



PROTERRA



RECALL

ISSUE DATE:	1-27-2021
SERVICE BULLETIN SUBJECT:	Anti-spray Front Fender Retrofit
VINs or MODELS AFFECTED:	Service Specified Buses
COMPLETE BY:	Next Service Opportunity
SERVICE BULLETIN #:	SC-21-13
Labor Operation Code:	N/A

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

ANTI-SPRAY FRONT FENDER RETROFIT

Retrofit Description:

This procedure adds wider fender flares to prevent slush, water, and mud spray from splashing onto the driver's window and mirrors,

Tools/Parts Required

Tools and Supplies Required:

- Power Drill
- 1/4-Inch Drill Bit
- 21/32-Inch Counterbore
- 36-Grit Sanding Disk
- Ratchet
- 5mm Allen Socket
- T-25 Torx Socket
- T-30 Torx Socket
- Calibrated Torque Wrench
- Orange Torque Stripe Paint
- Protective Gloves
- Tongue Depressors
- Shop Towels
- Isopropyl Alcohol

Kit Parts Required:

- 056528 Service Kit - Extra Wide Fender Flare (Consisting of)
 - 128-2517 FLARE, FENDER, 5.5"EXTRUSION, FRONT 18 FT
 - 006430-001 TAPE, 3M VHB, DOUBLE SIDED, 1 X .09" THICK 43 FT 1 EA
 - 019493-005 SCREW,BUTTON,FLG,TORX,BLACK, M6-1.0X25X25 6 EA
 - 128-8722 BAR, ATTACHMENT, FENDER, 5.5" 3 EA
 - 129-0295 BAR, ATTACHMENT, FENDER, 5.5", SS, FRONT 1 EA
 - 046986 WITTEN, 150-M6X1.0-14-SS 6 EA
 - 050104 WASHER FLAT, M6 X 25 X 1.8 16 EA
 - 129-0296 SPACER, FENDER, ATTACHMENT, BOTTOM 2 EA
 - 113-3470 SCREW, BUTTON FLANGE, TORX, M5-0.8X30X30 16 EA
 - 016877 WSHR, DIN 125A, SST, M8 6 EA

Parts required but Not included in the Kit:

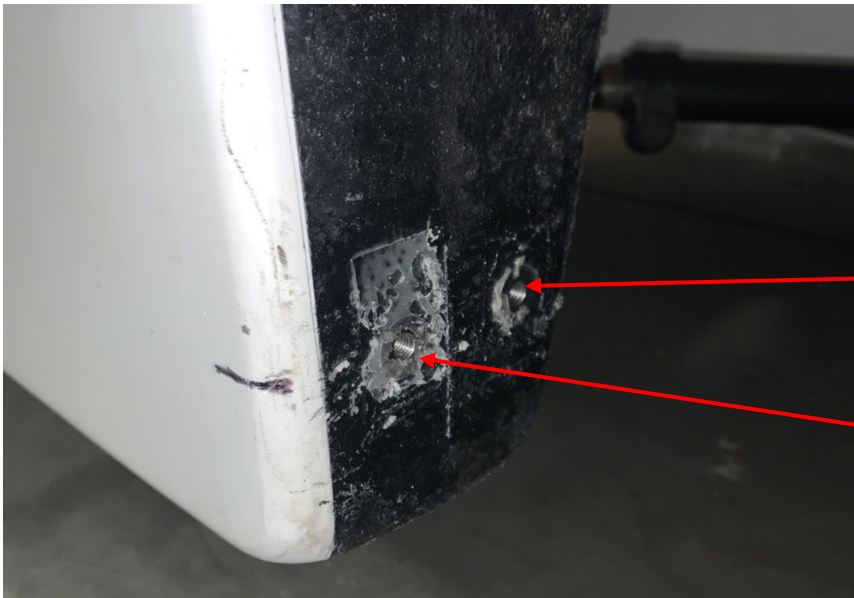
- 009479 RESIN, EPOXY, WEST SYSTEMS 1 EA
- 027017 FILLER, HIGH DENSITY, WEST SYSTEMS 1 EA
- 009499 HARDENER, EPOXY, FAST, WEST SYSTEMS 1 EA
- 043223 EQUIPMENT, SERVICE, WEST SYSTEM MINI PUMP 1 EA

Procedure:

1. Complete the Proterra approved Lockout/Tagout procedure to make the bus safe for work.
2. **Use hand tools only for installing fasteners in this procedure. Power tools are likely to cause the inserts to de-bond and spin.**
3. Using a Ratchet with a T-25 Torx Socket, remove both front Fender Flares from the front of the bus and set them aside.



