



Straight LP Conversion Kit — PA-241881 Model 7.5kW RV

This listed kit may be installed on L-654-powered RV Generator Sets to convert from gasoline to a straight LP fuel.

Warning

EXPLOSIVE GASES! LPG fuels are highly explosive. Proper ventilation is imperative. Be aware these gases are heavier than air and tend to settle into low areas where even the slightest spark can cause explosion.

Warning

UNINTENTIONAL CRANKING! Disconnect starting cables (negative lead first) to prevent sparks or unintentional cranking while working on unit.

Warning

Pipe joint sealing compound Classified by Underwriters Laboratories, Inc. and suitable for use with LP-Gas must be used at all fuel line pipe joints.

Warning

PRESSURIZATION! After all LP-Gas connections have been completed, the entire system shall be test pressurized to 6-8 ounces (10-14 inches water

column). Test the connections for leakage with soapy water or bubble solution. Do not use solutions that contain ammonia or chlorine for soap will not bubble for an accurate leakage test.

Note

Before you can begin installing this kit it is necessary for you to remove the unit from its mounting in order to be able to remove and remount the necessary parts.

Removing Gasoline Parts

Warning

When removing fuel line and carburetor catch gas in a proper container to prevent fire or explosion from spills.

1. Remove fuel pump, fuel pump gasket, fuel solenoid and fuel line.
2. From governor lever remove ball joint and throttle rod. Remove air cleaner, elbow, air cleaner gasket, choke lead, carburetor assembly (including choke) and intake elbow. Remove breather hose from valve cover. (NOTE: Retain ball joint and hex nuts; air cleaner assembly and mounting hardware.)

