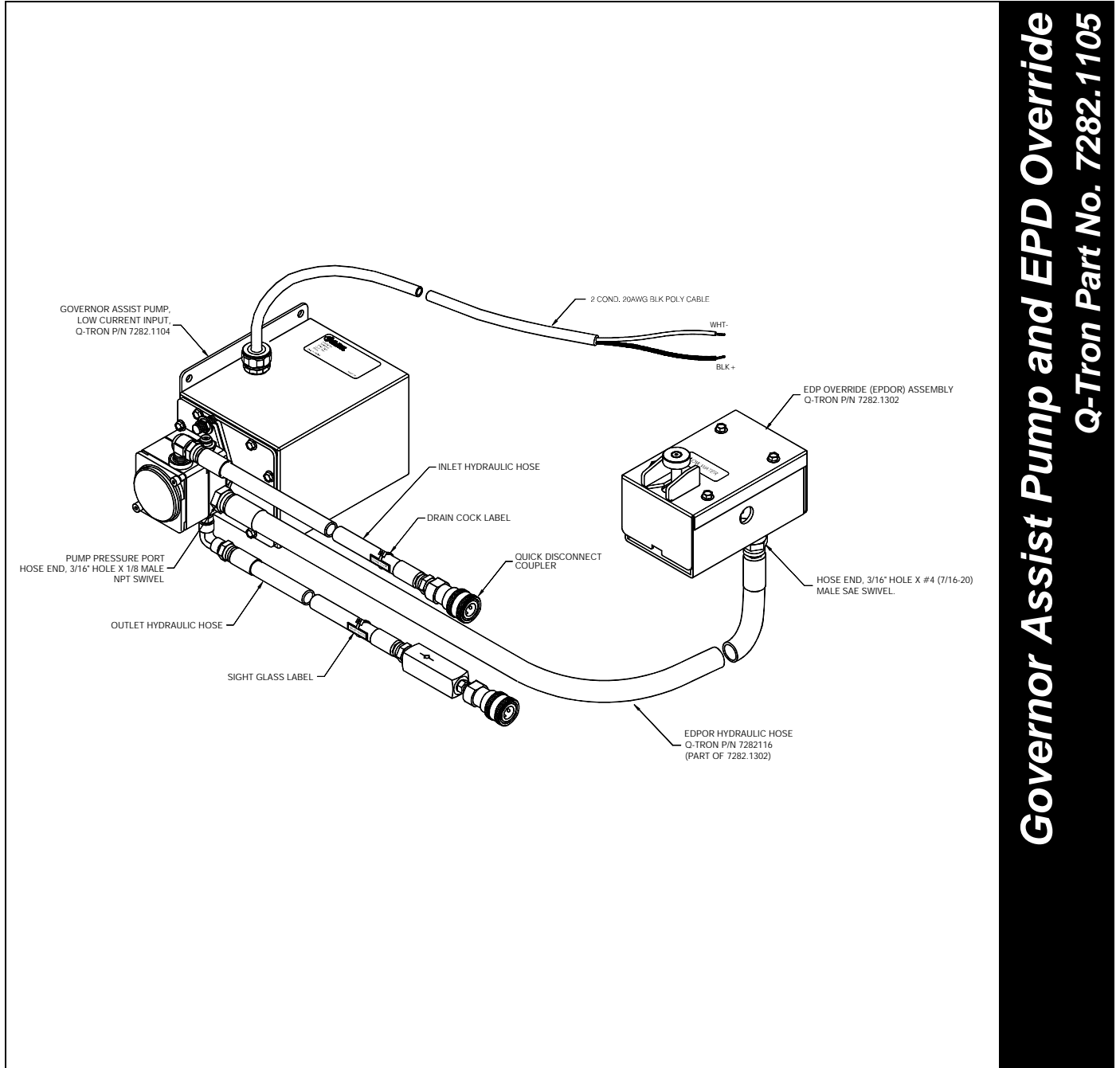


Governor Assist Pump and EPD Override

Q-Tron Part No. 7282.1105

Product Information Sheet



Governor Assist Pump and EPD Override
Q-Tron Part No. 7282.1105

Figure 1. Governor Assist Pump and EPD Override application



Governor Assist Pump and EPD Override Specifications

Q-Tron Part No.:	7282.1105
Weight:	19 lb (8.7 kg)
Operating Temperature (Governor Assist Pump and EPD Override assembly):	-22°F to 158°F (-30°C to 70°C)
Oil*:	Texaco 100 Hydraulic Oil

Note*: Unless otherwise specified, the Governor Assist Pump and EPD Override assembly is pre-charged with Texaco 100 Hydraulic Oil. The recommended oil operating temperature range is 32°F to 158°F (0°C to 70°C).

