Instruction Sheet

Fire Pump Controller

Pressure Transducer Replacement

Effective: September 2008

Safety

Due to the weight and size of Fire Pump Controllers and dangers from electrical hazards, every precaution should be taken to maintain safe working conditions when handling this equipment. Due to the site variables, every potential situation cannot be anticipated. Safety must always be the overriding factor. Always follow all instructions and all safety guidelines published by OSHA and other industry and local, state and federal agencies.

⚠ WARNING

CONSULT LOCAL REGULATIONS OR CODES REGARDING SPECIAL REQUIREMENTS FOR WORKING ON FIRE PROTECTION SYSTEMS

⚠ WARNING

IF CONTROLLER IS ALARMED TO A CENTRAL SYSTEM, CONTACT APPROPRIATE PERSONNEL TO INFORM THEM THAT THE CONTROLLER WILL BE DOWN FOR APPROXIMATELY 2 HOURS

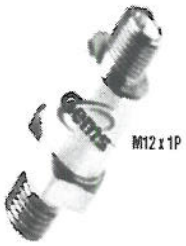
Pre-Installation: Receiving, Handling and Storage

Receiving

Upon delivery, use the packing list to confirm the number of items against what was received to ensure that the shipment is complete. Any discrepancies should be noted on the freight bill before signing. Report any shortages or damage to the freight carrier immediately.
Immediately upon receipt of the replacement transducer, the packaging should be carefully removed and a thorough inspection of each section should be made to detect any damage incurred during shipment. Any damage should be noted on the bill of lading (freight bill) and the consignee receiving the equipment should notify the freight carrier.

FAILURE TO NOTIFY THE FREIGHT CARRIER OF DAMAGE IN A TIMELY MANNER MAY RESULT IN THE CONSIGNEE ASSUMING THE COSTS ASSOCIATED WITH REPAIR OR REPLACEMENT OF DAMAGED EQUIPMENT.

After inspection, the components should be returned to its packaging until it is ready for installation. Retain packaging for use in returning old transducer (shown below), as detailed in this instruction.



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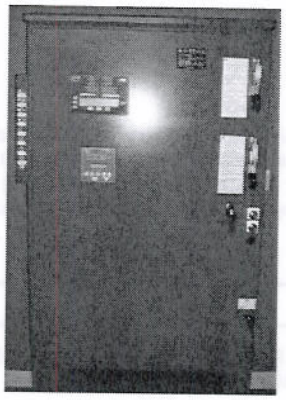
Pressure Transducer Replacement

Effective: September 2008

Repair Time: Approximately 30 minutes.

Electric Controller



1) Contact Alarm Company (if required)
   a. Indicate that work is being done on the system for 2 hours.

⚠ WARNING

HAZARDOUS VOLTAGE WILL CAUSE SEVERE INJURY OR DEATH

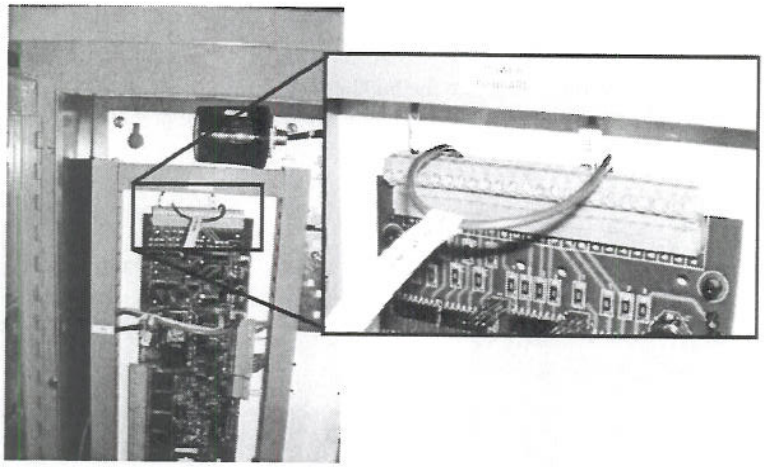
⚠ WARNING

ONLY THOSE PROFESSIONALS TRAINED AND QUALIFIED ON FIRE PUMP CONTROLLERS SHOULD INSTALL AND/OR SERVICE THIS EQUIPMENT

2) Power off the Controller
   a. Follow any lock out procedures that apply to your facility.

3) Install Interlock

   a. Install a jumper wire between terminals 39 & 49 on the I/O Board to prevent the unit from starting on a pressure drop.



4) Drain Sensing Line

   a. Isolate the pressure transmitter from the system by operating the appropriate valves to isolate and drain the pressure sensing lines. .

