



**PROTERRA**



# TECHNICAL SERVICE BULLETIN

<b>ISSUE DATE:</b>	10-27-2022
<b>SERVICE BULLETIN SUBJECT:</b>	ZX5 Overhead Destination Sign Bracket Retrofit
<b>VINs or MODELS AFFECTED:</b>	Service Specified Buses
<b>COMPLETE BY:</b>	Next Service Opportunity
<b>SERVICE BULLETIN #:</b>	SC-22-135
<b>LABOR OPERATION CODE:</b>	N/A

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

## **ZX5 OVERHEAD DESTINATION SIGN BRACKET RETROFIT**

### **Description:**

This procedure describes the process of updating the Overhead Destination Sign Bracket to a more robust version.

## Tools/Parts Required:

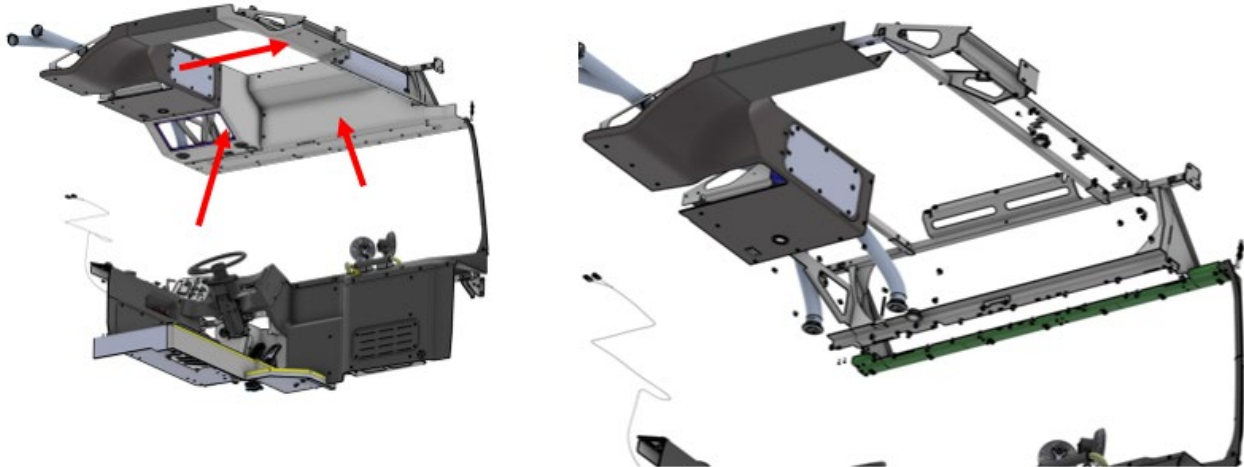
- Ratchet
- 13mm Socket
- 10mm Socket
- Calibrated Torque Wrench
- Orange Torque Stripe Paint

## Kit Parts Required:

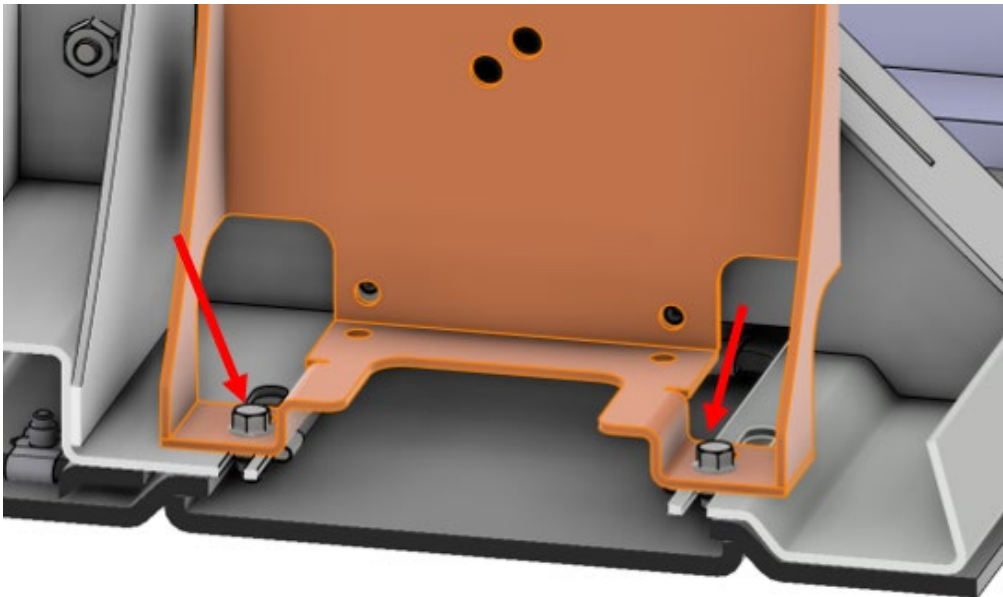
- 063012 KIT, SERVICE, DESTINATION SIGN FRAME REPLACEMENT (Consisting of)
  - 051619 FRAME, OVERHEAD, FRONT DESTINATION SIGN 1 EA
  - 005443-002 BOLT, HEX, FLANGE, STL, YZPL, CLASS 10.9, M8-1.25X16X16 16 EA
  - 030266 U-NUT, M6, 0.8-4.0mm THICK 40 EA
  - 019493-005 SCREW, BUTTON,FLG,TORX,SS,EPOXY BLACK, M6-1.0X25X25 40 EA
  - 033222 WASHER, DIN 9021, STL, HDN, BLK WATCH #53259, M6 40 EA
  - 005442-003 BOLT, HEX, FLANGE, STL, YZPL, CLASS 10.9, M6-1.0X16X16 4 EA

