

Vehicle Safety Recall - Technical Service Bulletin

PROMPT ACTION REQUIRED

Attention: McNeilus Product Owner
Subject: 140" Frame Mount CNG with Luxfer Valves
Models Affected: Bridgemaster Rear Discharge Mixer and Standard Rear Discharge Mixer
Model Year: 2016 - 2018
Date: January 2019

Purpose:

McNeilus Truck and Manufacturing, Inc. has decided that a defect which relates to motor vehicle safety exists in certain Bridgemaster mixer and Standard mixer trucks with optional composite CNG type 4 Vessel. McNeilus has identified that some trucks equipped with Luxfer One-Turn valves (OTV) attached to various Luxfer CNG tanks may experience a valve separation. An operator when operating one of the Luxfer OTV may experience a valve body separation when turned on after being turned off. If the OTV valve body separates, it may strike the operator resulting in a possible injury, and lead to fuel leak of the CNG fuel, resulting in a possible fire or explosion, causing possible injuries to nearby persons or property damage to nearby structures or property.

Affected Vehicles:

The affected vehicle population is McNeilus Bridgemaster mixers and Standard mixers with 140" frame mount CNG units with Luxfer valves built between December 2016 and September 2018. This procedure will instruct how to remove and replace the valve with another valve from a different manufacturer that will function properly as well as specific tubes and fittings on each CNG tank. Please refer to the attached VIN list of affected vehicles.

Time Completion:

Upon receipt of the parts, complete the enclosed procedure for each affected unit. The time of accomplishment may vary due to a number of factors; however, the estimated time for completion of the procedure is 1.5 hours per tank under normal circumstances.

Required Action:

Review and verify your ownership of all affected serial numbers of McNeilus vehicles. If McNeilus records indicate that you are the owner of one or more affected units, a Serial Number List is enclosed. **Please be reminded that it is a violation of Federal law for you to sell or lease the vehicles covered by this notification until this recall has been performed on these vehicles. Substantial civil penalties apply to violations of this law.** If the CNG fuel system needs to be turned off, follow the instructions included in your owner's manual for proper fuel shut-off by using the shut-off valves located near the CNG fuel center. The Luxfer valves should only be used if the CNG fuel system is being serviced. If the main service valve is turned off for any reason, do not turn the valve back on until the repair is completed.

Reimbursement of Costs:

Affected units shall be repaired using the customer’s own qualified service technicians - at no cost to the owner. The repairs should take approximately 1.5 hours per tank.

Labor Reimbursement:

In order to receive credit, claims are to be submitted through the normal warranty claim system. Claims must be received within 30 days of the repair. Claims must include the McNeilus serial number of the vehicle, the customer asset number, and the number of this bulletin.

Parts Reimbursement:

Parts and ground shipping will be reimbursed to the customer. Parts necessary for this repair must be ordered from McNeilus Parts at 888-686-7278.

Claims are to be submitted through the normal warranty claim system. Claims must be received within 30 days of the repair. Claims must include the McNeilus serial number of the vehicle, the customer asset number, and this bulletin’s number.

Contacts:

If you have questions or need further information, please contact a McNeilus National Service Representative at 888-686-7278.

Enclosures:

- Valve and tube replacement procedure
- VIN List of Affected Vehicles

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| SAFETY NOTICE |
| Perform your company’s Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate. |

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| SAFETY NOTICE |
| Wear face shield and safety goggles when operating defective valve. |

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| SAFETY NOTICE |
| Use appropriate Personal Protective Equipment (PPE) as required by your company. |

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|---|
| SAFETY NOTICE |
| Wear gloves when operating defective valve. |

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| SAFETY NOTICE |
| Do not operate valve unless servicing CNG fuel system. |

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| SAFETY NOTICE |
| Wear fall protection if operating valve at heights - on a ladder or on top of vehicle. |

PROCEDURE: Remove and replace Luxfer valves with another valve and specific fittings


Tools and Equipment Required (Customer to supply own):

