ISSUE DATE:	2-22-2022
SERVICE BULLETIN SUBJECT:	40 Foot 800 Volt Accelerator Pedal Overlay Harness Retrofit
VINs or MODELS AFFECTED:	Service Specified Buses
COMPLETE BY:	Next Service Opportunity
SERVICE BULLETIN #:	SC-22-17
LABOR OPERATION CODE:	DE46Z

NOTICE! It is expected that this process will require three (3) hours pers bus. Please schedule appropriately to minimize vehicle downtime.

40 FOOT 800 VOLT ACCELERATOR PEDAL OVERLAY HARNESS RETROFIT

Retrofit Description:

This procedure describes the process of adding an Overlay Harness between the Accelerator Pedal and the Drive Train for improved performance.

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Tools/Parts Required

Tools and Supplies Required:

- Side Cutting Pliers
- Wire Strippers
- Ratchet
- 10mm Socket
- Calibrated Torque Wrench
- Orange Torque Stripe Paint

Kit Parts Required:

- 060539 RETROFIT - 40' ACCELERATOR PEDAL LAYOVER HARNESS (Consisting of)
  - 136-6794 HARNESS, ACCELERATOR PEDAL OVERLAY (ACCL) 1 EA
  - 164-5032 TAPE, MOISTURE CONTROL ELECTRICAL 1 EA

Additional Parts Required:

- 001911 CABLE TIE, STANDARD CROSS SECTION, 7.5 BLACK" 25 EA
- 012138 CABLE TIE, HEAVY DUTY .5WIDE 9.1" BLACK 15 EA

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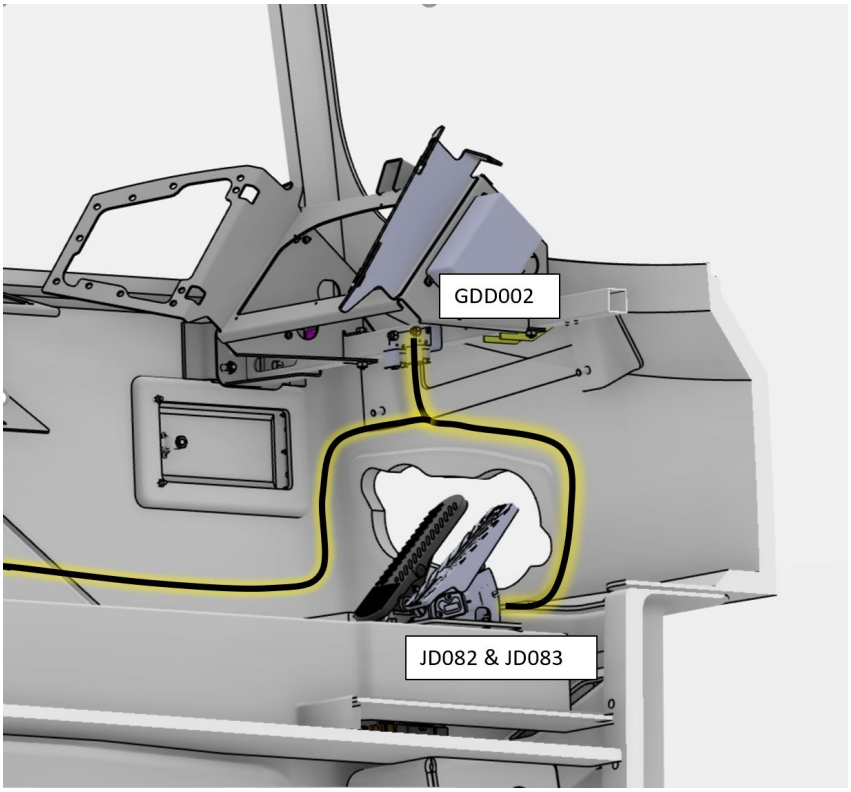
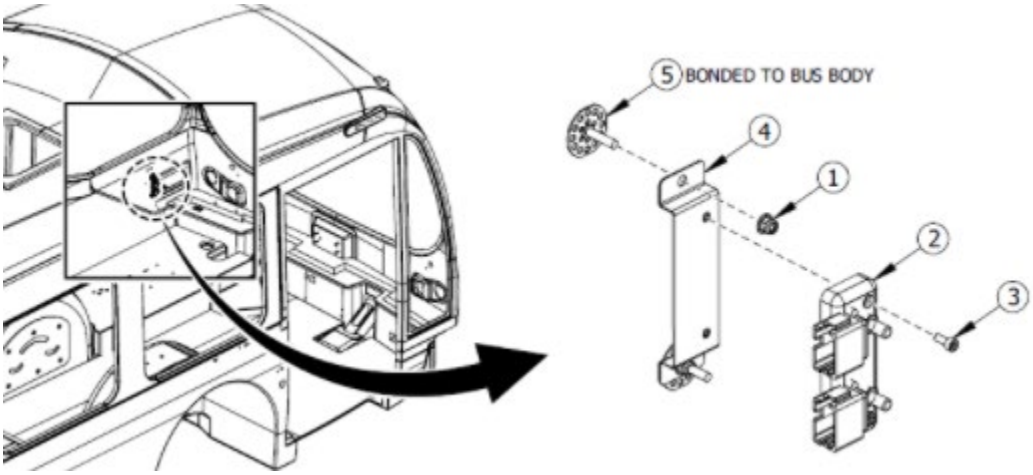
Procedure