## Procedure:

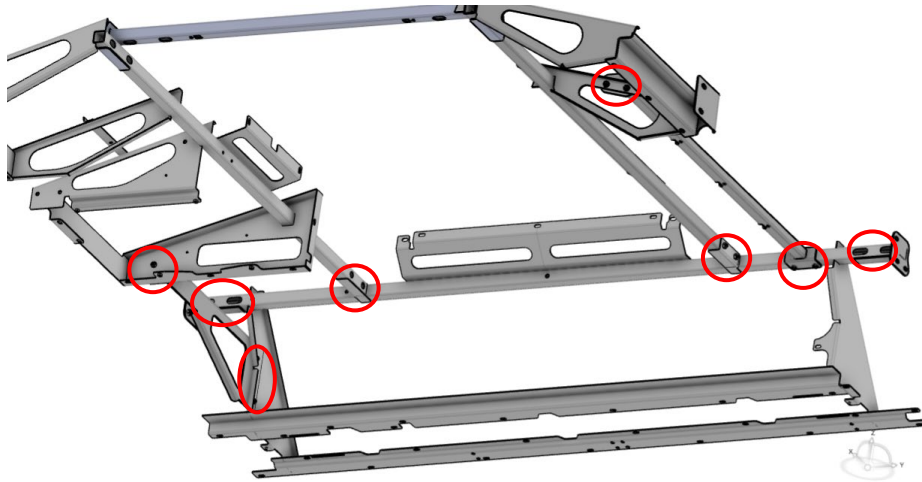
1. Use the Proterra approved Lockout/Tagout procedure to make the bus safe for work.
2. Using a T-30 Torx Driver, remove the overhead panels necessary to access the destination sign bracket. Retain the M6 Panel Fasteners and Washers for reuse.



