Technical Bulletin

09-01-09-02

High Mounted Stop Lamp (HMSL) – Service replacement procedure

Applicability:
Bentley Continental GT and GT derivates upto and including 2011 Model Year

Market Region: All

Introduction:
The high mounted stop lamp located on the top edge of the rear windscreen aperture is positioned during manufacture prior to bonding the rear windscreen in position. Therefore to replace the high mounted stop light it has, in the past, been considered necessary to first remove the rear windscreen.

Description:
A revised remove and refit procedure has been developed eliminating the requirement to remove the rear windscreen. This new procedure involves cutting through the lower 'lip' of the HMSL, partially secured under the rear windscreen, before removing the high mounted stop lamp in two parts. A service only HMSL with the lower 'lip' deleted is then used to replace the original unit. All this is carried out without removing the rear screen

Procedure:

Note: A new HMSL has been introduced on Continental GT cars from 2012 MY. The remove and refit procedure for 2012 MY cars onwards can be found in the relevant workshop manual.

This new part utilised a round section cable thus deleting the ribbon cable and block interface. From this a new service part has been developed which also uses only round section cable.

This new service part (3W8945097L) will be supplied when stock of the original service part is exhausted, expected to be early 2011.

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The fitting procedure for the new service part differs only slightly from the ribbon cable part. The only significant point of note is the additional intricacy of ensuring sufficient Betafill is placed around the compete circumference of the round section cables to ensure water cannot enter the vehicle at this point

Caution: When drilling and removing the high mounted stop lamp eye protection must be used to protect from shards of plastic

Caution: Do not allow solvents to contact the new HMSL unit as this may cause premature failure of the lens. This is especially important when finally cleaning off any excess screen sealer

1. Remove the main headlining (Refer to ASSIST BIN 08-67 Main headlining – To remove and fit)
2. Apply a protective layer of tape around the paint and glass surrounding the HMSL
3. Referencing Figure 1, cut through the lip of the defective HMSL

Note: For clarity, the stop lamp is shown removed in Figure 1 inset A and B

- A small saw frame holding a standard hacksaw blade is suitable for cutting the lip from the defective lamp
- Note that although the lamp lens is made of crystalline plastic and would shatter if cut, the lip that has to be removed is made of ABS plastic which is soft and malleable and will cut easily
- Use the vertical side of the stop lamp as a guide for the cutting tool thus ensuring the cutting blade is kept well away from the edge of the glass (A)
- Repeatedly drawing the cutting blade along the stop lamp will cut through the lip (B) that is sitting under the rear glass
- Inset (B) shows the removed stop lamp and the condition of the lip once it is cut sufficiently to remove

4. Remove the HMSL from the vehicle
- Drill five 3mm holes into the top face only of the HMSL at 11cm, 34.5cm and 58cm from each end, these hole positions correspond with the location of each securing clip (see Figure 2)
- Screw slider hammer RH 13237 into each 3mm hole in turn and gently pull the stop lamp from its securing clips (see Figure 3)
- It is understood that the original ribbon cable electrical connection will break as a result of this removal process

5. If necessary, cut smooth any errant screen bonding adhesive to improve the aesthetics.
6. Apply a coating of bare metal primer to any metal exposed on the body flange as a result of cutting off the HMSL lip (see Figure 4)
7. Check the integrity of the HMSL securing clips riveted to the body, apply a coat of Sika 209 C screen primer before sealing any rivets found to be loose with a small quantity of Betafill, this is to prevent water ingress (see Figure 5)
8. Referencing Figure 6, produce a slot in the screen adhesive to allow the passage of the de-pined cable that is attached to the new HMSL. The slot should be produced at the original cable entry point
   - Using a surgical scalpel, remove approximately 25mm of old adhesive
   - The majority of the cutting should be done from inside the vehicle as access is more direct and less likely to damage the glass
   - The slot must be at least wide enough to allow the ribbon cable block to pass through. Use the old part as a gauge (see Figure 7). When fitting the new round cable part (3W8945097L) the slot size can be reduced

Caution: Do not allow the scalpel to apply any leverage to the glass during this operation as this will cause the rear screen to facture

- Ensure all remnants of the old ribbon cable are removed from the newly prepared slot
- A cautious approach to this operation is recommended allow 15 minutes to cut the slot

9. Referencing Figure 8 or 8a, prepare the new HMSL (part number 3W8945097H or 3W8945097L)
   - Using tool WT10079/8 de-pin and remove the plug from the stop lamp wires
   - Apply Sika 209 C screen primer to the top face of the ribbon cable or in the case of the round section cables apply 209 C primer along approximately 100mm of their length and complete circumference. This is to aid sealer adhesion as well as creating a matt black surface on the cables to help obscure them from view as they exit the stop lamp assembly. The other side of the ribbon cable is adhesive backed and therefore does not require primer

10. Apply a coat of Sika 209 C screen primer to the body flange previously treated with metal primer in operation 6. Also apply the primer to the slot produced in the screen adhesive ensuring the underside of the glass is coated, this is to promote adhesion when applying the Betafill
11. Apply the obscuration strip (part number 3W8853995) to the prepared body flange (see Figure 9 and 10)
    - The obscuration strip (C) should be applied so it fits under the overhang of the glass. Its function is to cover the body flange that would otherwise be visible when the new stop lamp is fitted