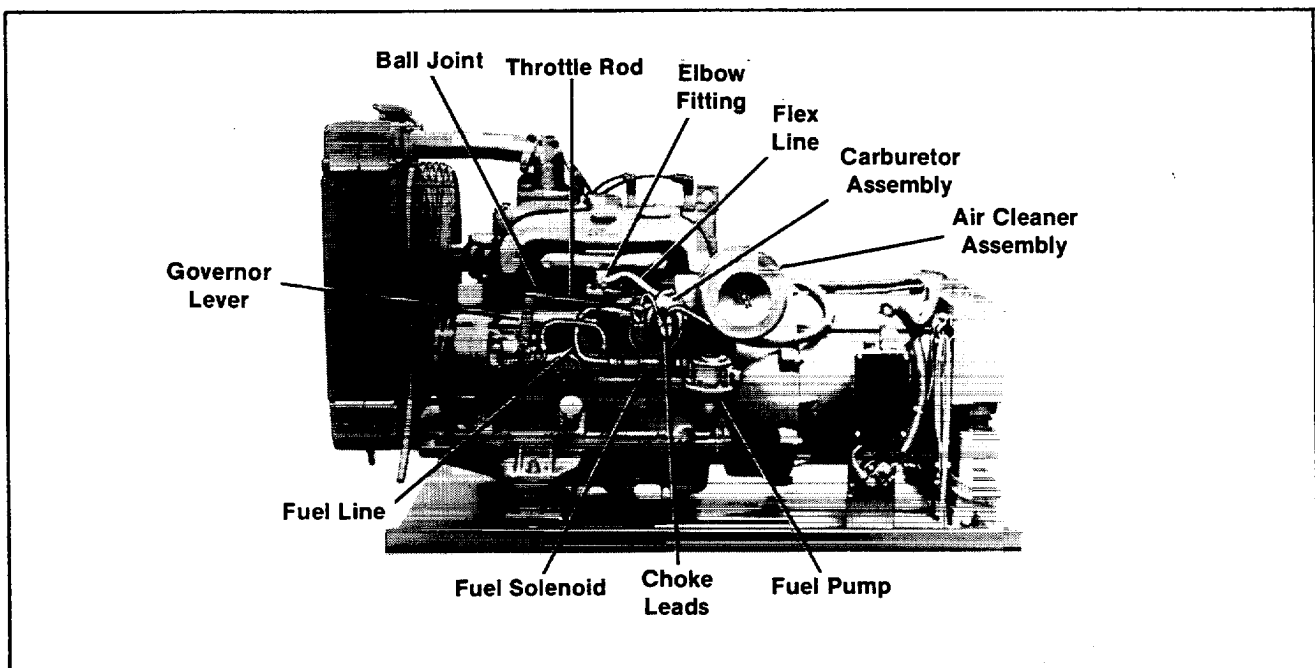


Figure 1. Gasoline Parts to be Removed

3. Disconnect elbow fitting and flex line from intake manifold.
4. Replace the fuel pump with cover gasket (240260) and cover (285601). Attach with two screws (X-154-6).
5. Replace elbow intake with pipe plug (X-75-17).
6. Relocate low oil pressure switch and elbow to accommodate repositioning of air cleaner. See figure 3 for new location. Insert pipe plug (X-75-17) in old switch opening.

Connecting LP Gas Parts

1. Attach throttle rod (241408) to throttle lever on LP carburetor with retainer clip (241409).
2. Place carburetor gasket in position and attach with carburetor to intake manifold with two screws (X-5-3), lockwashers (X-20-1) and hex nuts (X-81-1).
3. Connect ball joint to back of governor lever with hex nut taken off with throttle rod. Screw throttle rod to ball joint, secure with other hex nut off of old throttle rod. Attach street elbow X-391-15 to inlet on carburetor. See figure 3 for position of elbow.
4. To bottom of carburetor mount adapter gasket and air cleaner elbow with washers (X-18-2), plain washers (X-25-4) and screws (X-51-44).
5. Making sure adapter gasket is in position attach air cleaner base plate to air cleaner elbow. After base is secure, mount element and cover to base, tighten with wing nut.
6. Connect breather line (X-386-40) to valve cover breather outlet and air intake elbow.

To Connect LP Regulator

1. To mount regulator bracket, measure 14-1/8 inches from radiator end and 5/16 inches from top of mounting trap, drill two holes .344 (11/32) inch in diameter, 5-3/4

inches apart on mounting tray. To drill holes for support bracket measure 22-21/32 inches from radiator end and 1/2 inches from the top of mounting tray, drill two holes .281 (9/32) inch in diameter, 1-3/16 inches apart. See figure 2.

2. Mount bottom of regulator to bracket using screws (X-5-13) and lockwashers (X-21-1). Secure regulator at top of bracket using screws (X-5-46), lockwashers (X-20-1) and hex nuts (X-81-1).
3. To gas regulator inlet attach in the following order after applying sealant to the male pipe threads: street elbow (SA-472), pipe connector (X-206-9), fuel valve (244621), and street elbow (SA-472). Make sure the fuel valve is at an angle so it clears the engine (30° angle). To the street elbow attach pipe nipple (X-206-2) and coupling (X-216-3). Place the U-bolt (X-397-1) over the coupling and through the holes on top of the support bracket. Tighten the U-bolt screws. Mount the support bracket to the mounting tray with screws (X-5-13) and lockwashers (X-20-1).
4. Bolt regulator assembly to mounting tray with screws (X-6-11), washers (X-21-1) and nuts (X-82-2).
5. Attach street elbow (X-391-13) to opening on top of regulator. Attach fuel line between regulator elbow (X-391-13) and carburetor elbow (X-391-15). Tighten with hose clamps.
6. To connect fuel valve wires: Check that battery has been disconnected. Cut valve wire "A" to reach mounting screw on tray (see figure 3). Strip wire to .38 inch and add terminal (X-283-15). Mount to tray with washer (X-22-16). Cut valve wire "B" to reach blue (#2) wire on harness. Cut off terminal on harness lead. Strip both wires to .38 inch and connect with insulink (X-367-3).
7. Regap spark plug to .018 inch.
8. Reconnect battery.

