

Vehicle Safety Recall - Technical Service Bulletin

Inspection Procedure

PROMPT ACTION REQUIRED

Attention: McNeilus Service Technicians

Subject: Pressure Relief Device (PRD) on CNG Tank

Models Affected: McNeilus Concrete Standard and Bridgemaster V Mixers fitted with Emcara PRD valves on the CNG tanks

Date Revised: November 2019

Purpose:

McNeilus Truck and Manufacturing, Inc. has been alerted by our supplier that a concern affecting safety exists in some Emcara Pressure Relief Device (PRD) valves on CNG tanks (for your information, Emcara's NHTSA Recall number is 15E059). Some McNeilus Standard and Bridgemaster V Concrete Mixer models were shipped with an Emcara CNG PRD which may not vent properly. The purpose of the thermal PRD is to relieve pressure in the CNG system if the CNG tank is reaching an unsafe level of pressure, as might occur with a thermal event that heats up a tank. In the event of a thermal event, the thermal PRD may not vent properly, which increases the likelihood of a CNG tank over-pressurizing and rupturing. A tank rupture creates an increased risk of injury to the truck occupants, firefighters, or bystanders.

Affected Vehicles:

The affected vehicle population is PRD valves fitted on tanks assembled by McNeilus between 2013 and 2018 and are PRD valves with serial numbers as found in the attached list.

Time Completion:

Affected units shall be inspected using McNeilus qualified service technicians - at no cost to the owner. The time of accomplishment may vary due to a number of factors; however, the estimated time for completion of the procedure is 1.0 hour under normal circumstances.

Required Action:

Review and verify the ownership of all affected serial numbers of trucks. If McNeilus records indicate 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 companies to sell or lease the CNG systems or vehicles that use CNG systems covered by this notification until this recall has been performed on these vehicles. Substantial civil penalties apply to violations of this law.

This work instruction is limited to Internal McNeilus Use Only.

Contact:

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

Enclosures:

Emcara PRD Valve Inspection Procedure

List of Affected Serial Numbers/Vehicles

SAFETY NOTICE

Before entering vehicle's body or drum or performing maintenance to the vehicle, read and follow OSHA Regulations concerning entry and working in "CONFINED SPACE" OSHA 1910.146 and "LOCKOUT/TAGOUT" OSHA 1910.147.

Follow OSHA Regulations while performing any work to the vehicle.

Follow all safety instructions in your manual.

Shut off truck engine, lock cab doors, and keep keys in your pocket before entering vehicle's body or drum or performing any work to the vehicle.

Place magnetic "DANGER" signs on both cab doors. Failure to do so can result in serious personal injury or death.

If you have any questions regarding this notice or require further assistance, call McNeilus at 888-686-7278.

 WARNING

Wear proper Personal Protective Equipment (PPE) such as hard hats, safety glasses or goggles, sturdy gloves, hearing protection, steel toed boots, and snug fitting sturdy long-sleeve shirt and long pants when operating, fueling, defueling, or maintaining the truck.

Reflective clothing is recommended for drivers and employees.

Serious personal injury or death can result without proper PPE.

 WARNING

Use proper fall protection equipment and training when inspecting or maintaining the CNG cylinder on the truck.

Failure to use proper fall protection equipment may result in serious personal injury or death.

PROCEDURE: Emcara PRD Valve Serial Number Inspection

Read the entire procedure before beginning.

Tools and Equipment Required:

- Bore Scope and micro SD card if you want pictures from the scope
- Emcara Field Inspection Sheet (obtain from your Branch Manager)
- Socket Set
- Small mirror
- Flashlight
- If you want, use the light from your cell phone and take a picture of the serial number. The number may be backwards in the picture.

Procedure A: Preparation

1. Place unit on a flat surface, block truck tires, and observe all conditions of the Safety Notice concerning Lockout/Tagout posted in this bulletin. Contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278 if you have any questions.

2. 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.

