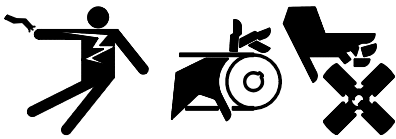

INSTALLATION INSTRUCTIONS

Original Issue Date: 7/96
 Model: 15/20CCO/CCOZ
 Market: RV/Mobile
 Subject: Fuel Pump Kit PA-225463

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

⚠ WARNING


Accidental starting.
Can cause severe injury or death.

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

Disabling generator set. 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 the generator set or connected equipment. The generator set can be started by the remote start/stop switch unless this precaution is followed.

⚠ WARNING


Fire.
Can cause severe injury or death.

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

Servicing fuel system. 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. Catch all fuel in a suitable container when removing fuel line or carburetor.

⚠ WARNING


Explosive fuel vapors.
Can cause severe injury or death.

Use extreme care when handling, storing, and using fuels.

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 and storing 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 sources of spilled fuel or fuel vapors. Keep fuel lines and connections tight and in good condition. Do not replace flexible fuel lines with rigid lines. Use flexible sections to avoid breakage caused by vibration. Do not operate generator set in the presence of fuel leaks, fuel accumulation, or sparks. Repair systems before resuming generator set operation

Installation

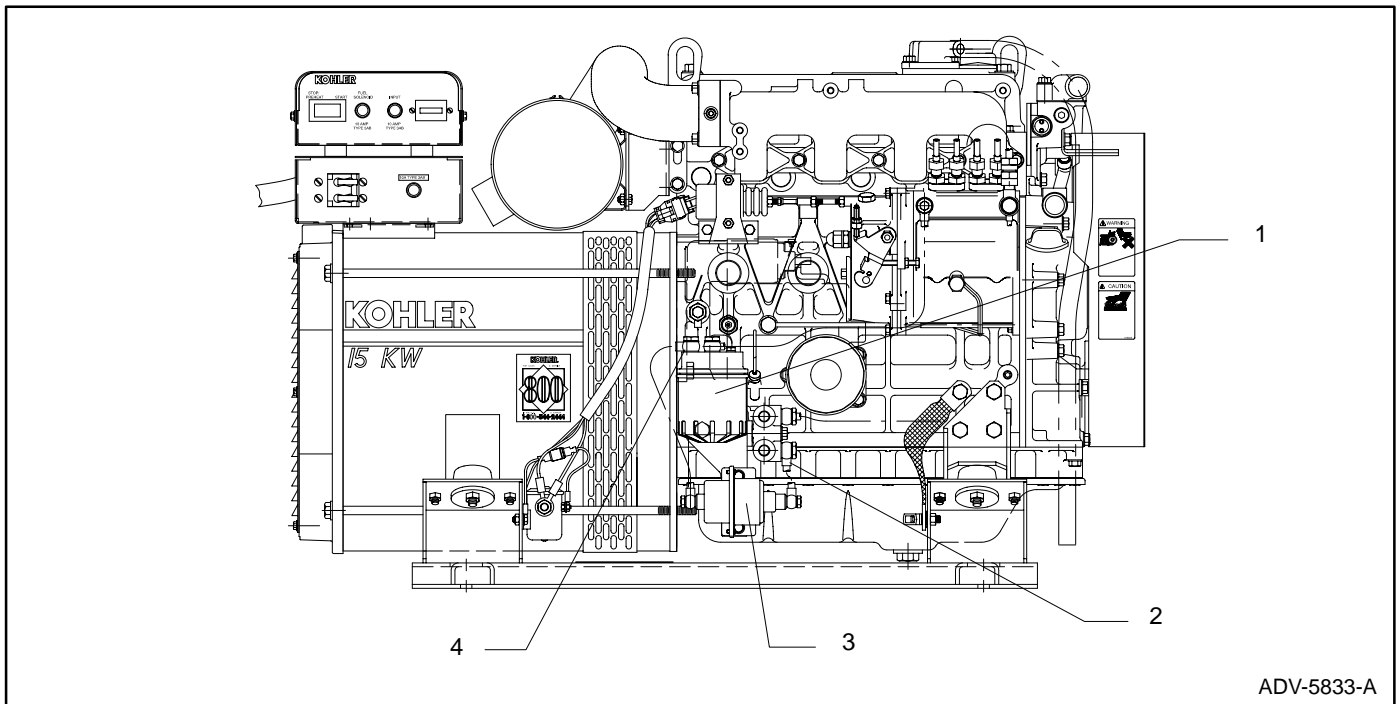
1. Disconnect generator set engine starting battery, negative (-) lead first.
2. Close fuel tank supply petcock.
3. Locate existing electric fuel pump on generator set and disconnect the steel fuel lines to the fuel-inlet connection and the fuel filter. See Figure 1.
4. Drain fuel from fuel line/hose into a suitable container to prevent spillage.
5. Cut two-wire lead assembly (leads "N" and "8") near fuel pump.
6. Remove screws attaching fuel pump and bracket assembly to engine.
7. Discard original fuel pump and steel fuel lines.
8. Mount fuel pump bracket (225462) to fuel inlet/return block mounting bracket using two screws (X-6049-8) and two flat washers (X-25-40).
9. Install three grommets (X-284-29) in holes of bracket.
10. Remove and discard the three studs supplied with the new fuel pump.
11. Install three studs (X-352-82), three flat washers (X-25-40), and three nuts (X-81-9) on the new fuel pump. Torque nuts to 30 in. lbs. (3.4 Nm).
12. Apply pipe sealant to male threads of two hose elbow connectors (X-391-20) and install into fuel pump's inlet and outlet. Do not final tighten elbows. See Figure 2.
13. Determine installed angle of hose elbow connectors (see Figure 2) and final tighten.
14. Place three flat washers (X-25-40) on fuel pump studs and install fuel pump assembly (229051) to mounting bracket.
15. Place three flat washers (X-25-40) over studs after installation of the fuel pump assembly onto the mounting bracket and secure with three lock nuts (X-101-7). See Figure 2.
16. Remove existing copper washers on the fuel filter and install the banjo union (X-6288-1) if not already on the fuel filter. Replace existing copper washers. See Figure 2.
17. Remove existing copper washers on the fuel-inlet connection point and install the banjo union (X-6288-1). Replace existing copper washers. See Figure 2.
18. Connect flexible fuel line (X-386-99) from the connector on the fuel-inlet side of the fuel pump to the