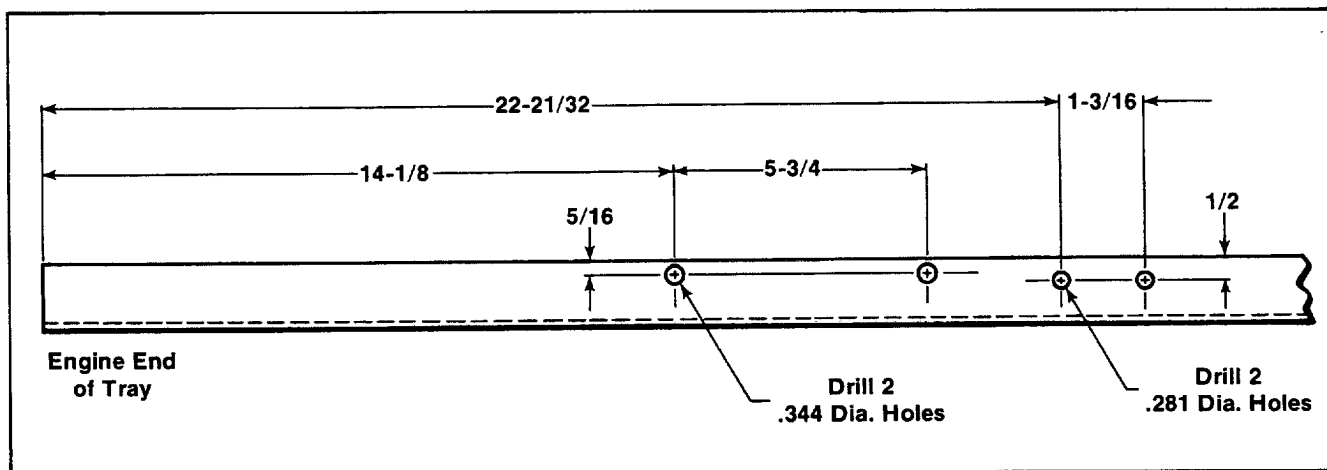


Figure 2. Drilling Instructions

Adjustments

1. **Carburetor Adjustments:** The LP carburetor has two adjustment screws, the top screw is the low speed adjustment and should be closed. The lower screw should be adjusted by turning the fuel adjustment screw in until it bottoms lightly. From the closed position back the screw out two complete turns. When running the generator set minor adjustments may have to be made to reach maximum power.
2. **Checking Gas Supply:** The gas supply pressure should not exceed six ounces. To check inlet pressure, remove plug on fuel inlet of gas regulator. Insert manometer or ounce pressure gauge. Adjust pressure to 4-6 ounces (7-11" water column). Inlet pressure is adjusted on primary regulator.
3. **Deration:** The kilowatts of the generator set will decrease 3.5% for each 1000 feet (305 meters) above sea level, 1% for each 10°F (5.5°C) above 60°F (16°C) and 9.6% when converted to LP fuel.