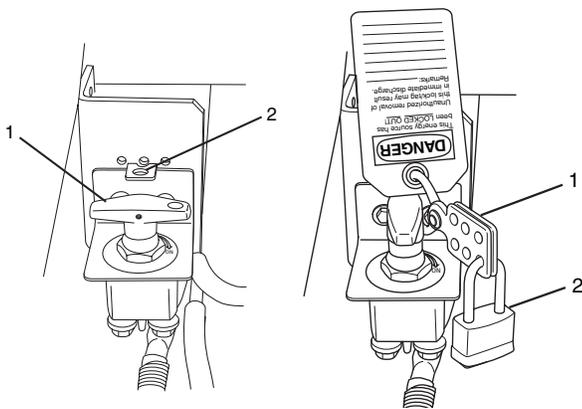


Figure A

Figure B

Battery Cable Disconnect - No Switch Application

If your vehicle is not equipped with a battery disconnect switch, disconnect the negative (black) battery cable first, then disconnect the positive (red) cable.

⚠ 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.

3. You must use the proper fall protection equipment when working on this bulletin procedure. Contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278 if you have any questions.

⚠ WARNING

Use proper fall protection equipment and training when inspecting or maintaining the CNG cylinder on the truck.

Failure to use proper fall protection equipment may result in serious personal injury or death.

Procedure B: Inspection of the PRD Serial Number

IMPORTANT: Read the entire bulletin before starting the procedure so that you can gather all of the necessary equipment.

Because the CNG system covers will remain on the system, use the bore scope to read the serial number on the label of the PRDs.

Tips for using the bore scope:

- If you want the bore scope to take a picture, make sure you have purchased and installed a micro SD card in the bore scope.
 - Make sure to bend the bore scope camera to the angle you will need to view the serial number before you insert the bore scope under the CNG cover.
 - Practice using the bore scope before you attempt this bulletin procedure.
1. Locate the serial numbers on the PRD valves. Figures 1 through 4 are illustrative representations of the various CNG system configurations and the location of PRDs on those configurations. Use these Figures as your guides to determining the location of the PRDs and where to place the bore scope to read the PRDs.

For the Frame Mount: Try determining the serial number by inserting the bore scope through the side access cover opening (follow Figure 1). If you cannot determine the serial number on the PRD using this method, follow the instructions given in Figure 2 and Figure 3 to access the PRD by removing a tank cover.

