



Service Bulletin

Number	SVC-09-10-007
Author	Service Operations
Date	15-Feb-10 - Update
Model & Year	Roadster, 2008/2010

Title: EV Light Ring De-Bond Repair

Reason: Repairing de-bonded light rings on body side panel

Description: There are some cases where the bond path on the EV inlet ring was not applied properly. This causes a separation when loads are applied from charge cable connection and disconnection. This process, using approved adhesives, allows for complete repair of the EV inlet ring.

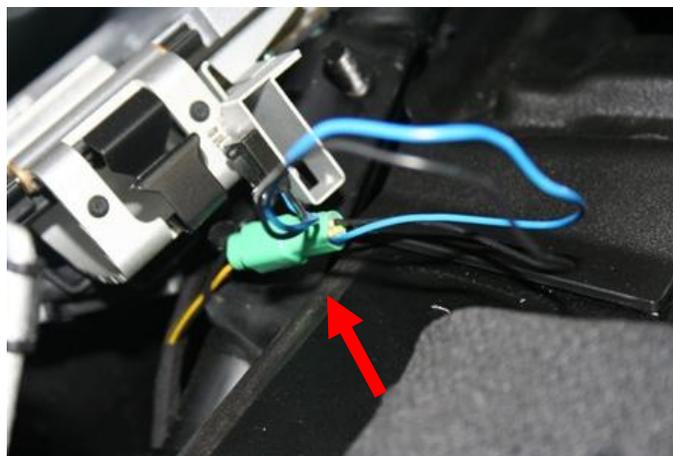
It is important to follow this repair process and to use the chemicals specified to ensure permanence and integrity of the bond.

1. Remove the decking panel; refer to FRT No. 10012602 for instructions.
2. Remove the charge port light ring assembly, refer to FRT No. 44012502.
3. Remove the charge port door.
4. Remove the rubber finisher at the bottom of the charge port door.
5. If the EV inlet mount is not completely separated from the body side panel: use a standard heat gun and apply medium heat at a distance of 15 cm for duration of 20-30 seconds to the charge port ring to aid removal.



6. Apply light pressure and separate the charge port ring from the body side panel.
7. Disconnect the LED connector and the charge door switch connector.

Caution: Use care when removing the green charge door connector. The wires can separate very easily and become damaged.



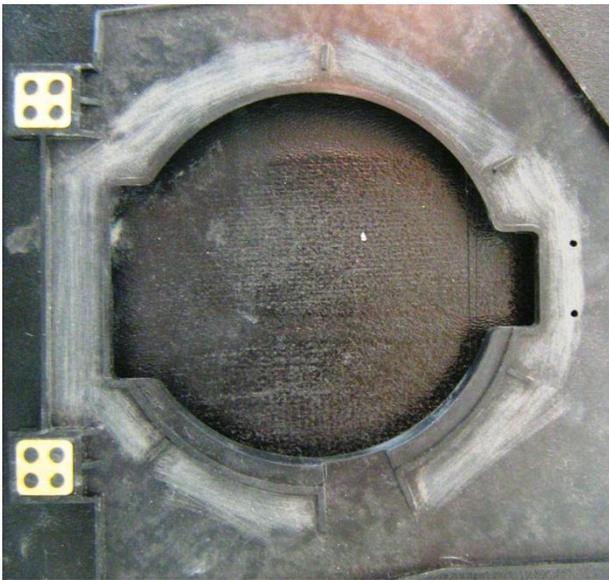
8. Once the EV inlet has been removed, lay protective plastic to the inside area over the Battery and PEM to protect from debris and dust.



