

# KOHLER<sup>®</sup> POWER SYSTEMS

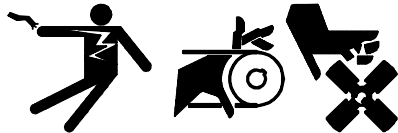


## INSTALLATION INSTRUCTIONS

### LP Fuel Conversion Kit PA-226361 For 10-12 kW Mobile Generator Sets

This kit allows 10-12 kW RV generators to be converted from gasoline to LP vapor withdrawal fuel system. Be sure to follow all safety precautions when installing the LP conversion kit.

**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.

**WARNING**



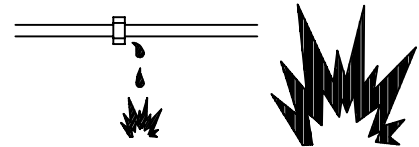
**Fire.**

**Can cause severe injury or death.**

Do not smoke or permit flame or spark to occur near fuel or 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. When removing fuel line or carburetor, use a proper container to catch all fuel.  
*(Gasoline Models Only.)*

**WARNING**



**Explosive fuel vapors.**

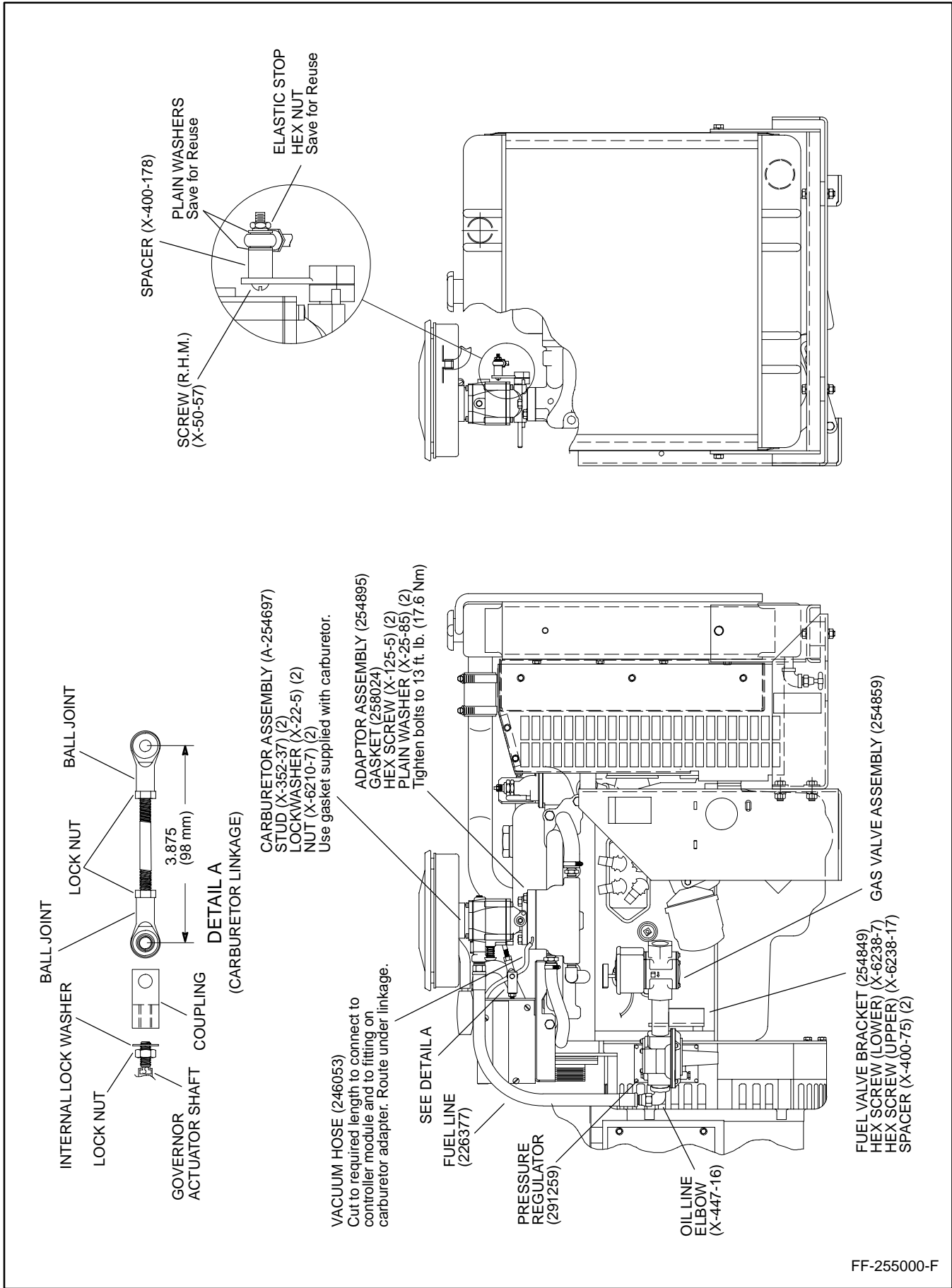
**Can cause severe injury or death.**

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

**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.

**Explosive fuel vapors can cause severe injury or death.** Fuel leakage can cause an explosion. Check LP vapor gas fuel system for leakage using a soap-water solution with fuel system test pressurized to 6-8 ounces per square inch (10-14 inches water column). Do not use test solutions that contain ammonia or chlorine, since the soap will not bubble for an accurate leakage test.