- Set of wrenches
- Torque wrench (ft.-lbs.)
- Leak detection equipment


Parts Required (Order from McNeilus):

| Item | Part Number | Description | Qty. |
|------|-------------|-----------------------------|------|
| 1 | 1479550 | Valve,MAN,CNG,Beta | 1 |
| 2 | 1603615 | TUBE,CNG,PRD,21 FR,FEED,140 | 1 |
| 3 | 1540693 | PRD,PLUG,ST,8FL | 1 |
| 4 | 1541321 | FTG,90 8JIC-8JIC FM SS | 1 |
| 5 | 1487506 | FTG,PLUG 6 ST INHEX | 2 |
| 6 | 1493152 | FTG,ST 8FS-6ORG MM SS | 1 |
| 7 | 1481187 | FTG,ST 6 PTC-6 SAE,SS | 1 |

1. Follow the defueling process found in the operator’s supplement manual that was provided with your vehicle. If you require another copy, download one by going to streetsmartparts.com.


 DANGER

KEEP THE EQUIPMENT AREA WELL VENTILATED. CNG is considered to be non-toxic by inhalation. The effects of inhalation of high concentrations may cause the same effects as asphyxiation. This includes central nervous system depression such as dizziness, drowsiness, headache, and similar narcotic symptoms, but no long-term effects if removed from the exposure area. Numbness, a “chilly” feeling, and vomiting have been reported from accidental exposures to high concentrations. Failure to follow will cause serious personal injury or death.

 WARNING

Never purge the tanks in an enclosed area. Be sure there are no sources of ignition in the area.

Failure to comply may result in explosion, fire, or serious personal injury or death.

 WARNING

PRD lines are always pressurized. The tanks the lines are connected to must be completely depressurized prior to working on this plumbing.

Failure to completely depressurize the lines may result in serious personal injury or death.

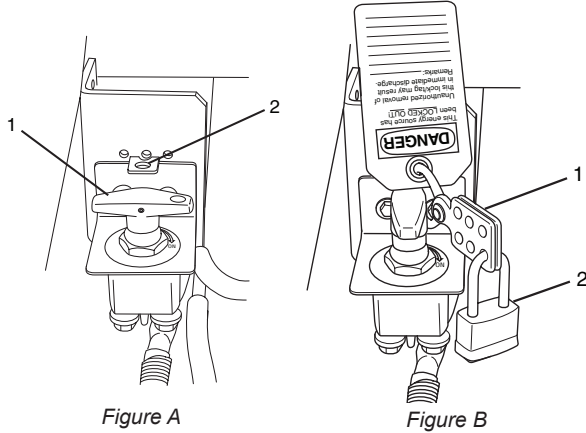
2. Perform your company’s Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate. Chock the vehicle’s wheels and place the vehicle in park with the parking brake engaged.

3. Battery Disconnect Switch

If your vehicle is equipped with a BATTERY DISCONNECT switch, it is located near the battery box. Use the battery disconnect switch when performing any maintenance so the vehicle cannot accidentally be started.

1. Turn the battery disconnect switch (Figure A, Item 1) counterclockwise so the hole on the switch aligns with the hole in the bracket (Figure A, Item 2).
2. Install the safety lockout device ring (Figure B, Item 1) through the holes on the battery disconnect switch and the bracket.

3. Install a padlock (Figure B, Item 2) onto the safety lockout device ring, lock it, and put the key in your pocket. If more than one person is working on the vehicle, each person must install his or her own padlock.



Battery Cable Disconnect

WARNING

For trucks without a battery disconnect switch, to prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative cable first) before proceeding.

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury.

