



Solid State Fuel Pump Kit #278803 7CMZ & 7CKM RV Generator Sets

This instruction sheet describes procedures on replacing the existing round fuel pump with a new solid state version. Installation of this kit requires removal of the generator set from the coach. Observe the following safety precautions when installing the fuel pump kit.



⚠ WARNING

Accidental starting can cause death or serious personal injury. Disconnect battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by remote start/stop switch unless this precaution is followed.



⚠ WARNING

A flash fire can cause serious burns. Do not smoke or permit flame or spark to occur near carburetor, fuel line, fuel filter, fuel pump, or other potential sources of spilled fuel or fuel vapors. When removing fuel line or carburetor, use a proper container to catch all fuel.

Spilled fuel can ignite on contact with hot engine parts. Use a container to catch fuel when draining fuel system. Wipe up all spilled fuel after draining system.

⚠ WARNING



All fuels are highly explosive in a vapor state. Use extreme care when handling, storing, and using fuels

Store fuel in a well-ventilated area away from spark producing equipment and out of the reach of children. Never add fuel to the tank while the engine is running since spilled fuel may ignite on contact with hot parts or from ignition spark. Do not smoke or permit flame or spark to occur near potential sources of spilled fuel or fuel vapors. Keep fuel lines and connections tight and in good condition—don't replace flexible fuel lines with rigid lines. Flexible sections are used to avoid breakage due to vibration. Additional precautions must be taken when using the following fuel:

Gasoline – Store gasoline only in approved red containers clearly marked GASOLINE. Do not store gasoline in any occupied building.

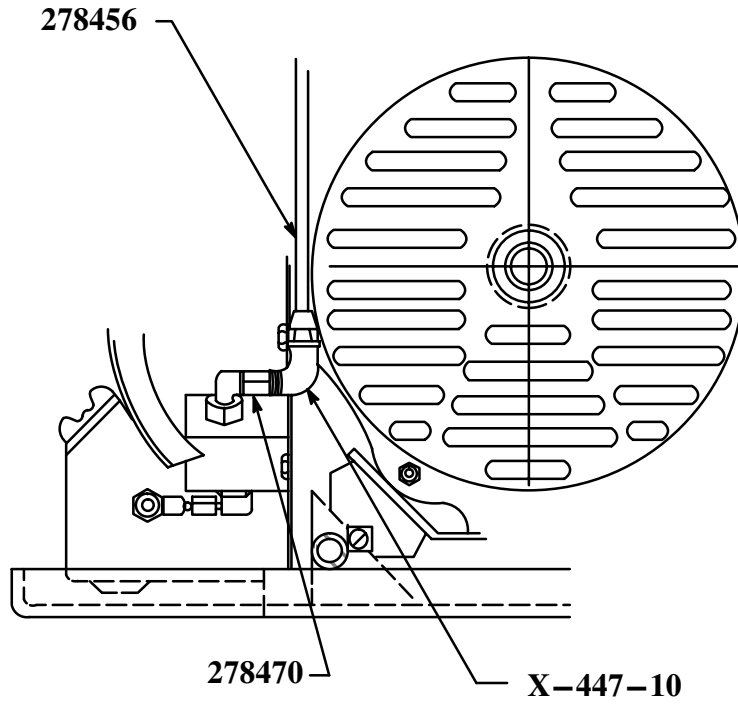
To remove existing round fuel pump and replace with solid state version, use the following procedure:

1. Disconnect battery, negative lead first. Disconnect generator fuel lines, load leads, remote leads, exhaust system, and ductwork. Remove generator set from coach according to procedure supplied by coach manufacturer.

