ISSUE DATE:	12-15-2021
SERVICE BULLETIN SUBJECT:	35 Foot ZX5 Prodrive Harness Update
VINs or MODELS AFFECTED:	Service Specified Buses
COMPLETE BY:	Next Service Opportunity
SERVICE BULLETIN #:	SC-21-179
Labor Operation Code:	N/A

NOTICE! It is expected that this process will require one (1) hour per bus. Please schedule appropriately to minimize vehicle downtime.

35 FOOT ZX5 PRODRIVE HARNESS UPDATE

Retrofit Description:

This procedure describes updating the Prodrive harness with the correct terminals.

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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:

- Square Key
- T-30 Torx Driver
- Pin Extractor Tool
- Side Cutting Pliers
- Pin Crimping Tool
- Butt Splice Crimper
- Wire Strippers

Parts Required:

- 060096 RETROFIT KIT - 35' HERON UPDATE PRDV HARNESS (Consisting of)
  - 010050 TERMINAL, SOCKET, 20-16 AWG GOLD, DEUTSCH 3 EA
  - 010051 PIN, SOLID, SZ,16,16-20AWG, GLD 3 EA
  - 001262 SEALING PLUG, SIZE 12-16G) DEUTSCH #114017 6 EA
  - 002332 BUTT CONNECTORS, NON-INSULATED, #16-14 AWG 3 EA
  - 008294 HEAT SHRINK, DOUBLE WALL, ADHESIVE, 1/4 4' STICK 6 IN
  - 010101 20 AWG WIRE, TYPE GXL, BLACK (BK) 6 IN
  - 010103 20 AWG WIRE, TYPE GXL, YELLOW (YE) 6 IN
  - 010107 20 AWG WIRE, TYPE GXL, GREEN (GN) 6 IN

