



INSTRUCTION BULLETIN

No. 340028
Machine: 6400 LQ/Gas
Published: 12-96/00
System: ENGINE

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation Instructions for Kit number 366060

SYNOPSIS / PROBLEM:

This kit contains the parts needed to install a Gas to LP conversion kit on the model 6400 Liquid-cooled/Gas sweeper.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: A fairly complete Metric tool set.

(Estimated time to complete: 10 hours)

PREPARATION:

1. Start the machine and raise the hopper. Engage the support arm. Shut off the machine.

FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.

2. Open the engine cover.
3. Disconnect battery cables from machine.



WARNING: Always disconnect battery cables from machine before working on electrical components.

TO REMOVE GASOLINE FUEL SYSTEM PARTS:

(Refer to FIG. 1)

1. Drain fuel completely from system. (Refer to FIG. 1)

FOR SAFETY: Keep flames and sparks away from fuel system service area. Keep area well ventilated.



WARNING: Work in a well ventilated area. Keep sparks and flames away from machine as a precaution against fire or explosion.

2. Disconnect existing fuel lines, fittings and fuel filters from fuel tank, carburetor and fuel pump and discard. (Refer to FIG. 1)
3. Remove all of the fuel lines and clamps from the machine. (Refer to FIG. 1)
4. Remove existing fuel tank, tank straps and tray from machine frame and discard. (Refer to FIG. 1)

5. Remove existing fuel pump from machine frame and discard. (Refer to FIG. 1)
6. Remove all of the remaining gasoline related parts. Use FIG. 1 as a reference for parts removal. (Refer to FIG. 1)

