ISOLATION AIDS:
FIX:

SAS KEYWORDS:

9406TAPE	9404TAPE	7208	7208M12
7208M02	OEM TAPE	TAPE MEDIA	8MM TAPE

1.3.3 D/T7208 MODEL 232 MAY NOT OPERATE AFTER MULITPLE POWER ON

Record number: H015556

```
Device:              D/T9406
Model:               M
Tip key:
Date created:        O94/09/21
Date last altered:   A94/09/26
```

SYMPTOM: 7208 MODEL 232
AFTER AN UNDETERMINED NUMBER OF POWER ON CYCLES, THE BOOT PORTION OF THE MICRO-CODE WILL BE IMPROPERLY OVER WRITTEN. THE UNIT WILL POWER UP, BUT IT WILL NOT OPERATE.

PROBLEM ISOLATION AIDS:
THE PROBLEM HAS BEEN IDENTIFIED BY THE UNIT MANUFACTURER DEALING WITH THE MICROCODE. THE FIX IS CONTAINED IN A NEW LEVEL OF MICROCODE. THE NEW LEVEL OF MICROCODE HAS BEEN IMPLEMENTED IN THE DRIVES COMING OUT OF THE PLANT OF MANUFACTURING, BUT APPROXIMATELY 25 UNITS HAVE BEEN SHIPPED OUT TO THE FIELD. THESE UNITS WILL HAVE UPDATE TAPES AND THE INSTRUCTIONS SENT DIRECTLY TO THE CUSTOMER ENGINEERS INVOLVED IN THOSE ACCOUNTS. THE CE'S WILL INSTALL THE UPDATES AND RECORD THEIR SERVICE TIME USING SC 20 WITH CIA CODE OF 6.

FIX:
THIS IS A LIST OF THE 7208 MODEL 232 THAT WERE SENT OUT TO THE FIELD BEFORE THE MICROCODE FIX WAS IMPLEMENTED IN THE PLANT OF MANUFACTURING. ALL OF THE BELOW SERIAL NUMBERS OF FOR MACHINE TYPE 7208 MODEL 232:

10 - 0010007	10-0010053	10-0010064	10-0010076
10 - 0010017	10-0010054	10-0010065	10-0010083
10 - 0010019	10-0010056	10-0010066	10-0010084
10 - 0010024	10-0010057	10-0010067	
10 - 0010026	10-0010060	10-0010069	
10 - 0010049	10-0010062	10-0010072	
10 - 0010052	10-0010063	10-0010074	

SAS KEYWORDS:

D/T7208	D/T7208M232	7208M232	D/T7208232
D/T9406TAP	D/T9404TAP	D/T9402TAP	D/T9406MISC
D/T9404MISC	D/T9402MISC	7208 MODEL 232	D/T7208 MOD232

1.3.4 EC=1100 ON DISPLAY PANEL OF THE 7208 MODEL 232 OR 234

Record number: H162304

```
Device:               D/T7208
Model:                M
Tip key:
Date created:         O97/12/30
Date last altered:    A97/12/30
```

SYMPTOM:

EC=1100 on Display Panel of the 232 or 234 attached to an AS/400 on release V4R1M0.
The 7208 232 or 234 does not report in the the AS/400.

PROBLEM ISOLATION AIDS:

The drive worked on previous release.

FIX:

The controller code must be at B=1.30 R=2.20.
The new code must be loaded from a "Code Load Tape".
Contact Rochester level 2 hardware support to obtain the code load tape.

SAS KEYWORDS:

```
DT7280          7208-232        7208-234        9406TAP
9404TAP         9402TAP
```

1.3.5 UNABLE TO READ/RESTORE 8MM TAPES
Record number: H066069

```
   Device:               D/T701X
   Model:                M
   Tip key:
   Date created:         O90/11/14
   Date last altered:    A95/03/13
```

SYMPTOM:
1. USER IS UNABLE TO READ 8MM TAPES CREATED ON ANOTHER SYSTEM OR ON ANOTHER 7208 TAPE DRIVE.
2. USER IS UNABLE TO RESTORE 8MM TAPES THAT WERE CREATED OR BACKED UP PRIOR TO A RELOAD OF AIX OPERATING SYSTEM CODE.

MACHINES AFFECTED: D/T7012, D/T7013, D/T7015, D/T7016, D/T7208

PROBLEM ISOLATION AIDS: NONE

FIX:

HAVE THE USER CHECK THE "BLOCK SIZE" VALUE FOR THE 8MM TAPE DRIVE IN AIX. THE "BLOCK SIZE" MUST BE SET TO THE SAME VALUE WHEN WRITING AND READING TAPES.

THE DEFAULT "BLOCK SIZE" VALUE SET BY AIX IS EITHER 512 OR 1024.

THE PARAMETERS FOR THE 2.3 GB 8MM TAPE DRIVE MAY BE DISPLAYED/ CHANGED BY ENTERING 'SMIT' FROM THE AIX PROMPT.

SELECT 'DEVICES'
SELECT 'TAPE DRIVE'
SELECT 'CHANGE/SHOW CHARACTERISTICS OF A TAPE DRIVE'
SELECT '2.3GB 8MM TAPE DRIVE'

IF THE "BLOCK SIZE" VALUE IS SET TO 512, CHANGE TO 1024.
IF THE "BLOCK SIZE" VALUE IS SET TO 1024, CHANGE TO 512.
THEN TRY THE TAPE READ/RESTORE OPERATION AGAIN.

SAS KEYWORDS:

701X	7012	7013	7015
7016	7208	701XMISC	7012MISC
7013MISC	7015MISC	7016MISC	7208MISC
RS6000	701XTAPE	7012TAPE	7013TAPE
7015TAPE	7016TAPE		

L A S T P A G E