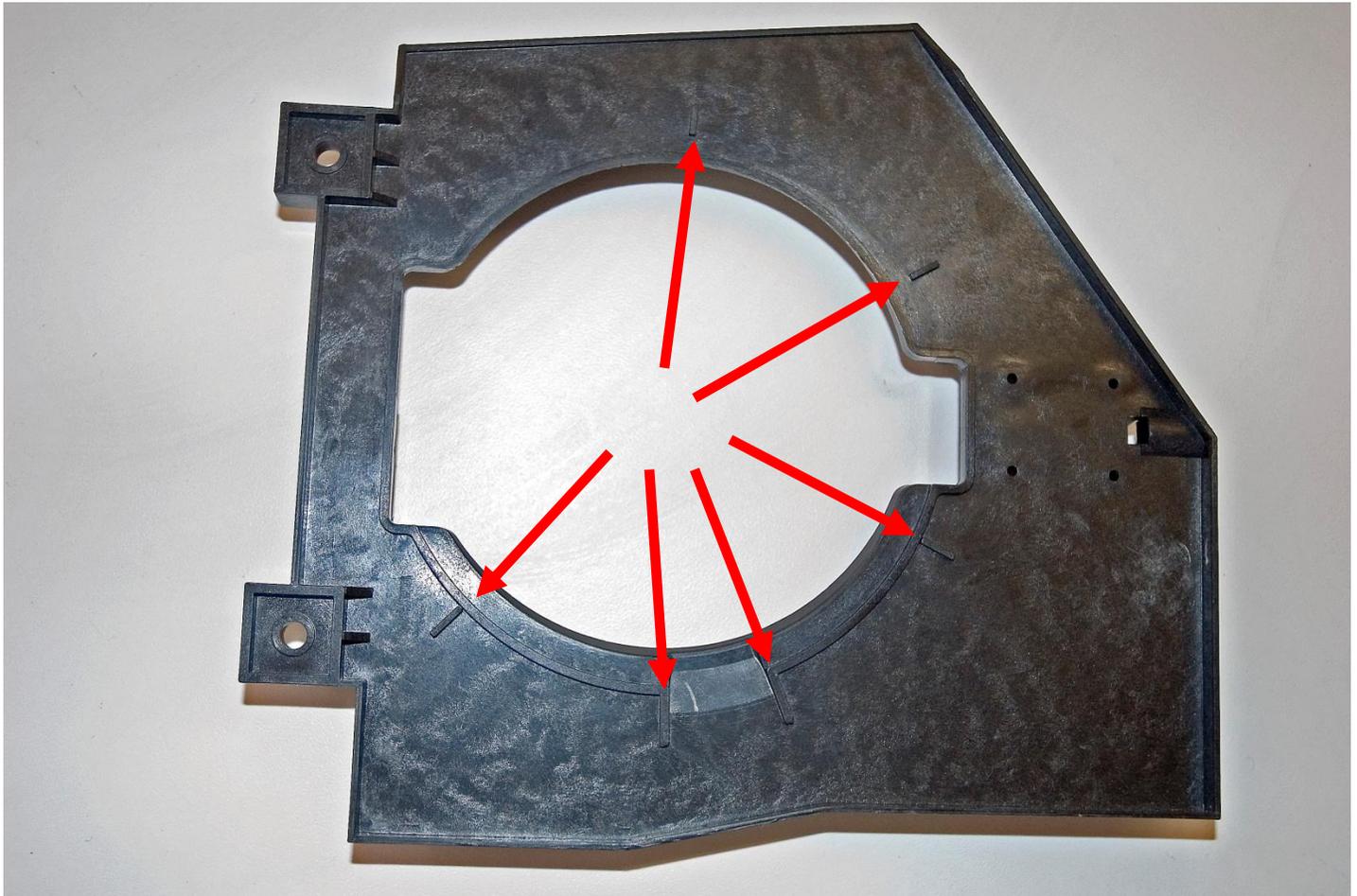
9. Clean the body side panel and EV inlet ring surface of old adhesive using a scraper.



10. Abrade both surfaces with 80 grit sand paper and blow off areas with compressed air. See below for examples of desirable abrasion patterns on both the EV light ring and the body side panel.



