

TECHNICAL INSTRUCTIONS

X4 7300/7500 EES FUEL BYPASS INSTALLATION (CTD P/N 76-02070-00)

KIT CONTENTS

Qty.	Part number	Description
1	30-00532-01	Pump, Fuel EES
4	34-00945-06	M6 Spring Washer, Lock
4	34-01184-05	M5 Nylock Nut
1	40-00785-00	3/16 Tee Fitting
1	40-00787-00	Barb Orifice Fitting
3	44-00347-07	Tube Clamp 1/2
5	58-00079-00	Tie Wrap
1	58-00659-14	14" Bypass Fuel Line
1	58-01333-31	28" Flex Guard Sleeve
1	79-04041-01	Stainless Braid Fuel Line

Qty.	Part number	Description
4	34-00944-06	M6 Flat Washer
4	34-00967-45	M6 x 45 Hex Screw
1	40-00756-00	3/8 Fitting
1	40-00786-00	Fitting Adapter
4	44-00293-06	Stepless Clamp 7/16
2	44-01168-00	Fuel Hose Clamp
1	58-00658-19	28" Main Fuel Line
1	58-01333-02	12" Flex Guard Sleeve
1	68-16970-01	Mounting Bracket
4	34-0944-05	M5 Flat Washer

WARNING

Unit may start automatically at any time even if the switch is in the OFF position. Use proper lockout/tagout procedures before inspection/servicing. All unit inspection/servicing by properly trained personnel only.

CAUTION:

Before performing any work, ensure the unit start-run off switch SROS is in the OFF position, the negative battery cable is disconnected, and any external shore power is removed. Proper lockout / tag out procedures MUST be followed.

1. Remove and discard the fuel line from the top of the EES fuel filter to the fuel pump. Figure 1 shows the unlocking of the quick disconnect.



Unlocked Locked
Figure 1: Fuel quick disconnect

2. Remove and discard the braided line from the fuel pump to the EES fuel injector (Doser). The three stauff clamps will be reused to hold the provided braided line down.
3. Remove the EES fuel pump. Remove the EES fuel pump bracket.
4. Install the provided fuel pump mounting bracket (68-16970-01) using the bolts from the removed bracket.
5. Install the provided fuel pump using the provided mounting clamps and nylon nuts (34-01184-05). Torque the nuts to 3 Ft/Lbs. connect the harness and verify the harness is properly routed and secured.

NOTE: Do not torque the orifice barb to the gauge port tee while it is mounted on the fuel pump. See Figure 2 showing the tee mounted in the vise to be properly torqued.



Figure 2: Gauge port tee in the vice

6. Install the 40-00787-00 orifice barb into the 40-00786-00 gauge port tee using a small amount of Loctite 565 or equivalent to the threads. Torque to 20 ft/lb. Verify there no excess Loctite is blocking the orifice.
7. Install the gauge port assembly onto the fuel pump. Install the new braided line from the fuel injector to the gauge port tee. Torque both the gauge port assembly and the injector to 11 ft/lb.
8. Reuse the three stauff clamps to hold the braided line and torque to 6 ft/lb. Verify the braided line is free from any chaffing points or heat sources. See Figure 3 and Figure 4.



Figure 3: Braided hose routing



Figure 4: Braided hose routing

9. Installing the bypass fuel line tee (40-00785-00). Measure 10 inches from the fuel filter head barb on the return fuel line. Cut the line and insert and clamp the tee between the two lines. See Figure 5.

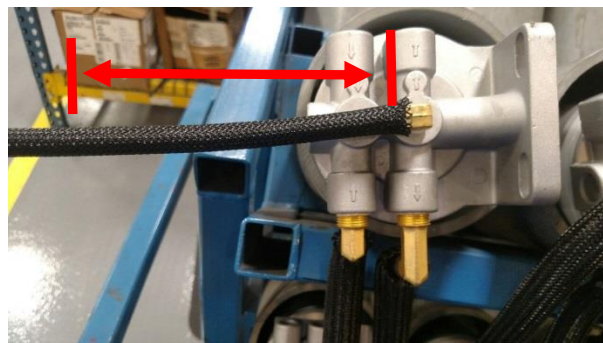


Figure 5: Fuel filter return line

10. Install the flex guard over the bypass fuel line and install the line from the gauge port assembly to the tee on the return line.
11. Install the flex sleeve over the main fuel line. Install the new quick disconnect on the main fuel line. Install the line from the EES fuel filter to the fuel pump.



Figure 6: Stauff clamps main fuel line routing

12. Install the three stauff clamps. The two stauff clamps on the fuel pump bracket must point down. See Figure 6. The last clamp goes on the door latch bracket. Verify the fuel line does not kink when it turns up from the two cushion clamps to the stauf clamp. See Figure 7.
13. Verify the fuel lines are properly run free from kinks, chaffing or heat sources. Start the unit and check the fuel system for leaks.



Figure 7: Picture of bypass installation. Insure highlighted areas are not kinked.

Warranty Submission

- Submit warranty claims through TransCentral / WebClaim, referencing R-947 in the failure report section.
- All kits will be sent at no charge, handling will be paid at a predetermined value which will be added when the claim is processed.
- If you need kits, please contact Service Engineering at 1-800-448-1661.

Use the following table for labor times. Use the additional labor field to enter the labor allowed

Kit Part number	Description	SRT Time
76-02070-00	X4 EES Fuel Bypass installation	1.0