



PROTERRA



TECHNICAL SERVICE BULLETIN

ISSUE DATE:	12-13-2021
SERVICE BULLETIN SUBJECT:	Aux Heat Streetside WWB Tube Retrofit
VINs or MODELS AFFECTED:	Service Specified Buses
COMPLETE BY:	Next Service Opportunity
SERVICE BULLETIN #:	SC-21-177
Labor Operation Code:	VD58Z

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

AUX HEAT STREETSIDE WWB TUBE RETROFIT

Retrofit Description:

This procedure describes replacing the aux heat coolant tubing on the streetside Wheel Well with a more robust version to prevent leaks.

Tools/Parts Required

Tools and Supplies Required:

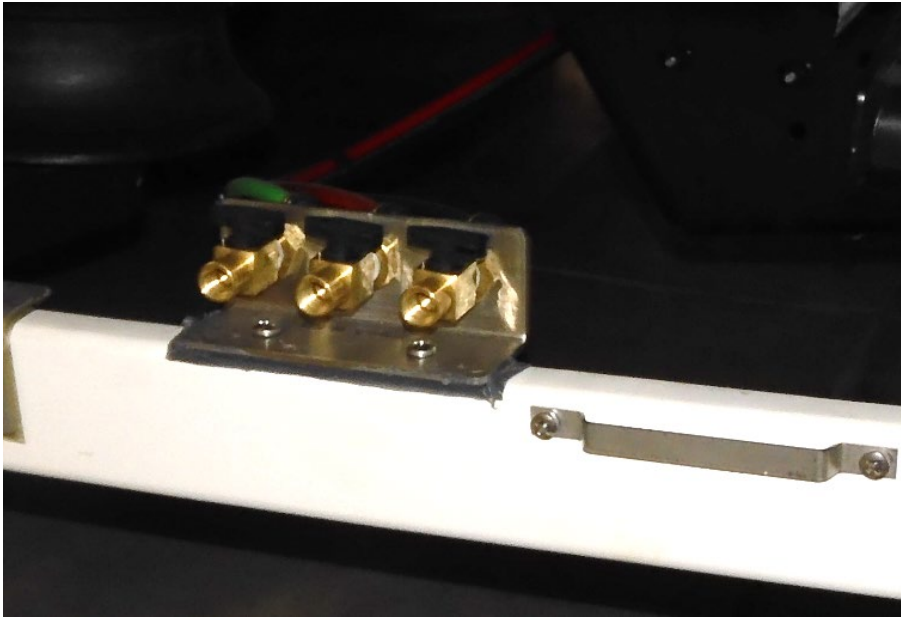
- T-30 Torx Driver
- Large Catch Pan
- 6mm Allen Driver
- 1/2 Inch Combination Wrench
- T-20 Torx Driver
- Side Cutting Pliers
- Small Catch Pan
- Flat Blade Screwdriver
- Coolant Pump
- Shop Towels

Parts Required:

- 059805 RETROFIT KIT, SSWW Aux Heat Tubes (Consisting of)
 - 148-3427 HOSE, COOLANT, AUX HEAT, SSWW 1 EA
 - 148-3428 HOSE, COOLANT, AUX HEAT, SSWW 1 EA
 - 001957 CORRUGATED TUBING, SPLIT LOOM, 1-1/4 BLACK, 50' REEL 16 FT
 - 012138 CABLE TIE, HEAVY DUTY .5WIDE 9.1" BLACK 10 EA

Procedure:

1. Perform the Proterra approved Lockout/Tagout process to make the bus safe for work.
2. Open the three (3) Ball Valves shown at the streetside rear of the bus to drain the air system.



3. Using a Large Catch Pan, drain the coolant from the Aux Heat system.
4. Using a 6mm Allen Driver and a 1/2-Inch Combination Wrench, remove the fasteners that secure the Driver's Seat to the Seat Bracket.



5. Disconnect the Air Line from the Driver's Seat.

6. Remove the Driver's Seat from the bus and store it in a safe place.



7. Using a T-30 Torx Driver, remove the fasteners that secure the streetside Wheel Well Box to the bus.
8. Move the Wheel Well Box toward the center of the bus so that the coolant lines on the Wheel Well may be accessed.