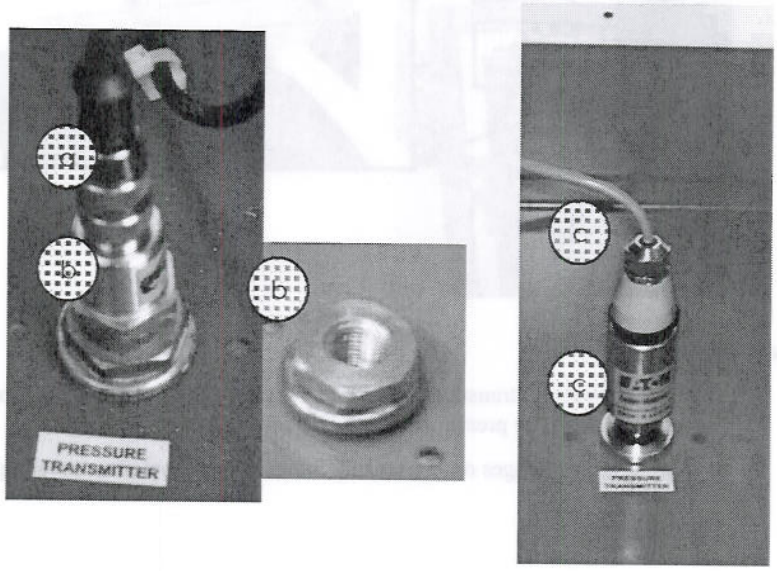
   b. Ensure pressure gauges on the sensing line read 0 PSI before proceeding.

5) Change out transducers

a. Unscrew the cable from the top of the pressure transmitter on the bottom of the enclosure.

b. Remove the Transmitter from the Bulk Head fitting. This can be done inside the enclosure and should not require the removal of any external piping. Ensure any water does not come in contact with any electrical components.

c. Install the new transducer into the bulkhead fitting on the bottom of the enclosure. Verify all piping and fitting connections are tight before proceeding.

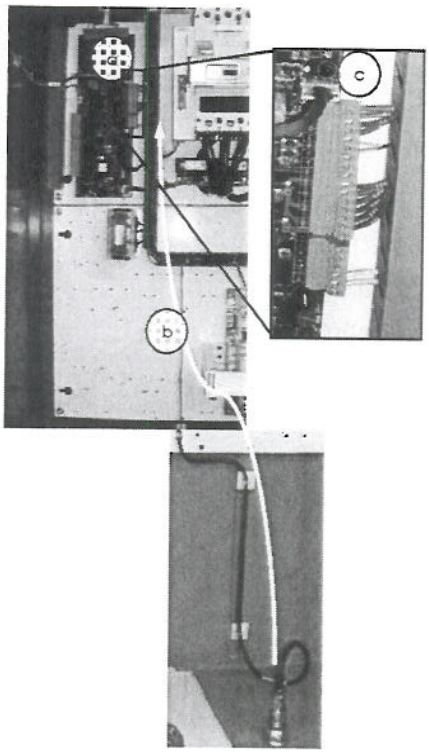


6) Wiring

   a. Remove the old Transmitter cable from the enclosure. The cable should have two wires terminated on terminals 54 & 55 on the I/O board.

   b. Install the new transducer cable; ensure that the pressure transducer cable is routed as far away from incoming and outgoing power wire to the enclosure as possible.

   c. Terminate to I/O board per attached technical bulletin (FPCTB-RH019 – Rev C_Transducer.pdf).



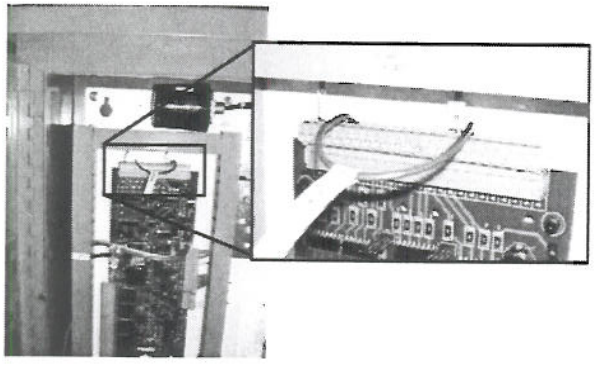
7) Restore power to the Controller

8) Return pressure to system

   a. Pressure will come up on the system display.

   b. Pressure on display should match the pressure on the sensing line gauges.

   c. Once pressure is restored and confirmed to match the controller remove the Interlock by removing jumper from terminals 39-49.



9) Contact Alarm Company (if required)

   a. Inform them that work has been completed.