*(LP Vapor Gas Models only.)*

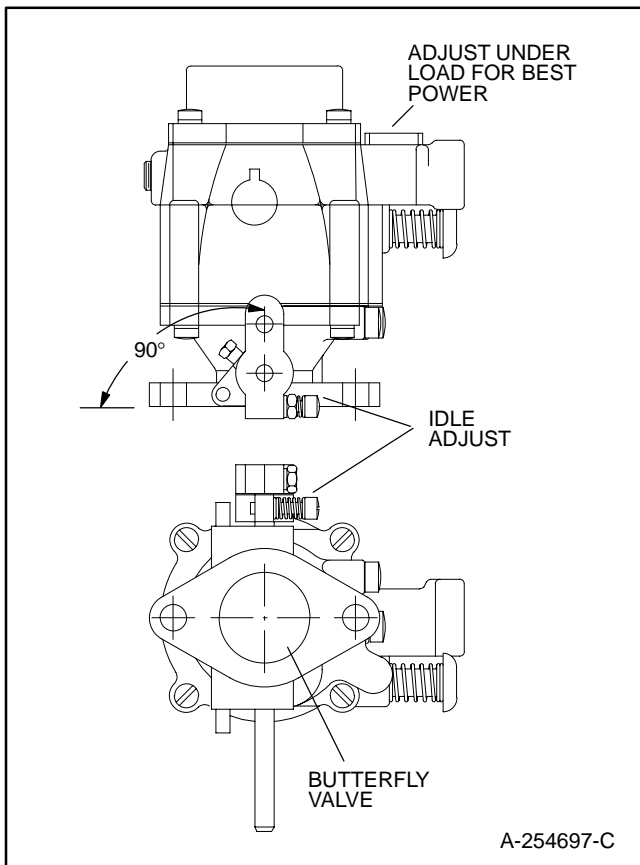


FF-255000-F

Figure 1. LP Fuel Conversion Kit

## INSTALLATION

1. Move controller START/STOP switch to STOP position.
  2. Disconnect battery, negative lead first.
  3. Remove air cleaner, gaskets, and mounting hardware. Retain these parts for reuse.
  4. Remove fuel pump lead, fuel pump, and mounting brackets. Cap fuel line and disconnect fuel line at gas tank. Cap fuel tank connection. Drain all fuel from fuel tank and generator set. Cap and secure both ends of the fuel line to prevent contamination.
  5. Remove choke leads and anti-diesel solenoid from intake manifold and ignition coil. Replace nut and lockwasher on ignition coil.
  6. Disconnect linkage from carburetor. Retain #10 plain washers and 10-32 elastic stop hex nut for reuse.
  7. Remove carburetor, fuel line, gasket, and carburetor mounting screws.
- NOTE**
- Use UL listed pipe-sealing compound suitable for use with LP gas at all threaded connections to prevent dangerous fuel leaks.
8. Install gas valve assembly (254859) and pressure regulator (291259) on fuel valve bracket (254849) as shown in Figure 1.
  9. Attach the fuel valve bracket to engine block with one 3/8-16 x 2.50-in. hex screw (X-6238-7), 3/8-16 x 2.25-in. hex screw (X-6238-17), and two 0.406 x 0.625 x 0.297-in. spacers (X-400-75).
  10. Connect gas valve assembly leads to engine harness connector P8.
  11. Using pipe-sealing compound, install 90° oil line connection elbow (X-447-16) in pressure regulator.
  12. Clean carburetor mounting flange on intake manifold to remove any remaining gasket material. Do not allow gasket material (or any other foreign material) to fall into intake manifold.
  13. Install carburetor adapter assembly (254895), with gasket (258024), two 5/16-18 x 1.00-in. hex screws (X-125-5), and two 5/16-in. plain washers (X-25-85). Torque screws to 13 ft. lbs. (17.6 Nm).
  14. Install two studs (X-352-37) in carburetor adapter assembly.
  15. Install carburetor (A-254697) on adapter with gasket (supplied with carburetor), two 5/16 internal tooth lock washers (X-22-5), and two 5/16-18 hex nuts (X-6210-7). (See CARBURETOR ADJUSTMENT section following.)
  16. Connect carburetor linkage with one 10-32 x 1.50-in. R.H.M. screw (X-50-57), 0.219 x 0.500 x 0.640-in. spacer (X-400-178), two #10 plain washers, and one 6-32 hex nut.
  17. Cut vacuum hose (246053) to required length and connect to fitting on carburetor adapter assembly and controller module. Route hose under linkage.
  18. Using thread-sealing compound, connect flexible fuel line (226377) to 90° elbow on pressure regulator and carburetor.
