

# INSTRUCTION SHEET

## Protector Diesel Generator Stainless Steel Fuel Lines

G007660-0 (2.5L)

G007661-0 (2.2L)

G007662-0 (3.3L)

**⚠ DANGER**

Accidental start-up. Disconnect power and render unit inoperable before performing service work. Failure to do so will result in death or serious injury.

(000344)

**⚠ WARNING**

Equipment damage. Only qualified service personnel may install, operate, and maintain this equipment. Failure to follow proper installation requirements could result in death, serious injury, and equipment or property damage.

(000182a)



**⚠ WARNING**

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

**IMPORTANT NOTE:**

- Instructions for installing fuel lines on **2.5L engines** begin on this page.
- Instructions for installing fuel lines on **2.2L engines** begin on [page 2](#).
- Instructions for installing fuel lines on **3.3L engines** begin on [page 4](#).

## INSTRUCTIONS—2.5L ENGINES

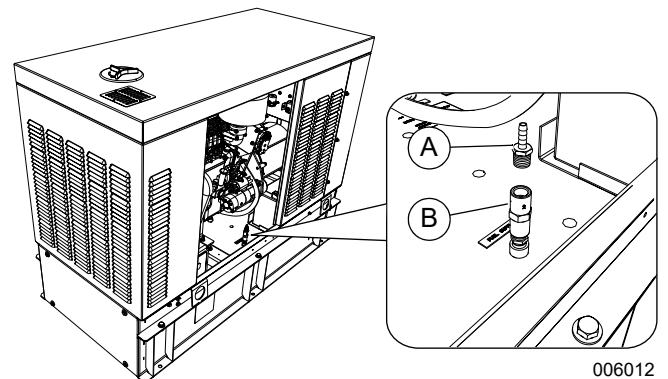
### Preliminary Instructions

1. Remove stainless steel fuel lines and adapters from packaging.
2. Use key to remove generator left side access panel.
3. Remove unit from service as described in the owner's manual.

### Remove Original Equipment Fuel Supply Hose

Proceed as follows to remove original equipment fuel supply hose:

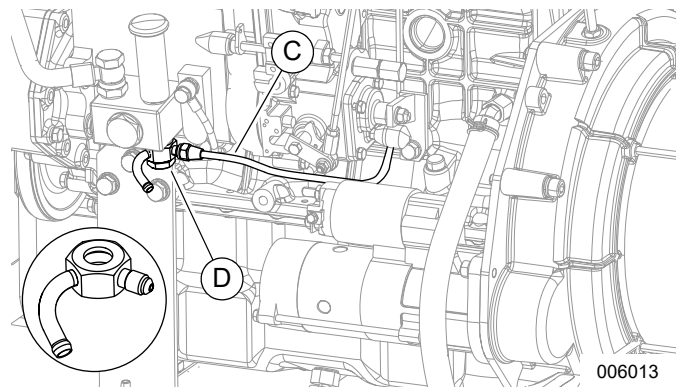
1. Loosen hose clamp at each end of fuel supply hose between fuel tank and injection pump. Remove and discard hose and clamps.
2. See [Figure 1](#). Remove barbed straight fitting (A) from check valve (B) in fuel tank. Hold hex on check valve when loosening straight fitting to prevent rotation. Discard straight fitting.



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**Figure 1. Remove Barbed Straight Fitting—2.5L**

3. See [Figure 2](#). Disconnect steel fuel return line (C) from banjo fitting (D).



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**Figure 2. Disconnect Banjo Fitting—2.5L**

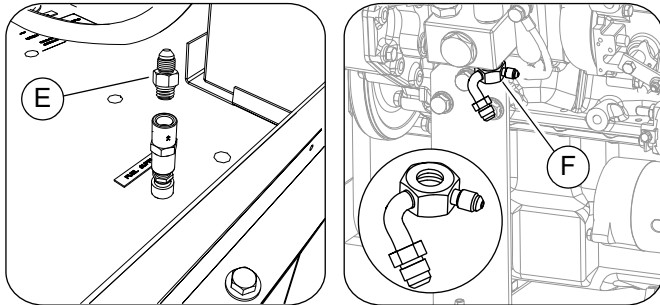
4. Remove banjo fitting from injection pump. Discard banjo fitting.