140" Frame Mount CNG Current Layout

4. Unbolt cover to access the valve on the CNG tank. Keep the hardware and cover for future reinstallation (Figure 1).

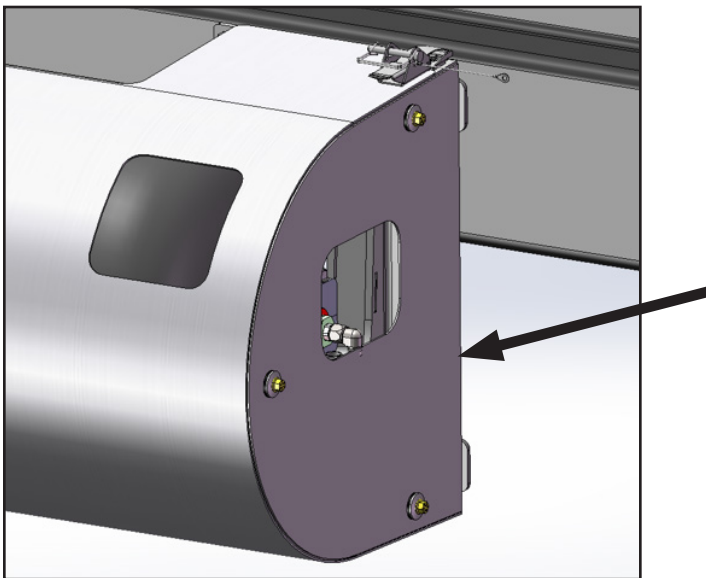


Figure 1

5. Refer to the illustration in Figure 2 to disconnect the tube (highlighted in blue) and remove the Luxfer valve from the CNG tank. Discard the Luxfer valve.