1. Complete the Proterra approved Lockout/Tagout procedure to make the bus safe for work.

2. Working underneath the Steering Wheel, locate and disconnect the Connectors labeled JD082 and JD083.



3. Using a 10mm Ratchet/Socket, remove the Ground Lug from Ground Block GDD002 underneath the dash. Retain the Washer and Nut to use later. The following Parts Manual illustration shown the location of the Ground Block.



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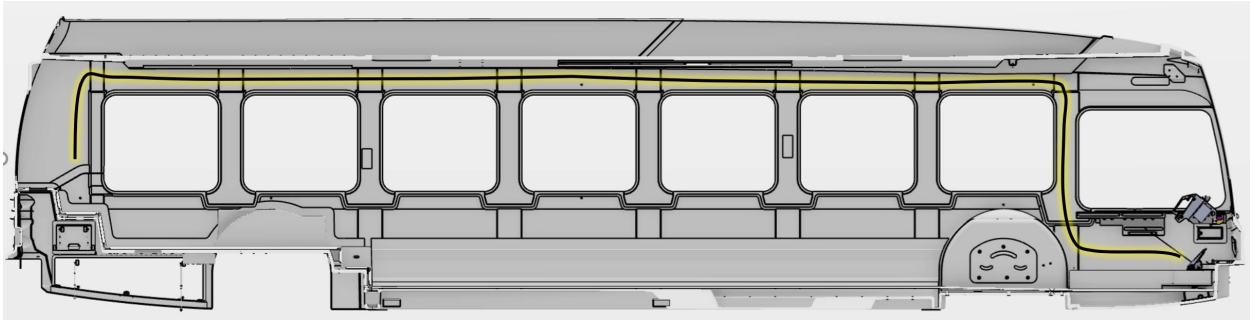
4. Using a T-30 Torx Driver, loosen or remove the panels necessary to route the new Harness through the Armrest and up through the ECAB to the Hadley Panels as shown in the following illustration.