## Install Stainless Steel Fuel Supply Line

**NOTE:** Apply a suitable pipe sealant to external threads of all pipe fittings.

Proceed as follows to install stainless steel fuel supply line:

1. See **Figure 3**. Install JIC straight fitting (E) into check valve in fuel tank. Hold hex on check valve when tightening straight fitting to prevent rotation.



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**Figure 3. Insert Replacement Fittings—2.5L**

2. Place sealing washers on each side of fuel inlet adapter (F). Use existing banjo bolt from engine to install fuel inlet adapter on injection pump.
3. Connect fuel return line to fuel inlet adapter.
4. Install stainless steel fuel line on fittings between fuel tank and fuel inlet adapter.
5. Proceed to **Final Instructions**.

## INSTRUCTIONS—2.2L ENGINES

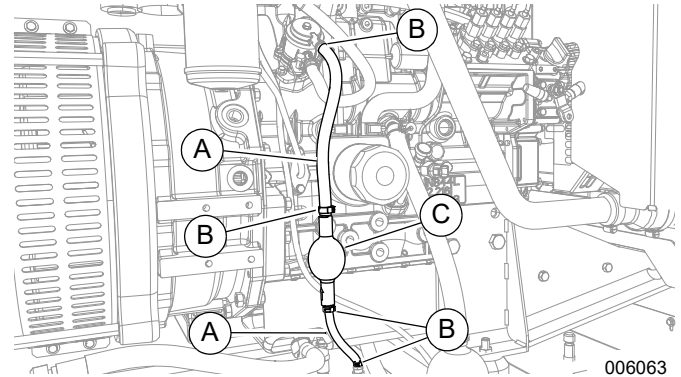
### Preliminary Instructions

1. Remove stainless steel fuel lines, adapters, hardware, bracket, and remote hand primer pump from packaging.
2. Use key to remove generator right side access panel.
3. Remove unit from service as described in the owner's manual.

## Remove Original Equipment Fuel Supply Circuit

Proceed as follows to remove the original equipment fuel supply circuit:

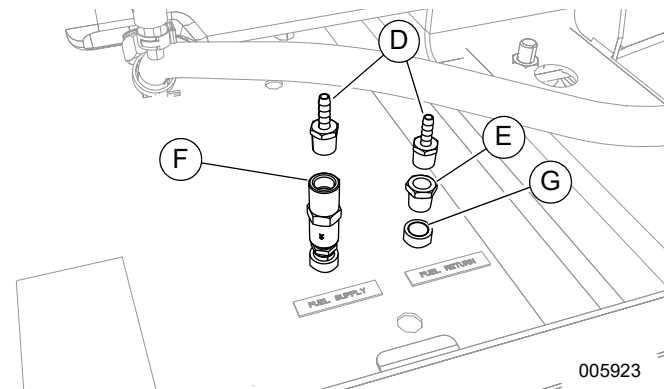
1. See **Figure 4**. Loosen hose clamp at each end of fuel supply circuit between fuel tank and engine auxiliary fuel lift pump. Remove and discard hoses (A), clamps (B), and rubber primer bulb (C).



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**Figure 4. Remove Original Fuel Supply Circuit—2.2L**

2. Loosen hose clamp at each end of fuel return hose between fuel tank and steel fuel line located on top of engine. Remove and discard hose and clamps.
3. See **Figure 5**. Remove barbed straight fittings (D) and reducer bushing (E) from fuel tank supply (F) and return (G) ports.



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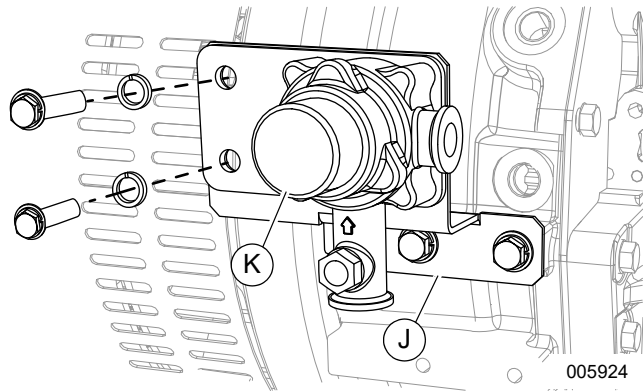
**Figure 5. Remove Barbed Straight Fittings—2.2L**

**NOTE:** Hold hex on check valve when loosening straight fitting on fuel tank supply port to prevent rotation. Discard straight fittings and reducer bushing.