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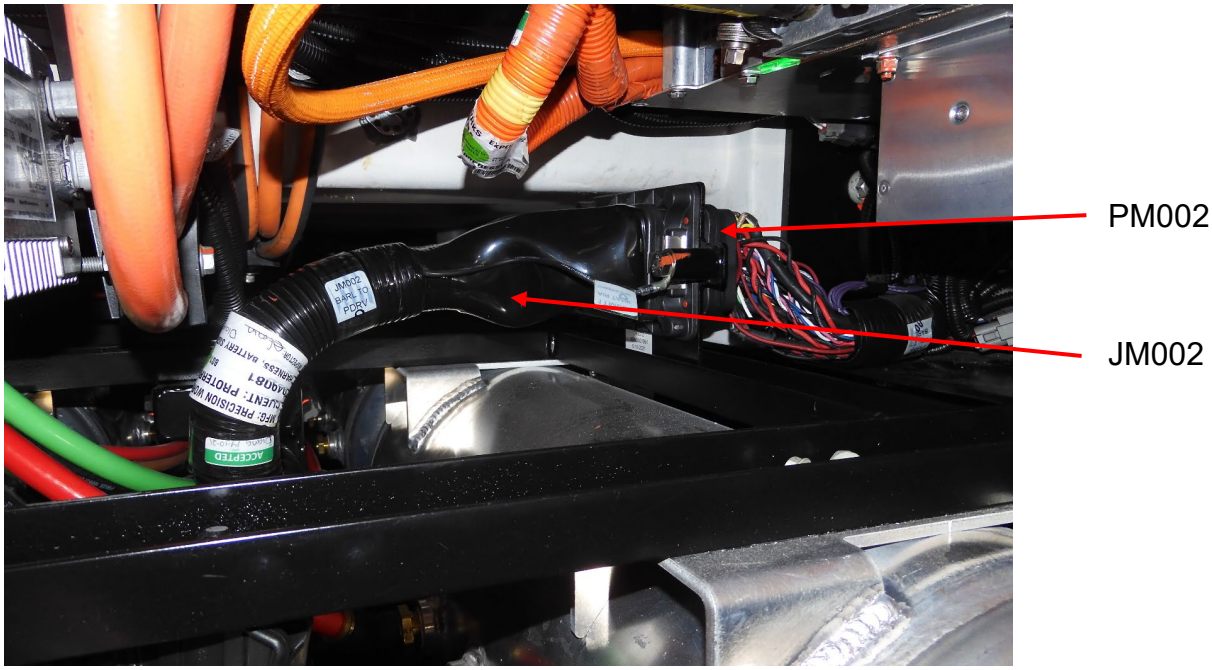
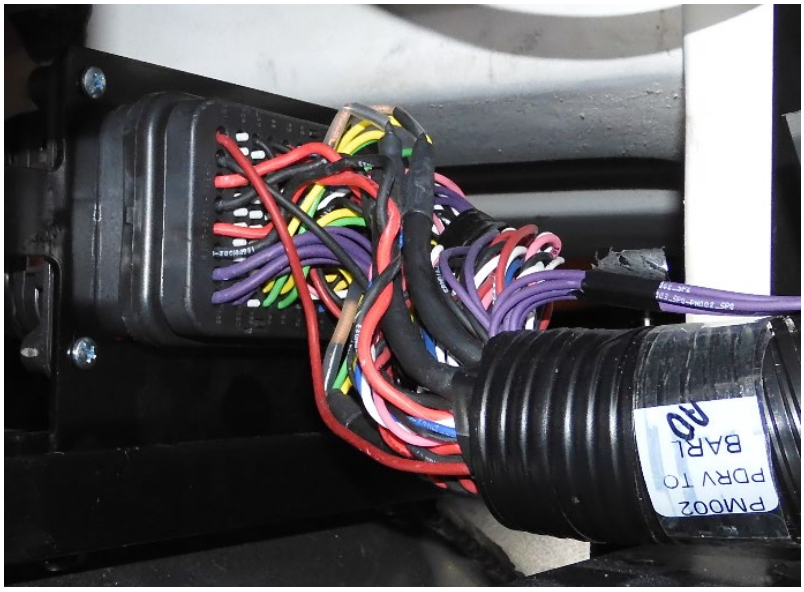
Procedure:

1. Perform the Proterra approved Lockout/Tagout process to make the bus safe for work.

2. Using a Square Key, open the Trunk Panel to access Connectors JM002 and PM002 just above the rear air tanks as shown in the following photograph.



3. Using a #2 Phillips Screwdriver, remove the four (4) screws that secure PM002 to JM002. Separate the connectors by pulling them apart.



4. Using a Pin Extractor Tool, remove the terminals installed into Cavities 6, 7, and 8 of Connector PM002.

5. Insert a Sealing Plug (001262) into Cavities 6, 7, and 8 of PM002.

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6. Using Side Cutting Pliers, cut the terminals off the wires. Cut the wire as close as possible to the terminal.

