



Fuel Pump Kit PA-229172 8/10/12.5C Marine Generator Sets

The fuel pump kit provides additional fuel lift capabilities and has improved operation in high temperature applications. This kit replaces the standard electric fuel pump.

NOTE

Due to the higher ampere draw of this fuel pump, battery drain will occur unless a separate battery charger is used. The generator set battery charging system will not sufficiently charge the battery.

WARNING



Accidental starting.

Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

Accidental starting can cause severe injury or death. 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.

A flash fire can cause severe injury or death. 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.

WARNING



Fire.

Can cause severe injury or death.

Do not smoke or permit flame or spark to occur near fuel or fuel system.

Explosive fuel vapors can cause severe injury or death. 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. Should any fuel leakage, fuel accumulation, or electrical sparks be noted, **DO NOT OPERATE GENERATOR SET.** Have systems repaired before resuming generator operation. Additional precautions must be taken when using the following:

Gasoline—Store gasoline only in approved red containers clearly marked GASOLINE. Don't store gasoline in any occupied building.

Explosive fuel vapors can cause severe injury or death. Fuel leakage can cause an explosion. To prevent fuel leakage, use pipe sealant on all threaded fittings. Pipe sealant must be suitable for use in marine applications having oil and gasoline environments.

INSTALLATION

1. Disconnect battery, negative lead first.
2. Close fuel tank supply petcock.
3. Locate existing electric fuel pump on generator set and disconnect fuel line on inlet side. See Figure 1. Drain fuel from fuel line/hose in a suitable container to prevent spillage into the bilge.

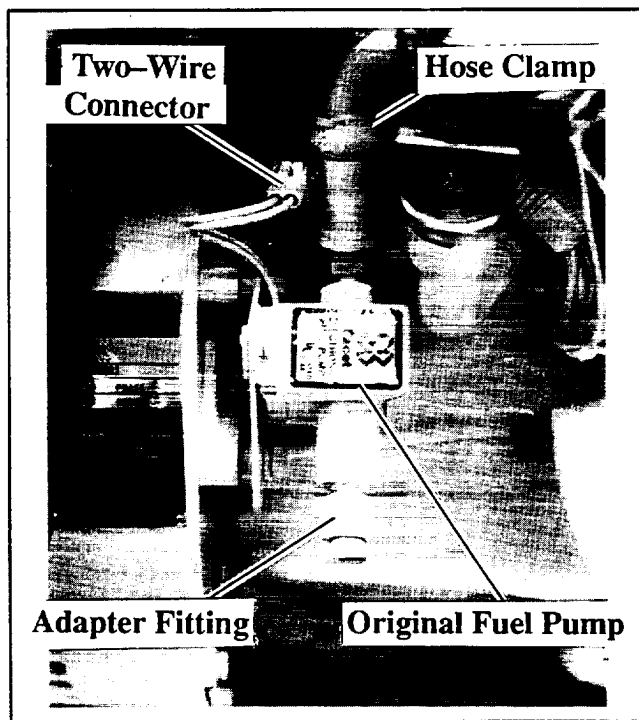


Figure 1. Existing Fuel Pump

4. Loosen hose clamp at fuel filter and remove hose from fuel filter.
5. Disconnect two-wire connector near fuel pump.
6. Remove two screws attaching fuel pump and bracket assembly to engine. Hardware will be reused. Original fuel pump, adapter fitting, and bracket will not be reused.
7. Mount fuel pump bracket 229050 to same location on engine using original hardware. Install three grommets X-284-29 in holes of bracket.
8. Remove the three nuts and studs supplied with the new fuel pump. The original three nuts and studs will not be used. Install three studs X-352-82. Install three flat washers X-25-40 and nuts X-81-9 on the new fuel pump. Torque nuts to 30 in. lbs. (3.4 Nm).
9. Remove fuel filter from existing fuel pump. Original elbow will not be reused. Apply pipe sealant to male threads of reducer bushing X-202-27 and install in new fuel pump outlet. Apply pipe sealant to male threads of pipe elbow X-555-2 and install in reducer bushing. Do not final tighten elbow. Apply pipe sealant to male threads of fuel filter and install in pipe elbow. Temporarily place fuel pump assembly in mounting bracket. Determine proper installed angle of pipe elbow and fuel filter. Remove fuel pump and final tighten pipe elbow and fuel filter. When the elbow is final tightened, the fuel filter should be pointing toward the 2 o'clock position.

Place three flat washers X-25-40 on fuel pump studs and install fuel pump assembly to mounting bracket. Place three flat washers X-25-40 over studs when fuel pump assembly is installed in mounting bracket and secure with three nylon lock nuts X-101-7. See Figure 2.
10. Connect hose from carburetor to fuel filter. Locate hose clamp 1/4 in. (6 mm) from end of hose and tighten.
11. Reconnect the fuel supply line to fuel pump inlet fitting.