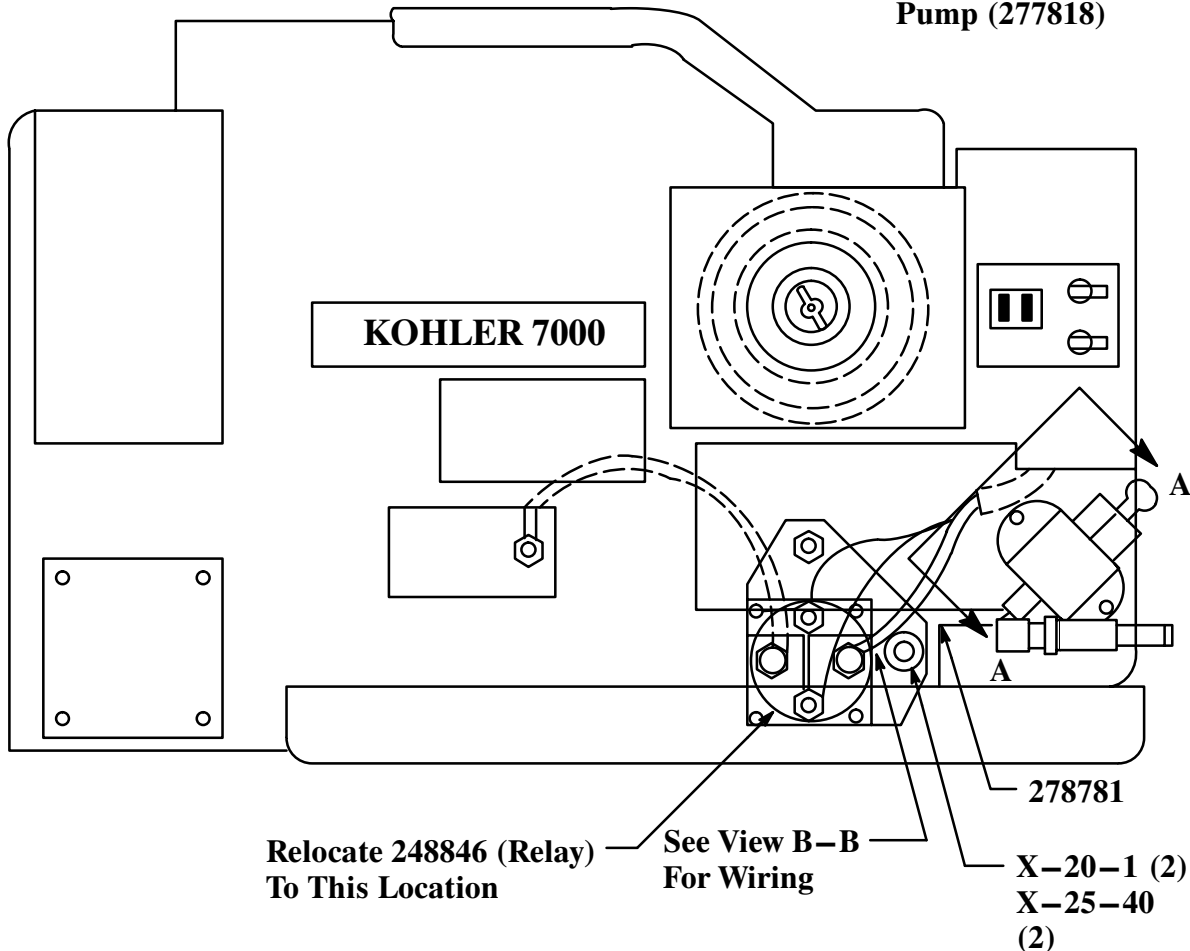
2. Using a container to catch spilled fuel, disconnect fuel line at fuel pump and carburetor and discard fuel line. Dispose of fuel in suitable container. Wipe up spilled fuel.
 3. Remove hardware securing round fuel pump to generator frame. Remove fuel pump (cut off plug), mounting bracket, and mounting hardware and discard. Mount new fuel pump mounting bracket (278781) using mounting hardware supplied in kit. See Figure 1.
 4. Using mounting hardware (X-465-6, X-22-11, and X-25-63), install new fuel pump (278490), to mounting bracket as shown in Figure 2. Cut off plug on new fuel pump. Attach street elbows (X-211-10) on each end of fuel pump. Connect pipe adapter (278470) to lower elbow, attach another street elbow (X-211-10), install fuel filter (249433). See Figure 2, View A-A.
- Note**
- Add Loctite pipe sealant to fuel pump fittings.
5. To upper elbow connected on fuel pump, Secure pipe adapter (278470) and elbow (X-447-10). Attach fuel line (278456) to elbow. See Figure 1. Secure fuel line to carburetor.
 6. Disconnect wires from starter relay. Cut off at terminals and strip ends. Relocate relay to location shown in Figure 1 using mounting hardware supplied (X-20-1, X-25-40, and X-81-1).
 7. Attach insulink (X-367-3) to each end on lead SW06-1808-404. Connect one end to red (positive) lead coming from fuel pump. Connect the other end to the already existing lead number 6.
 8. Install new wires (LW05-1808-1404, LW01-1808-1604, LW02-1808-1604, and 278276) to harness using insulink (X-367-3) to connect to wires. Reconnect terminals to relay. See Figure 1, View B-B.
 9. Connect black (negative) lead on fuel pump to LN-1812-1504 lead using insulink (X-367-3) to crimp together. Attach terminal end of lead LN-1812-1504 to blower housing screw or fuel pump mounting screw. Scrape off paint if necessary to insure a good ground.
 10. Reconnect generator battery, negative lead last.
 11. Start generator set and examine fuel pump/fuel line for leaks. If leak occurs, stop generator set and tighten fuel line fittings.