10) Place old transducer and wiring in the existing packaging. Return to:

ATTN: Pressure Transmitter Field Campaign

Eaton Corporation

403 East Lake Blvd,

Airdrie, AB T4A 2G1

CANADA

Repair Time: Approximately 30 minutes.

Diesel Controller

Figure 3: Diesel Fire Pump Controller

1) Contact Alarm Company (if required)
   a. Indicate that work is being done on the system for 2 hours.

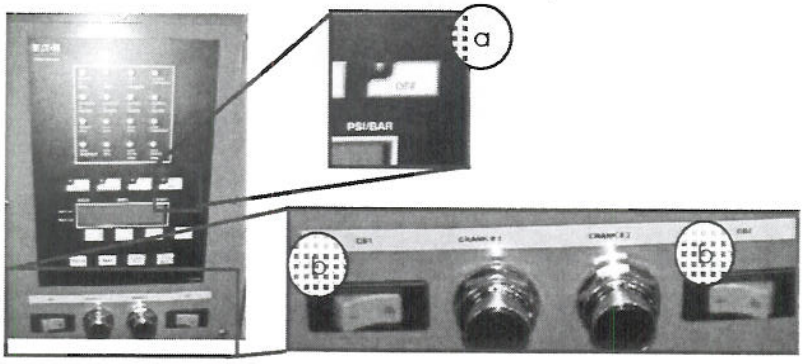
⚠ WARNING

HAZARDOUS VOLTAGE. WILL CAUSE SEVERE INJURY OR DEATH.

⚠ WARNING

ONLY THOSE PROFESSIONALS TRAINED AND QUALIFIED ON FIRE PUMP CONTROLLERS SHOULD INSTALL AND/OR SERVICE THIS EQUIPMENT

2) Power off the controller.
   a. Press the "OFF" button on the front of the panel.
   b. Turn both breakers on the front of the panel to the off position.



3) Drain Sensing Line

   a. Isolate the pressure transmitter from the system by operating the appropriate valves to isolate and drain the pressure sensing lines.

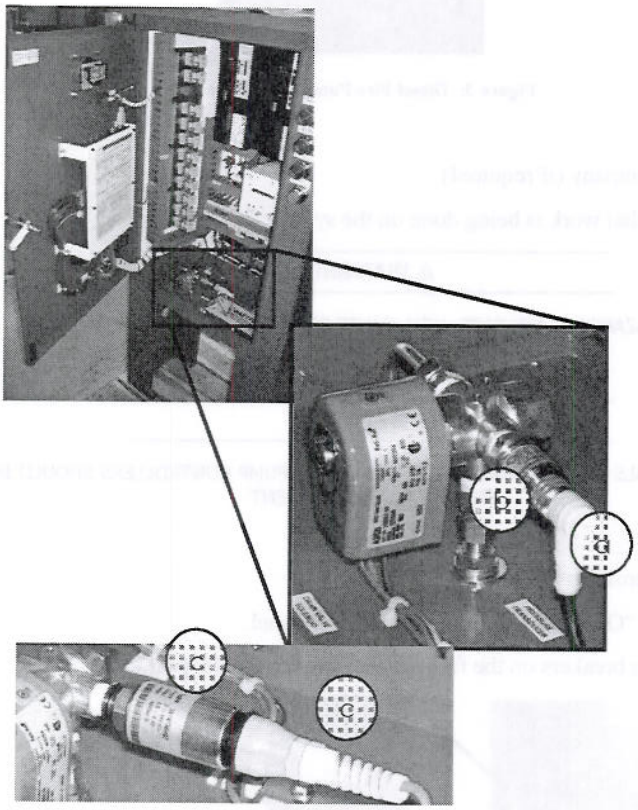
   b. Verify pressure gauges on the sensing line read 0 PSI before proceeding.

4) Change out transducers

   a. Unscrew the cable from the top of the pressure transmitter on the bottom of the enclosure.

   b. Remove the Transmitter from the drain valve solenoid. Ensure any water does not come in contact with any electrical components.

   c. Install the new transducer into the drain valve on the bottom of the enclosure. Ensure all piping and fitting connections are tight before proceeding.