5. Roll up the free end of the disconnected Harness and place it behind the Armrest.

6. Using a 4mm Allen Driver, open all the Hadley Panels on the streetside of the bus.

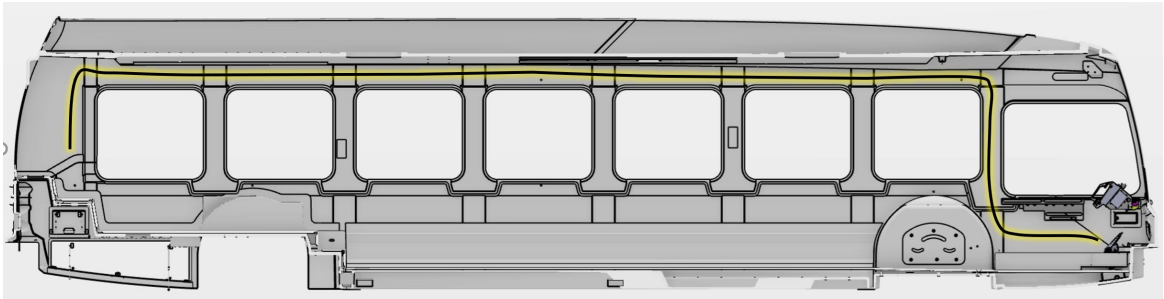
7. Connect the new Harness (136-6794) to the Accelerator Pedal using Connectors JD082 and JD083.

8. Using a 10mm Ratchet/Socket, connect the Ground Lug on the new Harness (136-6794) to the Ground Block labeled GDD002 underneath the dash using the original hardware.

9. Using a Calibrated Torque Wrench with a 10mm Socket, **torque the nut to 11 foot-pounds.**

10. Using Orange Torque Stripe Paint, mark the properly torqued fastener.

11. Route the free end of the new Harness (136-6794) back through the path shown in the following illustration. Keep the Harness as far away from High-Voltage cables if possible. If the Harness must cross High-Voltage cables, it should cross at a right angle.



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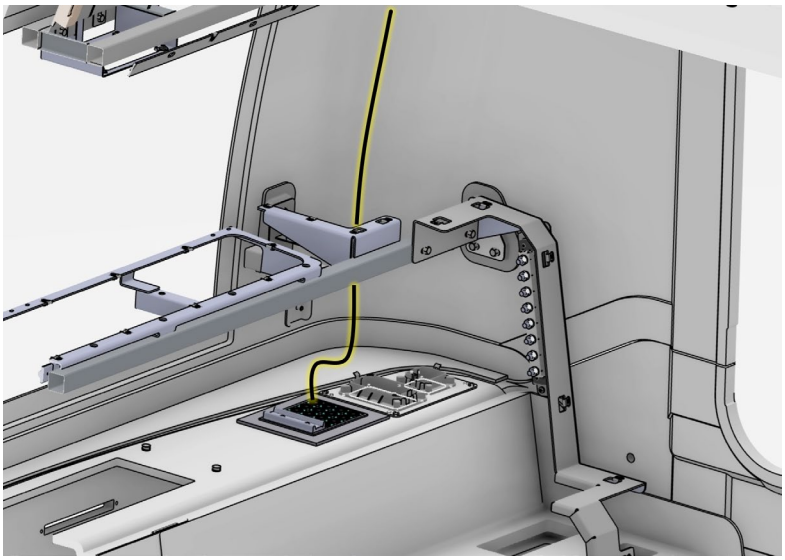
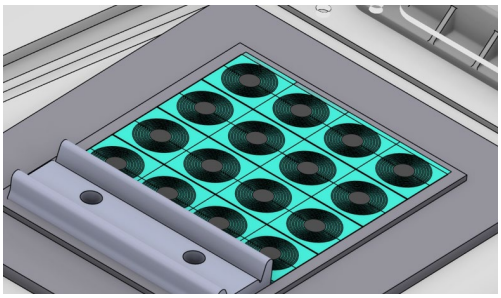
12. Working inside the bus at the streetside rear, remove any panels necessary to route the new Harness (136-6794) down through the rear deck of the bus as shown in the following illustration.



13. Route the free end of the new Harness (136-6794) down to the Roxtec Pass-Through as shown in the previous illustration.