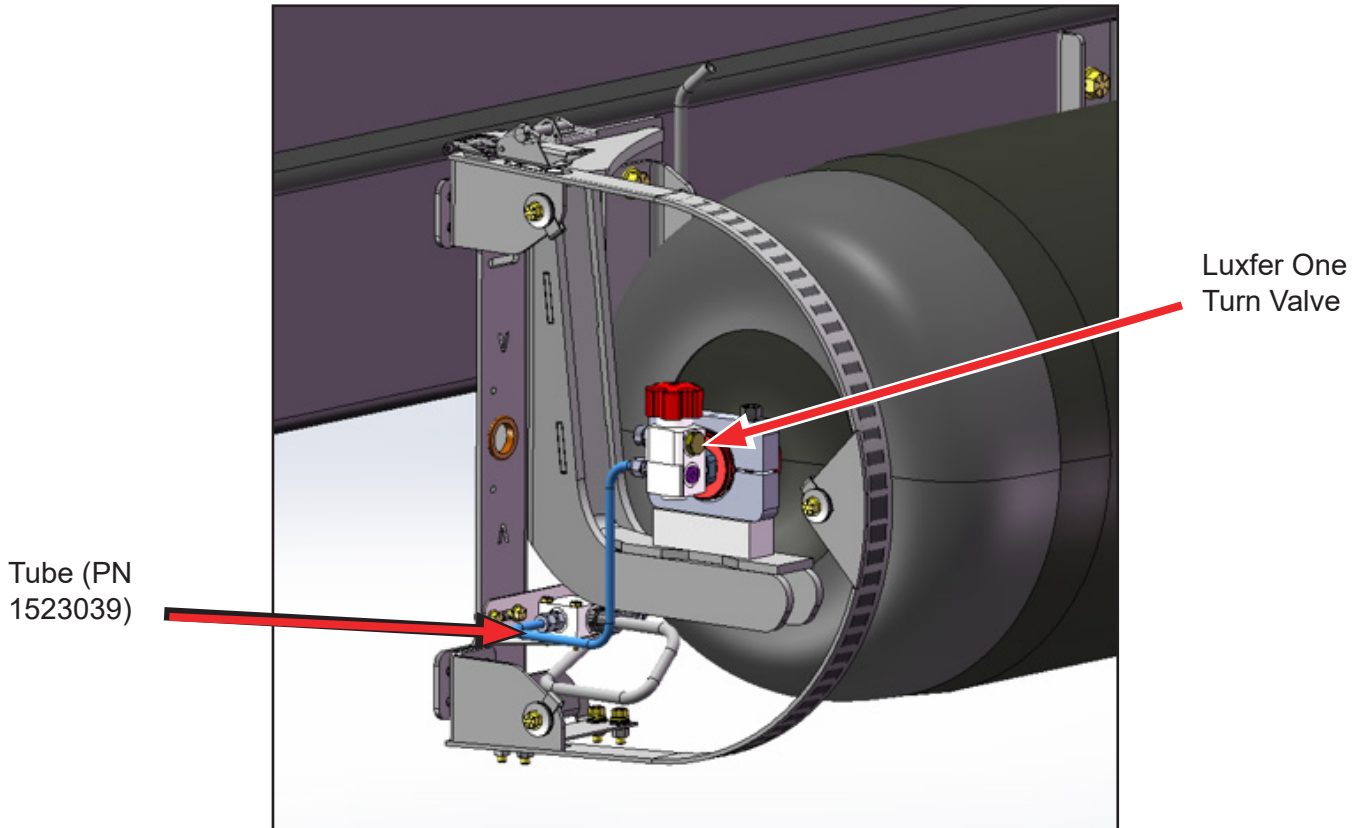


Figure 2

6. Disconnect PRD vent line and remove PRD plug (PN 1519024) (Figure 3).

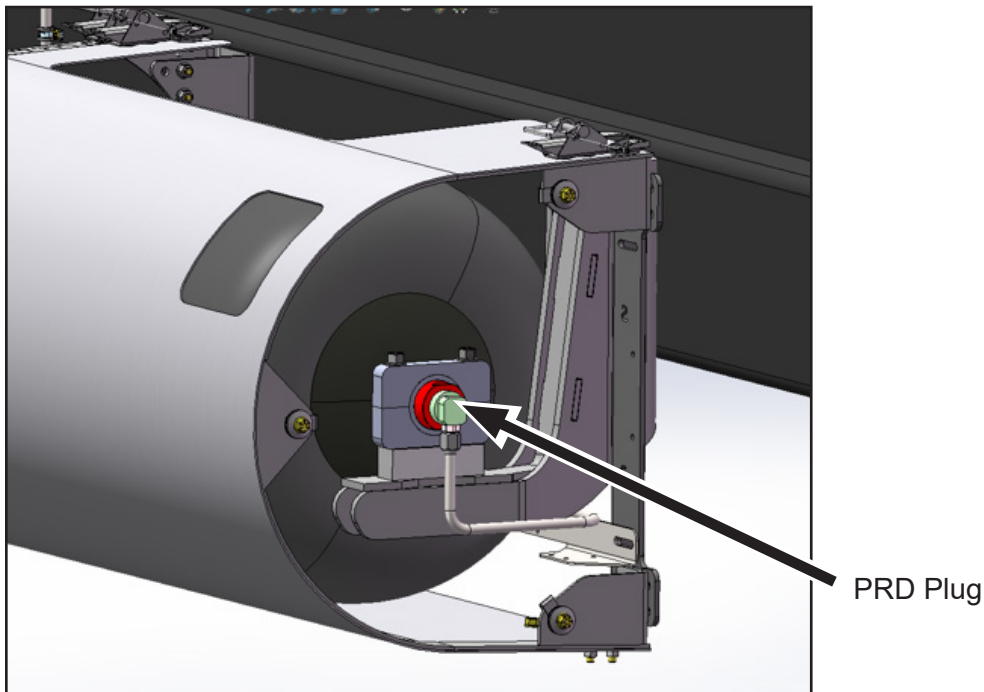


Figure 3

7. Install replacement fittings, plugs, tubes, and new OMB valve according to the illustration below (Figure 4).

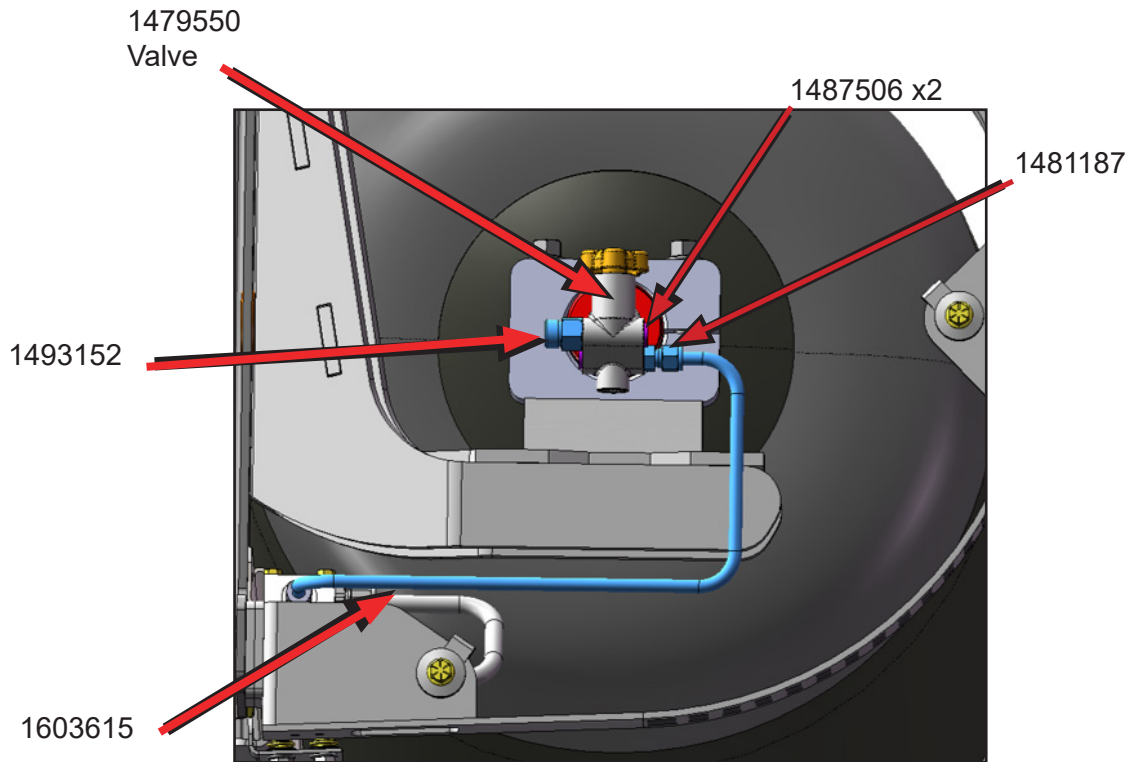


Figure 4

8. Use a torque wrench to torque the fittings to 60 ft.-lbs and the valve to the tank to 80 ft.-lbs.