Figure 1

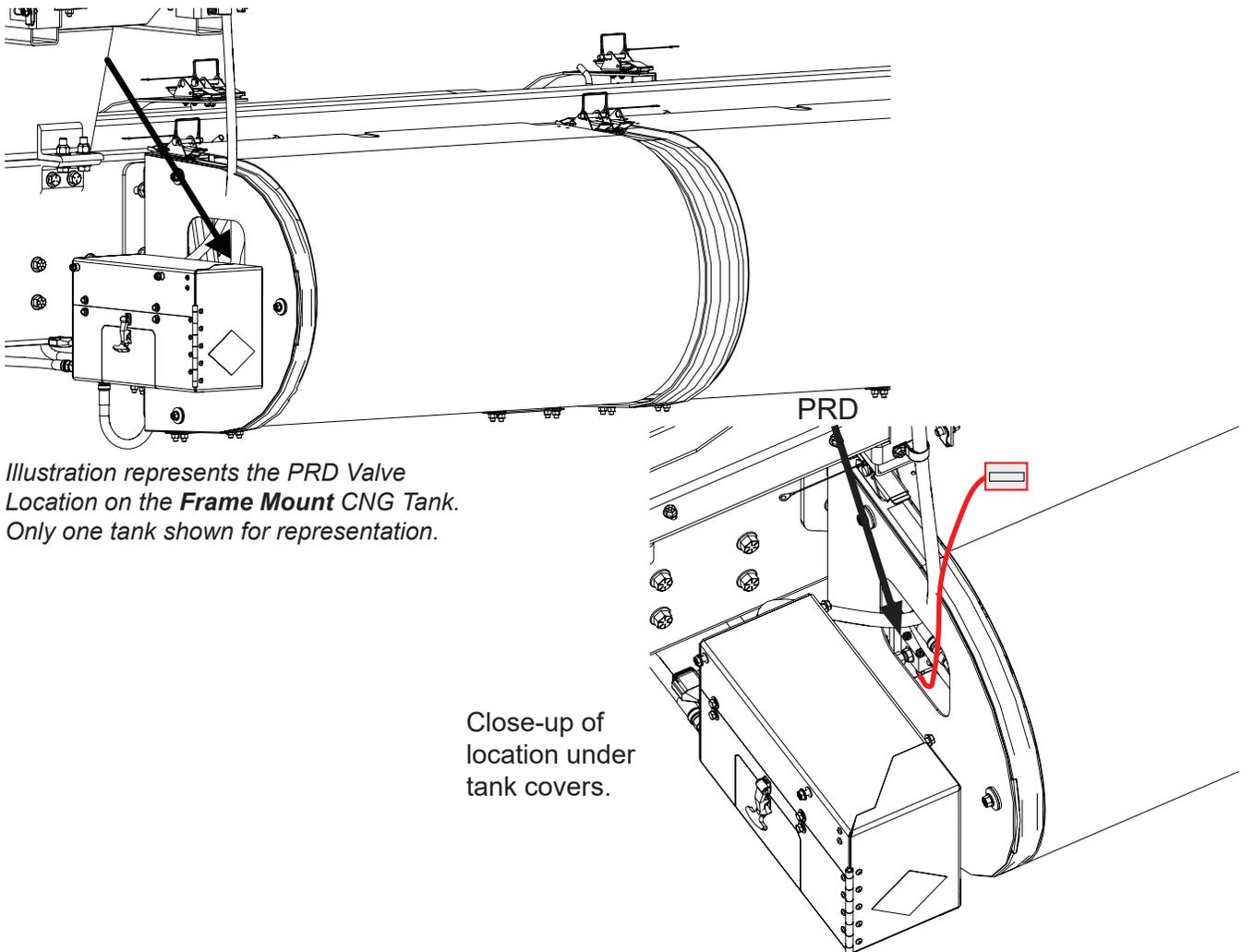
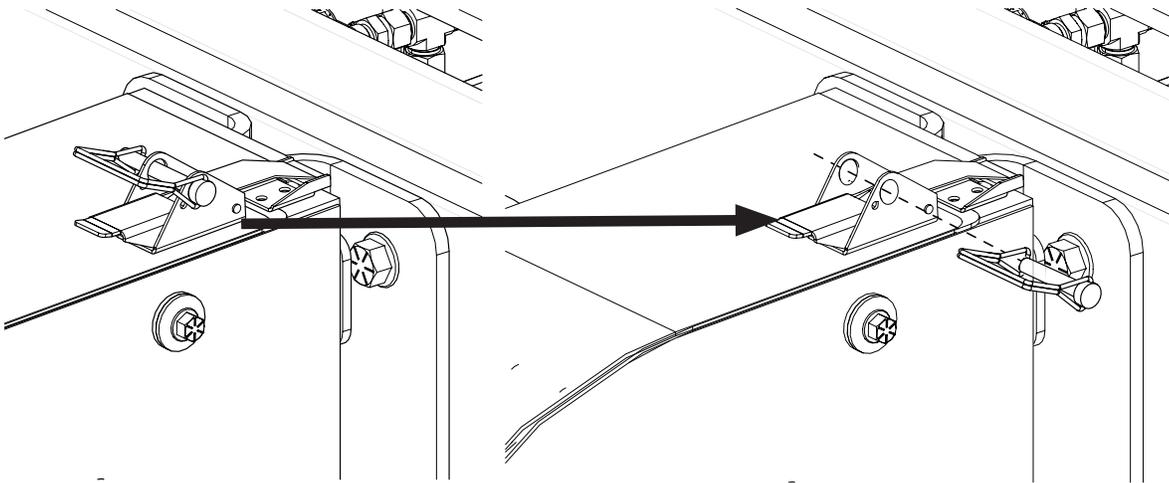
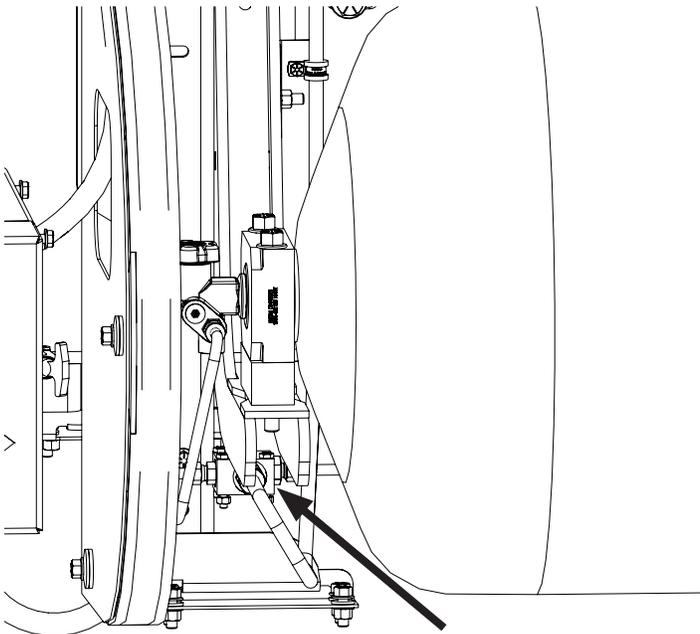