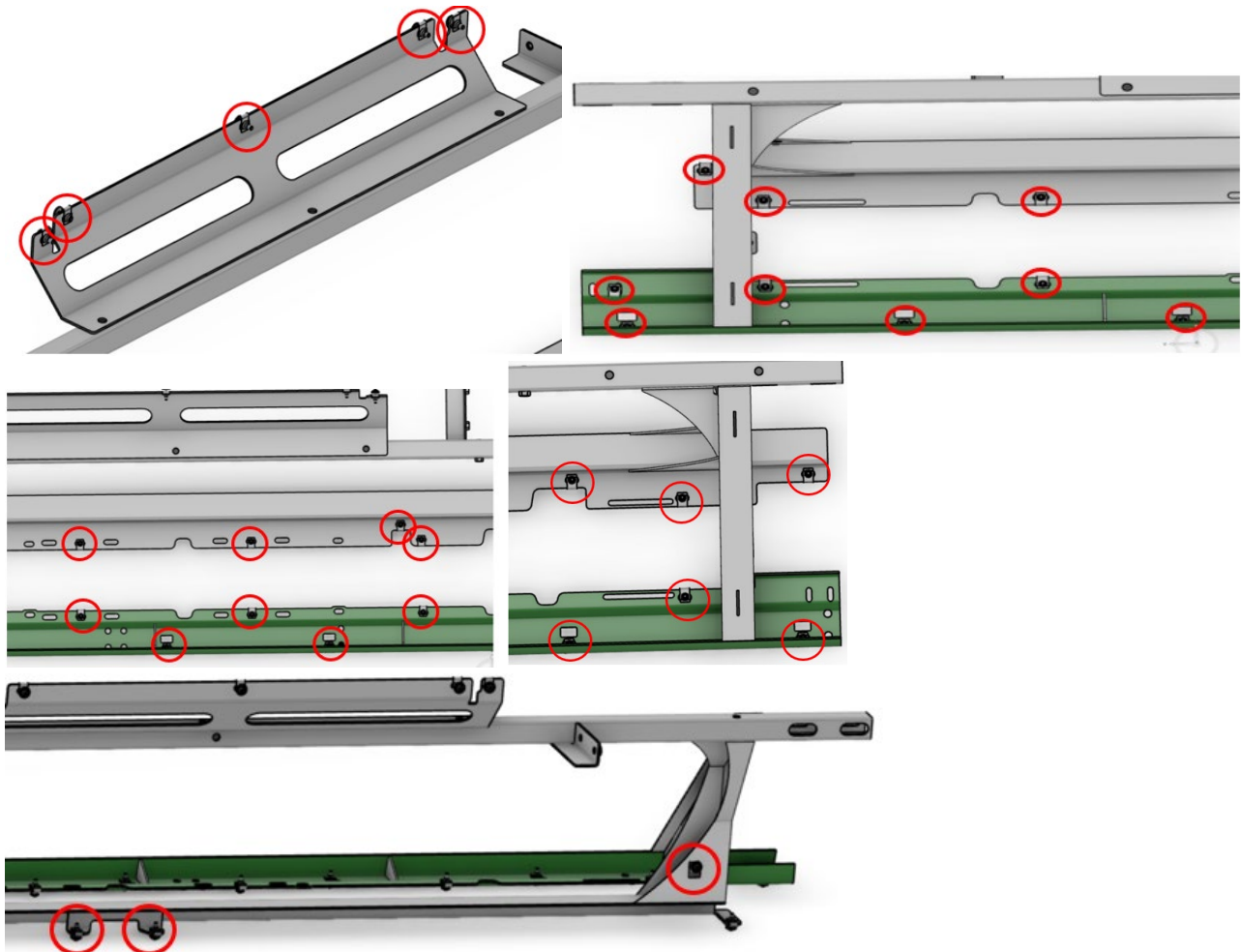
3. Using a 10mm Ratchet/Socket, remove the Destination Sign by removing the M6 Fasteners shown in the following illustration.



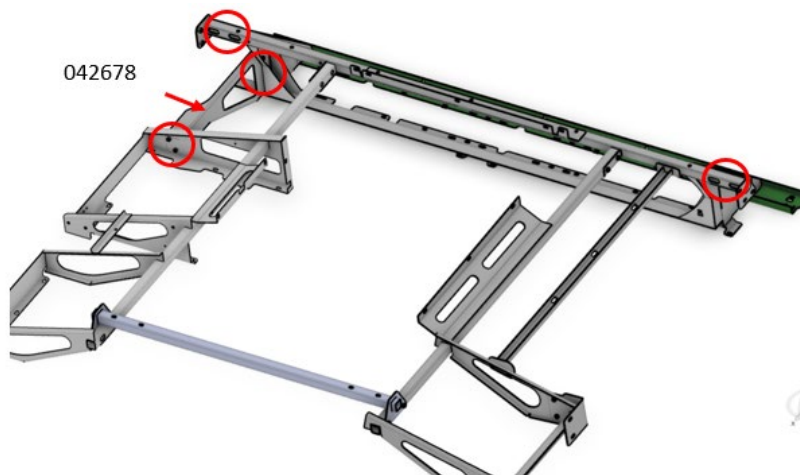
4. Using a 13mm Ratchet/Socket, remove the Destination Sign Brackett from the bus by removing the M8 Fasteners shown in the following illustration.