12. Fit the new HMSL (part number 3W8945097H or 3W8945097L)
    - Partial peel back and cut off approximately 25mm of adhesive backing from the ribbon cable prior to fitting. This is to avoid the difficult job of removing this section of adhesive backing that would otherwise be inside the slot in the screen adhesive (see Figure 11)
    - Feed the de-pined terminals and cable through the slot whilst positioning the HMSL (see Figure 12)
    - In the case of the ribbon cable ensure the cable lies flat, takes on its natural route and is not creased

13. Partially engage the HMSL first with the centre clip, this acts to centrally position the lamp, then work outward to engage each pair of clips either side of centre. When correctly positioned firmly push down on the HMSL to fully engage with the body clips. When fully engaged the stop light should be level with or just below the roof line. Note that the slight movement evident on the original installation when downward pressure is applied at either end of the HMSL may be evident along the entire length of the service unit, this is understood and does not compromise its performance
14. Remove all the protective tape from the vehicle body and the lamp
15. Use a soft blade, such as PM27707PA, to gently push the ribbon cable on to the flange to promote adhesion (see Figure 13)
16. Inside the vehicle refit the electrical plug and connect the HMSL to the vehicle harness. Depress the brake pedal check the HMSL functions correctly and that all the LED's illuminate before preceding
17. Inside the vehicle remove the final length of adhesive backing from the ribbon cable and affix the cable to the vehicle body. In the case of the round section cable fit the adhesive pad (part number 3W0945067) to the edge of the inner screen aperture flange. This serves to secure and protect the cable. When fixing either cable type allow sufficient radius at position 'D' to avoid a hard foul with the edge of the body flange(see Figure 14 or 14a)
18. Use Betafill seam sealer to re-fill the slot carrying the cable
    - Blank off the exterior exit point of the cable to enable the Betafill to be compacted up to outside exit point (see Figure 15)
    - Apply sufficient Betafill onto a plastic trowel (see Figure 16)
    - Use a narrow spatula to fill and compact the Betafill into the cavity from inside the vehicle specifically with a round section cable ensure that Betafill completely encapsulates the two cables to avoid water ingress (see Figure 17)
    - Remove the exterior blanking and if necessary smooth any errant betafill to improve the aesthetics.
    - Allow the Betafill to cure for a minimum of 2 hours prior checking the integrity of the repair by carrying out a water leak test