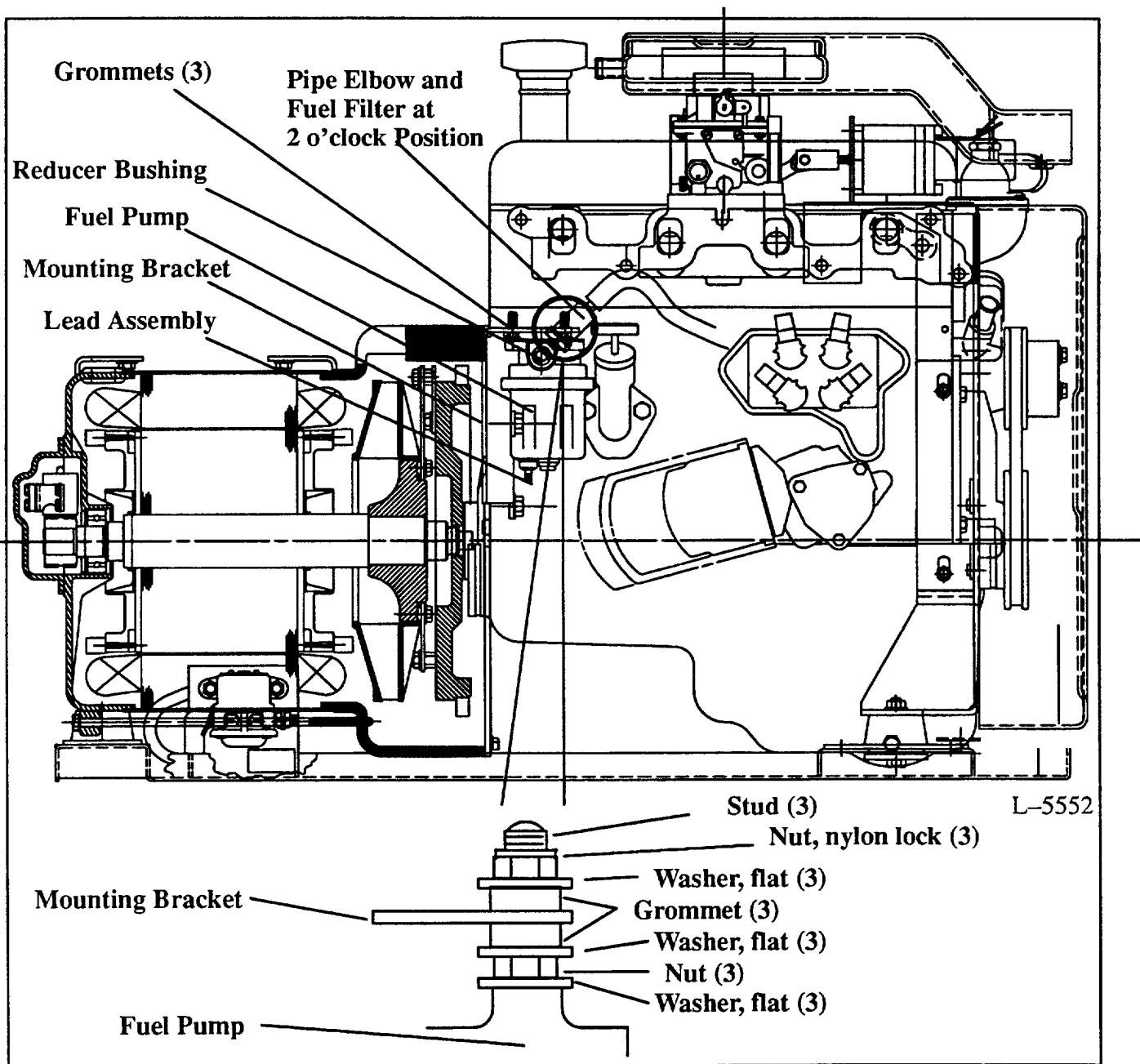


Figure 2. Mounting Fuel Pump

13. Attach lead N of lead assembly 229168 to negative terminal of fuel pump. Negative terminal is the one closest to the fuel pump inlet. Attach the other lead to the remaining fuel pump terminal. Connect lead assembly connector to connector of engine wiring harness. These connectors are keyed to fit one way only.



14. Open fuel supply petcock.

15. Wipe up all spilled fuel and dispose of fuel container and rags in a proper manner.

16. Reconnect battery, negative lead last.

17.

Parts Listing

 WARNING

<p>Explosion. Gasoline vapors can cause explosion and severe injury or death.</p> <p>Before starting generator set, operate blower 4 minutes and check engine compartment for gasoline vapors.</p>

Description	Qty.	Part No.
Washer, 1/4 in. flat	9	X-25-40
Nut, 1/4-28	3	X-81-9
Nut, 1/4-28 nylon lock	3	X-101-7
Bushing, reducer 1/8F x 1/4M	1	X-202-27
Grommet	3	X-284-29
Stud	3	X-352-82
Elbow, pipe 1/4M x 1/8F	1	X-555-2
Bracket, mounting	1	229050
Pump, fuel	1	229051
Lead assembly	1	229168

Follow proper starting procedure (found in Operation Manual) to start generator set and check for fuel leaks. STOP generator set.