REMOVE ALL PARTS WITH AN ARROW POINTING AT THEM

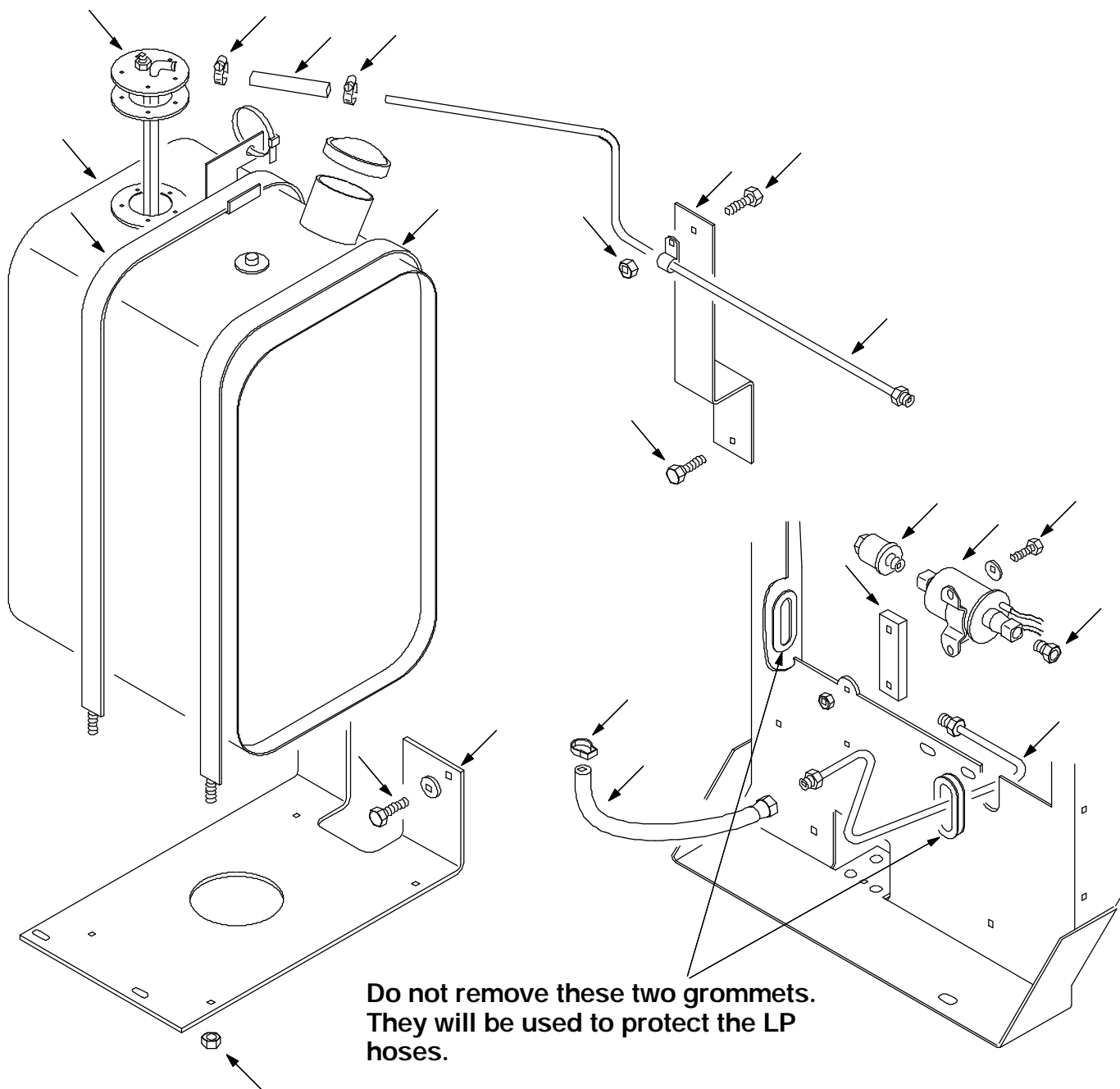


FIG. 1 - Gasoline Parts Removal Breakdown

TO PREPARE INSTRUMENT PANEL:
(Refer to FIG. 2)

1. Remove the existing fuel gauge and gauge light from the instrument panel. (Refer to FIG. 2)
2. Install the new plug button in place of the removed fuel gauge. (Refer to FIG. 2)