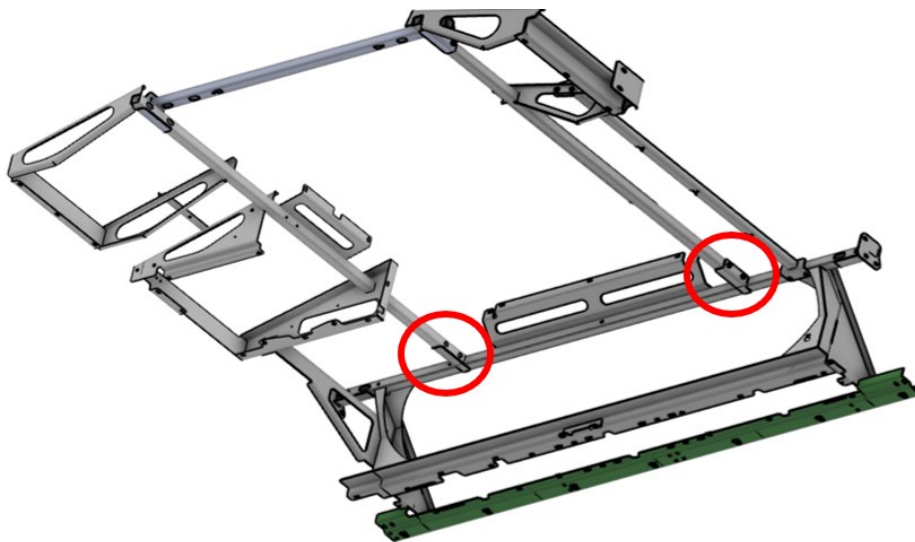
5. Working with the new Destination Sign Frame (051619), install 32 U-nuts (030266) in the positions shown in the following illustrations.



6. Using a 13mm Ratchet/Socket, install the Sign Frame (051619) into the support brackets as shown using two M8 Bolts (005443-002) per side.

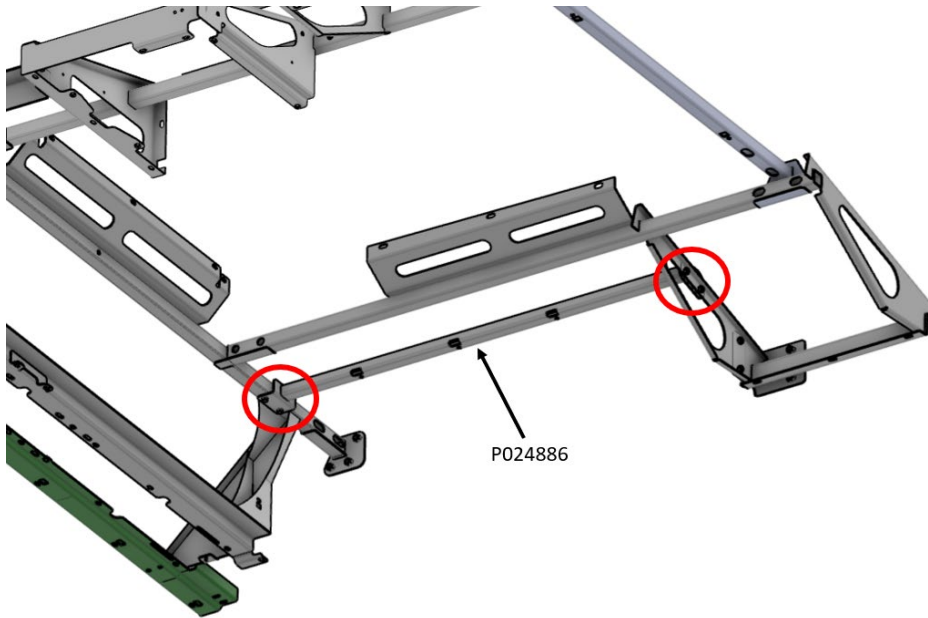


7. Using a 13mm Ratchet/Socket, Install the Support Bracket (042678) using four M8 Bolts (005443-002).
8. Using a Calibrated Torque Wrench with a 13mm Socket, torque the M8 Bolts to 23 foot-pounds.
9. Using Orange Torque Stripe Paint, mark the properly torqued fasteners.
10. Using a 13mm Ratchet/Socket, attach the Sign Frame (051619) to the upper frame using four M8 Bolts (005443-002) as shown in the following illustration.

