



FIELD SERVICE CAMPAIGN – 16130

08 November 2016

SUBJECT:

PSI Liquid Propane Gas (LPG) Fuel Fill Valve Inspection Procedure

MODELS INVOLVED:

CE Bus

DEFECT DESCRIPTION:

Certain fuel fill ports may have not been tightened to their assembly specification at the time of assembly by the supplier and require replacement.

ELIGIBILITY:

This procedure applies ONLY to vehicles built 14 May 2015 through 19 July 2016 equipped with PSI 8.8L Propane Engine marked in the International® Service PortalSM with FSC 16130. All other propane models built in this time period have either been repaired or determined to not require this repair. Also complete any other open campaigns listed on the Service Portal at this time.

TOOLS REQUIRED:

Special tools are not required for this procedure.

PARTS REQUIRED:

Part Number	Description	Quantity
6125707C1	Fuel Fill Valve, Bus Body, Propane Fuel	1
PSIZ108417	Seal, Fuel Fill Hose Propane (O-ring)	1

Table 1 Parts Information

WORK INSTRUCTIONS

GOVERNMENT REGULATION: Engine fluid (oil, fuel, and coolant) may be a hazard to human health and the environment. Handle all fluid and other contaminated materials (such as filters and rags) in accordance with applicable regulations. Recycle or dispose of engine fluids, filters, and other contaminated materials according to applicable regulations.

WARNING! To prevent property damage, personal injury, and / or death, park vehicle on hard flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in both directions.

WARNING! To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING! To prevent property damage, personal injury, and / or death, keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases.

1. Park vehicle on flat surface.
2. Shift transmission into Park or Neutral and set parking brakes.
3. Install wheel chocks.
4. Open fuel fill door.

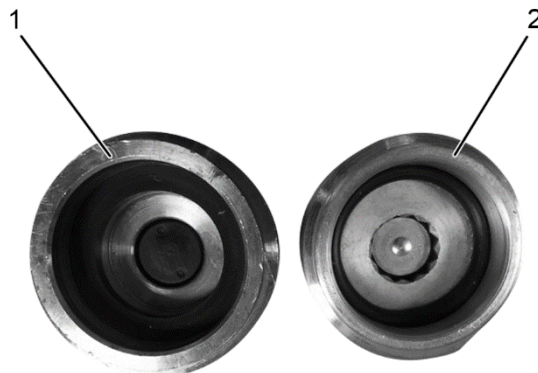


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Figure 1. Valve Cap

1. Marshall valve cap
2. Sherwood valve cap

5. Identify fuel fill valve manufacturer by inspecting valve cap (Figure 1, Items 1 & 2).
6. Remove dust cap from fill valve (Figure 1, Items 1 and 2).

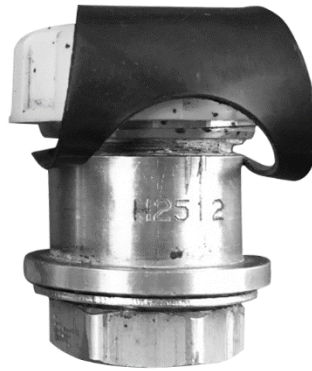


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Figure 2. Valve Identification

1. Marshall valve
2. Sherwood valve

7. Double-check identification by inspecting valve (Figure 2, Items 1 and 2). If valve is Marshall, continue to next step. If Sherwood, proceed to Step 30.



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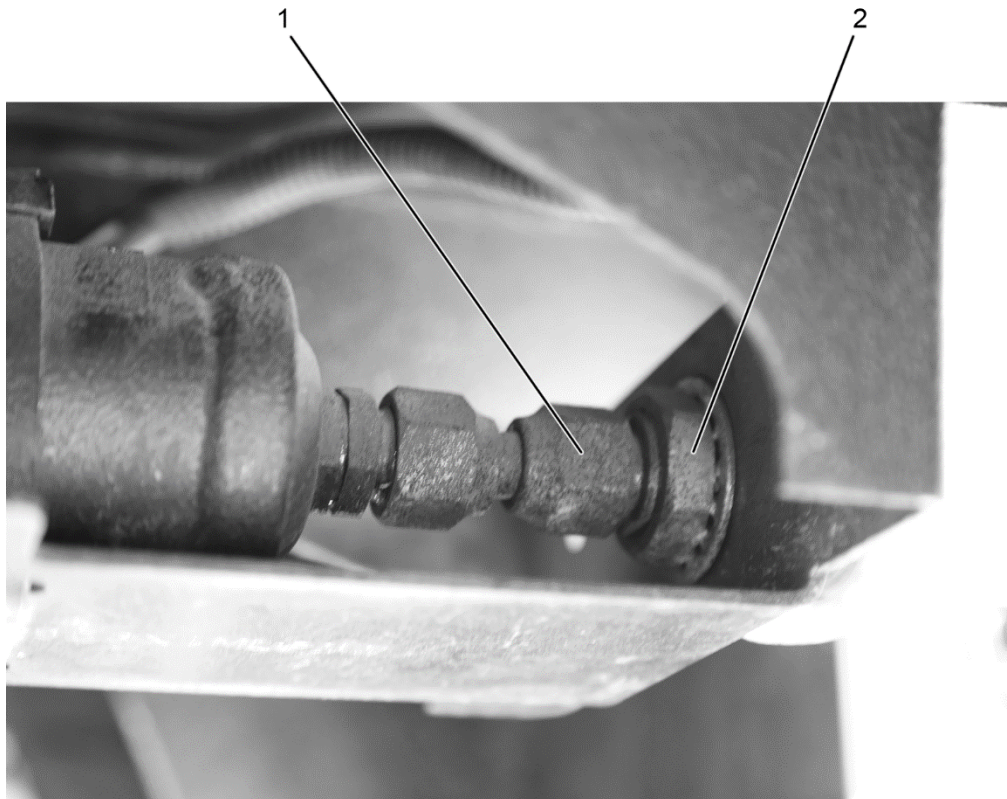
Figure 3. Marshall Valve Date Code

