

L-05: Replace Board

SAFETY FIRST

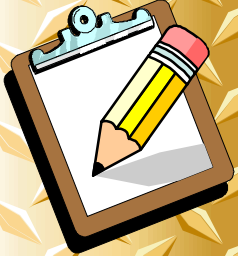
- Follow all Caterpillar facility safety standards when performing this task.
- Ground straps are recommended.

EQUIPMENT

- Basic Electrician hand tools

RESOURCES

- manufacturer's manual for the board

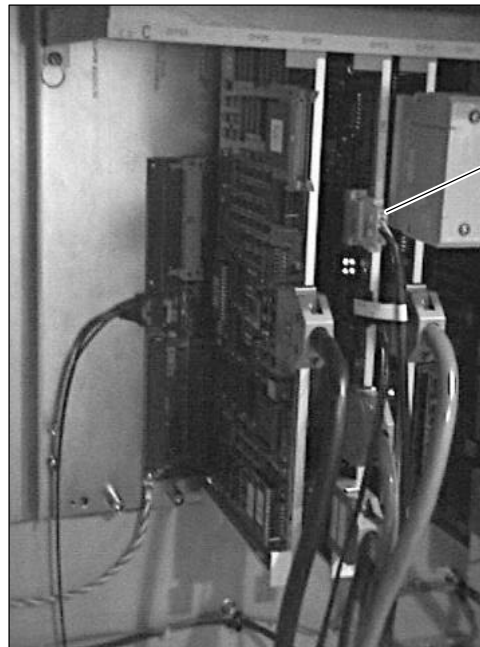


Replace Board

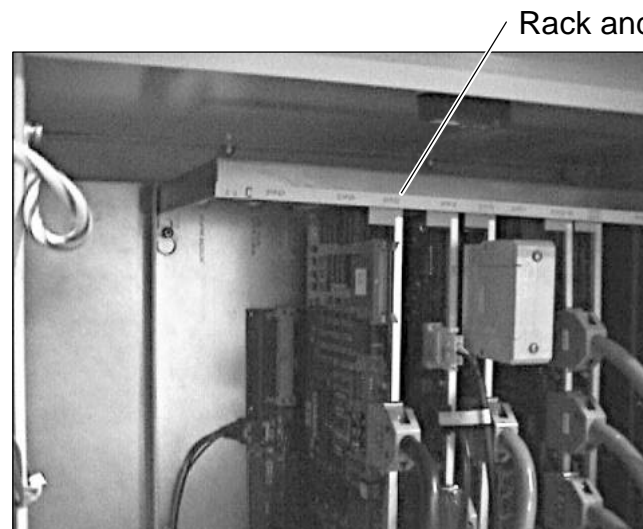
Caution: Check the manufacturer's manual for special board removal procedures. Many boards may require performing a backup of parameters.



1. Locate the inoperable board.
 - Check the board for a backup battery cable. The cable is a good indication that a backup of parameters may need to be performed.



- Note the rack and slot number indicated on the board location cover.