### Install Hand Primer Pump

Proceed as follows to install hand primer pump:

1. See **Figure 6**. Use 3/8 in screws, lock washers, and flat washers to mount bracket (J) to side of engine flywheel housing.



**Figure 6. Install Hand Primer Pump—2.2L**

2. Use M10 screws and lock washers to mount hand primer pump (K) to bracket.

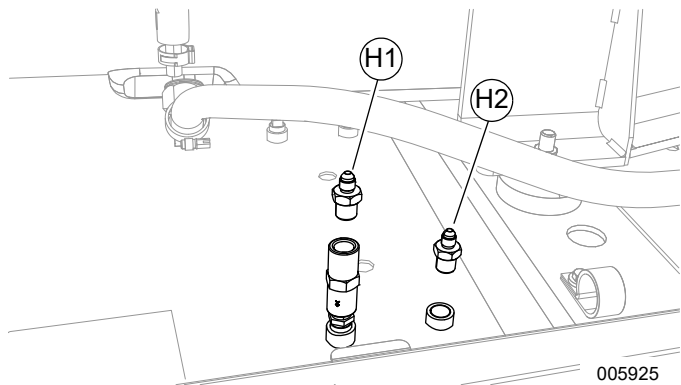
**NOTE:** Verify hand primer pump is oriented as shown.

### Install Stainless Steel Fuel Lines

**NOTE:** Apply a suitable pipe sealant to external threads of all pipe fittings.

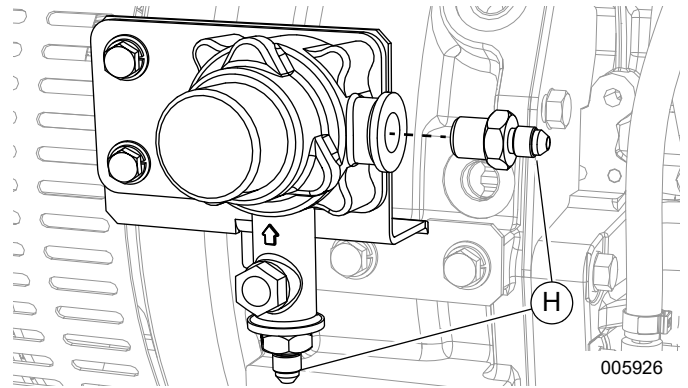
Proceed as follows to install stainless steel fuel lines:

1. See **Figure 7**. Install JIC straight fittings (H1, H2) in fuel tank supply and return ports.



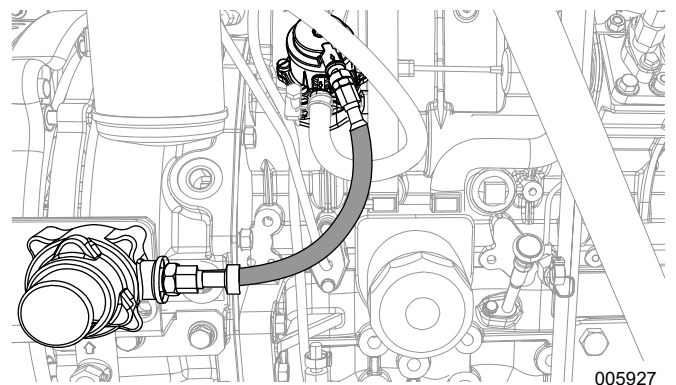
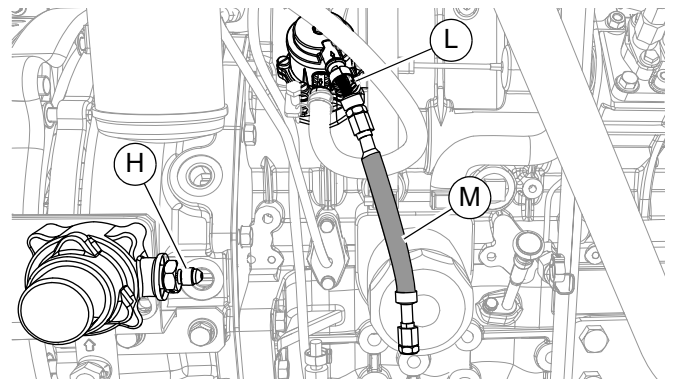
**Figure 7. Install JIC Straight Fittings—2.2L**

2. See **Figure 8**. Install one JIC straight fitting (H) in bottom port of remote hand primer pump. Install second JIC straight fitting (H) in side port of remote hand primer pump.