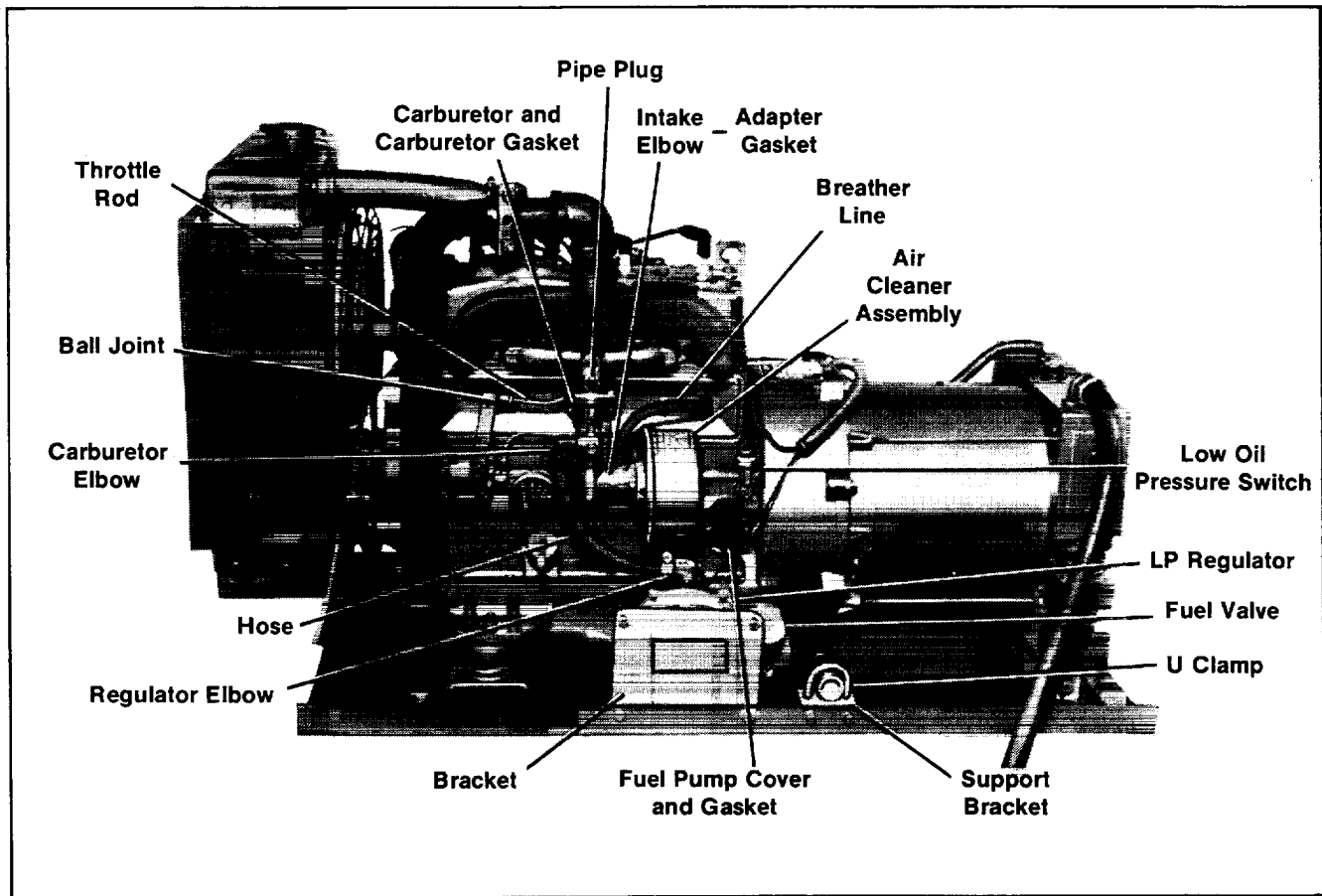
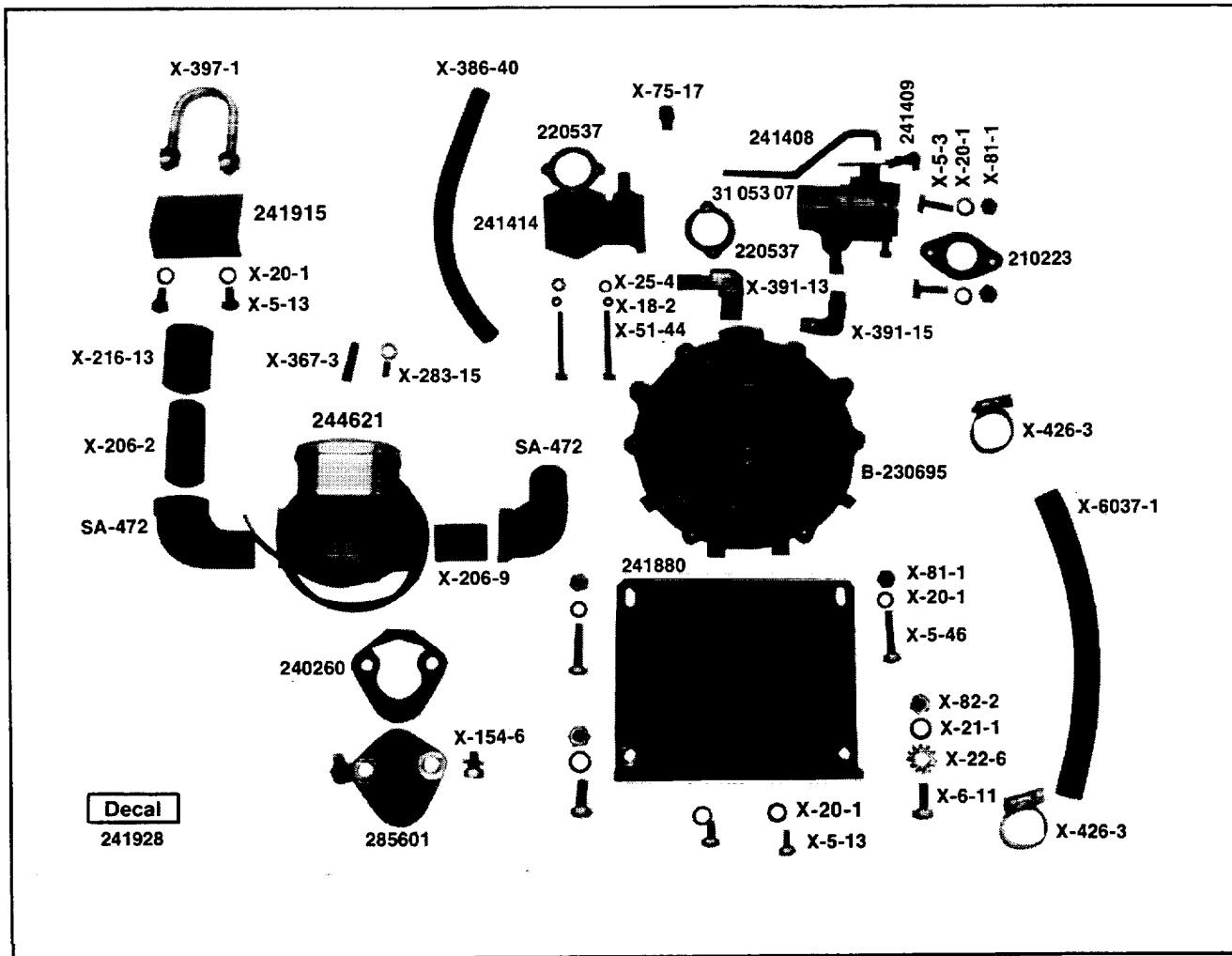