Parts Listing

Part Number	Description	Qty
LN-1812-1504	Lead	1
LW01-1808-1604	Lead	1
LW02-1808-1604	Lead	1
LW05-1808-1404	Lead	1
SW06-1808-404	Lead	1
X-20-1	Washer, Lock 1/4	2
X-211-10	Elbow, Street	3
X-22-11	Washer, Lock 1/4	2
X-25-40	Washer, Plain 9/32 x 5/8 x .05	2
X-25-63	Washer, Plain 17/64 x 1/2 x .062	2
X-367-3	Insulink	7
X-447-10	Elbow 7/16-20 x 1/8	1
X-465-6	Screw, H.C.	2
X-81-1	Nut, Hex. 1/4-20	2
249433	Filter, Fuel	1
278276	Heat Element Plug	1
278456	Line, Fuel	1
278470	Adapter, Pipe	2
278490	Pump, Fuel	1
278781	Bracket, Fuel Pump	1



NOTE:
 Remove Bracket
 (278175) & Old Fuel
 Pump (277818)

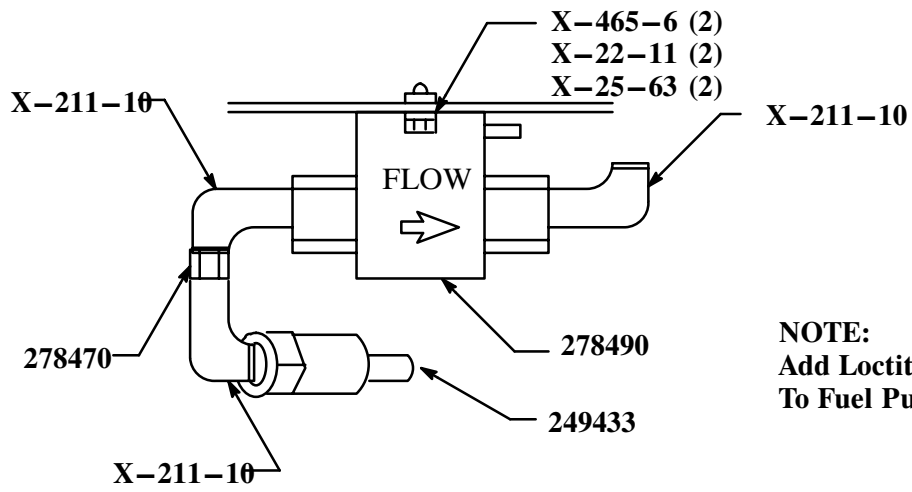


Relocate 248846 (Relay)
 To This Location

See View B-B
 For Wiring

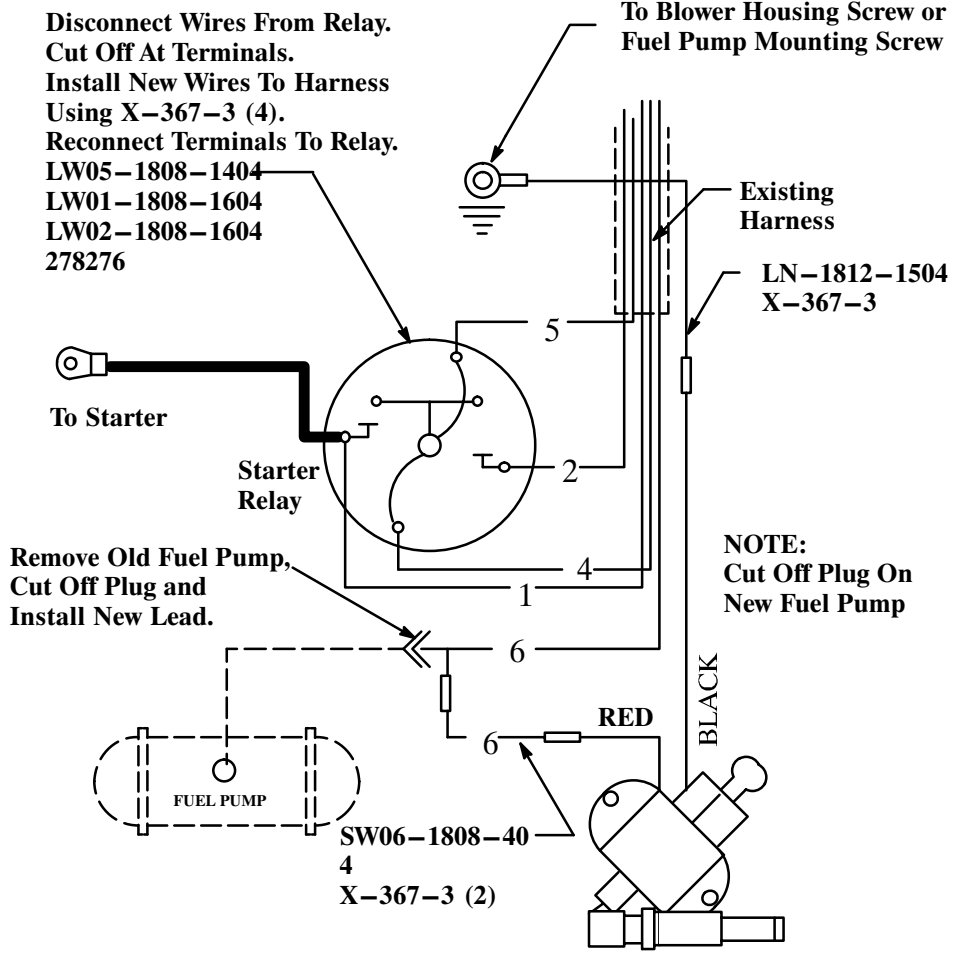
278781
 X-20-1 (2)
 X-25-40
 (2)
 X-81-1 (2)

Figure 1. Fuel Pump Installation



NOTE:
Add Loctite Pipe Sealant
To Fuel Pump Fittings.

VIEW A-A



Disconnect Wires From Relay.
Cut Off At Terminals.
Install New Wires To Harness
Using X-367-3 (4).
Reconnect Terminals To Relay.

- LW05-1808-1404
- LW01-1808-1604
- LW02-1808-1604
- 278276

NOTE:
Cut Off Plug On
New Fuel Pump

VIEW B-B

Figure 2. Fuel Pump Installation