  19. Using thread-sealing compound, connect fuel supply line to gas valve assembly.
  20. Reinstall air cleaner.
  21. Reconnect battery, negative lead last.



**Figure 2. Carburetor Assembly**

## CARBURETOR/LINKAGE ADJUSTMENT

- Loosen actuator shaft lock nut. Advance lock nut and coupling to the end of threaded portion of actuator shaft (see Figure 1, Detail A).
- Loosen carburetor link arm lock nuts, and advance ball joints until the center to center dimension is 3.875 inches (98 mm). Tighten lock nuts to secure.
- Loosen throttle level screw. Hold butterfly valve in the closed position. (Check to see if the carburetor idle screw is not turned in too far. To set properly, partially back the screw out. Hold the butterfly valve closed and advance the screw until it touches the stop, then advance the screw an additional 1/4 turn.) Rotate throttle lever 90° in relation to the carburetor mounting base. Tighten throttle lever screw (see Figure 2).
- Verify that the carburetor linkage is the proper length. To check the adjustment, disconnect the ball joint from the carburetor throttle lever. With the carburetor butterfly valve in the closed position and the governor actuator in the shutoff position, the ball joint hole should not align with the hole in the carburetor throttle lever (it should appear that the linkage is too short). Adjusting the linkage in this manner will ensure that the throttle completely closes before the actuator bottoms out.
- Reconnect the carburetor linkage to the throttle lever. Check throttle linkage for free movement.
- After assembly is completed, start generator and adjust main fuel screw for maximum power under full load condition.
- Adjust the governor control box for the best response operation.

## Parts List

Kit PA-226361		
Qty.	Description	Part Number
1	Carburetor Assembly	A-254697
2	Screw, hex, 5/16-18 x 1.00 in.	X-125-5
2	Washer, lock, internal tooth, 5/16 in.	X-22-5
2	Washer, plain, 0.344 x 0.687 x 0.065 in.	X-25-85
2	Stud, 5/16-18 UNC-2A x 1.03 in.	X-352-37
1	Spacer, 0.219 x 0.500 x 0.640 in.	X-400-178
2	Spacer, 0.406 x 0.625 x 0.297 in.	X-400-75
1	Elbow, oil line connection, 90°	X-447-16
1	Screw, R.H.M., 10-32 x 1.50 in.	X-50-57
2	Nut, whiz, 5/16-18	X-6210-7
1	Screw, hex, 3/8-16 x 2.25 in.	X-6238-17
1	Screw, hex, 3/8-16 x 2.50 in.	X-6238-7
1	Line, flexible fuel	226377
1	Hose, vacuum	246053

<b>Parts List</b>		
<b>Kit PA-226361</b>		
<b>Qty.</b>	<b>Description</b>	<b>Part Number</b>
1	Bracket, fuel valve	254849
1	Valve Assembly, gas	254859
1	Adapter, sub-assembly	254895
1	Gasket, exhaust flange	258024
1	Regulator, pressure	291259