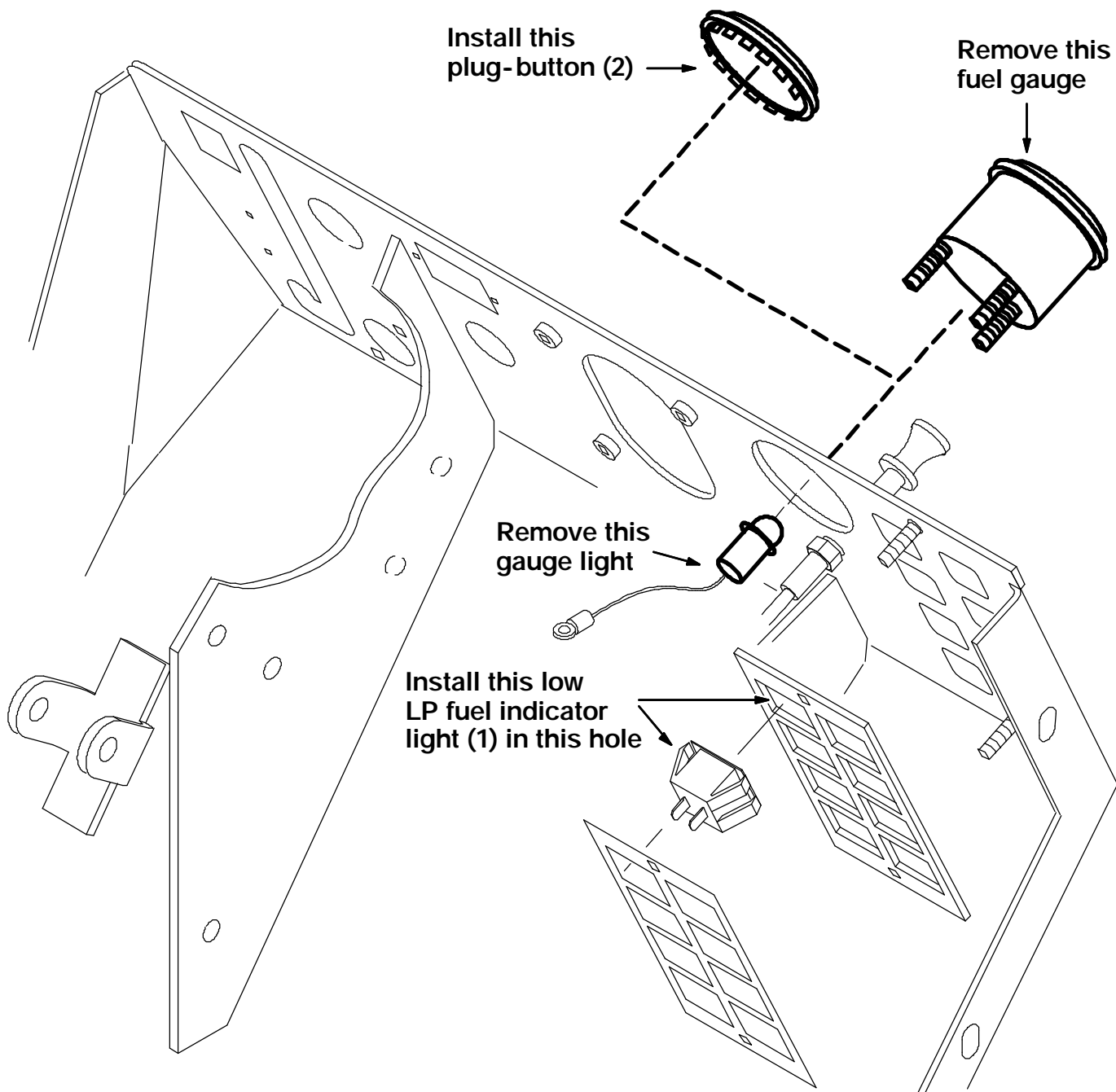


FIG. 2 - Instrument Panel Re-work

3. Remove the back panel on the indicator light holder. (Refer to FIG. 2)
4. Install the low LP fuel indicator light in the upper left space of the back panel. Reinstall the back panel on the light holder. (Refer to FIG. 2)
5. Connect the wires 34/BRN, 18/B orange and 18C/YEL to the low LP fuel indicator light. (Refer to FIG. 2)

TO INSTALL LP FUEL SYSTEM:

(Refer to FIG. 3 and 4)

1. Refer to FIG. 3 and 4 for reference when installing the LP conversion kit.
2. Drain the anti-freeze from the radiator and engine.
3. Install the tank weldment bracket (3), latch assembly (4), and plate mount weldment (5) in the machine. (Refer to FIG. 3)

NOTE: Use loctite PST joint sealant, or equivalent, on all LP connections.