19. Refit the main headlining (Refer to ASSIST BIN 08-67 Main headlining – To remove and fit)

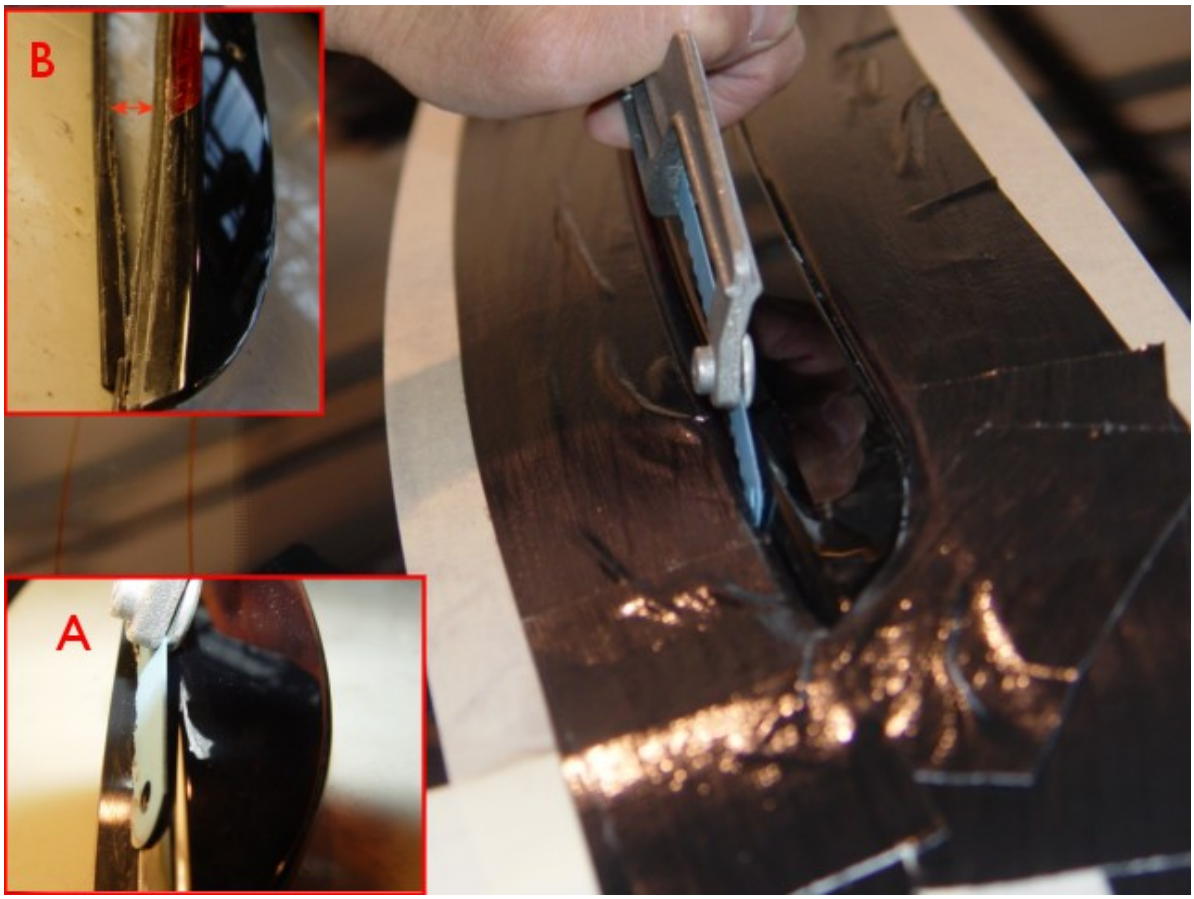