9. Install the new PRD plug (1540693) and 90-degree fitting (1541321) (Figure 5). Adjust the PRD vent line to connect to the 90-degree fitting.

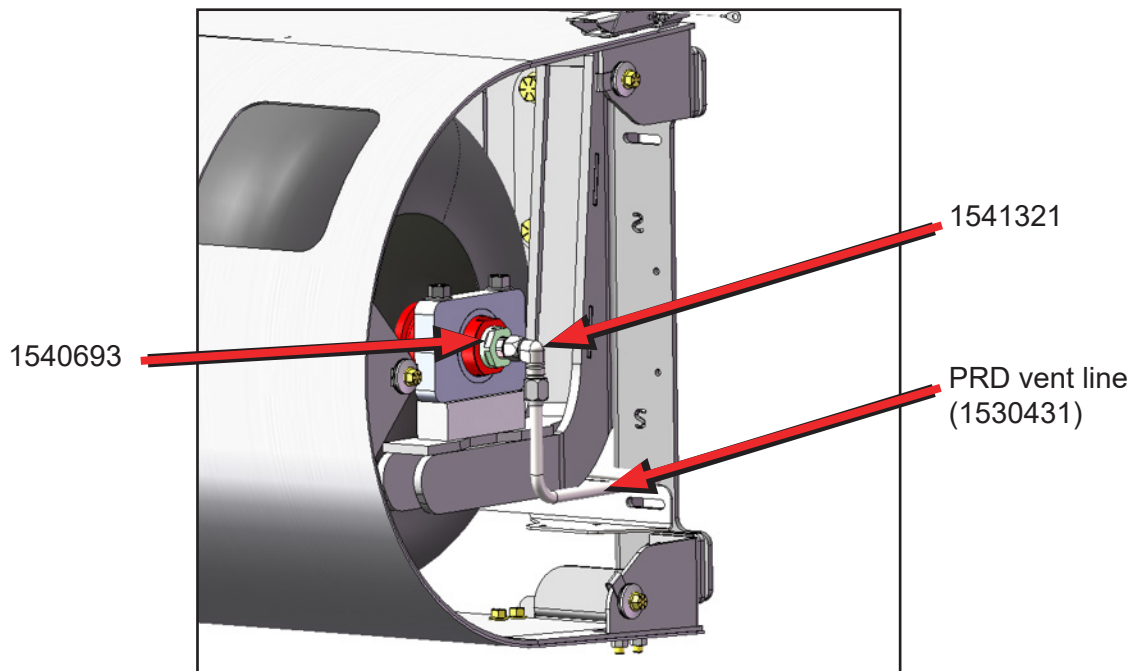


Figure 5

10. Use a torque wrench to torque the fittings to 80 ft.-lbs.

Potential Interference Between the New Valve/PRD Plug Assemblies and the CNG Tank Cover