Governor Assist Pump assembly

Oil Pump:	125-PSI Oil Pump with Relief Valve
Hoses and Connections:	1 – Inlet Hydraulic Hose, which connects to the Governor Sump Port. 1 – Outlet Hydraulic Hose, which connects to the Governor Oil Pressure Port.
Mounting Plate:	Q-Tron Part No. 7282.1401 (included with Governor Assist Pump assembly)

Operations

The combined Governor Assist Pump and EPD Override assembly is an integral part of Q-Tron's Engine Run Manager (ERM) system.

Each component of this product provides a unique function (listed below), yet works together to provide the required hydraulic oil pressure for the ERM system.

The Governor Assist Pump component works in conjunction with the engine governor during auto-restarts to provide sufficient fuel necessary to start the locomotive. Whereas the EPD Override component disables the engine protection device (EPD) during an engine auto-restart. Disabling the EPD prevents an unnecessary (or false) engine shutdown during locomotive auto-restart resulting from a false low water pressure condition.

Mounting Instructions

Each component of the combined Governor Assist Pump and EPD Override assembly is mounted separately, but linked together via the hose connection. Figure 1 illustrates the product assembly. Other mounting and product illustrations are included with the respective component mounting instructions as required.

Governor Assist Pump Mounting Instructions

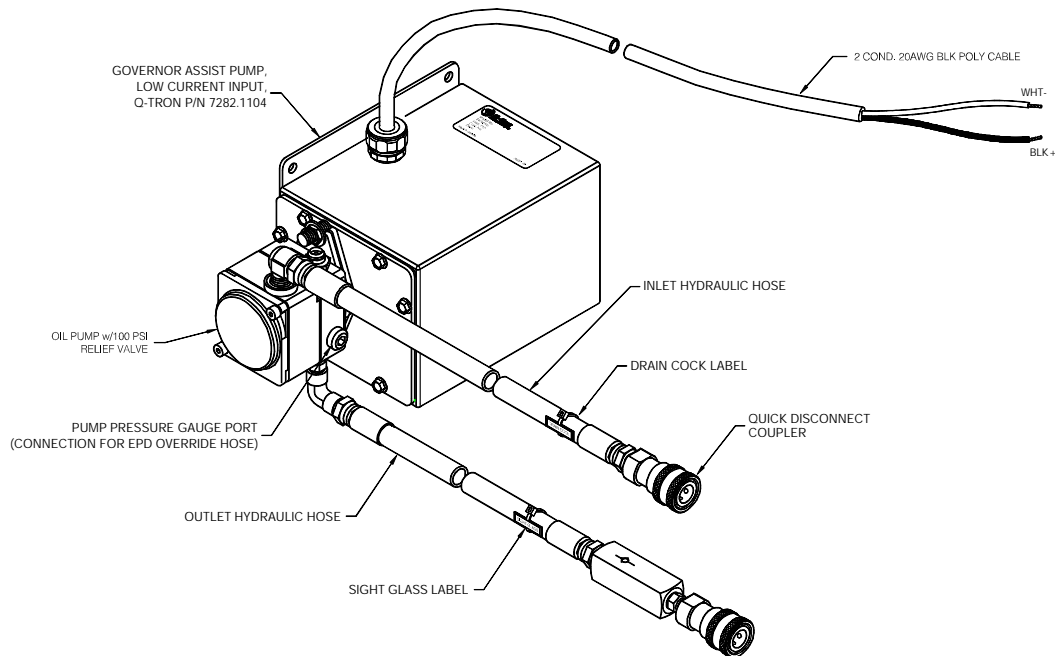


Figure 2. Governor Assist Pump assembly

Note: The return and bleeding port is located on the underside of the Governor Assist Pump.

