

MAP 2200: Cluster Adapter

Symptom Explanation	Conditions That Could Cause This Symptom
You have entered this MAP because you received a 22XX error message, or you suspect a Cluster Adapter problem.	<ul style="list-style-type: none">• The switch settings are incorrect.• The Cluster Adapter is failing.• The terminating plug is failing.

001

(From Step 006 in this MAP)

Obtain from the operator: the station address, number of adapters, and remote IPL Status.

Ensure the Cluster Adapter switch settings are correct.

Note: Before removing a Cluster Adapter, make a note of the location (system and slot number) of the adapter.

- Power off the system.
- Insert the Advanced Diagnostics diskette into drive A.
- Power on the system.
- Run the Cluster Adapter tests. Use the **(RUN TESTS ONE TIME)** option.
- Follow the instructions on the screen. Do not power off the system during the tests.

Note: Use terminating plug (IBM Part 6323481) when instructed to install the terminating plug.

(Step 001 continues)

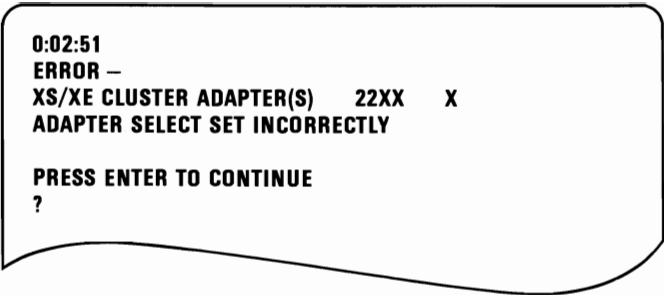


Figure 1. Adapter Select Set Error

**DID YOU RECEIVE THE ERROR MESSAGE SHOWN
(Figure 1)?**

Yes No

002

Go to Step 004 in this MAP.

003

The adapter has more than one adapter number switch set to the On position. Check the switch settings and correct any errors. If all switch settings are correct, replace the failing Cluster Adapter and terminating plug.

004

(From Step 002 in this MAP)

**ARE THE DISPLAYED SWITCH SETTINGS CORRECT AND
DID THE TEST RUN WITHOUT AN ERROR MESSAGE?**

Yes No

005

Replace the Cluster Adapter and its terminating plug.

006

If you want to test the Cluster Adapter again or test a different Cluster Adapter, go to Step 001 in this MAP.

(Step 006 continues)

006 (continued)

DO YOU WANT TO DISPLAY THE CLUSTER STATUS?

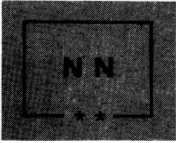
Yes **No**

007

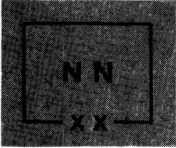
You have successfully completed the Advanced Diagnostic tests. If you suspect an intermittent problem, start an error log. If you need instructions, refer to the Reference manual.

008

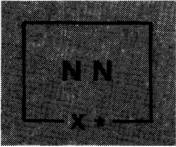
- Follow the instructions on the screen to display cluster status. Figure 2 on page 2200-4 explains the cluster status that may appear on the screen.
NN is any station address from 0 to 63.



The system you are using is indicated on the screen in blinking reverse video, and the box is marked by two asterisks.



Stations in the cluster that are powered on are displayed in reverse video, and their boxes are marked by two Xs.



If another system has the same station address as you are testing, a long beep sounds every 3 seconds, and the box appears in blinking reverse video with an X and asterisk.



A station address not in the cluster is indicated by a box in normal video; the box has no Xs or asterisks.

A "**CLUSTER ACCESS ERROR**" message may appear in reverse video.

Figure 2. Cluster Status

The cluster-status screen presentation in Figure 3 on page 2200-5 shows 64 boxes that represent the stations in the cluster that are powered on and connected to the main coaxial bus.

0	1	2 xx	3 **	4 xx	5 xx	6 xx	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63						

CLUSTER STATUS FOR ADAPTER X
PRESS ANY KEY TO EXIT

Figure 3. Cluster Status

DO ALL STATIONS IN THE CLUSTER APPEAR AND REMAIN ON THE SCREEN?

Yes No

009

Go to Step 011 in this MAP.

010

The cluster is operating properly. Press any key to end the test. If you suspect an intermittent problem, start an error log. If you need instructions, refer to the Reference manual.

011

(From Step 009 in this MAP)

You may have an error similar to the one shown in Figure 4 (a box in blinking reverse video with an X and asterisk, and a beep sounding every 3 seconds).

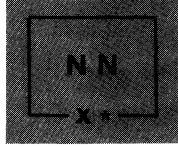


Figure 4. Error Symbol

DID YOU RECEIVE THE ERROR DESCRIBED (Figure 4)?

Yes No

| |
| |
| |
| |

012

Go to Step 014 in this MAP.

013

Another system has the same station address as the one you are testing. Compare the cluster map with the status screen presentation. Perform a diagnostic test of any system missing from the Cluster Status screen. Check the switch settings and correct any errors. If all switch settings are correct, replace the failing Cluster Adapter.

014

(From Step 012 in this MAP)

You may have an error similar to the one shown in Figure 5 on page 2200-7 (a box in normal video with no Xs or asterisks) for a station address that is in the cluster.

Note: Multiple grounds on the Cluster cables may cause stations to appear on the status screen presentation intermittently. Contact the installation manager.



Figure 5. Error Message

DID YOU RECEIVE THE ERROR SHOWN IN Figure 5?

Yes No

015

Go to Step 017 in this MAP.

016

Go to Step 019 in this MAP.

017

(From Step 015 in this MAP)

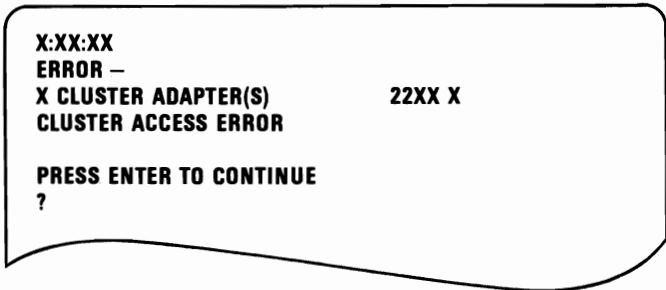


Figure 6. Cluster Access Error

DID YOU RECEIVE THE ERROR SHOWN (Figure 6)?

Yes No

018

You have successfully completed the Advanced Diagnostic tests. If you suspect an intermittent problem, start an error log. If you need instructions, refer to the Reference manual.

019

(Step 019 continues)

019 (continued)

(From Step 016 in this MAP)

You have a cluster access error, or the cluster map shows station addresses in the cluster that are not displayed on the Cluster Status screen. Do the following:

- Perform diagnostic tests on any station that has a cluster access error or that is not indicated on any status screen.
- If the diagnostic tests fail, replace the failing adapter.
- If the diagnostic tests pass, continue testing until all stations that had a cluster access error or did not appear in any status screen presentation are tested.
- If the Cluster Adapters check good and stations still have cluster access errors or do not appear in the Cluster status screen presentations, notify the installation manager that you suspect a problem with a coaxial cable or terminating plug.

If you have followed these procedures and still have an unsolved problem, request technical assistance.