8. For Marshall valves, use a mirror to locate date code (Figure 3). The format of this code is:
 - a. First letter = Month (A= Jan, B= Feb, etc.)
 - b. First two digits = Day of the month
 - c. Last two digits = Year (12 = 2012, 15 = 2015)

Month Code	Year Code	Action
A,B,C,D,E,F,G,H,I,J,K,L	11,12,13,14	Replace Valve
A,B,C,D,E,F,G,H,I,J	15	Replace Valve
K,L	15	Acceptable – Do Not Replace
A,B,C,D,E,F,G,H,I	16	Acceptable – Do Not Replace

Table 2 Marshall Valve Date Code Reference

9. Using Marshall Valve Date Code Reference (Table 2), determine whether valve must be replaced. If valve does NOT need to be replaced, proceed to Step 30.



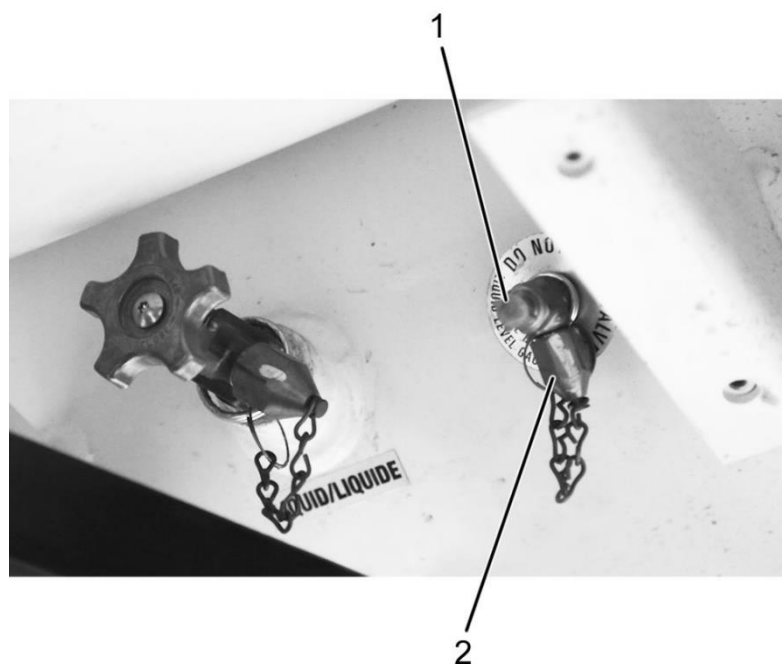
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Figure 4. Fuel Fill Valve Assembly (Underside of Bus)

1. Coupler
2. Lock nut

10. Loosen coupler (Figure 4, Item 1). Let vapor drain.
11. Remove lock nut (Figure 4, Item 2) holding fuel fill valve to mount.
12. Remove fuel fill valve from mount.
13. Install new fuel fill valve in mount.
14. Install new lock nut (Figure 4, Item 2). Using a torque wrench, tighten to 30 lb-ft (41 N·m).
15. Connect coupler (Figure 4, Item 1) to fuel fill valve. Using a torque wrench, tighten to 30 lb-ft (41 N·m).

16. Remove protective cover from vehicle fuel tank.



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Figure 5. Vehicle Fuel Tank – 80% Liquid Level / Spit Valve

1. 80% liquid level / spit valve
2. 80% liquid level / spit valve cap

17. Remove 80% liquid level / spit valve cap (Figure 5, Item 2).

18. Remove dust cap from fill valve (Figure 1, Items 1 and 2).

19. Check that fill valve O-ring is present and free of damage.

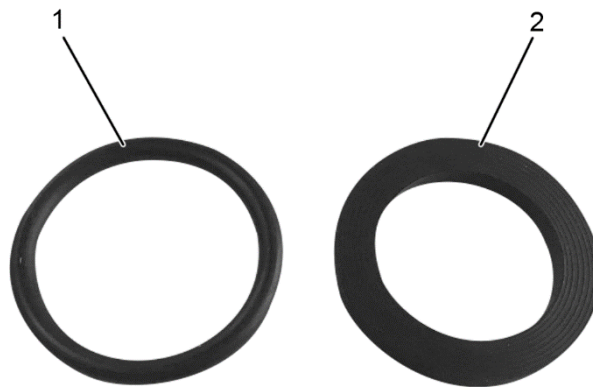
20. Connect dispenser nozzle to vehicle fill port.

