**WARNING**

Some of the procedures described on this card call for the removal of system covers. Such procedures should only be performed by suitably trained personnel. For the user, this material is provided for information only.

**JUMPER AND SWITCH LAYOUT**

- **W5**: W13 allow extra SAU85s TO BE SELECTED (NOT SUPPORTED BY DIGITAL)
- **DELIVERED STATUS**: with W10 and W11 installed, WB W12 and W13 OUT
- **MSB**: DEVICE ADDRESS LSS
- **15 14...1 0**: SWITCHPACK 228 0 0 0
- **11 1**: J1 SW

**E13 EXAMPLE**
- ADDRESS 17780110
- SELECT 228
- SW

**E1357 & SB MUST BE ON**
- **OFF**: no effect (normal operation)
- **ON**: boot on break

**SWITCH LEGEND**
- **ON** = on
- **OFF** = off

**BASE A**

**BASE B**
BASIC INSTALLATION PROCEDURE (MicroVAX SYSTEMS)

1. Unpack and check the components of the option.
2. Check and, if needed, set up device address, vector and break response switches. Make sure that jumpers W1-W4 are installed or step 5 will fail.
3. Install an H329 loopback connector on J1.
4. Install the module in the correct backplane slot.
5. Run EHDXZ for 3 error-free passes of tests 1-21 (ST/SEC-ALL).
6. Configure W1-W4 as appropriate for the customer.
7. Remove H329 and install BC05L cable and the 70-19964-00 panel.
8. Run Macroverify without error as a final system check.
9. The DZQ11 should now be ready for connection to external equipment.

BASIC INSTALLATION PROCEDURE (PDP-11 SYSTEMS)

1. Unpack and check the components of the option.
2. Check and, if needed, set up device address, vector and break response switches. Make sure that jumpers W1-W4 are installed or diagnostic tests will fail.
3. Install module in correct backplane slot.
4. Run 3 error-free passes of CVDZA and CVDZB in internal mode.
5. Install H329 and run 3 error-free passes of CVDZA and CVDZB in staggered mode.
6. Remove H329 and install BC11U-25 cable assembly, or BC05L and 70-19964-00.
7. Install H325 on each line in turn. Run 3 error-free passes of CVDZC per line.
8. Configure W1-W4 as appropriate for the customer.
9. Run the DEC/UX/11 system exerciser without error.
10. The DZQ11 should now be ready for connection to external equipment.
**DOQI1 TEST CONFIGURATIONS FOR PDP-11 SYSTEMS**

**EXAMPLES SHOW BC11U CABLE ASSEMBLY (THROUGHOUT)**

1. **INTERNAL**
   - M3106
     - CONFIGURATION A: STAGGERED
   - M3106
     - CONFIGURATION B: EXTERNAL OR CABLE
   - BC11U
     - M3106
     - NULL MODEM
     - TEST TERMINAL
     - ECHO
     - EXIT

2. **REMOTE LINK**
   - M3106
     - CONFIGURATION D: MODEM
     - NULL MODEM
     - LOCAL LINK
     - DL11
     - NULL MODEM
     - LOCAL LINK
     - H325
     - EXIT

*DEPENDING ON THE TERMINAL USED FOR TEST, A NULL-MODEM SUCH AS THE H312 MAY BE NEEDED.*

**INTERPROCESSOR TEST ITP (DOQI1 OVERLAY IS DQ0DZ)**

* BOTH PROCESSORS MUST BE RUNNING DOQI1

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**TROUBLESHOOTING FLOWCHART FOR PDP-11 SYSTEMS**

1. **START**
2. **REPLACE M3106 (OR H329)**
3. **RUN CVDZA AND CYCLE FOR 3 PASSES IN INTERNAL MODE**
4. **ERROR**
   - CONFIG A RUN CYCLE AND CYCLE FOR 3 PASSES IN STAGGERED MODE
5. **NO**
   - CONFIG D RUN CYCLE FOR 3 PASSES IN STEVEN MODE
6. **ERROR**
   - IDENTIFY AND CORRECT THE PROBLEM
7. **NO**
   - IDENTIFY AND CORRECT THE PROBLEM
8. **EXIT**

**NOTE:** PROBLEMS ENCLODED IN BRACKETS ARE UNLIKELY TO BE DEFECTIVE

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**MINIMUM REQUIREMENTS FOR CVDZA, CVDZB AND CVDZC**

- Q-Bus CPU with 4K Memory
- Console
- DOQI1
- H325 and H329 Test Connectors
- Terminal, and possibly Null-Mode (CVDZC only)
DZQ11 TEST CONFIGURATIONS FOR MicroVAX

DIAGNOSTICS (PDP-11)
CVDZA  DZQ11 Logic Test - Part 1
CVDZB  DZQ11 Logic Test - Part 2
CVDZC  DZQ11 Cable/Echo Test
DVDZD  Overlay for ITEP
DZITA  Interprocessor Test Program (ITEP)
CXDZB  DECX/11 Module

DIAGNOSTICS (MicroVAX)
EHXDZ  DZQ11 Test
EHKMV  Macroverify MicroVAX System

TROUBLESHOOTING FLOWCHART FOR MicroVAX SYSTEMS

MINIMUM REQUIREMENTS FOR EHKMV AND EHXDZ
EHKMV (MACROVERIFY) - MicroVAX with 30Kbyte Memory
EHXDZ - MicroVAX with DZQ11 and 512Kbyte Memory
- Terminal for Echo Test
- H329 Test Connector

MINIMUM REQUIREMENTS FOR CVDZC
Q-Plus CPU with 4K Kbyte Memory
Console
DZQ11
H325 and H329 Test Cables