1. Using the mounting plate assembly provided, mount the Governor Assist Pump in the engine compartment, near the engine governor assembly. The Governor Assist Pump must be positioned so that it is lower than the governor oil level sight glass. The mounting plate may be either welded or bolted into position (see Figure 3 for mounting pattern).
2. Connect the Outlet Hydraulic Hose to the Governor Oil Pressure Port. Refer to Figure 2 for further connection information.
3. Connect the Inlet Hydraulic Hose to the Governor Sump Port. Refer to Figure 2 for further connection information.

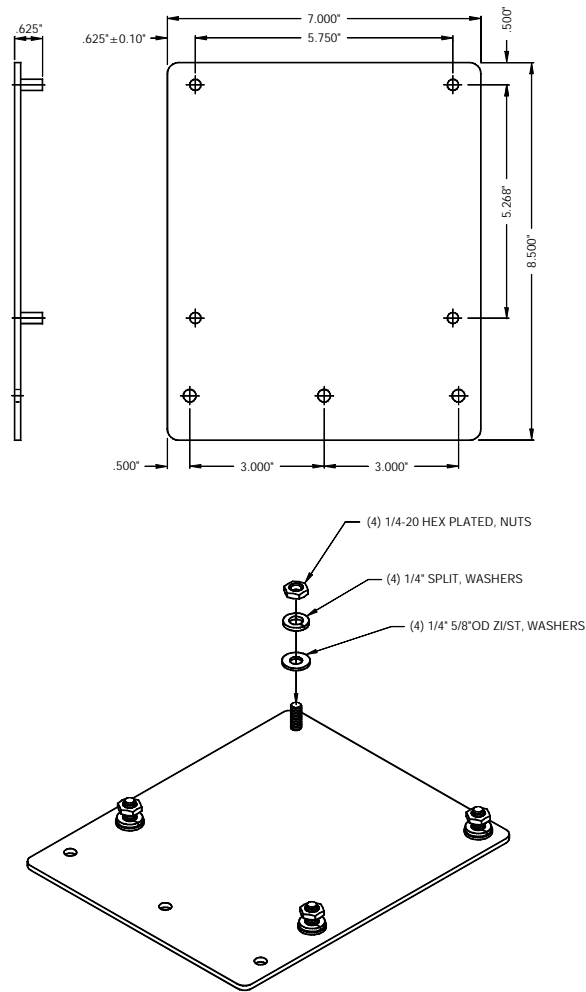
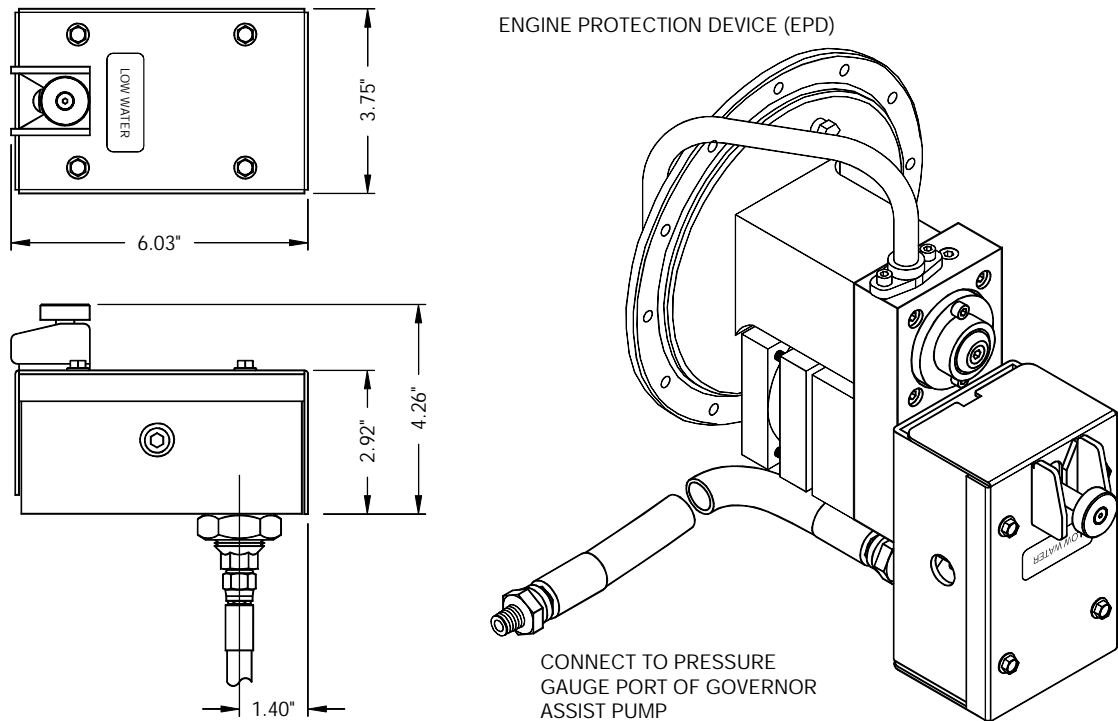