Figure 2



*Illustration represents the access the PRD of a **Frame Mount** system. Remove the tank cover to access the PRD label. Start by locating the clamps. Remove and retain the cotter pin in the clamps. Open the clamps to free the cover. Take the cover off and bend the bore scope or use a mirror (and flashlight or cell phone light and camera to take a picture) to angle down to read the serial number on the PRD label. Replace the cover and clamp shut to secure the cover.*

Figure 3



*Illustration represents the location of the PRD valve when the cover is removed on the **Frame Mount** CNG system.*

Figure 4

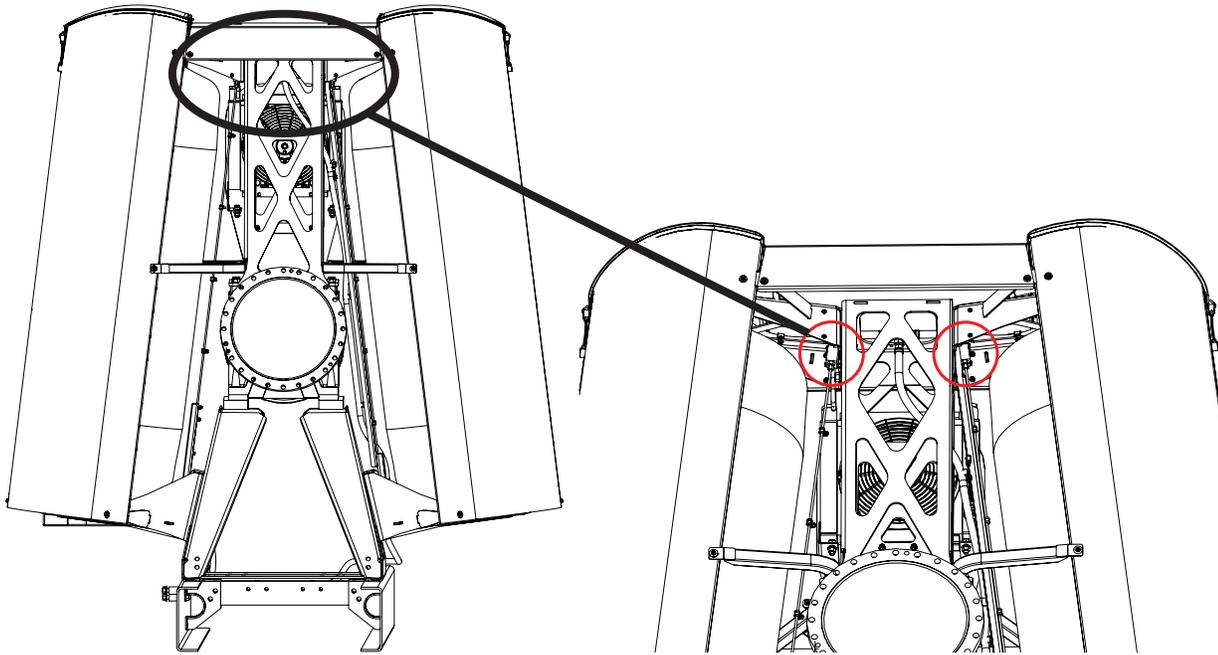


Illustration represents the PRD Valve Locations on the **Twin Vertical Mount CNG Tanks**.

