

Using a UBEC3 to control an E4F or E6F actuated valve

Refer to Unibody valve installation and instruction manual p/n 99311000.
The manual can be found online at www.elkhartbrass.com.

When using a UBEC3 controller to operate an E4F or E6F actuated valve the UBEC3 must be programmed as a secondary and use a secondary harness for CAN communication with the E4F or E6F actuated valve. Part number 08899173 includes a UBEC3 controller, a secondary (CAN) harness (available in three different lengths to connect the controller to the valve), a pressure sensor, a choice of flow sensor, and a pressure/flow sensor harness (available in five different lengths to connect the pressure and flow sensors to the valve).

Installation: see section IX, pages 42-50 of the manual.

Wiring: Figure 1 is a photo showing the secondary harness required for communication between the UBEC3 and the E4F or E6F. The 12 pin connector on this harness will plug into the back of the UBEC3 controller. Connect the red (+) & black (-) wires of this harness to 1 amp fused 12v (or 0.5 amp fused 24v) truck power & ground using the heat shrinkable crimp connectors. The two wires in this harness labeled DATA BUS are for communication between the UBEC3 and the E4F or E6F actuator. The female terminals on these two wires are to be inserted into the 12 pin connector on the harness that was included with the actuator shown in figure 2. The red wire with the female terminal goes to position 11 and black wire with the female terminal goes to position 12. (The original three position connector with its two leads in positions 11 & 12 is to be removed and discarded.) The 12 pin connector on the harness in figure 2 will then plug into the top of the E4F or E6F actuator. Connect the red (+) & black (-) wires of this harness to 30 amp fused 12v (or 20 amp fused 24v) truck power & ground using the heat shrinkable crimp connectors. The 2 pin Packard connector will plug into its mating connector on the lead from the actuators electric motor. (Powered by 12V - units are rated for 18A. Peak 24A. Fuse should be 30A. Powered by 24V - units are rated for 10A. Peak 18A. Fuse should be 20A.) The 6 position plug in the top of the E4F or E6F actuator should be transferred to the back of the UBEC3 to seal it and allow the 6 pin connector on the pressure/flow sensor harness to be plugged into the top of the actuator. The other connectors on the pressure/flow sensor harness connect to the pressure sensor and flow sensor.

Final wiring check: Check that all unused connector positions have seal plugs in them, that wires are in the correct positions in their connectors, and that their contacts are locked securely into the connectors and can not come back out.

Programming; see section XI, pages 53 -55 of the Unibody valve instruction manual.

You will need to program the unit;

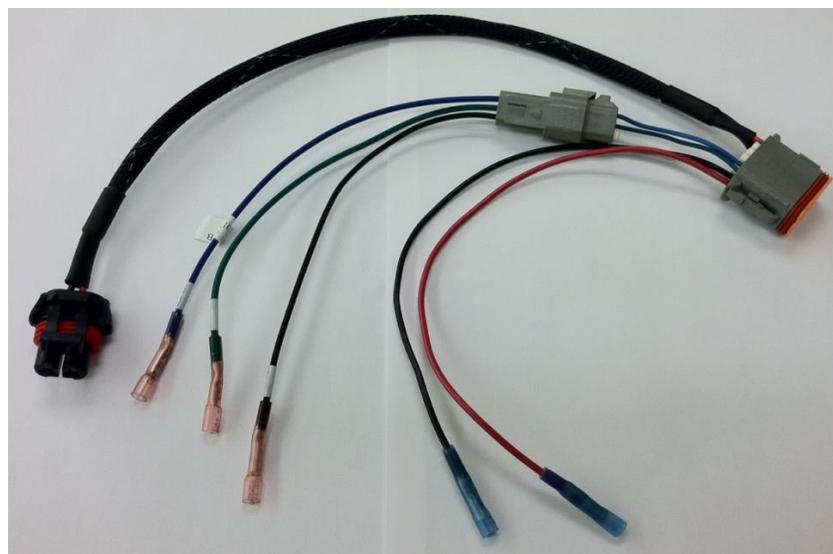
- To be a remote.
- To reverse polarity (only if an E4F is used on an EB_J Jamesbury butterfly valve.)
- To change the pressure display units (if they want something other than PSI).
- To change the flow display units (if they want something other than GPM).

2) After the UBEC3 has been programmed cycle the power to it and then transfer the program from the UBEC3 controller to the E4F or E6F actuator using the instructions on page 62 of the manual (see transfer code 4110) and then cycle power to the actuator.

3) After step 2 is complete auto calibrate the valve per the instructions in step 2 on page 63 of the manual.



Figure 1



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Fire Fighting Equipment
Figure 2

98311040 Rev-B