Figure 3. LP Gas Parts

Parts Listing



Part Name	Part Number	Qty.	Part Name	Part Number	Qty.
Screw	X-5-3	2	Elbow Hose	X-391-13	1
Screw	X-5-13	4	Elbow Hose	X-391-15	1
Screw	X-5-46	2	U-Bolt	X-397-1	1
Screw	X-6-11	2	Hose Clamps	X-426-3	2
Lockwasher	X-18-2	2	Street Elbows	SA-472	2
Lockwasher	X-20-1	8	Fuel Line	X-6037-1	1
Lockwasher	X-21-1	2	Carburetor Gskt.	210223	1
IET Washer	X-22-16	1	Adapter Gasket	220537	1
Washer	X-25-4	2	Gas Regulator	B-230695	1
Screw	X-51-44	2	Gasket Cover	240260	1
Pipe Plugs	X-75-17	2	Throttle Rod	241408	1
Hex Nuts	X-81-1	4	Retaining Clip	241409	1
Hex Nuts	X-82-2	2	Air Cleaner Elb.	241414	1
Sems Screws	X-154-6	2	Bracket	241880	1
Pipe Nipple	X-206-2	1	Support Bracket	241915	1
Pipe Connector	X-206-9	1	Fuel Valve	244621	1
Coupling	X-216-13	1	Cover	285601	1
Terminal	X-283-15	1	Carburetor	31 053 07	1
Insulink	X-367-3	1			
Fuel Line	X-386-40	1			