banjo union on the fuel-inlet connection point. Locate two hose clamps (X-426-9) 1/4 in. (6 mm) from end of the fuel line and tighten.

19. Connect flexible fuel line (X-386-74) from the connector on the fuel-outlet side of the fuel pump to the banjo union on the fuel filter. Locate two hose clamps (X-426-9) 1/4 in. (6 mm) from end of the fuel line and tighten.
20. Reconnect the fuel supply line to the fuel pump inlet fitting.
21. Connect the rubber boots on leads (229056) to terminals on the bottom of the fuel pump and attach wire clip. "N" attaches to the negative terminal on the fuel pump and "P" attaches to the positive terminal on the fuel pump.
22. Connect lead SWON-1812-404 to "N" lead from the fuel pump using insulink (X-367-3).
23. Connect lead SWO8-1812-404 to "P" lead from the fuel pump using insulink (X-367-3).
24. Connect insulink end of lead SWON-1812-404 to "N" lead in the engine harness.
25. Connect insulink end of lead SWO8-1812-404 to "8" lead in the engine harness.
26. Open fuel supply petcock.
27. Wipe up any spilled fuel and dispose of fuel in an environmentally safe manner.
28. Reconnect the generator set engine starting battery, negative (-) lead last.

Fuel Pump Kit

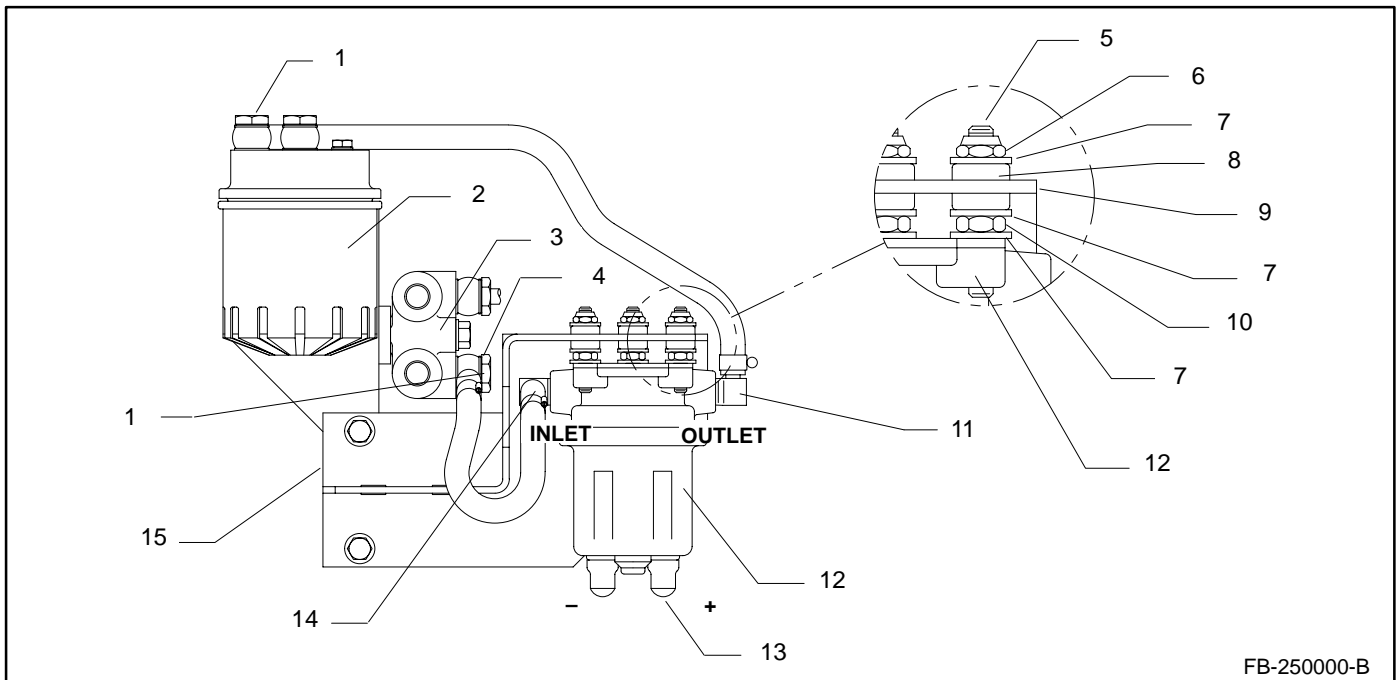
Parts List		
Kit: PA-225463		
Qty.	Description	Part Number
1	Lead (9 in.)	SWON-1812-404
1	Lead (9 in.)	SWO8-1812-404
3	Nut, nylon lock 1/4-28	X-101-7
11	Washer, plain 1/4 in.	X-25-40
3	Grommet	X-284-29