9. Using Side Cutting Pliers, remove the Cable Ties that secure the coolant lines to the Rotalocs and Cable Tie Mounts. These are shown in the following photograph.



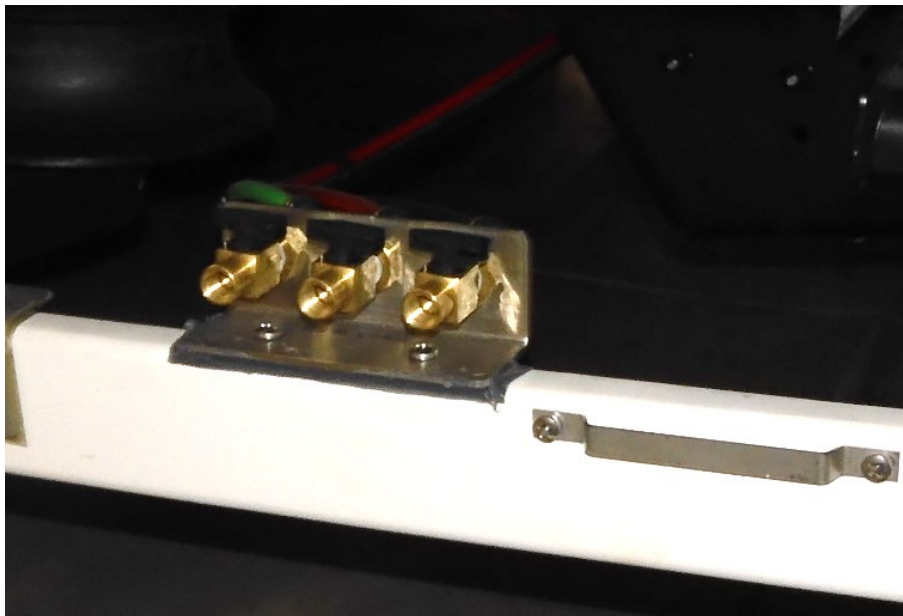
10. Using a T-20 Torx Driver, remove the cover shown in the following photograph.



11. Prepare a small Catch Pan to collect any coolant that leaks when the coolant lines are disconnected.
12. Using a Flat Blade Screwdriver, disconnect the coolant lines from the Convactor shown in the previous photograph.
13. Using a Flat Blade Screwdriver, disconnect the coolant lines from the Driver's Convactor shown in the following photograph. Collect any excess coolant in a small Catch Pan.



14. Using Electrical Tape, attach a length of Split Loom (001957) to each Coolant Hose from the kit. The Electrical Tape should first be wrapped around the Coolant Hose and then twice around the Split Loom. Secure the Split Loom to each hose every 8-inches of length.
15. Beginning on the Driver's Convactor, connect Coolant Hose (148-3427) to the bottom fitting of the Convactor. Secure the Hose to the Convactor using the original Hose Clamp.
16. Route the Coolant Hose (148-3427) over the Wheel Well to the bottom fitting of the Convactor in the Cabin. This hose will be in the inside position of the Wheel Well. Secure the Hose to the Convactor using the original Hose Clamp.
17. Connect Coolant Hose (148-3428) to the top fitting of the Driver's Convactor.
18. Route the Coolant Hose (148-3428) over the Wheel Well to the top fitting of the Convactor in the Cabin. This hose will be in the outside position of the Wheel Well. Secure the Hose to the Convactor using the original Hose Clamp.
19. Using Cable Ties (012138) secure the Coolant Hoses to the Cable Tie Mounts and Rotalocs.
20. Refill the Coolant System.
21. Using a T-20 Torx Driver, reinstall the Convactor Covers.
22. Using a T-30 Torx Driver, reinstall the Wheel Well Box.
23. Using a 6mm Allen Driver and a 1/2-Inch Combination Wrench, reinstall the Driver's Seat.
24. Close the three (3) Ball Valves at the rear of the bus.



25. Remove the Lockout/Tagout devices and return the bus to service after determining that no coolant leaks exist.