Figure 3. Governor Assist Pump Mounting Bracket, included as part of assist pump

EPD Override Mounting Instructions

Mount the EPD Override on the engine protection device (EPD), located in the engine compartment.

Important: Figure 5, Figure 6, Figure 7, Figure 8, Figure 9, and Figure 10 include helpful mounting information. When installing the EPD Override, refer to these illustrations to locate the position of screws and other mounting hardware.



Note: The EPD Override hydraulic hose is attached to the Governor Assist Pump at the factory.

Figure 4. EPD Override assembly

1. Unscrew and reserve the four screws from the EPD Override cover. Remove the cover (see Figure 5).
2. Remove three of the four existing cap screws from the EPD (see Figure 6). These screws are no longer required for EPD Override installation.

Important: Remove only three cap screws, not four, surrounding the EPD Low Water Button (see Step 2). If all four cap screws are removed, permanent damage to the EPD and/or to the main engine may result and/or intermittent engine shutdowns may occur.

3. Attach the EPD Override Body assembly to the EPD using the provided cap screws and washers (see Figure 7). Tightening torque must be 16.7 ft.lb or 200 in.lb.
4. Check the alignment of the EPD Override on the EPD to ensure proper operation (see Figure 8):
 - a. Open the water drain valve on the water line to the EPD. Ensure the Low Water Button is tripped when the drain valve is open.
 - b. Press and hold down the pressure point end of the EPD Override lever until it seats to the pressure point. **Do not adjust the pressure point.**
 - c. Screw down the ball plunger until it makes contact with the Low Water Button.
 - d. Tighten the set screw to secure the ball plunger into position. Tightening torque must be 7.5 ft.lb or 90 in.lb.
5. Run the Governor Assist Pump. Ensure the EPD Override resets the Low Water Button. Stop the Governor Assist Pump; open the water drain valve, allowing the Low Water Button to fully release. The reset button shaft should be in the position illustrated in Figure 8.
6. Replace the EPD Override cover, securing it using the four screws reserved from Step 1. Attach the Low Water Reset Button using the screw provided (see Figure 10).

