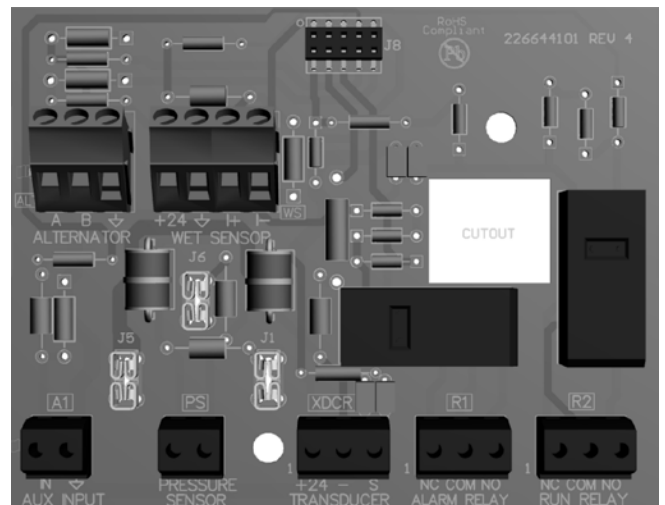


Enhanced Sensor Board Replacement

Installation Manual

Kit No. 226540902



Before Getting Started

⚠ WARNING

Serious or fatal electrical shock may result from failure to connect the ground terminal to the motor, SubDrive/MonoDrive controller, metal plumbing, or other metal near the motor or cable using wire no smaller than the motor cable wires. To minimize the risk of electrical shock, disconnect the power before working on or around the SubDrive/MonoDrive system. **CAPACITORS INSIDE THE SUBDRIVE/MONODRIVE CONTROLLER CAN STILL HOLD LETHAL VOLTAGE EVEN AFTER POWER HAS BEEN DISCONNECTED.**

WAIT 5 MINUTES BEFORE REMOVING THE SUBDRIVE/MONODRIVE COVER TO ALLOW DANGEROUS INTERNAL VOLTAGE TO DISCHARGE.

Do not use motor in swimming areas.

⚠ ATTENTION

This equipment should be installed by technically-qualified personnel. Failure to install it in compliance with national and local electrical codes, and within recommendations of Franklin Electric, may result in electrical shock or fire hazard, unsatisfactory performance, and equipment failure. Installation information is available through pump manufacturers and distributors or directly from Franklin Electric at the toll-free number 1-800-348-2420.

⚠ CAUTION

The SubDrive/MonoDrive should only be used with Franklin Electric 4-inch submersible motors. Use of this unit with any other Franklin Electric motor, or with motors from other manufacturers, may result in damage to both the motor and electronics. In applications where water delivery is critical, a replacement pressure sensor and/or back-up system should be readily available if the drive fails to operate as intended.

Tools and Hardware Required

Installation of the enhanced sensor board replacement requires a screwdriver.

Purpose

In some cases, an electrical surge event on the pressure sensor cable can cause the SubDrive/MonoDrive to not operate correctly, even though the drive is powered on and the system pressure is below the pressure sensor setting. The replacement pressure input board provides a degree of repairability for SubDrive/MonoDrive NEMA 3R models that have experienced an electrical surge event on the pressure sensor and other drive control I/O.

Installation Procedure

⚠ WARNING

DISCONNECT POWER AND WAIT 5 MINUTES BEFORE REMOVING THE DRIVE COVER TO ALLOW DANGEROUS INTERNAL VOLTAGE TO DISCHARGE

1. Remove the drive cover.
2. Disconnect all input and output wires connected to the various terminals of the enhanced pressure input board.
3. Disconnect the fan cable (Figure 1).
4. Disconnect the wire harness from the display board (Figure 2).
5. Slightly pull back on all four of the retention clips on the display board. Gently pull up on the display board to disengage the connector between the display board and the enhanced pressure input board (Figures 3A and 3B).
6. Carefully hold the retention clips away from the enhanced pressure input board. Gently pull up on the board in a rocking motion to disengage it from the three quick-connect prongs (Figure 4).

