

Armature-Pulse Transformer Board Replacement

(for 1250, 1650, and 3000A 1395 DC Drives)

Contents

This document shows how to remove and replace an armature-pulse transformer board from a 1250, 1650, or 3000A 1395 DC drive.

What This Kit Contains

Using the table below, verify that you have received the appropriate items in your kit:

For this part:	You should receive this quantity:
armature-pulse transformer board	1

Other Items Needed

Before you begin, be sure you also have the following:

- Tools needed for:
 - Measuring voltages (multimeter)
 - Opening and securing the bay door (slotted screwdriver)
- Documentation:
 - Your drive system schematics
 - Publication 1395-5.40, *Bulletin 1395 Digital DC Drive—User Manual*
 - Publication 2361-5.01, *Bulletin 1395 Digital DC Drive in Bulletin 2361 Motor Control Center for Drive Systems—User Manual*

Safety Precautions

The following general precautions apply when working on drives:



ATTENTION: Only those familiar with the drive system, the products used in the system, and the associated machinery should plan or implement the installation, startup, and future maintenance of the system. Failure to comply can result in personal injury and/or equipment damage.

ATTENTION: Verify that all sources of AC and DC power are deenergized and locked out or tagged out in accordance with the requirements of ANSI/NFPA 70E, Part II.

ATTENTION: The system may contain stored energy devices. To avoid the hazard of electrical shock, verify that all voltage on capacitors has been discharged before attempting to service, repair, or remove a drive system or its components. You should only attempt the procedures in this manual if you are qualified to do so and are familiar with solid-state control equipment and the safety procedures in publication NFPA 70E.

ATTENTION: When servicing any unit, do not drop any nuts, bolts, washers, etc. inside the unit, as they may cause a short circuit on power up.

ATTENTION: This drive system contains ESD (Electrostatic Discharge) sensitive parts and assemblies. Static control precautions are required when installing, testing, or repairing this assembly. Component damage can result if ESD control procedures are not followed. If you are not familiar with static control procedures, refer to Rockwell Automation publication 8000-4.5.2, *Guarding Against Electrostatic Damage* or any other applicable ESD protection handbook.

Special Instructions

Important: You will need to reuse parts that are removed from the drive. Place parts, in the order removed, on a clean surface.

Important: Some washers, such as clamp and Belleville washers, have only one correct orientation.

Preliminary Steps

Before replacing the armature-pulse transformer board, shut off the drive power, wait five minutes for voltage to discharge, open the bridge bay door, and remove the Lexan™ shielding.

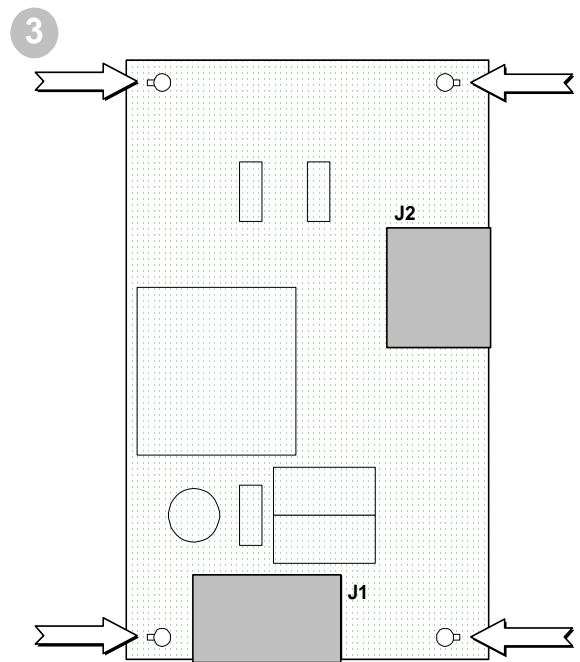
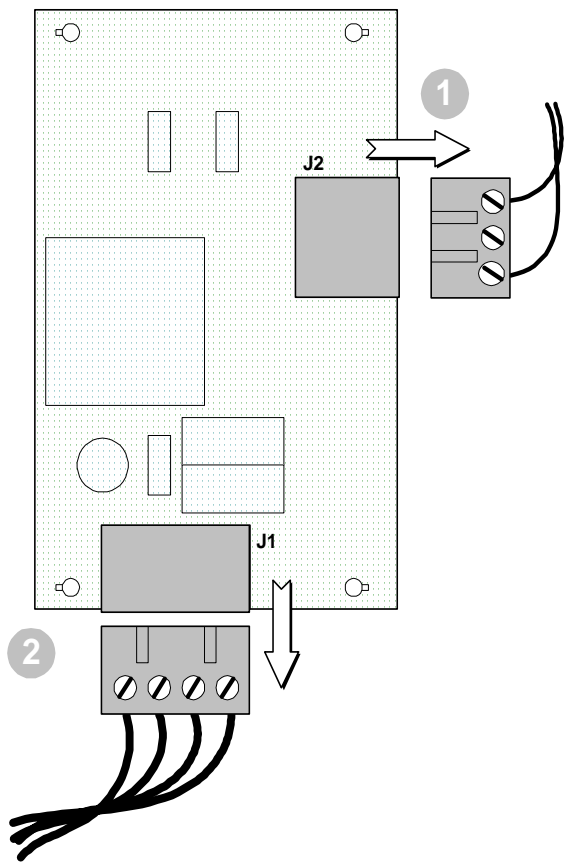
Removing an Armature-Pulse Transformer Board

1. Using a voltmeter, test the voltage across the three phases, then across the armature-pulse transformer board terminals.



ATTENTION: If there is any voltage present, remove the source of the voltage and check for voltages again before proceeding to the next step.

2. Disconnect the connector at J2 (red and white SCR leads).
3. Disconnect the connector at J1 (gate interface wires).
4. Push in the tabs of the nylon mounting posts and remove the board.



Replacing an Armature-Pulse Transformer Board

1. Gently press the board onto the nylon mounting posts until locked into place.
2. Connect the 4-terminal connector to J1. Check that the individual leads are secured in the terminals.
3. Connect the gate lead connector to J2. Check that the individual gate leads are secured in the terminals.

Concluding Steps

After installing the new board, replace all Lexan shielding and secure the bay door. Dispose old parts according to your company procedures and local codes.

Lexan is a trademark of General Electric Corp.



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