14. Locate an unused opening in the Roxtec Pass-Through to route the new Harness (136-6794) down through the rear deck.



15. Determine what part of the new Harness (136-6794) will contact the Roxtec when it is routed through the rear deck.

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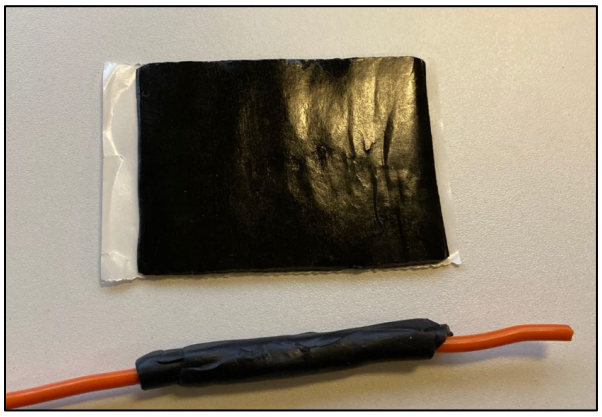
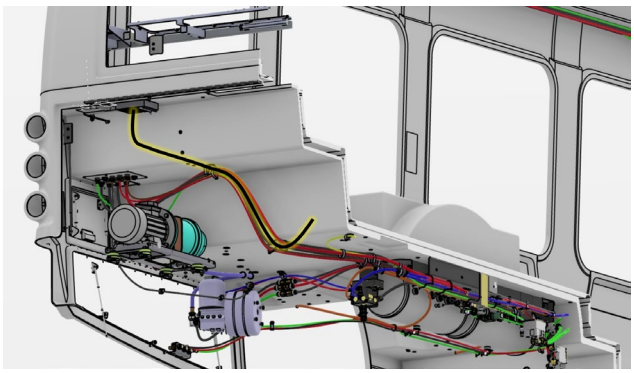
16. Using Moisture Control Tape (164-5032), wrap the Harness (136-6794) as shown in the following photograph. The Tape should cover the Harness in the area where it will contact the Roxtec.



17. Route the free end of the new Harness (136-6794) down through the Roxtec so that the Moisture Control Tape (164-5032) helps to seal the Roxtec.

18. If the bus you are working on is equipped with a Duopower drive, proceed to Step 23.

19. Working inside the Trunk Panel of the Prodrive equipped bus, route the free end of the new Harness (136-6794) as shown highlighted in yellow in the following illustration. The Harness should be routed with the Air Lines and Low-Voltage cables. If the Harness must cross High-Voltage cables, it must cross them at right angles.



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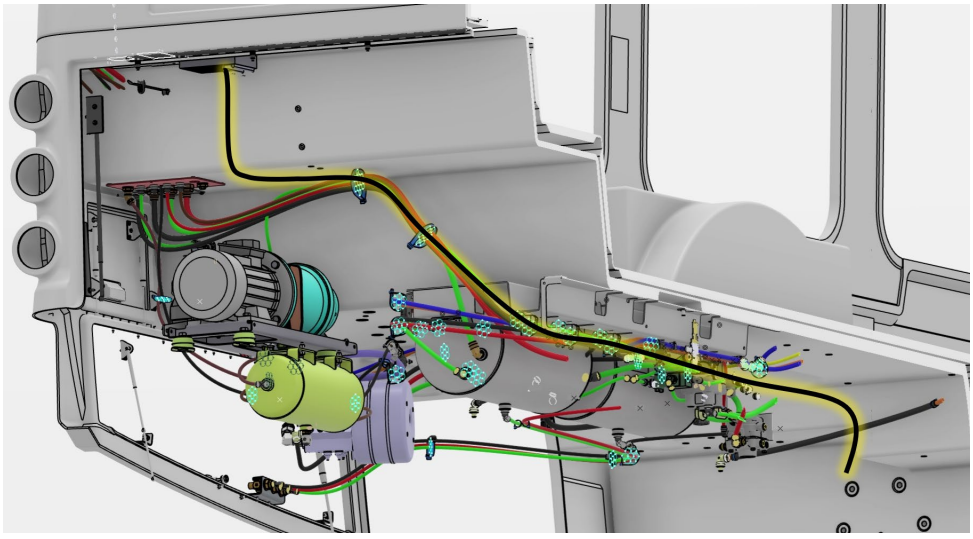
20. Locate the connector labeled PM152 on the Prodrive and disconnect it.

