7ISSUE DATE:	12/7/2020
SERVICE BULLETIN SUBJECT:	FC and E2 Charge Blade Loctite Retrofit
VINs or MODELS AFFECTED:	Service Specified Buses
COMPLETE BY:	Next Service Opportunity
SERVICE BULLETIN #:	SB-20-168

FC AND E2 CHARGE BLADE LOCTITE RETROFIT

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

Retrofit Description:

It is expected that the fast charge blade be visually inspected as part of the standard Proterra Catalyst FC and Catalyst E2 Preventative Maintenance Inspection Checklists. This bulletin clarifies that the high voltage connections at the blade should be checked for proper torque values every 6000 miles and provides the replacement procedure in the event a fastener on the charge blade is found loose or missing. The procedure specifies the fasteners, proper torque value, and required thread locker.

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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:

- Ratchet
- 5/8-Inch Allen Socket
- 4mm Allen Socket
- Calibrated Torque Wrench
- Loctite 271 Red Thread Locker
- Alcohol
- Shop Towels

Parts Required:

• 013096-010	SCREW,SHC,FLAT,SS, 0.25-20X1.0X1.0	8 EA
• 017960	NUT, HEX FLANGE, SS, .38-16 NON-SERRATED	8 EA
• 013100-012	SCREW, SHCS, FH, 3/8-16 X 1.5"-SS"	8 EA

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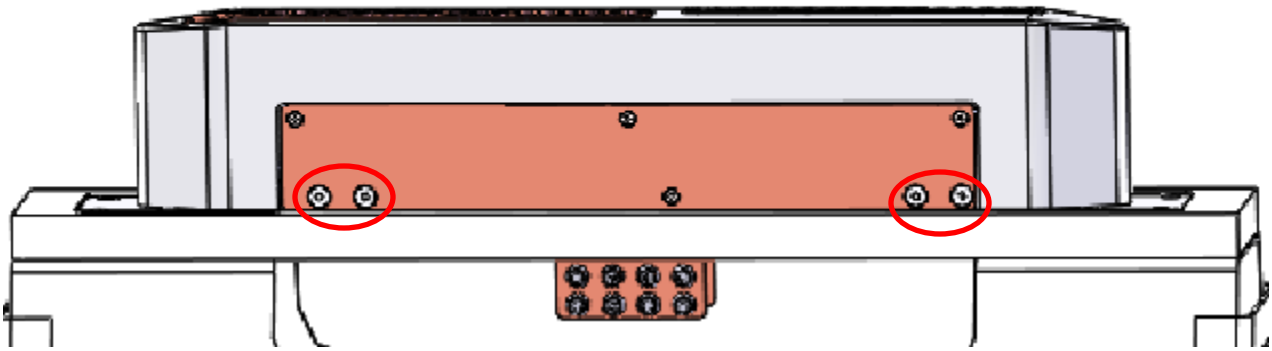
Procedure:

1. Preform the Proterra approved Lockout/Tagout procedure to make the bus safe for work.
2. Using the appropriate safety measures, access the rooftop of the bus.
3. Open the Clamshell Doors on the rooftop of the bus to access the charge blade.
4. Using a Ratchet with a 5/8-Inch Allen Socket and a 9/16-Inch Combination Wrench, remove one of the four screws and nuts shown circled in red on the Streetside of the Charge Blade. **Note:** Replacement Screws (013100-012) and Locknuts (017960) are supplied. They should be used to replace any damaged fasteners found in this procedure.



5. Using Alcohol and Shop Towels, clean and inspect the Screws and Locknuts. Replace them with parts from the kit if they are damaged.
6. Apply a drop of Loctite 271 to the threads of the screw that was just removed.
7. Using a Ratchet with a 5/8-Inch Allen Socket and a 9/16-Inch Combination Wrench, reinstall the screw and nut into the Charge Blade.
8. Using a Calibrated Torque Wrench with a 5/8-Inch Allen Socket, **torque the screw to 150 Inch Pounds.**
9. Repeat the process to apply Loctite 271 and properly torque the remaining three screws on the Streetside of the bus.
10. Working on the Curbside of the bus, repeat the process to apply Loctite 271 and properly torque the four screws on the Curbside of the Charge Blade.

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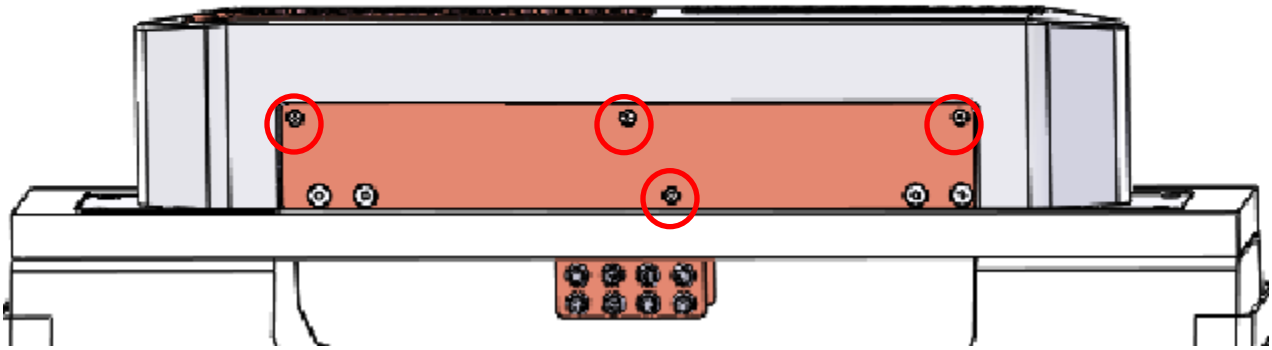
11. Using a Ratchet with a 4mm Allen Socket, remove one of the four screws shown circled in red on the Streetside of the Charge Blade.
    Note: Replacement Screws (013096-010) are supplied. They should be used to replace any damaged fasteners found in this procedure.



12. Using Alcohol and Shop Towels, clean and inspect the Screws. Replace them with parts from the kit if they are damaged.

13. Apply a drop of Loctite 271 to the threads of the screw that was just removed.

14. Using a Ratchet with a 4mm Allen Socket, reinstall the screw.

15. Using a Calibrated Torque Wrench with a 4mm Allen Socket, **torque the screw to 53 inch pounds.**

16. Repeat the process to apply Loctite 271 and properly torque the remaining three screws on the Streetside of the bus.

17. Working on the Curbside of the bus, repeat the process to apply Loctite 271 and properly torque the four screws on the Curbside of the Charge Blade.

18. Close the Clamshell Doors and exit the rooftop of the bus.

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

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