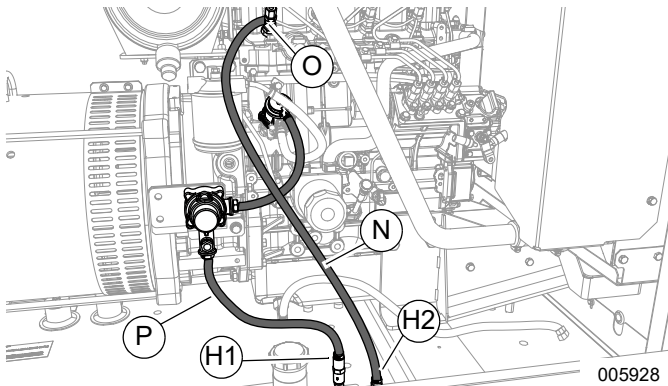
**Figure 8. Install JIC Fittings in Primer Pump—2.2L**

3. See **Figure 9**. Use hose clamp to fasten hose stub (L) from shorter fuel hose assembly (M) to hose barb on auxiliary fuel lift pump. Fasten other end of fuel hose assembly to JIC straight fitting (H) on side port of remote hand primer pump.



**Figure 9. Install Shorter Fuel Hose Assembly—2.2L**

- See **Figure 10**. Use hose clamp to fasten hose stub from longer fuel hose assembly (N) to hose barb (O) of steel return line on top of engine. Fasten female swivel on other end of hose assembly to fuel tank return fitting (H2).



**Figure 10. Install Fuel Lines—2.2L**

- Install stainless steel fuel line (P) between fuel tank supply fitting (H1) and straight JIC fitting on bottom port of remote hand primer pump.
- Proceed to **Final Instructions**.

## INSTRUCTIONS—3.3L ENGINES

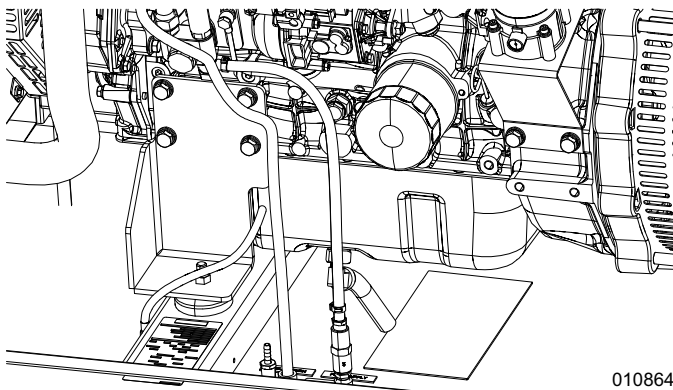
### Preliminary Instructions

- Remove stainless steel fuel lines and adapters from packaging.
- Use key to remove generator right side panel access.
- Remove unit from service as described in owner's manual.

### Remove Original Equipment Fuel Supply Hose

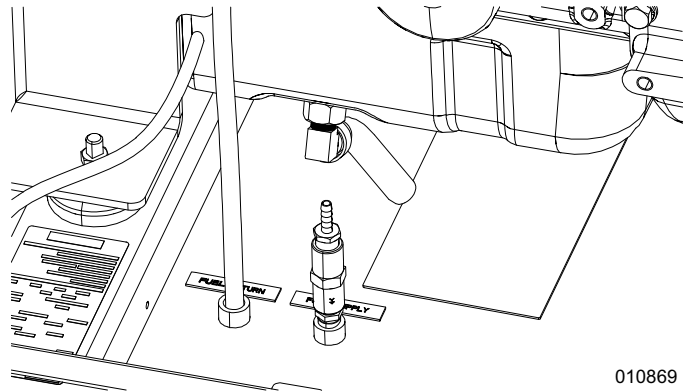
Proceed as follows to remove original equipment fuel supply hose:

- See **Figure 11**. Loosen hose clamp at each end of fuel supply hose between fuel tank and injection pump. Remove and discard hose and clamps.