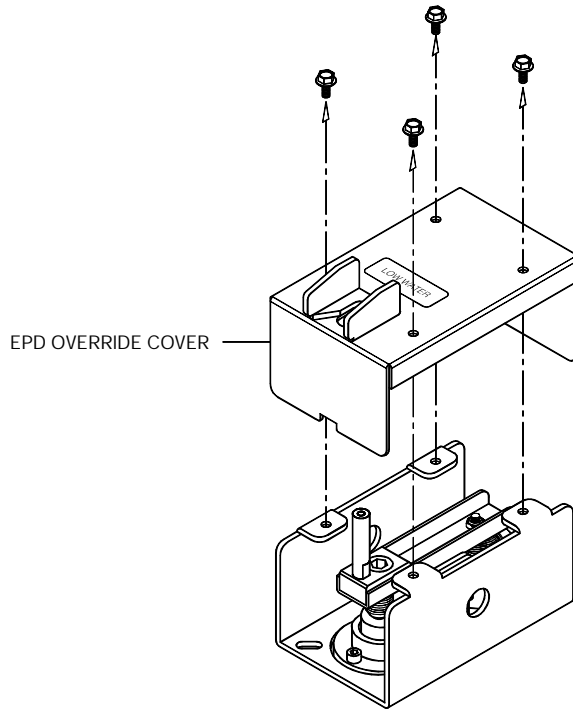


Figure 5. EPD Override, Connection Figure A

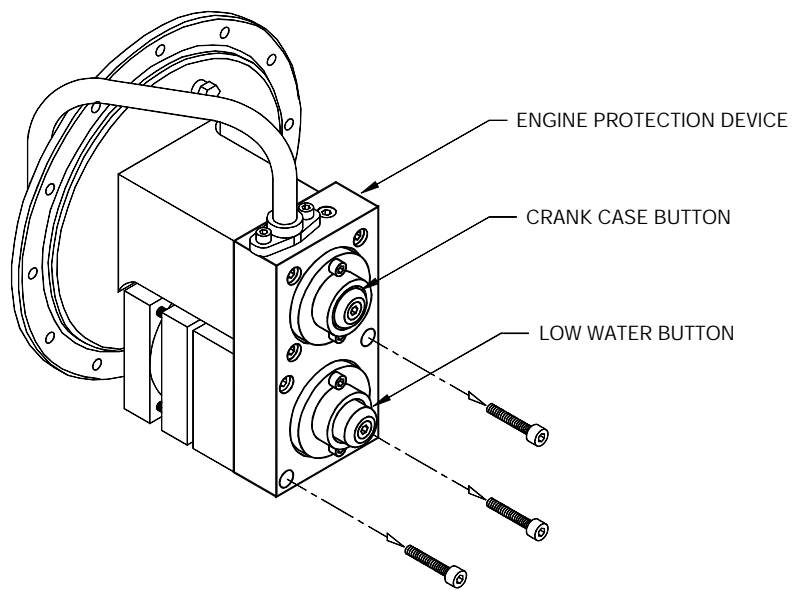


Figure 6. EPD Override, Connection Figure B

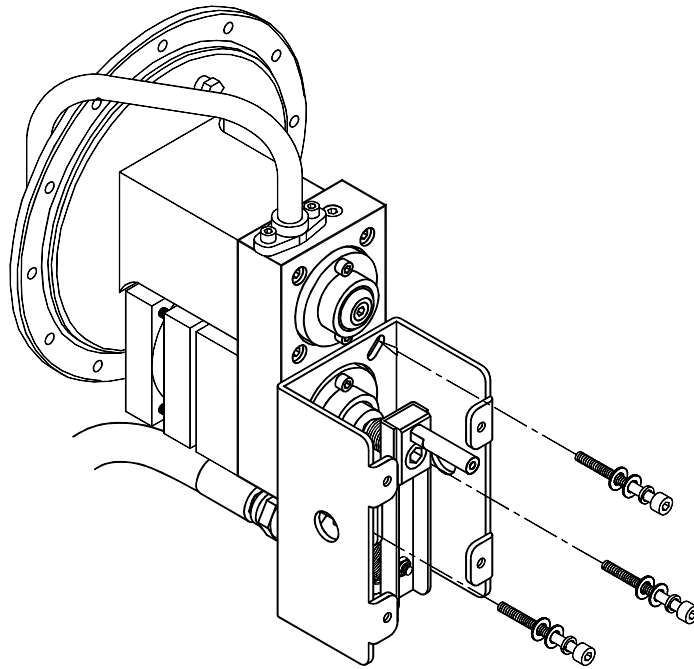


Figure 7. EPD Override, Connection Figure C