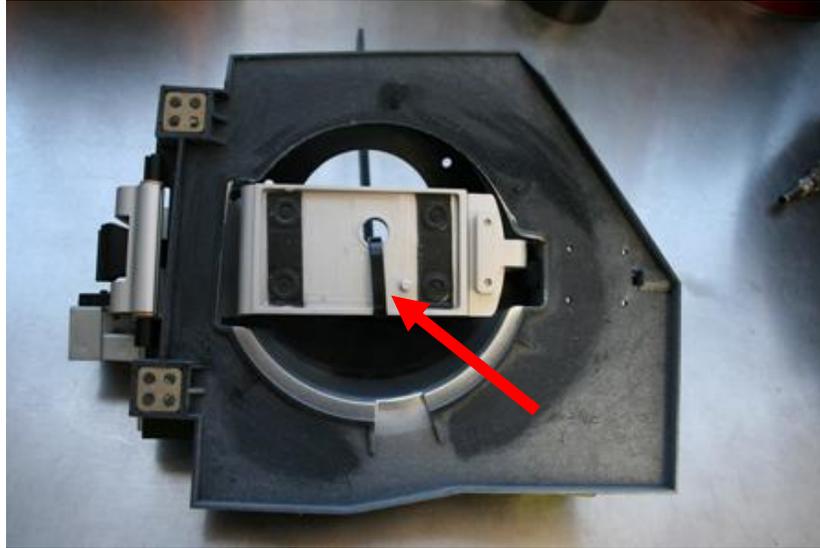
Note: Do not abrade stand offs or raised ridge around the EV inlet ring.



11. Clean both surfaces with 99% pure isopropyl alcohol. Allow two minutes or more to dry.

Note: Use only 99% pure isopropyl alcohol. DO NOT use a lower purity isopropyl alcohol that is more commercially available. Failure to use 99% pure isopropyl alcohol may affect bond integrity.

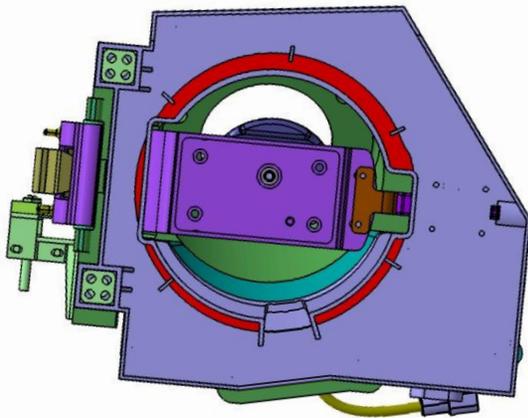
12. Zip tie the EV inlet hinge closed as shown.



13. Apply painters tape to the body to protect it during bonding process.

14. Apply 5404A primer to the EV inlet ring and body side panel. Allow 5-10 minutes for primer to evaporate.

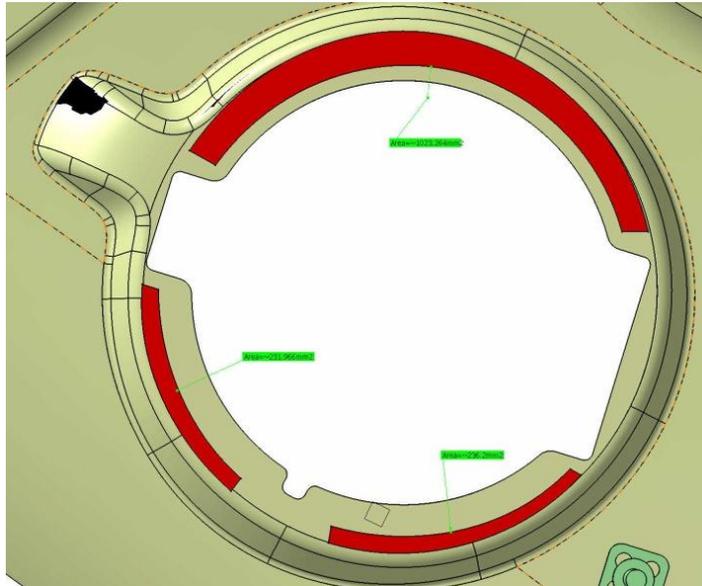
15. Apply Betaseal O^{ne} to the EV inlet ring as shown in red on the illustration below. A photo of the desired bond application is shown as well.