Figure 1

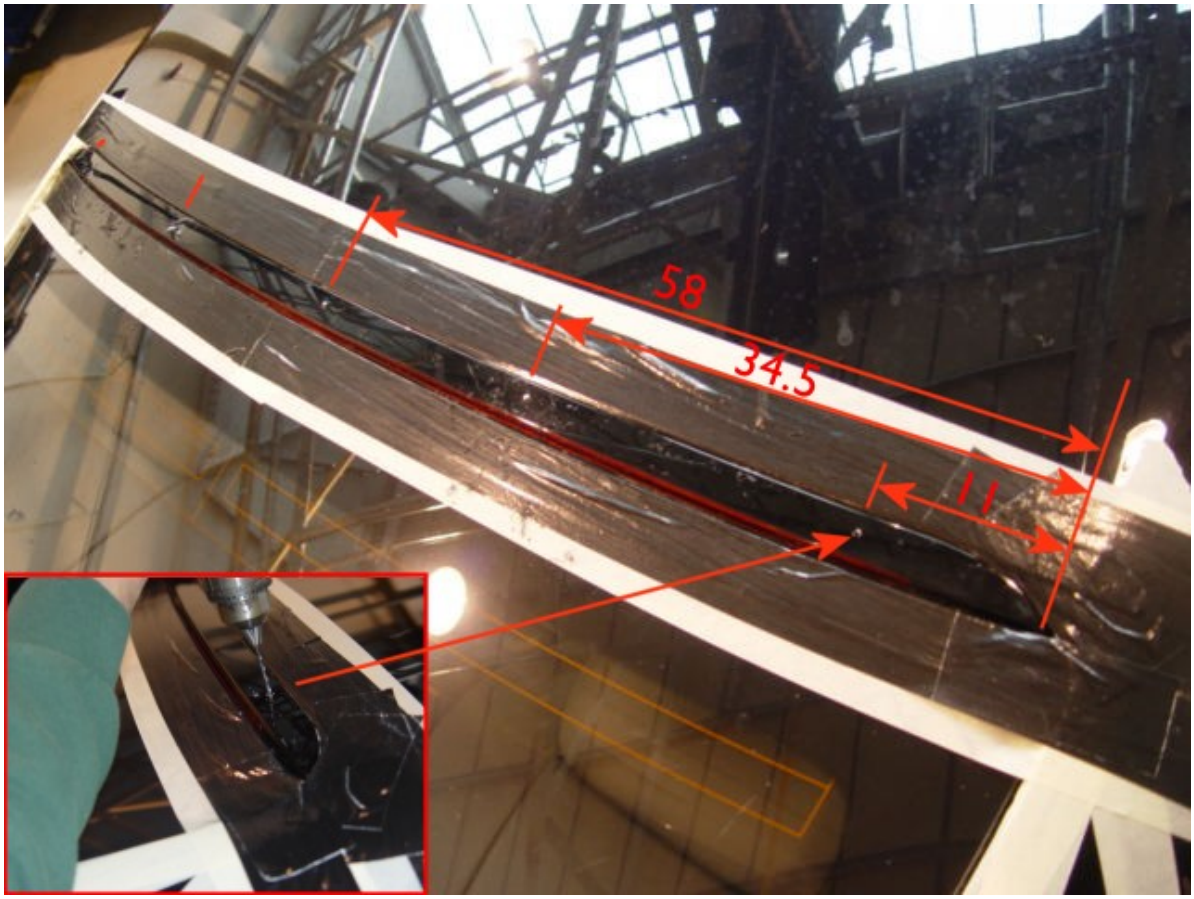

Figure 2

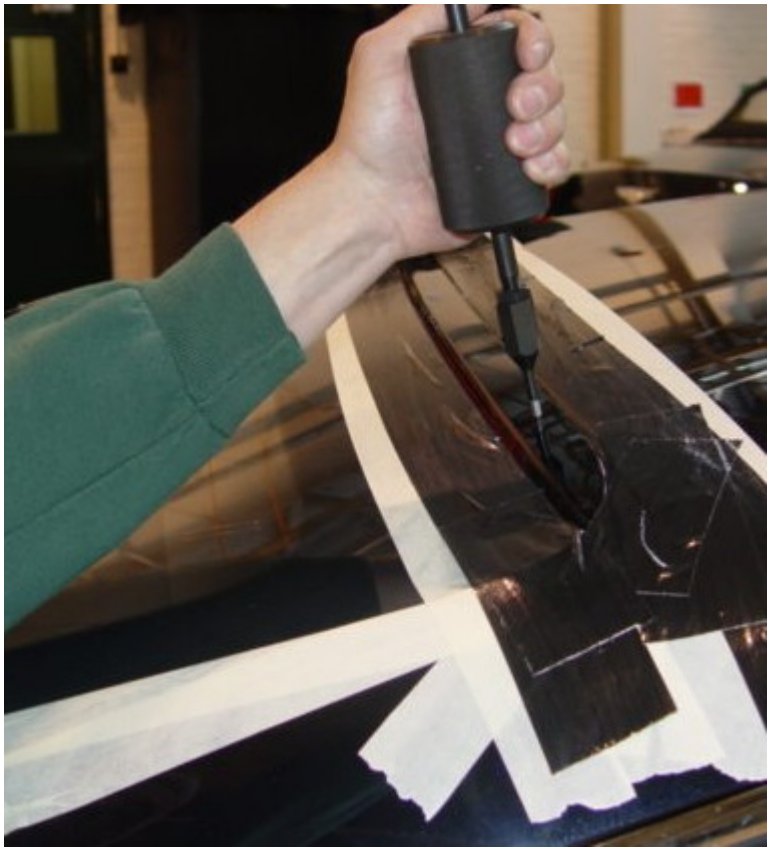