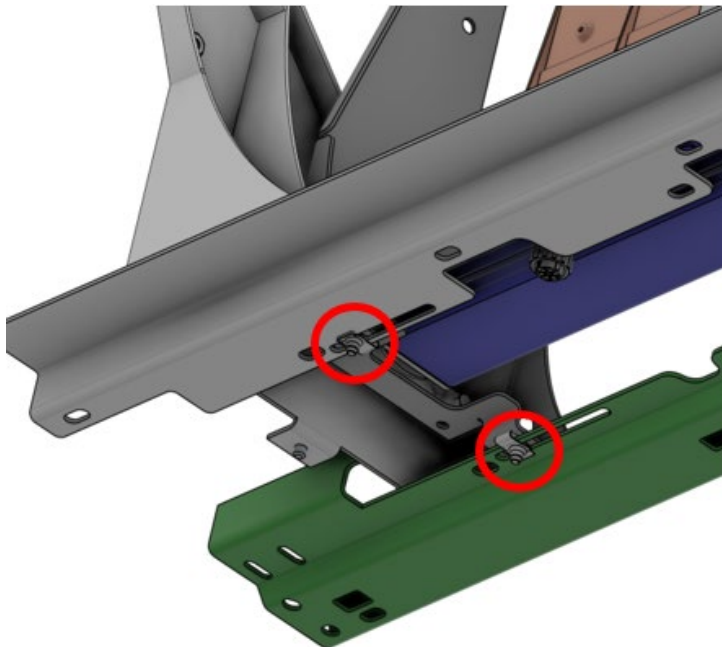


11. Using a Calibrated Torque Wrench with a 13mm Socket, torque the M8 Bolts to 23 foot-pounds.

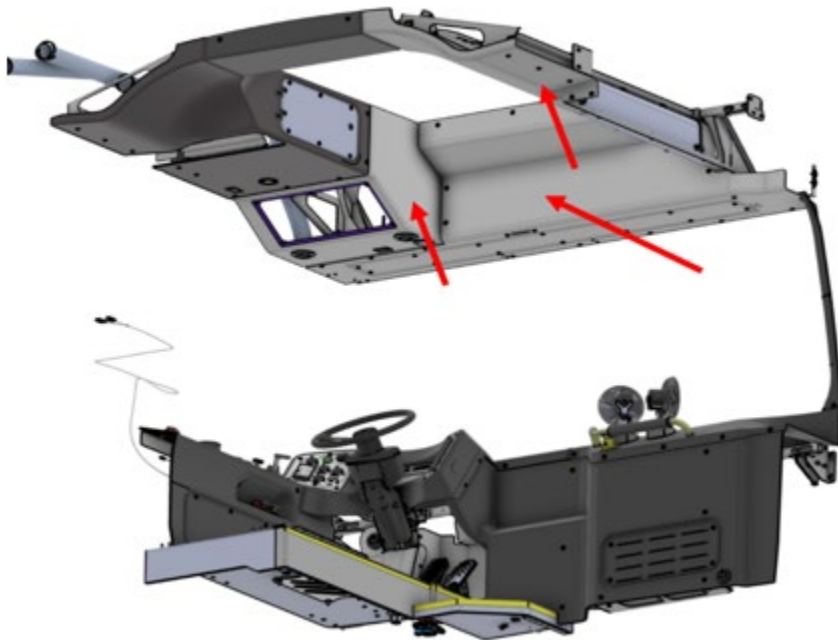
12. Using Orange Torque Stripe Paint, mark the properly torqued fasteners.
13. Using a 13mm Ratchet/Socket, attach the Support Frame (**P024883**) to the Sign Frame (051619) as shown in the following illustration.



14. Using a Calibrated Torque Wrench with a 13mm Socket, **torque the M8 Bolts to 23 foot-pounds.**
15. Using Orange Torque Stripe Paint, mark the properly torqued fasteners.
16. Install four U-nuts (030266) for the Destination Sign as shown in the following illustration.



17. Using a 10mm Ratchet/Socket, reinstall the Destination Sign using four new M6 Bolts **(005442-003)** and connect the harness.
18. Using a Calibrated Torque Wrench with a 10mm Socket, **torque the fasteners to nine foot-pounds.**
19. Using Orange Torque Stripe Paint, mark the properly torqued fasteners.
20. Using a T-30 Torx Driver, reinstall the overhead panels that were removed earlier using M6 Screws **(019493-005)** and M6 Washers **(033222)** as shown in the following illustration.



21. Remove the Lockout/tagout devices and return the bus to service.