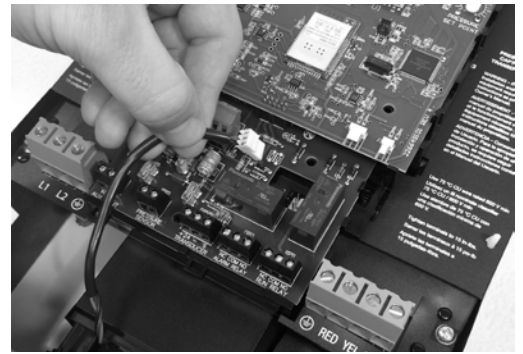


Figure 1

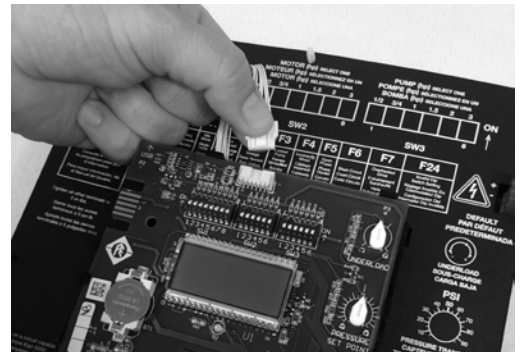


Figure 2

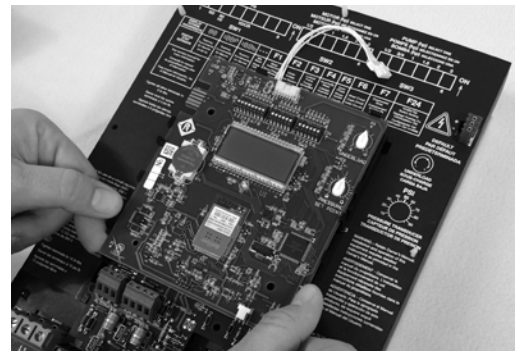


Figure 3A

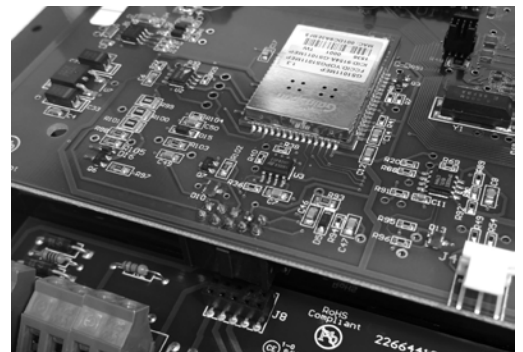


Figure 3B

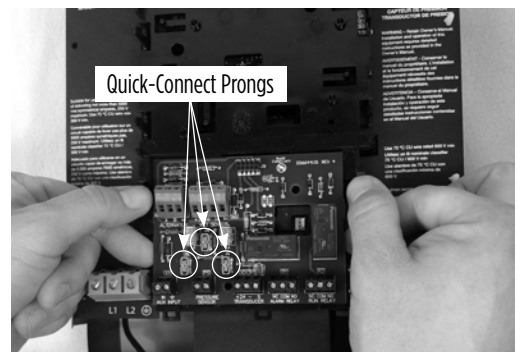


Figure 4

Installation Procedure (Cont.)

7. Install the replacement sensor board by lining up the three tabs on the drive with the three receptacles on the sensor board. Press the board straight down until fully seated in the plastic bracket (Figure 5).
8. Reinstall the display board by lining up the bottom-side connector with the connector on the sensor board. Press down until fully seated (Figure 6).
9. Reconnect the wire harness on the display board. Slightly tug on the wire harness to make sure it is fully seated (Figures 7A and 7B).
10. Reconnect the fan cable (Figure 8).
11. Reconnect all of the input/output leads that were disconnected in Step 2. Slightly tug on the leads to verify that they are securely installed.
12. Replace the drive cover.

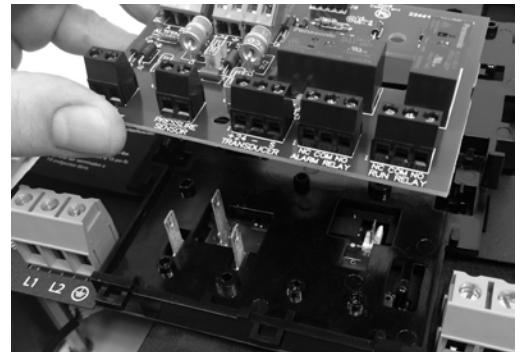


Figure 5

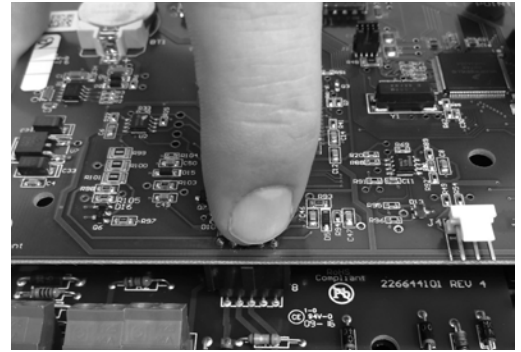


Figure 6

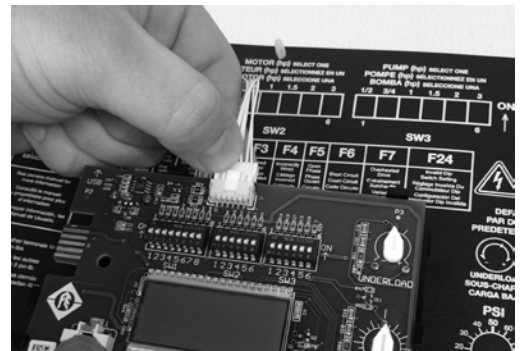


Figure 7A

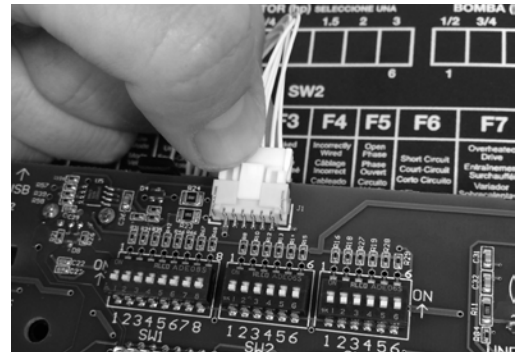


Figure 7B

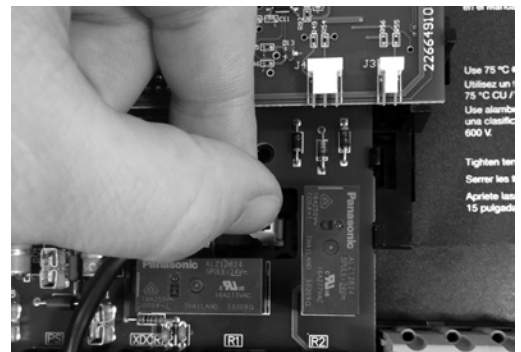


Figure 8

TOLL-FREE HELP FROM A FRIEND
Franklin Electric
Technical Service Hotline
800-348-2420



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