Figure 3

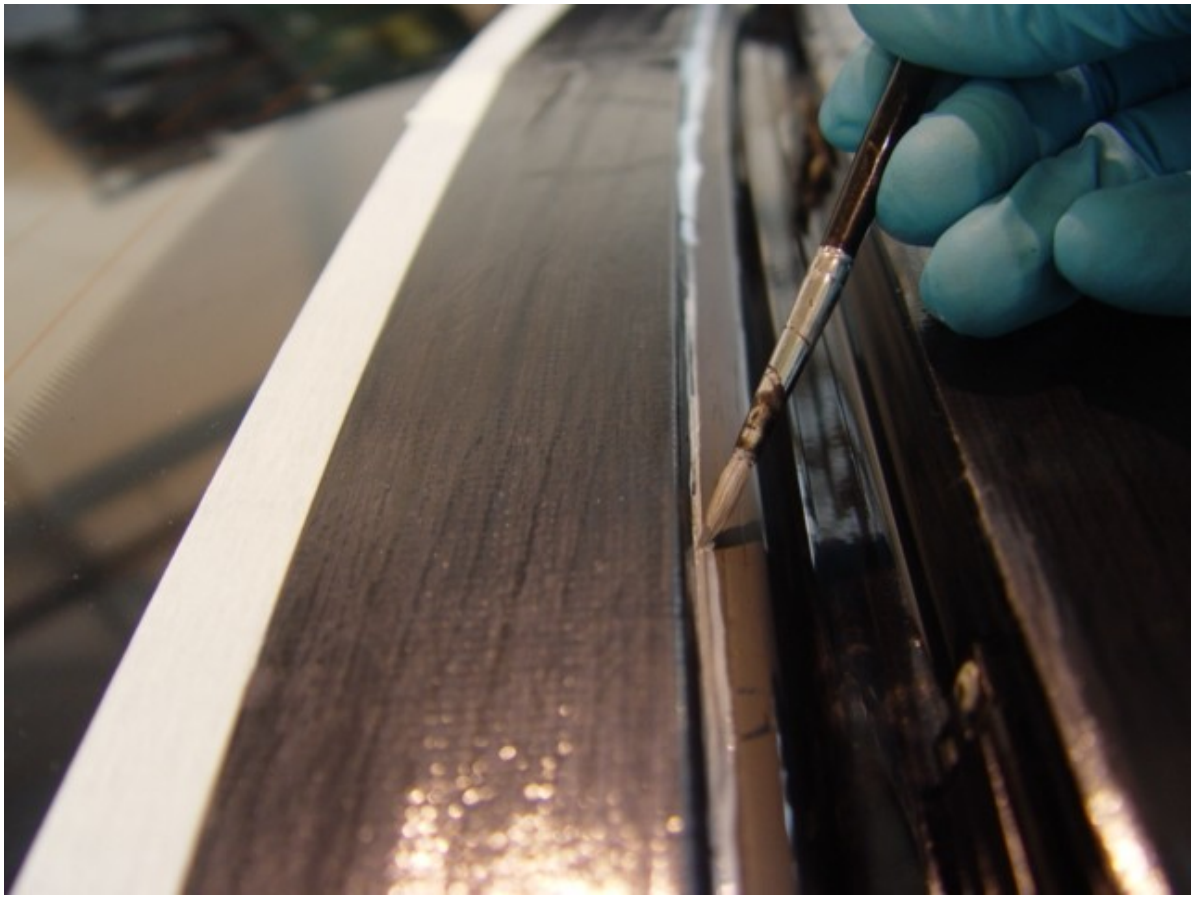

Figure 4

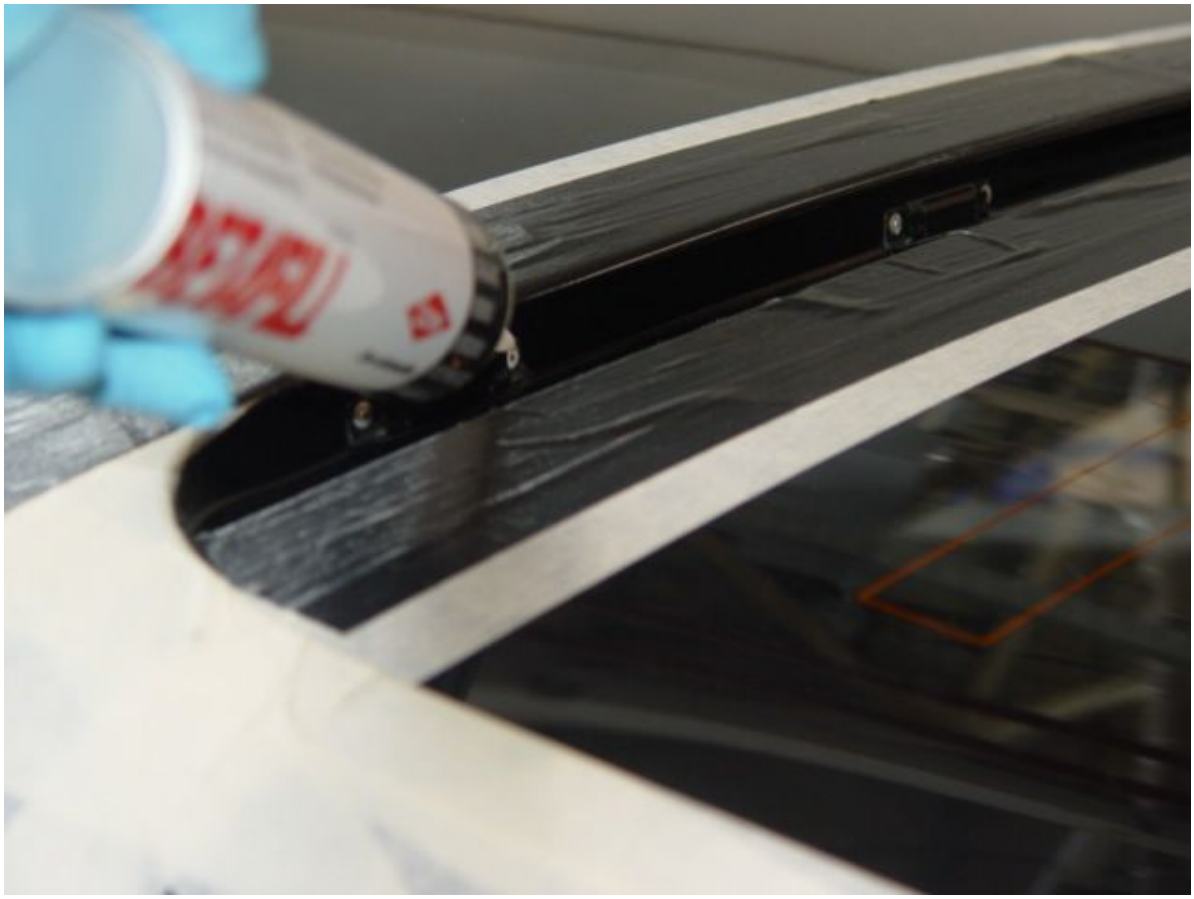

Figure 5