3	Stud	X-352-82
2	Insulink	X-367-3
1	Line, flexible fuel (17 in.)	X-386-74
1	Line, flexible fuel (8 in.)	X-386-99
2	Connector, hose elbow	X-391-20
4	Clamp, hose	X-426-9
2	Screw, hex head cap	X-6049-8
2	Union, banjo	X-6288-1
3	Nut, hex 1/4-28	X-81-9
1	Bracket, fuel pump mounting	225462
1	Pump, fuel	229051
2	Lead, wire	229056



ADV-5833-A

- | | |
|---------------------------------------|-----------------------------|
| 1. Fuel filter | 3. Fuel pump |
| 2. Fuel line to fuel-inlet connection | 4. Fuel line to fuel filter |

Figure 1. Unit With Standard Fuel Pump



FB-250000-B

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|------------------------------|--|
| 1. Banjo union (X-6288-1) | 11. Flexible fuel line (X-386-74), hose elbow connector (X-391-20), hose clamp (X-426-9) qty. 2 |
| 2. Fuel filter | 12. Fuel pump (229051) |
| 3. Fuel inlet/return block | 13. Lead (229056) qty. 2, insulink (X-367-3) qty. 2, use clips supplied with fuel pump to attach leads, lead (SWO8-1812-404), and lead (SWON-1812-404) |
| 4. Fuel-inlet connection | 14. Flexible fuel line (X-386-99), hose elbow connector (X-391-20), hose clamp (X-426-9) qty. 2 |
| 5. Stud (X-352-82) qty. 3 | 15. Fuel pump mounting bracket (225462), screw (X-6049-8) qty. 2, washer (X-25-40) qty. 2 |
| 6. Nut (X-101-7) qty. 3 | |
| 7. Washer (X-25-40) qty. 3 | |
| 8. Grommet (X-284-29) qty. 3 | |
| 9. Mounting bracket | |
| 10. Nut (X-81-9) qty. 3 | |

Figure 2. Fuel Pump Kit Installation