11. The new valve and PRD plug assemblies have the potential to cause interference with the CNG tank cover. If this occurs, the cover and tank must be adjusted. Follow steps 12 and 13 to make the adjustments. Adjustment may or may not be necessary based on layout from the factory.
12. The interference may require the tank to be adjusted toward the valve end in the fixed pillow block and the covers to be adjusted toward the floating end of the assembly (see illustrations below).
13. Reinstall the cover and hardware when ready to adjust. If no adjustment is necessary, reinstall the cover and hardware and continue at step 14.
 - Use a torque wrench to torque to 28 ft.-lbs.

Before Adjustment

The distance is 0.30" as shown in Figure 6a. Figure 6b. shows that before the adjustment, the cover mounts are centered in the slots.

Before Adjustment: 0.30"

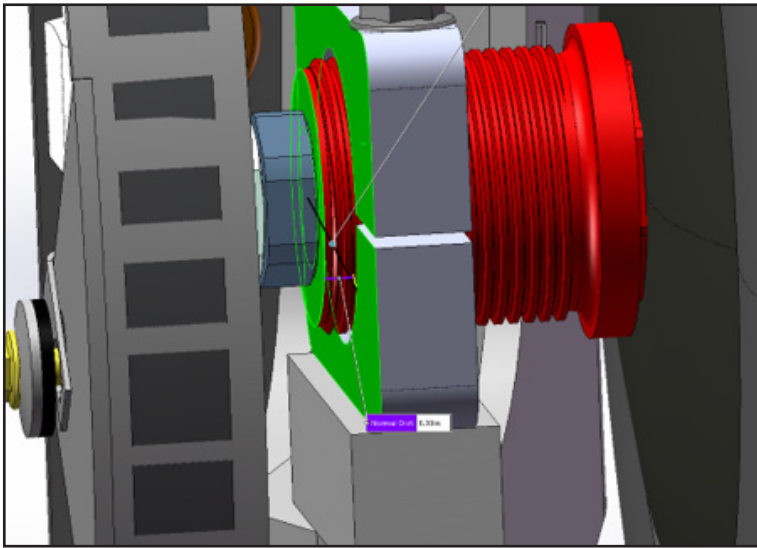


Figure 6a

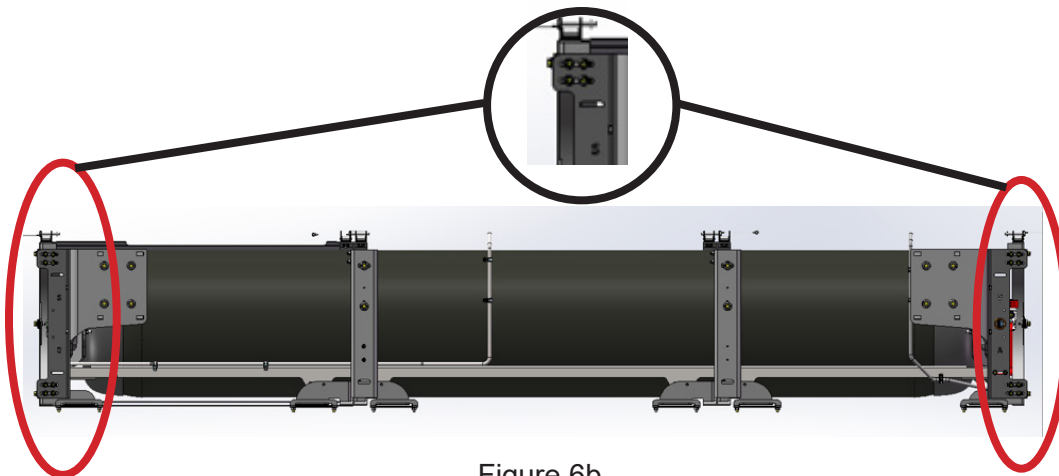


Figure 6b

After Adjustment

The distance is 0.55" as shown in Figure 7a. Figure 7b. shows that after the adjustment, the cover mounts favor the floating end of the slots.