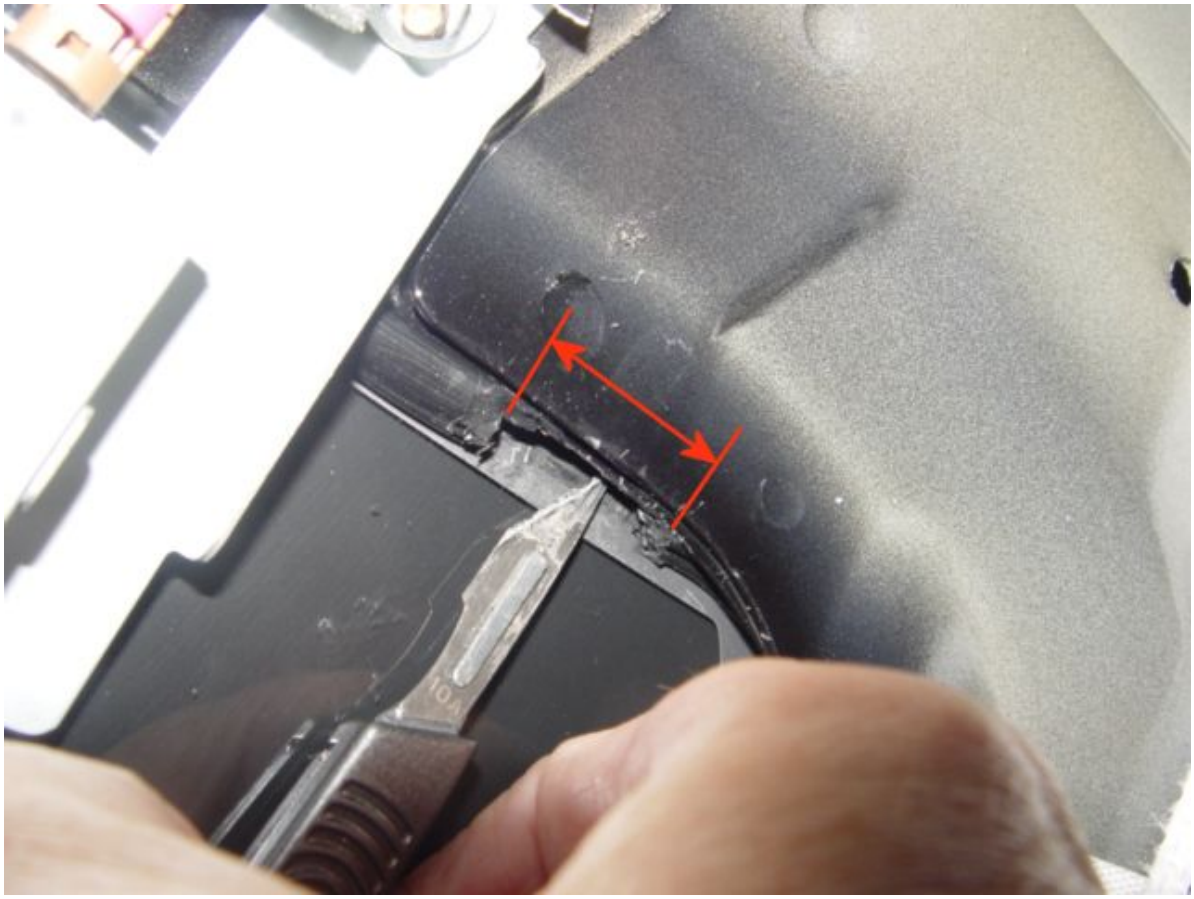

Figure 6

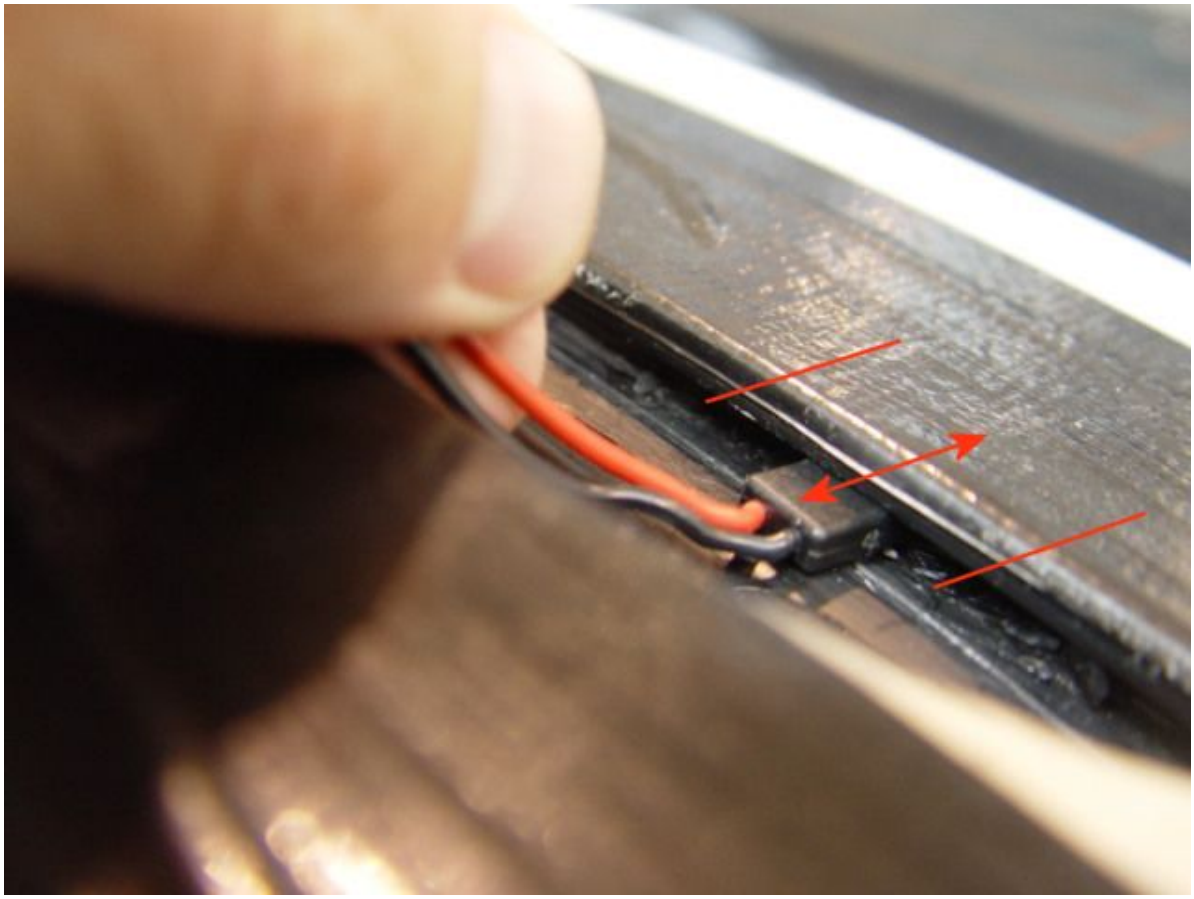

Figure 7

High Mounted Stop Lamp (HMSL) – Service replacement procedure

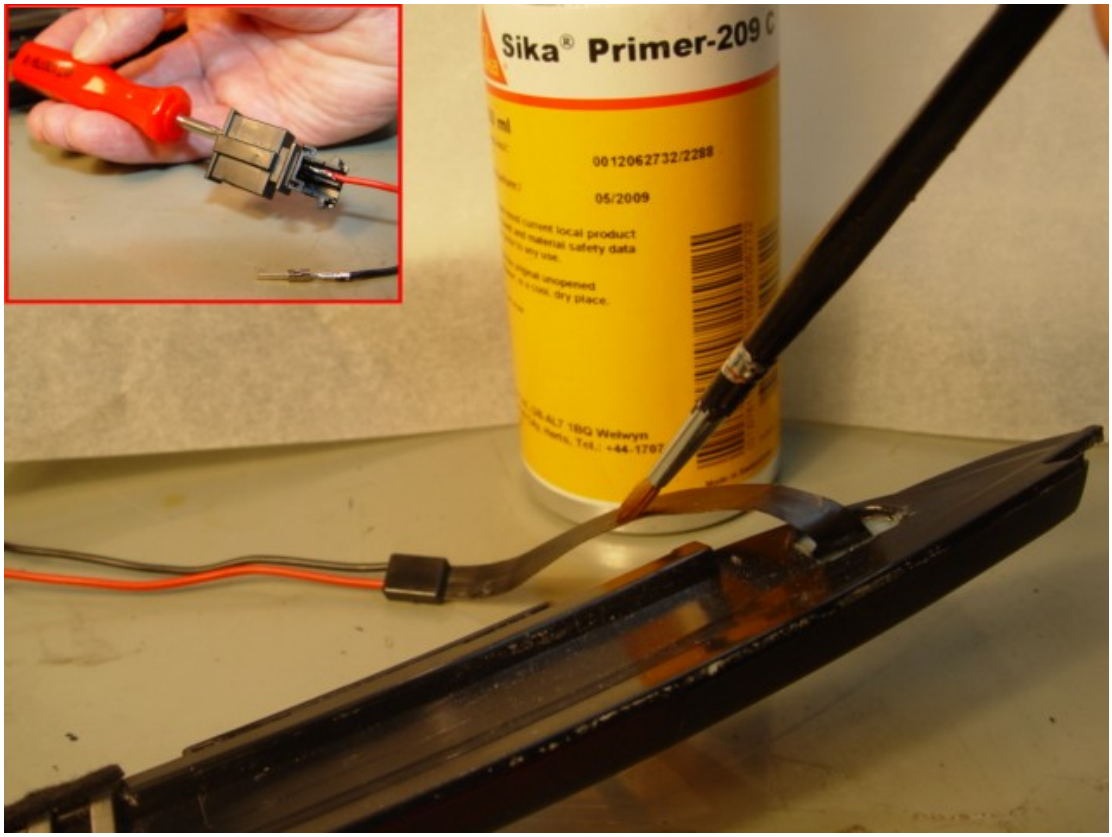

Figure 8

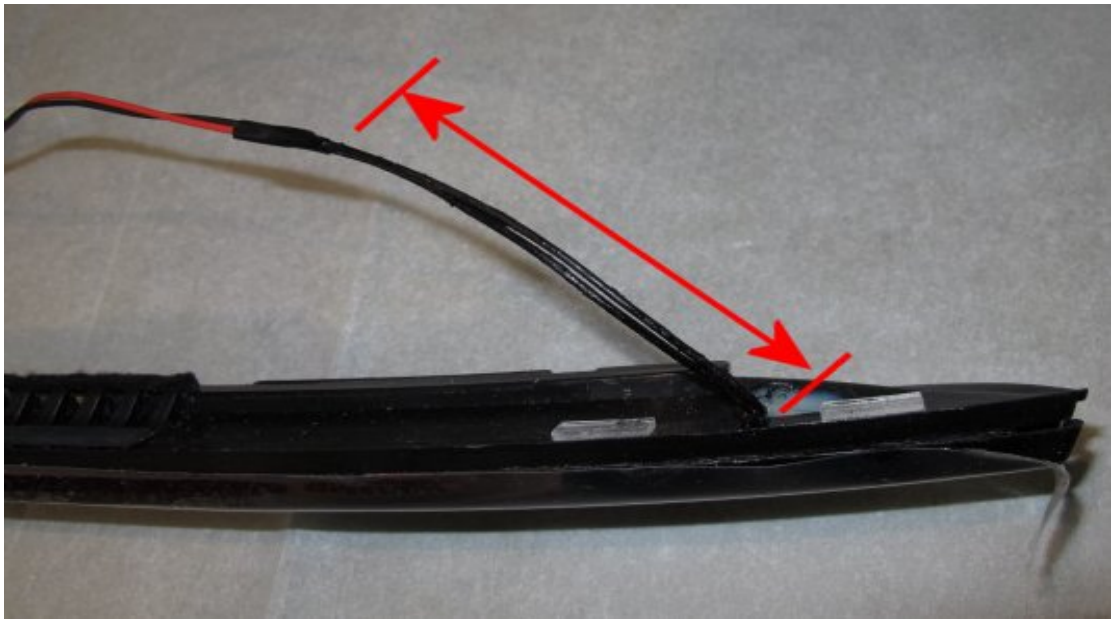