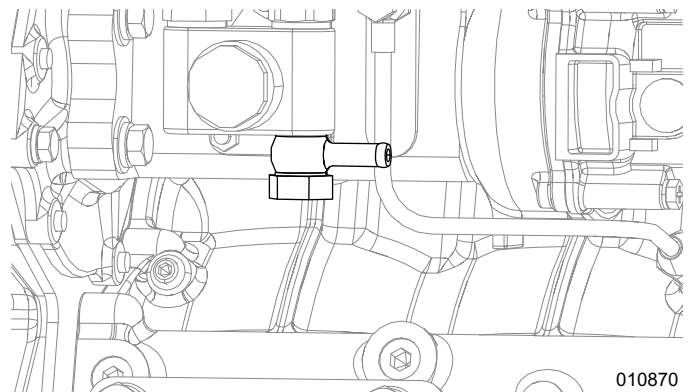
**Figure 11. Fuel Supply Hose Clamps**

- See **Figure 12**. Remove barbed straight fitting from check valve in fuel tank. Hold hex on check valve when loosening straight fitting to prevent rotation. Discard straight fitting.



**Figure 12. Barbed Straight Fitting**

- See **Figure 13**. Remove banjo fitting from injection pump. Discard barbed banjo fitting. Do not discard banjo bolt or sealing washers.

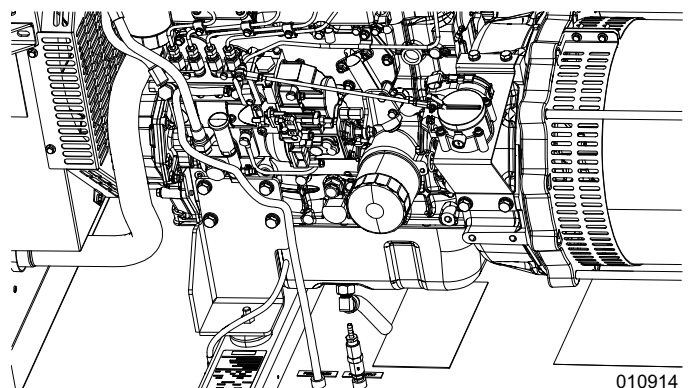


**Figure 13. Remove Banjo Fitting**

### Remove Original Equipment Fuel Return Hose

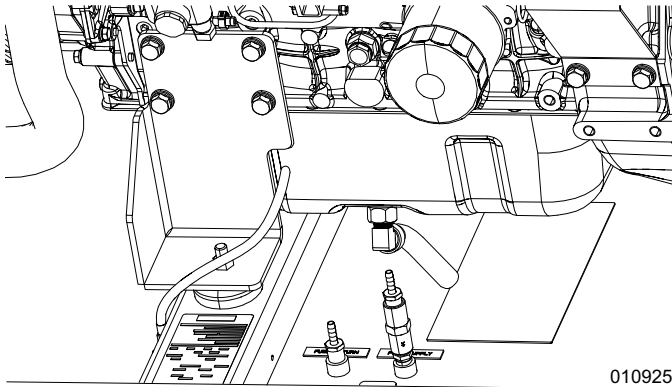
Proceed as follows to remove original equipment fuel return hose:

- See **Figure 14**. Loosen hose clamp at each end of fuel return hose between fuel return and fuel tank. Remove and discard hose and clamps.



**Figure 14. Fuel Return Hose Clamps**

2. See **Figure 15**. Remove barbed straight fitting from fuel return on fuel tank. Discard barbed straight fitting.

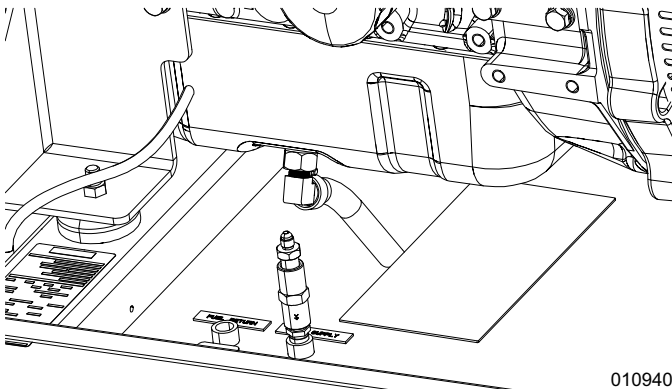


**Figure 15. Fuel Return Barbed Straight Fitting**

### Install Stainless Steel Fuel Supply Hose

Proceed as follows to attach stainless steel fuel supply hose:

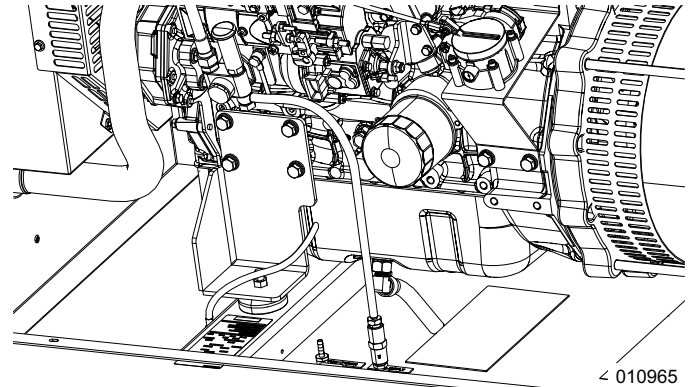
1. See **Figure 16**. Install JIC straight fitting into check valve in fuel tank. Hold hex on check valve when tightening straight fitting to prevent rotation.



**Figure 16. Fuel Return JIC Straight Fitting**

2. Place sealing washers on each side of the fuel inlet male JIC banjo fitting. Use existing banjo bolt from engine to install fuel inlet adapter on injection pump.

3. See **Figure 17**. Install 22 in (55.9 cm) stainless steel fuel line on fittings between fuel tank and fuel inlet banjo fitting.

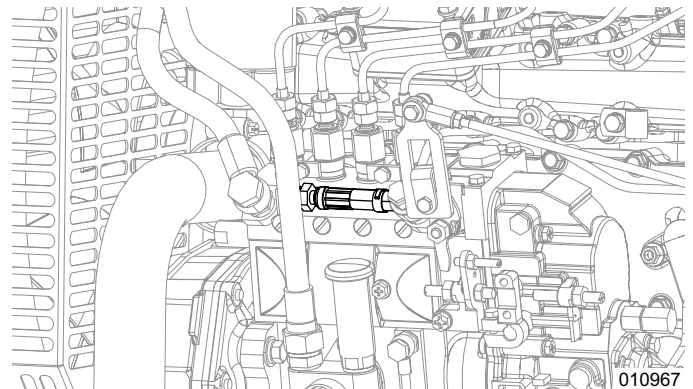


**Figure 17. Stainless Steel Fuel Supply Fuel Line**

### Install Stainless Steel Fuel Return Hose

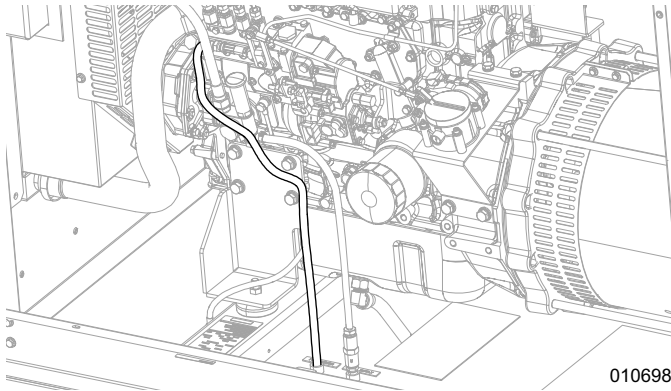
Proceed as follows to attach stainless steel fuel return hose:

1. Install JIC straight fitting into fuel return in fuel tank.
2. See **Figure 18**. Install JIC hose fitting onto fuel return on engine utilizing the provided hose clamp. Clamp hose for tight connection.



**Figure 18. JIC Hose Fitting**

3. See **Figure 19**. Install 32 in (81.3 cm) stainless steel fuel line on fittings between engine fuel return fitting and fitting on fuel return tank.



**Figure 19. Fuel Return Stainless Steel Fuel Line**

4. Proceed to **Final Instructions**.

## Final Instructions

1. Prime fuel system and check for leaks following instructions in the owner's manual.
2. Use key to install and lock side access panel.
3. Put unit back in service.