4. Install the relief valve mount bracket (10) on the radiator support. (Refer to FIG. 3)
5. Install the fittings (11) and (9) in the mount bracket (10). (Refer to FIG. 3)
6. Install the two tee fittings (12) in the straight fittings.(11 and (9). (Refer to FIG. 3)
7. Install the pressure relief valve (13), straight fitting (14), and pressure switch (15) in the tee fitting (12). (Refer to FIG. 3)
8. Install the 24" LP hose (8) in the lower tee fitting (12). (Refer to FIG. 3)
9. Install the elbow fitting (7) and quick disconnect fitting (6) on the other end of the 24" LP hose (8). (Refer to FIG. 3)
10. Install one end of the LP hose (16) in the other side of the tee fitting (12). Route the LP hose (16) through the two grommets that were used for the gas fuel line. (Refer to FIG. 3)
11. Use the clamp (18) to attach the LP hose (16) out of the way of any moving components. (Refer to FIG. 3)
12. Install the inlet cap (19) on the fuel line nipple were the gas fuel line was connected. Install one of the worm drive clamps (32) on the inlet cap (19). (Refer to FIG. 4)
13. Install the Kubota carb venturi (21) and carb adaptor (22) on the existing carb. (Refer to FIG. 4)
14. Install the regulator bracket (23) on the back of the engine. (Refer to FIG. 4)
15. Install the regulator (26) and filter fuellock (35) on the regulator bracket (23) using the four hex screws (20). (Refer to FIG. 4)
16. Install the 90° fitting (37) in the end of the filter fuellock (35). Point the fitting down. Connect the LP hose (16) to the fitting (37). (Refer to FIG. 4)
17. Install the two 90° fittings (28) in both the filter fuellock (35) and regulator (26). Point the fittings (28) to the outside of the machine. Install the .375" fuelline (36) on the two fittings (28). (Refer to FIG. 4)
18. Install the brass fitting (27) in the regulator (26). Point it toward the back of the machine. Install the low pressure fuel line (33) on the brass fitting (27) and fitting on the carb venturi (21). Use two worm drive clamps (34). (Refer to FIG. 4)
19. Install the three straight brass fittings (25) in the ports on the fuellock (35), regulator (26), and engine block. Install the short vacuum hose (24) on the plastic tee fitting (38). Install the two vacuum hoses (40 and 39) on the tee fitting (38). Install the vacuum hose assembly on the three straight brass fittings (25). (Refer to FIG. 4)

20. Install the two 90° elbow fittings (29) in the regulator (26). Point the fittings toward the back of the machine. Install the two straight brass fittings (30) in the elbow fittings (29). Install the rubber hose (31) from the top brass fitting (30) to the engine block. Connect the other fitting (30) to the existing rubber hose on the engine. Use the worm drive clamps (32). (Refer to FIG. 4)