NOTE: Rear discharge mixers that utilize the Emcara PRD will have one PRD per tank. The 65" tank will be the only tank that does not utilize this style PRD. In that tank design, there will be a single PRD integrated into the manual valve of the tank. As shown above, a twin vertical mount will also have one PRD per tank.

c. If the PRD was fitted on tanks assembled by McNeilus between (and including) 2013 and 2018 and are PRD valves with serial numbers as found in the attached list, the PRD valve will need to be replaced (see Figure 5 for location of serial number on the PRD valve).

d. Inspect each PRD valve on each CNG tank in the CNG system.

e. Obtain the Emcara Field Inspection Sheet from your Branch Manager. Fill out the sheet during the inspection.

f. Give the completed Emcara Field Inspection Sheet to your Branch Manager.

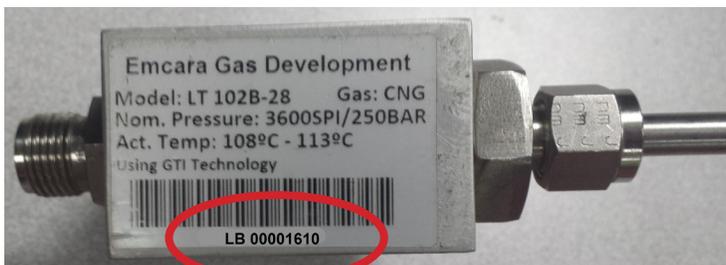


Figure 5: *Inspect the serial number on each PRD Valve in the CNG system.*

If you have questions on the inspection process, contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278.



(888) 686-7278

VSR-TSB-027-A
Emcara PRD Serial Number List of Suspect PRDs

LB00001346	LB00001757	LB00002718
LB00001347	LB00001758	LB00002719
LB00001348	LB00002121	LB00002733
LB00001350	LB00002122	LB00002735
LB00001354	LB00002123	LB00002737
LB00001355	LB00002124	LB00002746
LB00001356	LB00002125	LB00002749
LB00001357	LB00002128	LB00002751
LB00001358	LB00002129	LB00002754
LB00001364	LB00002130	LB00003075
LB00001365	LB00002132	LB00003080
LB00001366	LB00002138	LB00003081
LB00001367	LB00002139	LB00003084
LB00001368	LB00002140	LB00003090
LB00001369	LB00002142	LB00003175
LB00001600	LB00002143	LB00003176
LB00001601	LB00002145	LB00003180
LB00001602	LB00002148	LB00003181
LB00001604	LB00002149	LB00003183
LB00001606	LB00002151	LB00003185
LB00001607	LB00002152	LB00003187
LB00001609	LB00002154	LB00003190
LB00001611	LB00002157	LB00003192
LB00001612	LB00002158	LB00003195
LB00001613	LB00002159	LB00003198
LB00001614	LB00002160	LB00003543
LB00001615	LB00002161	LB00003544
LB00001616	LB00002163	LB00003545
LB00001619	LB00002164	LB00003548
LB00001620	LB00002180	LB00003551
LB00001621	LB00002542	LB00003552
LB00001622	LB00002545	LB00003562
LB00001624	LB00002547	LB00003563
LB00001626	LB00002555	LB00003564
LB00001628	LB00002556	LB00003565
LB00001629	LB00002557	LB00003705
LB00001730	LB00002559	LB00003707
LB00001731	LB00002560	LB00003735
LB00001733	LB00002571	LB00003745
LB00001734	LB00002695	LB00003748
LB00001735	LB00002696	LB00003752
LB00001739	LB00002697	
LB00001747	LB00002699	
LB00001751	LB00002707	
LB00001754	LB00002710	
LB00001755	LB00002716	
LB00001756	LB00002717	