After Adjustment: 0.55"

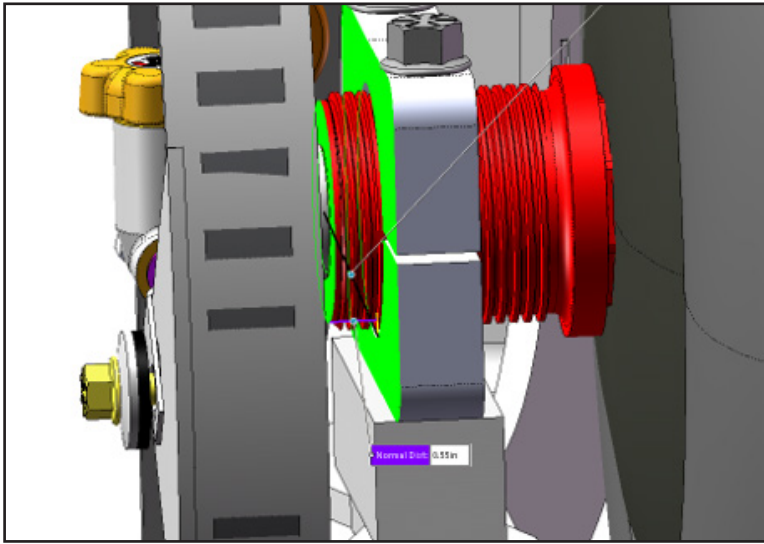


Figure 7a

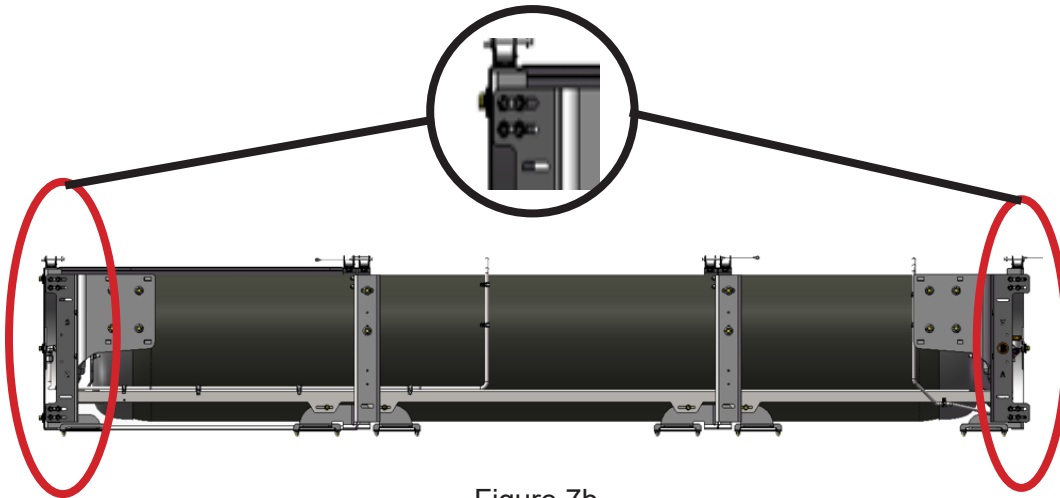


Figure 7b

14. Open all manual shut-off valves on the CNG tanks.
15. Follow the fueling process found in the operator's supplement manual that was provided with your vehicle. If you require another copy, download one by going to streetsmartparts.com.
16. Test for leaks at the installed parts using a leak detection fluid or sniffer.
 - If leaks are found, retighten fittings and retest for leaks.
 - If no leaks are found, the procedure is complete.
17. Remove your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate. Remove the chocks from the vehicle wheels and release park brake.

18. Record the following information on a piece of paper and keep it with the removed Luxfer valves.
 1. Truck information: VIN, model number, body serial number, miles on truck
 2. Information on the CNG tanks the valves were attached to (such as size of tank in DGE)
 3. Service location of the vehicle (company name, street address, city, and state)
 4. Date and time the valves were removed from the vehicle.
 5. Note any issues with valve removal (e.g., difficult to remove, damage noted on valves after removal).

6. Return vehicle to service.



(888) 686-7278

www.streetsmartparts.com