7. Using Wire Strippers, strip each wire to accept a Socket (010050).

8. Using a Crimping Tool, install a Pin (010051) onto each wire.

9. Insert the Socket (010050) on the Yellow Wire into Cavity 75 of PM002.

10. Insert the Socket (010050) on the Green Wire into Cavity 76 of PM002.

11. Insert the Socket (010050) on the Black Wire into Cavity 77 of PM002.

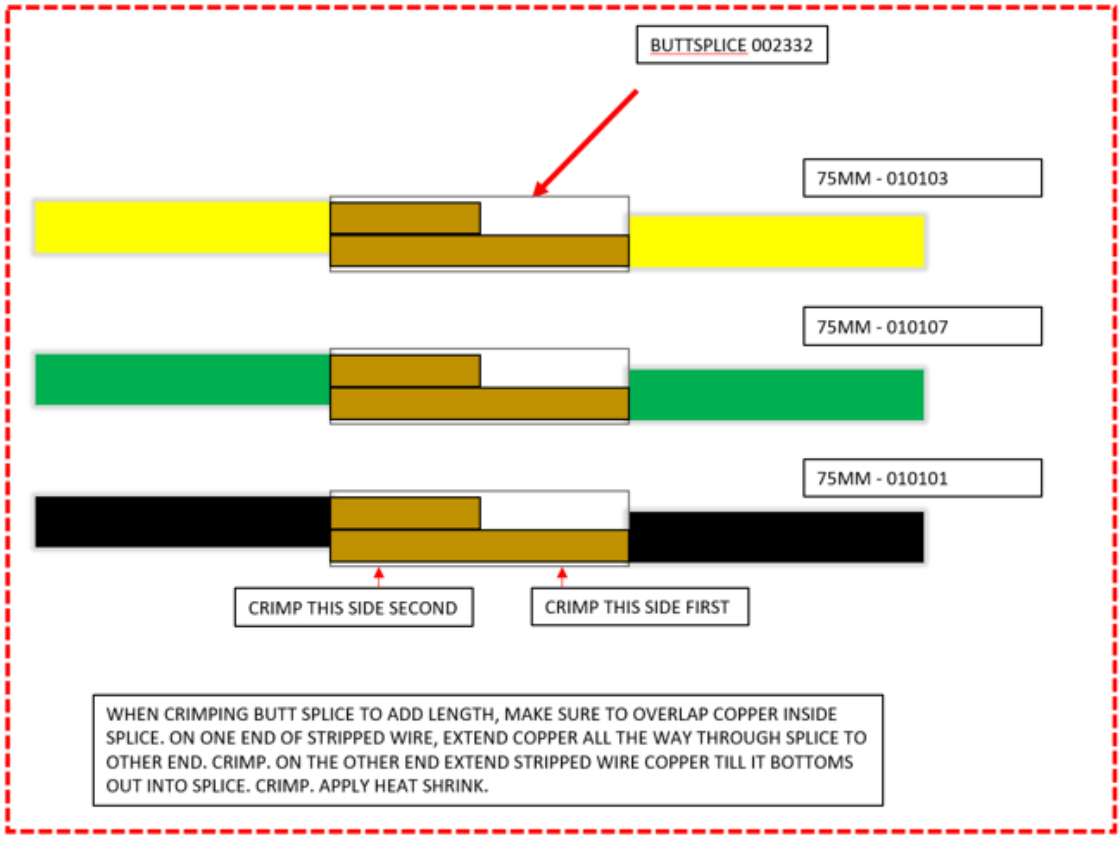
12. Using a Pin Extractor Tool, remove the terminals installed into Cavities 6, 7, and 8 of Connector JM002.

13. Insert a Sealing Plug (001262) into Cavities 6, 7, and 8 of JM002.

14. Using Side Cutting Pliers, cut the terminals off the wires. Cut the wire as close as possible to the terminal.

15. Using Wire Strippers, strip each of the three wires to accept a Butt Splice (002332).

16. Using the following illustration as a guide, extend each of the three wires using Butt Splices (002332) and additional wire. Ensure that the wires overlap inside the Splice as shown.



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17. Using a Heat Gun, seal each splice using a 2-inch length of Heat Shrink (008294).
18. Using Wire Strippers, strip the end of each wire to accept a Socket (010050).
19. Using a Crimping Tool, install a Pin (010051) onto the end of each wire.
20. Insert the Pin (010051) on the Yellow Wire into Cavity 75 of JM002.
21. Insert the Pin (010051) on the Green Wire into Cavity 76 of JM002.
22. Insert the Pin (010051) on the Black Wire into Cavity 77 of JM002.
23. Reconnect Connectors PM002 and JM002.
24. Using a #2 Phillips Screwdriver, reinstall the four (4) screws that secure the Connectors together.
25. Using a Square Key, close and latch the Trunk Panel.
26. Remove the Lockout/Tagout devices and return the bus to service.

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