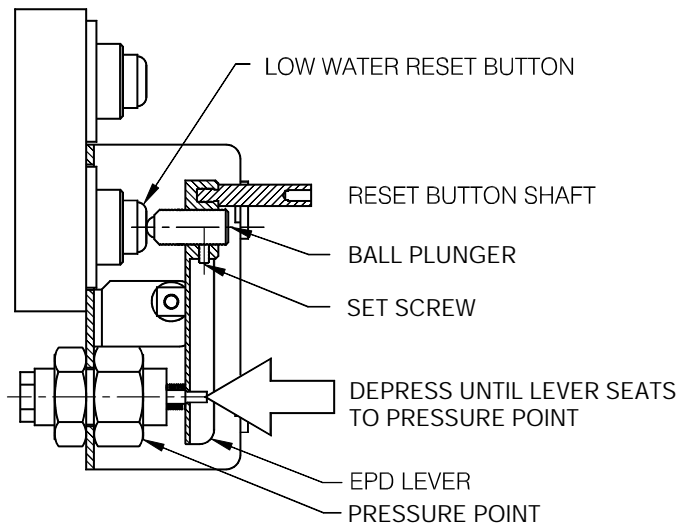


Figure 8. EPD Override, Connection Figure D

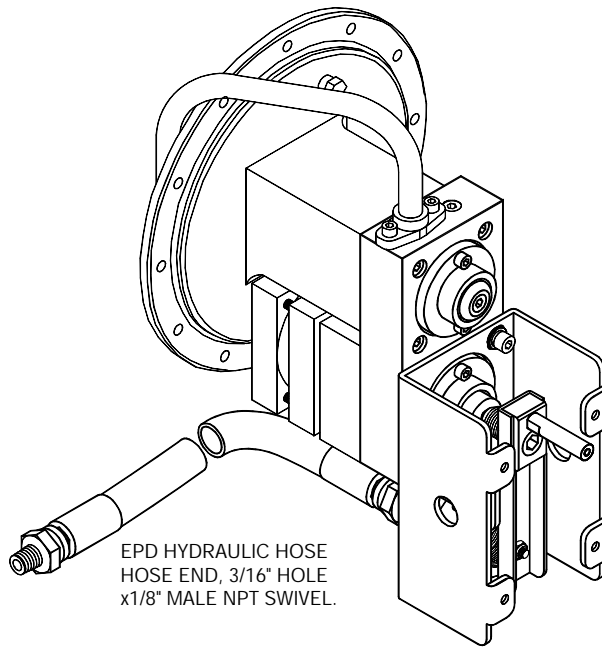


Figure 9. EPD Override, Connection Figure E

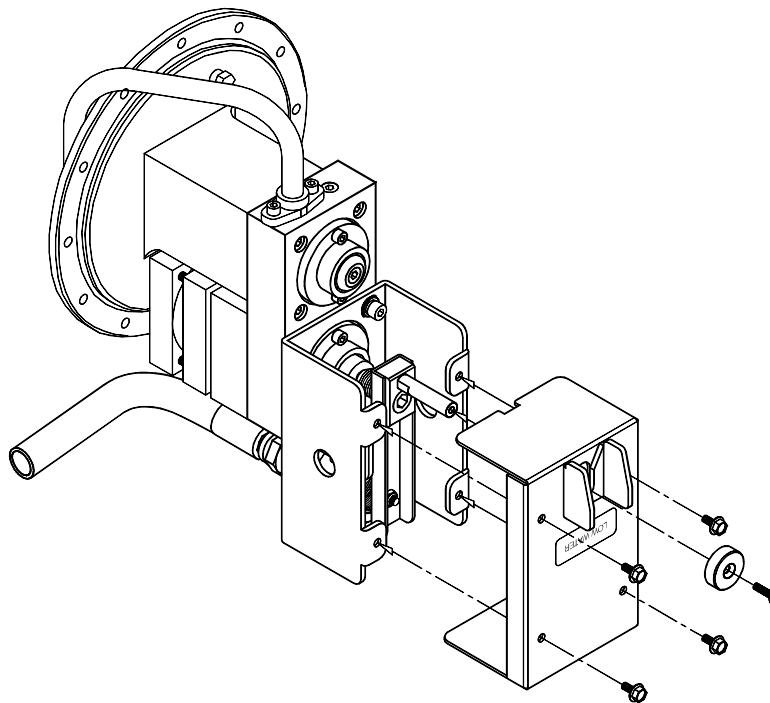


Figure 10. EPD Override, Connection Figure F