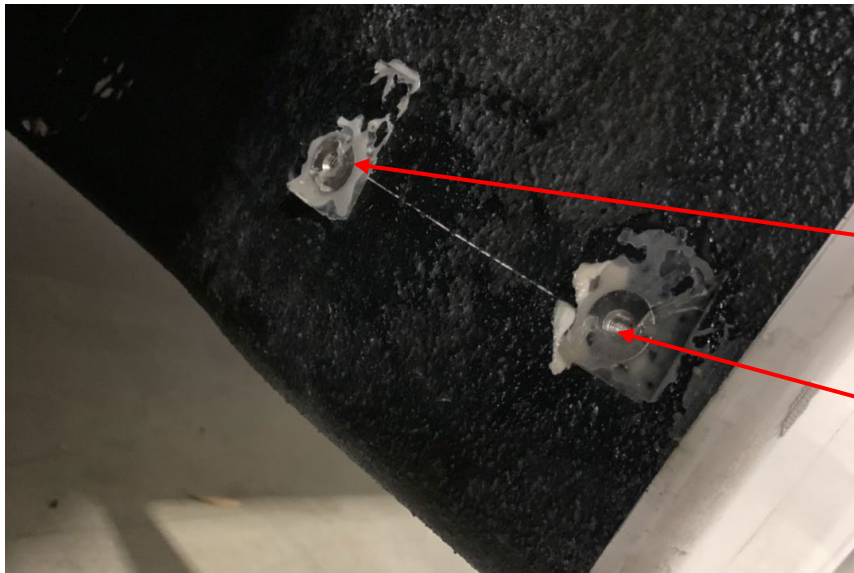
4. Working inside the Streetside Wheel Well, locate the lower front Insert that was used for mounting the original Fender Flares.
5. Using a Power Drill with a 1/4-Inch Drill Bit, drill out the lower front insert.
6. Using a Power Drill with a 9/16-Inch Counterbore, enlarge the hole to install a Witten (046986).
7. Using a Power Drill with a 1/4-Inch Drill Bit, drill a pilot hole parallel with the previous hole but 40mm closer to the inside of the bus.



Second Hole for
Witten

Original Insert Hole

8. Using a Power Drill with a 9/16-Inch Counterbore, enlarge the hole to install a Witten (046986).
9. Working inside the Curbside Wheel Well, locate the lower front Insert that was used for mounting the original Fender Flares.
10. Using a Power Drill with a 1/4-Inch Drill Bit, drill out the lower front insert.
11. Using a Power Drill with a 9/16-Inch Counterbore, enlarge the hole to install a Witten (046986).
12. Using a Power Drill with a 1/4-Inch Drill Bit, drill a pilot hole parallel with the previous hole but 95mm closer to the inside of the bus.



Second Hole for Witten

Original Insert Hole

13. Using a Power Drill with a 1/4-Inch Drill Bit, drill out the lower rear insert that was used to secure the original Fender Flare on both the Curbside and Streetside of the front wheel wells.
14. Using a Power Drill with a 9/16-Inch Counterbore, enlarge the holes to install Wittens (046986).