Note: The adhesive bead must be a minimum of 2mm thick as measured from the EV light ring to the top of the glue bead to ensure proper bonding and filling of the 1.5mm gap between the light ring and the body.

Note: Care must be taken to ensure that the glue does not spread beyond the standoffs of the EV Inlet Ring – otherwise this can cause interference with other fitted parts.

16. Apply Betaseal O^one to the body side panel as shown in red.



17. Guide the EV inlet ring into place use the slotted part of the EV inlet opening as a guide to align the EV inlet ring to the body side panel. Check alignment at the hinge side. If necessary place the charge port door on the hinge to check fitment.



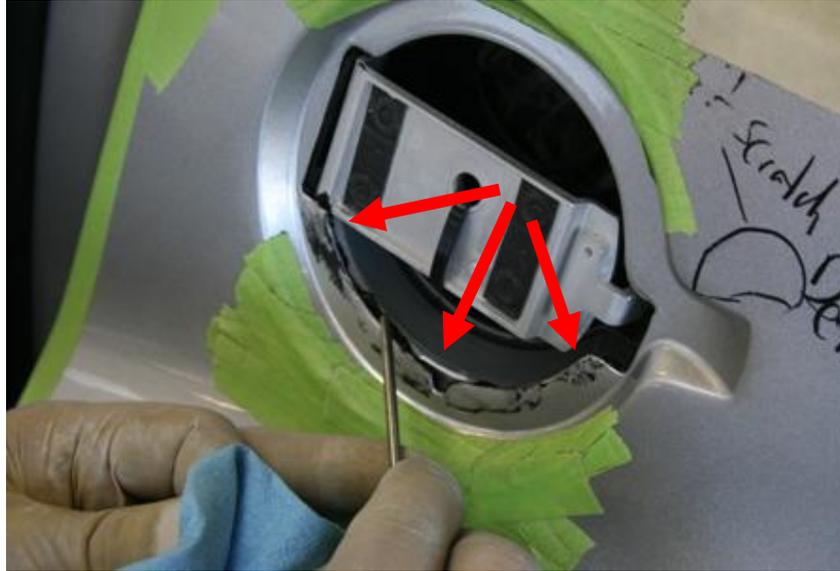
18. Use a paint stir stick or similar and a bolt/nut fastener as shown below.



19. Using the stick as a clamp, tighten the nut to secure the stir stick against the body and hold the EV inlet ring in place.



20. Using a pick or similar tool, clean out the pocket between the body side panel and the EV inlet of any excess adhesive. Wipe and clean the exposed surfaces with wax and grease remover to clean up any adhesive that has pushed out during assembly (picture is shown without stick for clarity).



21. Allow 24 hours for adhesive to cure. Re-assemble parts in reverse order.

Note: *If any painted surfaces have been affected, perform the repairs after the adhesive has cured. It is ideal to do so before re-assembly*

22. Replace rubber finisher if necessary.

Affected Part(s):

2006140 Beta Prime 5404A
 6006139 Beta Seal O^{ne}
 2000284 Rubber Finisher (if needed)
 Commercially available isopropyl alcohol 99% pure
 Commercially available wax and grease remover

Affected VIN(s): All vehicles. On a customer complaint basis perform this repair as needed.

Vehicle Systems Information: N/A

Warranty / SAP Coding Instructions: **Complaint:** A091 **Cause:** B053 **Correction:** SVC0917004

Contact for further information: Chief Technician

Service Writer	Service Manager	Technician	Parts Manager	General Manager