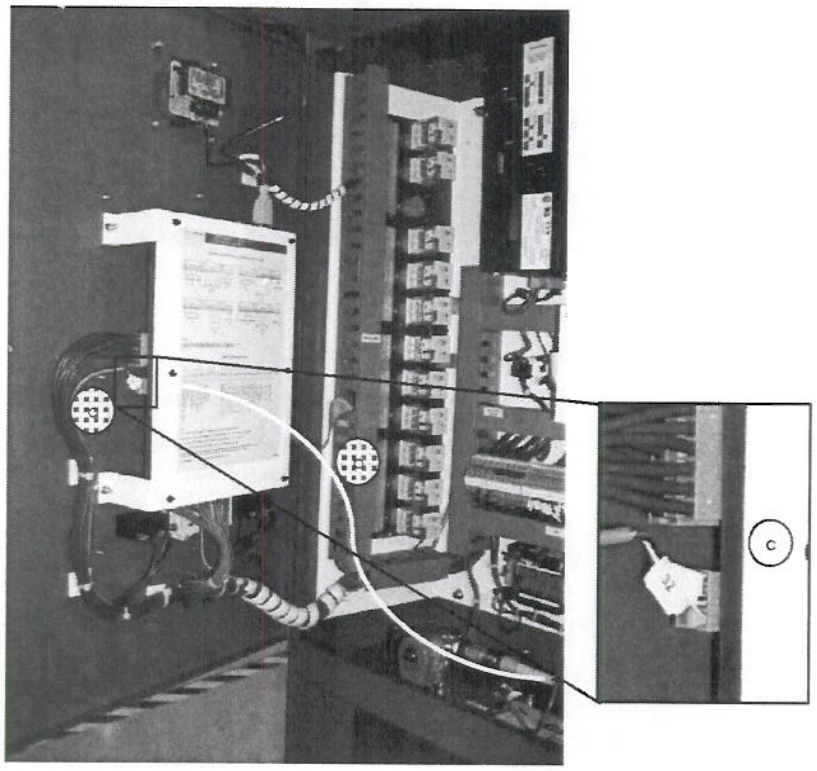


5) Wiring

a. Remove the old Transmitter cable from the enclosure. The cable should have three wires terminated on terminals 32, 33 and 34 on the main display board (mounted on the door).

b. Install the new transducer cable; ensure that the pressure transducer cable is routed as far away from incoming and outgoing power wire to the enclosure as possible.

c. Terminate to display board per attached technical bulletin (FPCTB-RH019 – Rev C_Transducer.pdf).

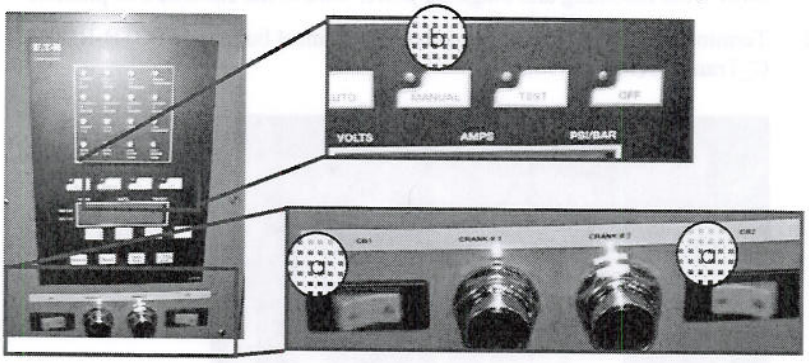


6) Power up unit

   a. Turn both breakers to the On position. The controller should still be in the Off mode,

   b. Press the "Manual" mode button.

   c. The pressure should now be visible on and screen and reading 0 psi.

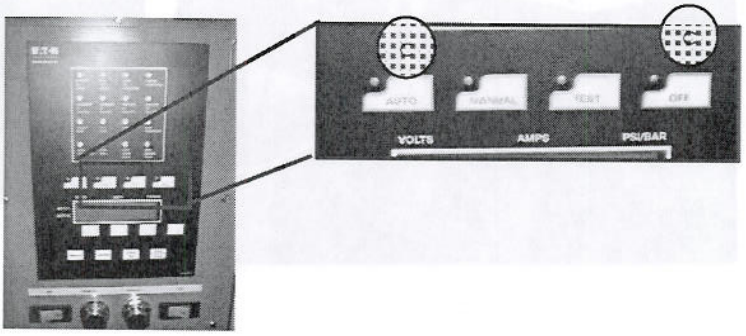


7) Return pressure to system

   a. Pressure will come up on the system display.

   b. Pressure on display should match the pressure on the sensing line gauges.

   c. Once pressure is restored and confirmed to match the controller return the controller to the Automatic Position (Press the "Off" button followed by the "Auto" button).



8) Contact Alarm Company (if required)

   a. Inform them that work has been completed.

9) Place old transducer and wiring in the existing packaging. Return to:

ATTN: Pressure Transmitter Field Campaign

Eaton Corporation

403 East Lake Blvd,

Airdrie, AB T4A 2G1

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