21. Using a Pin Extractor, remove the terminals installed into Cavities 37, 28, 39, and 40.

22. Install the terminals on the new Harness (136-6794) into their respective Cavities on PM152. The terminals are labeled for the proper Cavities.

23. Skip to Step 27.

24. If the bus you are working on is equipped with a Duopower Drive, route the free end of the new Harness (136-6794) as shown highlighted in yellow in the following illustration. The Harness should be routed with the Air Lines and Low-Voltage cables. If the Harness must cross High-Voltage cables, it must cross them at right angles.



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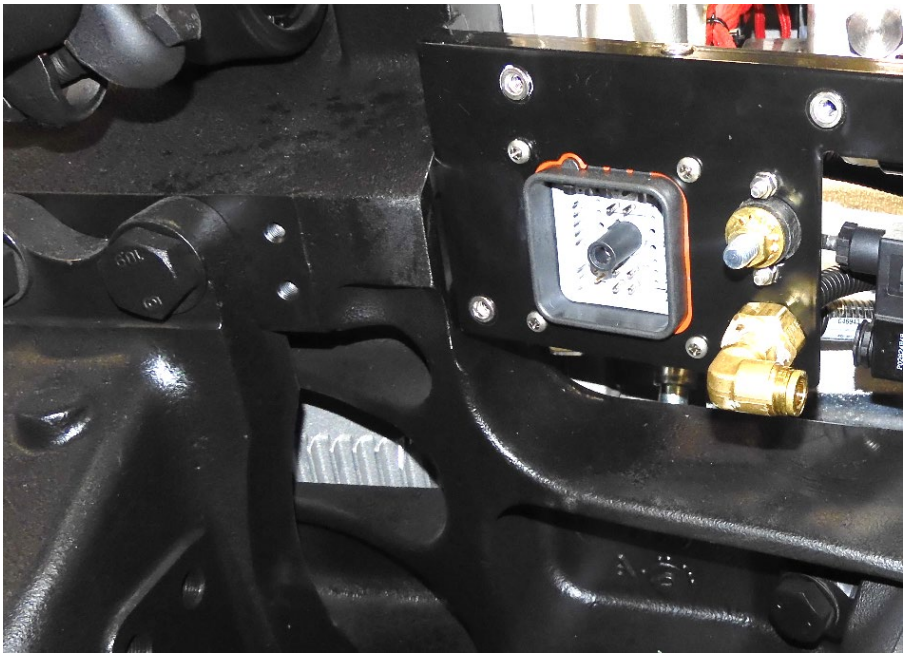
25. Locate the connector labeled PM152 on the Duopower Drive and disconnect it.
    NOTE: The mating connector on an uninstalled Duopower Drive is shown below for reference.



26. Using a Pin Extractor, remove the terminals installed into Cavities 37, 38, 39, and 40.

27. Install the terminals on the new Harness (136-6794) into their respective Cavities on PM152. The terminals are labeled for the proper Cavities.

28. Reconnect PM152 to the Prodrive.

29. Using Cable Ties (001911 and 012138), secure the harness along the length of its route.

30. Using a 4mm Allen Driver, close and secure the Hadley Panels.

31. Using a T-30 Torx Driver, replace any panels that were removed including the Armrest.

32. Remove the Lockout/Tagout devices and return the bus to service.

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