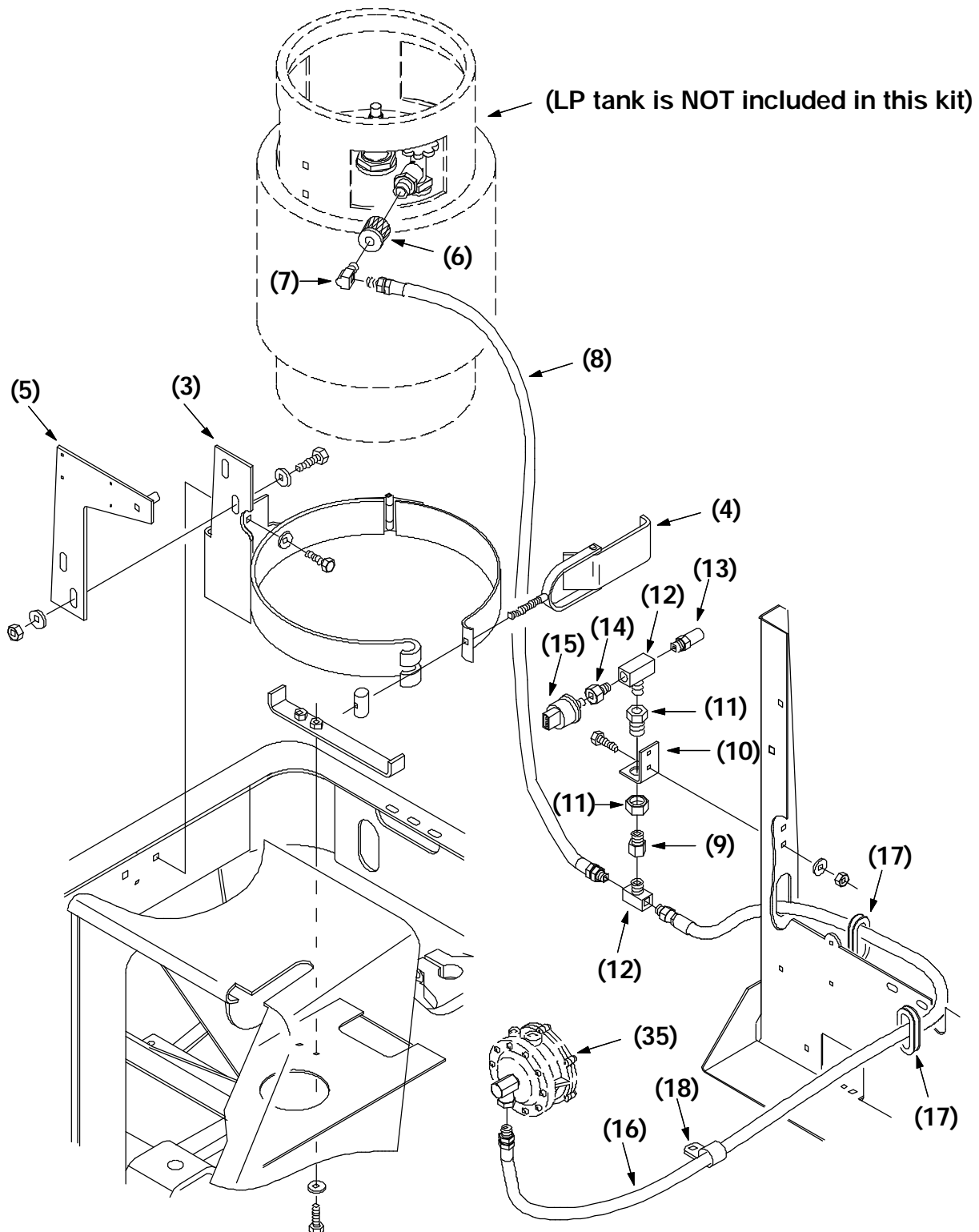


FIG. 3 - LP Fuel System Assembly

21. Refill the engine and radiator with anti-freeze.

22. Install a full LP tank (not included in this kit) in the machine. (Refer to FIG. 3)

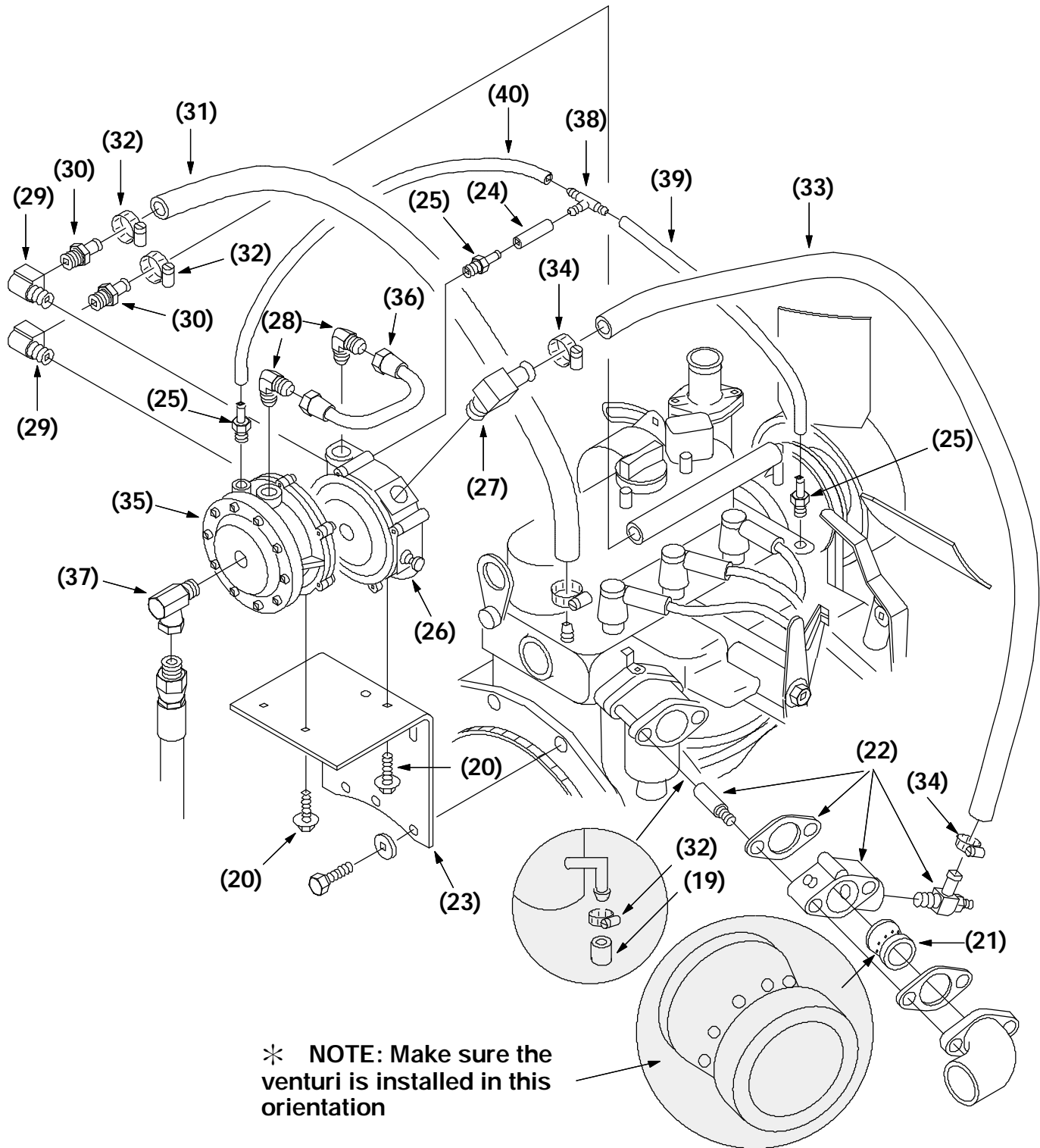


FIG. 4 - LP Fuel System Engine Assembly

23. Connect the quick disconnect fitting (6) to the full LP tank and open the tank valve. Check for any leaks at the fittings and hose connections. Start the machine and check for proper operation. (Refer to FIG. 3)

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BILL OF MATERIALS FOR GAS TO LP CONVERSION KIT 366060

Ref.	TENNANT Part No.	Description	Qty.
1	361075	Indicator light	1
2	82747	Plug-button, 2.09"	1
3	360405	Tank weldment bracket	1
4	53400-1	Latch assembly	1
5	361275	Plate mount weldment	1
6	26496	Quick disconnect coupling	1
7	27048	90° elbow fitting	1
8	10754	LPG hose, 24"	1
9	59892	Straight fitting	1