21. Open 80% liquid level / spit valve (Figure 5, Item 1).

22. Squeeze dispenser nozzle handle to fill tank. (This removes air from the fuel hose by pushing the air into the fuel tank.)

23. Wait ten minutes to allow LPG in tank to vaporize. (This removes air from the fuel tank.)

24. Release dispenser nozzle handle.
25. Close 80% liquid level / spit valve (Figure 5, Item 1).
26. Install 80% liquid level / spit valve cap (Figure 5, Item 2). Tighten cap securely.
27. Install protective cover on vehicle fuel tank. Using torque wrench, tighten bolts to 18 - 24 lb-ft (24 - 32 N·m).
28. Disconnect dispenser nozzle from vehicle fill port.
29. Proceed to Step 32.



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Figure 6. O-ring Identification

1. Old “circular” O-ring
2. New “square” O-ring

NOTE: Marshall valves were built with new “square” O-ring but may have been replaced with “circular” O-ring in service.

30. Inspect O-ring at base of fill valve:
 - a. If O-ring is new “square” type (Figure 6, Item 2), proceed to Step 32.
 - b. If O-ring is “circular” type (Figure 6, Item 1), remove O-ring using pick or small screwdriver.
31. Install new “square” O-ring (Figure 6, Item 2).

32. Replace dust cap.

33. Close fuel fill door.

34. Remove wheel chocks.

LABOR INFORMATION

Operation number must appear on all claims.

Table 3 Labor Information

Operation Number	Description	Time
A40-16130-1	Inspection and/or Replace O-ring only	0.3 hr
A40-16130-2	Inspect and Replace Fill Port	0.5 hr

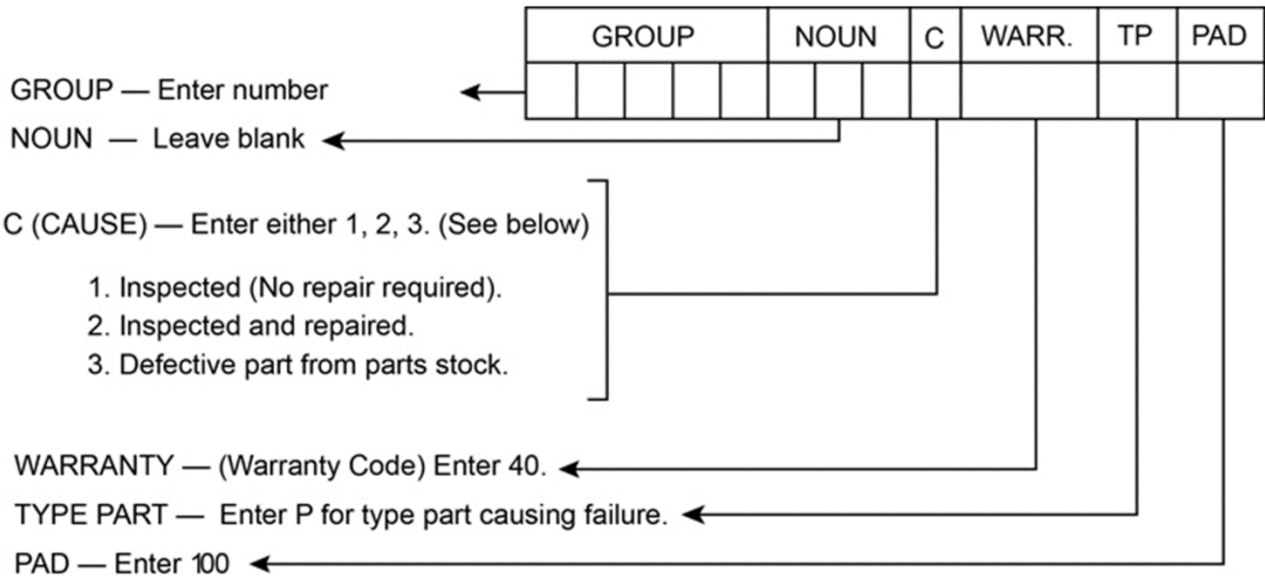
WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Field Service Campaign 16130.

Section 7 of the Warranty Policy and Procedures Manual contains further information related to the submission and processing of AFC / Recall claims.

As with all claim submissions, items acquired locally must be submitted in the “Other Charges” tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, or tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

To make sure this important improvement is made in a timely manner, all claims for 16130 activity must be submitted by 08 November 2017 or within the normal warranty period for the component, if after 08 November 2017.



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