7ISSUE DATE:	6/8/2020
SERVICE BULLETIN SUBJECT:	800 Volt Rear Interlock Solenoid Retrofit
VINs or MODELS AFFECTED:	Service Specified Buses
COMPLETE BY:	Next Service Opportunity
SERVICE BULLETIN #:	SB-20-81

800 VOLT REAR INTERLOCK SOLENOID RETROFIT

NOTICE! It is expected that this process will require 2 hours per bus. Please schedule appropriately to minimize vehicle downtime.

Retrofit Description:

This retrofit updates the rear interlock solenoid to an environmentally sealed version for improved reliability.

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East Coast Manufacturing: 1 Whitlee Court, Greenville, SC 29607
West Coast Manufacturing: 383 Cheryl Lane, City of Industry, CA 91789

Tools/Parts Required

Tools and Supplies Required:

- Ratchet
- 3mm Allen Socket
- Calibrated Torque Wrench
- Loctite 567

Parts Required:

- 053722 KIT, RETROFIT, INTERLOCK SOLENOID (Consisting of)
  - 053693 SOLENOID VALVE, 24V, 3-WAY, NC, 2-PIN BAYONET 1 EA
  - 004744 FITTING, NYLON, MUFFLER, PNEUMATIC, 1/4 M PT" 1 EA
  - 053985 HARNESS, REAR BRAKE INTERLOCK JUMPER 1 EA
  - 004302 FITTING, BRASS, PTC, 90 DEG. SWIVEL, 1/4 MPT X 3/8 TUBE" 2 EA
  - 016328-009 SCREW: SHC: M4-0.7X35X20 2 EA

Parts Required but not included in the kit:

- 001911 CABLE TIE, STANDARD CROSS SECTION, 7.5 BLACK" 10 EA

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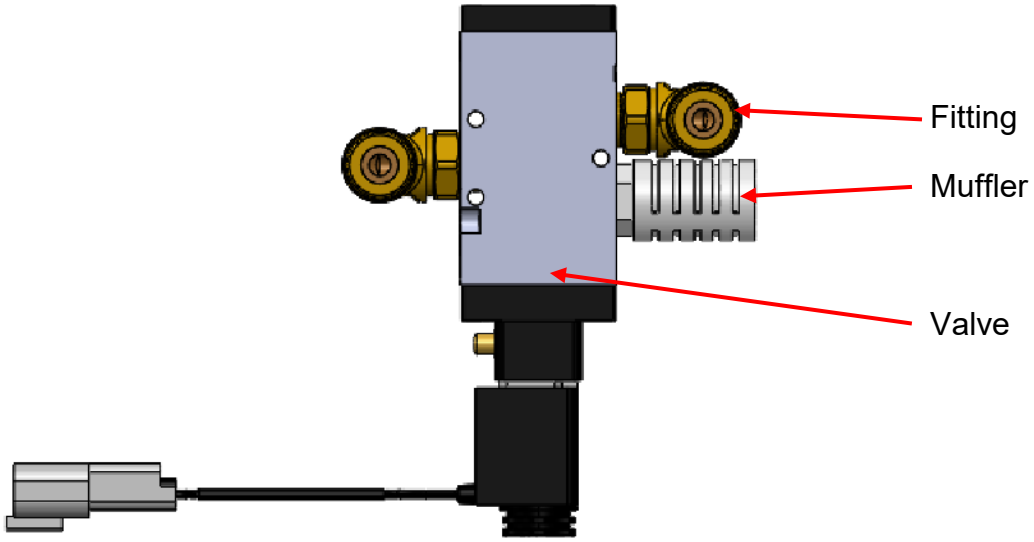
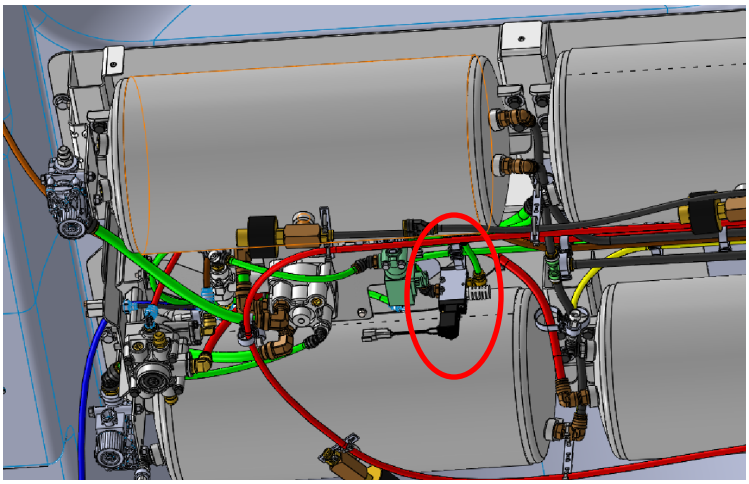
Procedure:

1. The Valve (053693) may be assembled before accessing the customer bus.
2. Apply a small amount of Loctite 567 to the threads on the Fittings (004302) and the Muffler (004744).
3. Assemble the Valve (053693), Fittings (004302), and Muffler (004744) as shown in the following illustration.



4. Using an 11/16-Inch Combination Wrench, **torque the Fittings (004302) two to three turns past finger tight.**
5. Using an 16mm Combination Wrench, **torque the Muffler (004744) two to three turns past finger tight.**
6. Perform the Proterra approved Lockout/Tagout procedure to make the bus safe for work.
7. Using Wheel Lifts of other approved lifting devices, lift the bus to access the Rear Air Tank assembly.
8. Locate the Rear Interlock Solenoid shown circled in red in the following illustration.



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9. Make a note showing which Valve Port each air lines is connected to.

10. Disconnect the two 3/8-Inch Air Lines from the original Valve.

11. Disconnect the original Valve from the wiring harness.

12. Using a Ratchet with a 3mm Allen Socket, remove the original Valve from the bracket.

13. Using a Ratchet with a 3mm Allen Socket, attach the new Valve (053693) with its installed components onto the bracket where the original Valve was installed using two new M4 Screws (016328-009).
    Note: The new Valve should be installed with the coil pointing upward on Roadrunner buses. All other buses should have the Valve installed in the same orientation as the original valve.

14. Using a Calibrated Torque Wrench with a 3mm Allen Socket, **torque the M4 Screws to 22 inch pounds.**

15. Connect the 3/8-Inch Air Lines that were removed earlier to the correct port on the new Valve (053693).

16. Connect the new Harness (053985) to the Valve (053693).

17. Connect the free end of the Harness (053985) to the bus harness where the original Valve was connected.

18. Using Wire Ties (001911) neatly secure the new harness and any other wiring that needs it.

19. Safely lower the bus.

20. Remove the Lockout/Tagout devices and power on the bus.

21. Return the bus to service after confirming that no air leaks are present.

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