10	54343	Relief valve mount bracket	1
11	78122	Bulkhead fitting	1
12	53268	Brass tee fitting	2
13	24047	Pressure relief valve	1
14	17414	Straight fitting	1
15	23156	Pressure switch	1
16	360936	LPG hose, special	1
17	54345	Rubber grommet	2
18	67767	Cable clamp	1
19	366061	Gas carb fuel inlet cap	1
20	16949	Hex screw, .25 x 20 - .75	4
21	360494	Kubota carb Venturi	1
22	360493	Kubota carb adaptor	1
23	361925	Regulator bracket	1
24	17164	Vacuum hose, 1.5"	1
25	40607	Straight brass fitting	3
26	360495	Kubota regulator	1
27	47388	90° brass fitting	1
28	52424	90° fitting	2
29	27048	90° elbow fitting	2
30	27769	Brass straight fitting	2
31	76589-2	Rubber hose, 10"	1
32	43844	Worm-drive clamp, .25x.62	4
33	361099	Low pressure fuel hose	1
34	86824	Worm-drive clamp, .50x1.06	2
35	59807	Filter fuellock	1
36	59808	Fuelline, .375"	1
37	11442-1	90° fitting	1
38	59886	Plastic tee fitting	1
39	09893	Vacuum hose, 12"	1
40	57578	Vacuum hose, 8"	1