2. Follow the lockout/tagout procedure documented for the machine.



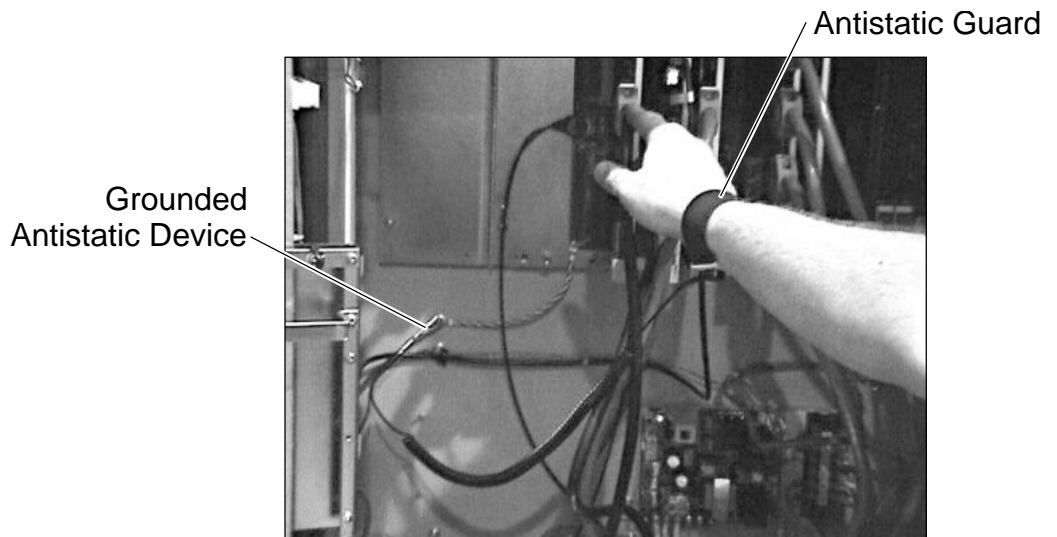
Documented
Lockout/Tagout
Procedure

3. Remove any retaining devices.

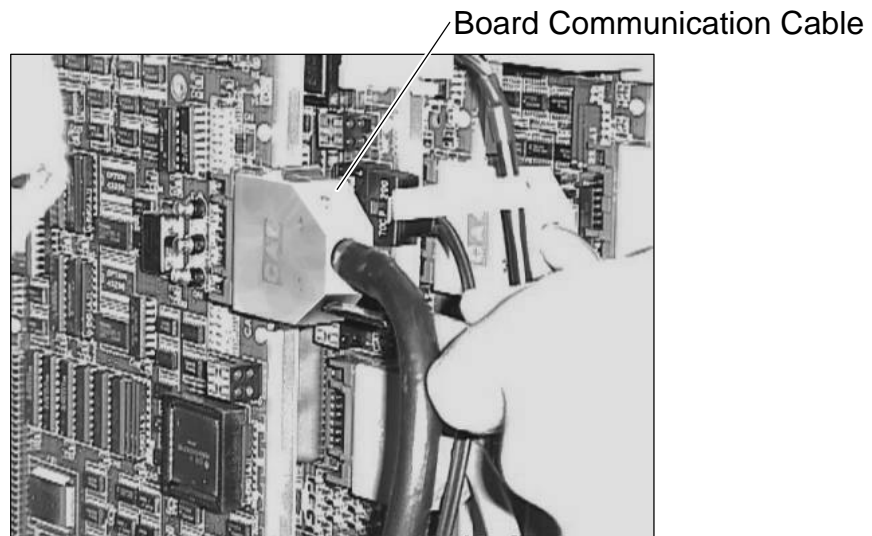


Example of Retaining Device

4. Follow the antistatic grounding procedure.



5. Remove any cables connected to the board.

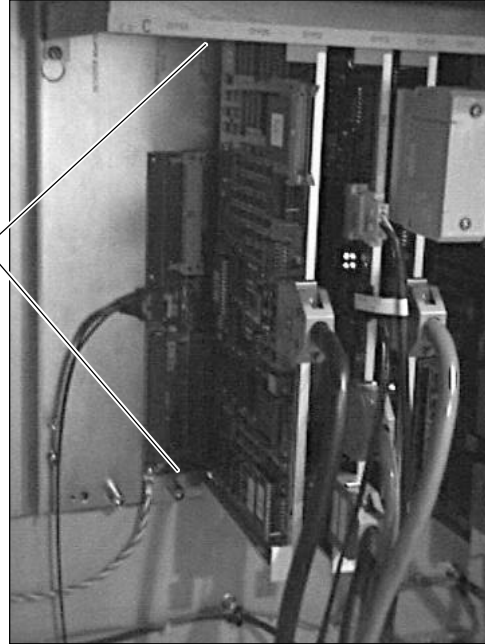


- Look for an identification marker on the cable. Mark the cable if necessary.

6. Remove the board.
 - Remove the top and bottom mounting bolts.

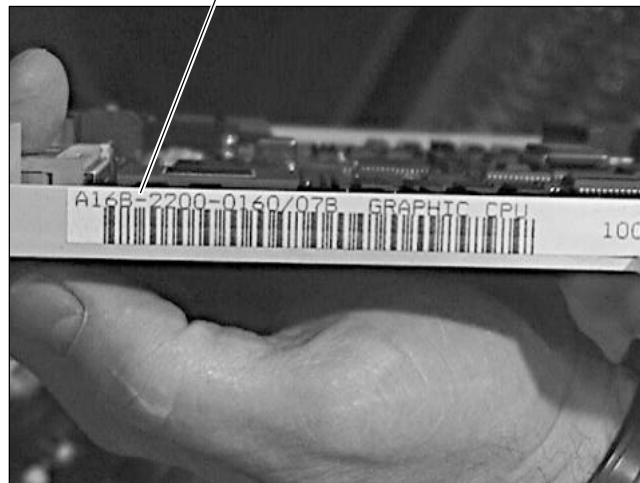


Mounting Bolts



- Carefully pull the board out of the slot.
7. Note the manufacturer's number, make, and model; obtain a replacement board.

Example of the Manufacturer's Replacement Number





8. Compare the jumpers, eproms, and switches of the new and old board.
 - Configure the new board to match the old board.
9. Replace the board.
 - Slide the board into the slot.
 - Hand-tighten the top and bottom mounting bolts with a screwdriver.
 - Replace the retaining devices.
 - Connect the required cable.
10. Test the board operation.
 - Set the zero reference and cycle the machine to verify proper machine operation.