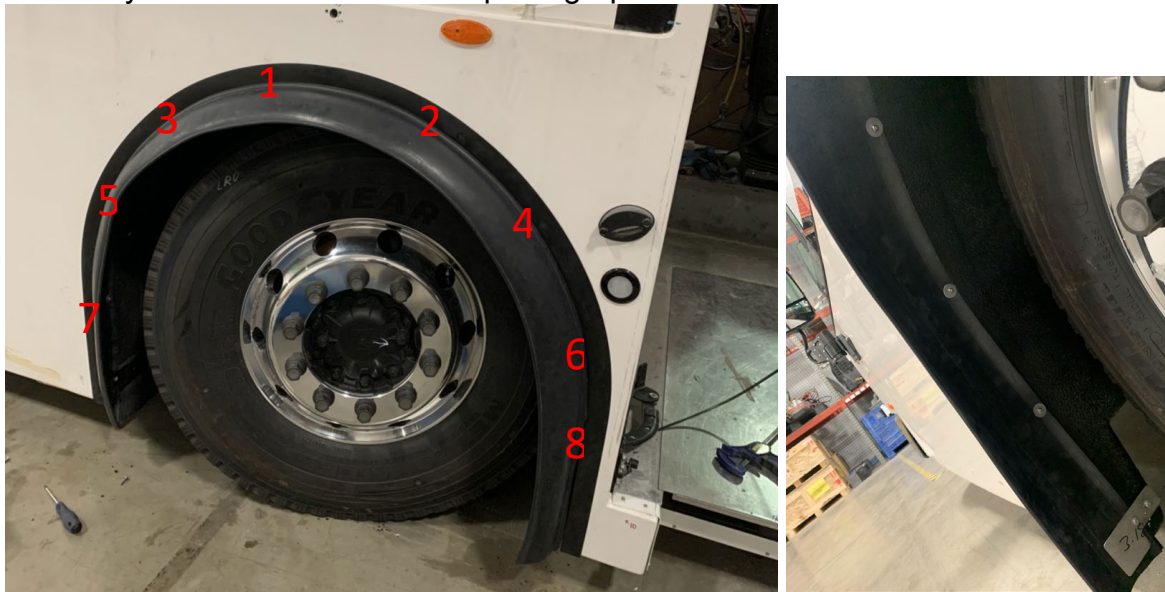


15. Mix West Systems 105 Epoxy Resin with West Systems 205 Hardener to get the amount required to install the six Inserts (046986).
16. Mix in West Systems 404 High Density Filler until the mixture has the consistency of peanut butter.
17. Using a plastic bag with a corner cut off or a tongue depressor, apply the Epoxy to the outer surfaces of the Inserts (046986).
18. Place the Epoxy covered Inserts (046986) into the mounting holes. Make sure that the Inserts are square with the body and that the tops of the Inserts are just below the top surface of the body. Use the small Plastic Keepers that are supplied with the Inserts to keep them square to the floor.
19. Allow at least three hours for the Epoxy to cure.
20. Using Shop Towels and Isopropyl Alcohol, clean the Fender Flares that were removed from the bus.
21. Apply 3M VHB Tape (006430) to the Extruded Fender Flare (128-2517) as shown in the following photograph.



22. Mate the one of the original Fender Flares on top of the Extruded Fender Flare (128-2517). Ensure that the original Fender Flare is placed against the molded lip on the Extruded Fender Flare.
23. Using an Approved Safety Knife, trim the Extruded Fender Flare (128-2517) to match the length of the original Fender flare.

24. Repeat this process to mate and trim the Extruded Fender Flare (128-2517) to the remaining original Fender Flare.
25. Using the slots in the original Fender Flares as a template, mark the holes in the original Fender flares for drilling using a White or Silver Permanent Marker.
26. Using a Power Drill with an 8mm Drill Bit, drill holes in the marked locations on the Extruded Fender Flares (128-2517).
27. Using a Ratchet with a T-30 Torx Driver, install the combined Fender Flares using M5 Screws (113-3470) and Washers (050104). Begin the process using the top two locations on the Fender Flares. After the two top fasteners are installed, alternate sides of the Fender Flares while installing the fasteners toward the bottom of the Fender Flares. The installation order is shown by the numbers in the first photograph.



28. Repeat the process to install the combined Fender Flare onto the other side of the bus.
29. Working at the rear of the Wheel Well, install the Bar Attachment (128-8722) as shown in the following photograph. The Bar Attachment should be between to Mud Flap and the original bracket. Use the original fasteners to attach the Mud Flap ensuring that the screws pass through the slot in the Bar Attachment. Use a M6 Screw (018081-005) and Washer (016877) to attach the Bar Attachment to the newly installed Witten (046986).



30. Repeat the process to install the Bar Attachment (128-8722) on the other side of the bus.
31. Working on the Curbside of the bus, install a Spacer (129-0296) as shown in the following photograph. Secure the Spacer and Fender Flare to the bus using M6 Screws (018081-005) and Washers (016877) and the newly installed Wittens (046986).



32. Working on the Streetside of the bus, install a Spacer (129-0296) as shown in the following photograph. Secure the Spacer and Fender Flare to the bus using M6 Screws (018081-005) and Washers (016877) and the newly installed Wittens (046986).



33. Remove the Lockout/Tagout Devices and return the bus to service.