



## 1397 Main Control Board / Drive Replacement Considerations

This publication will guide you through replacement of a 1397 Regulator/ Main Control Board or complete drive (Firmware Version 1.08) with a newer (2.01) version. For additional drive information, refer to the 1397 User Manual, publication 1397-5.0.

### Replacement Procedure



**ATTENTION:** The drive contains ESD (Electrostatic Discharge) sensitive parts and assemblies. Static control precautions are required when installing, testing, servicing or repairing this assembly. Component damage may result if ESD control procedures are not followed. If you are not familiar with static control procedures, reference A-B publication 8000-4.5.2, “Guarding Against Electrostatic Damage” or any other applicable ESD protection handbook.

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1. With drive energized, upload the current firmware configuration (v1.08) to the HIM (EEPROM Mode: DRIVE => HIM). Refer to the 1397 User Manual for details.
2. Record the current setting of [Max Process Spd], par. 42 (Setup Group).  
\_\_\_\_\_ RPM.
3. Remove and lock-out all incoming power to the drive.

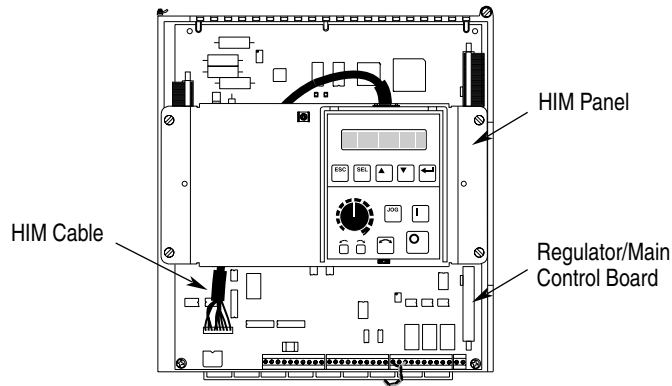


**ATTENTION:** To avoid a shock hazard, assure that all power to the drive has been removed before proceeding. In addition, verify with a voltmeter that no voltage exists at terminals L1, L2 and L3 on the drive input power terminal block.

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4. Remove the drive cover by loosening the two captive retaining screws.
5. Disconnect the HIM Cable from the Regulator/Main Control Board. Remove the four screws securing the HIM Panel. Remove HIM Panel and set aside. See [Figure 1](#).
6. Label and disconnect all cables/wires from the Regulator/Main Control Board. Remove the board.
7. Set jumpers on the new board to match the settings on the old board.

Figure 1 1397 Drive



8. Install the new Regulator/Main Control Board. Replace cables/wires, HIM Panel and drive cover previously removed/disconnected.
9. Apply power to the drive.
10. Using the HIM, navigate to the “EEPROM” mode. Then . . .
  - A. Select “Reset Defaults.” When complete,
  - B. select “Save Values.” Then,
  - C. download the firmware configuration saved in step 1 (HIM => DRIVE).
  - D. When the HIM displays “1.08 => 2.01,” press the Enter key. As the download continues, the parameter number currently being downloaded will be displayed. If it stops on parameter 42 and displays “Error 4,” press the ENTER key. When the download is complete, navigate to the “PROGRAM” mode and set the following parameters:
 

Parameter	Group	Setting
Max Process Speed	Setup Group	Value recorded in step 2.
Tach Loss Angle	Advanced Setup	109
  - E. Navigate to the “EEPROM” mode and select “Save Values.” Then, select “DRIVE => HIM.”
11. Replacement is complete.

**Power, Control and Information Solutions Headquarters**