Figure 8a

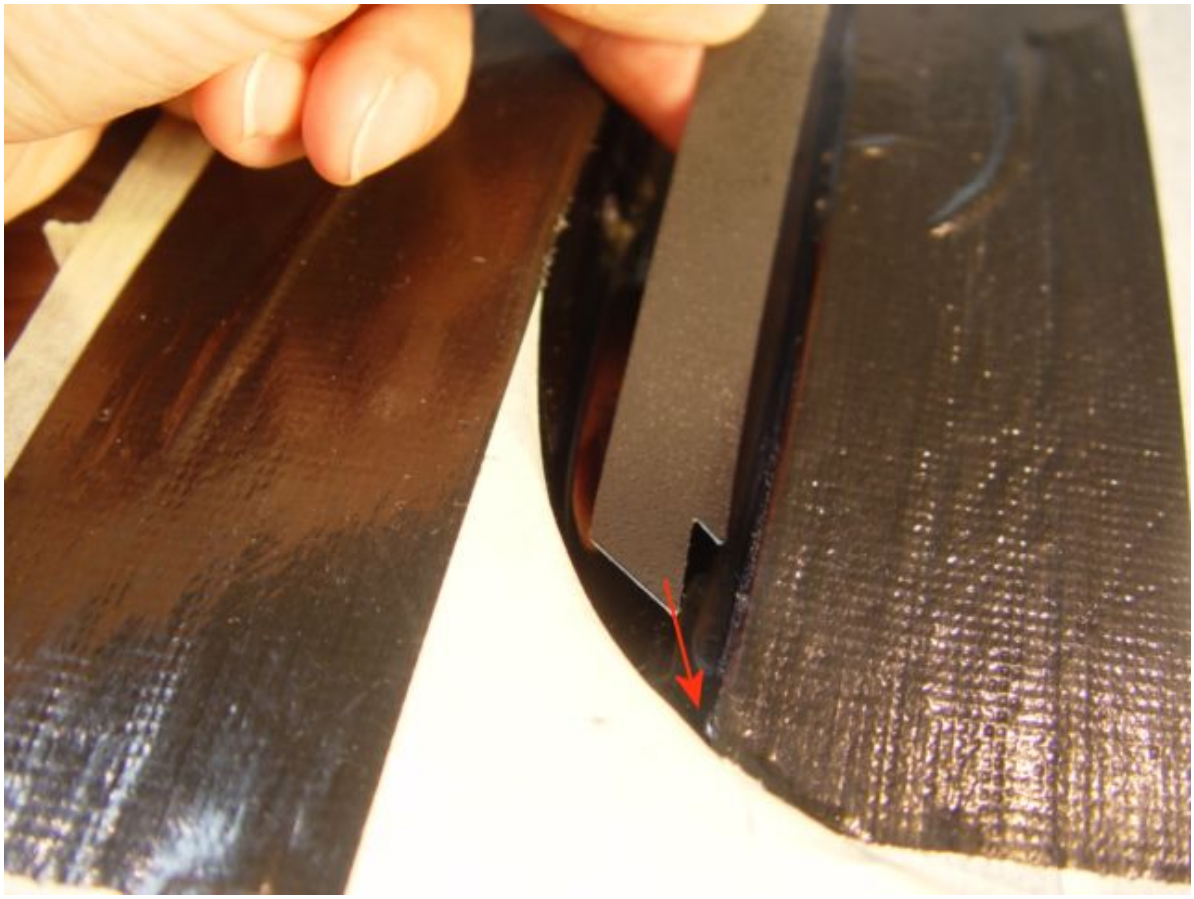

Figure 9

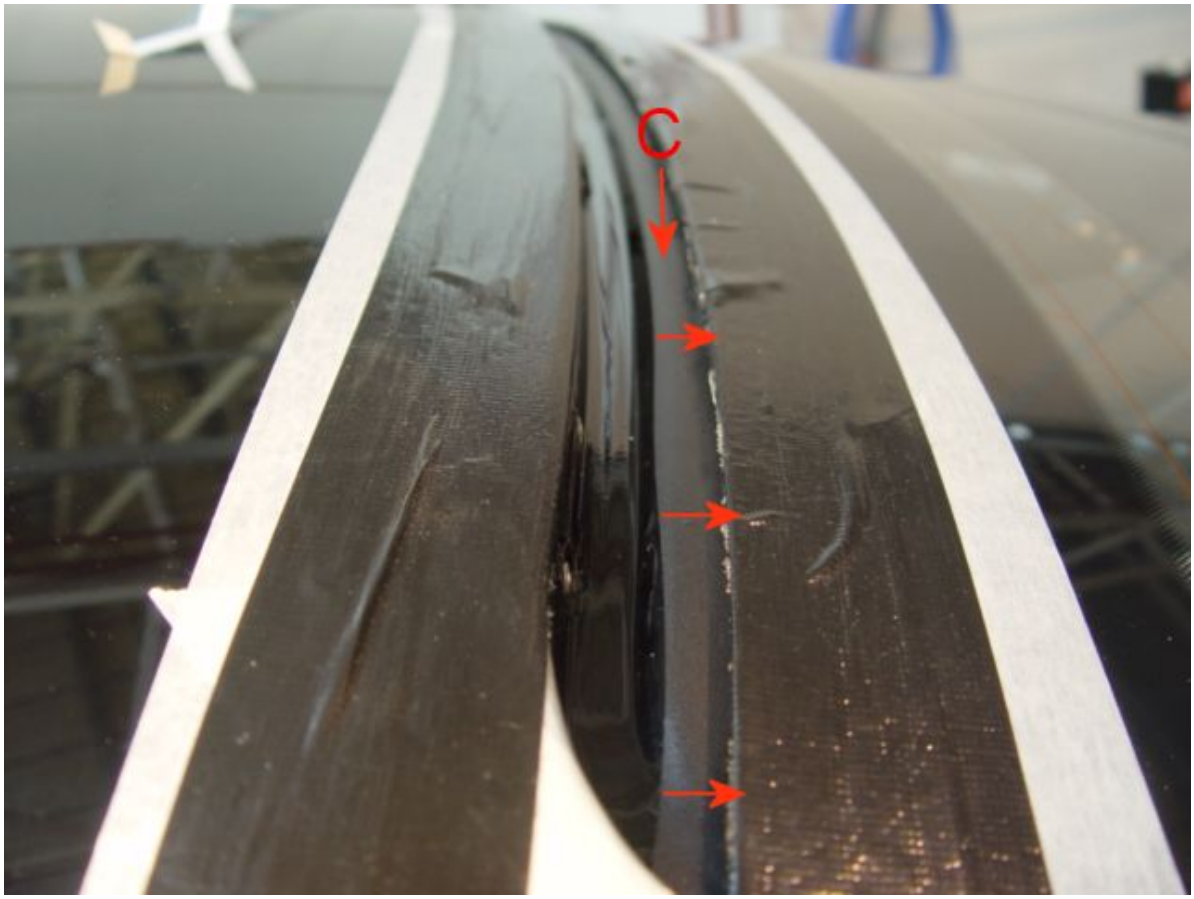

Figure 10

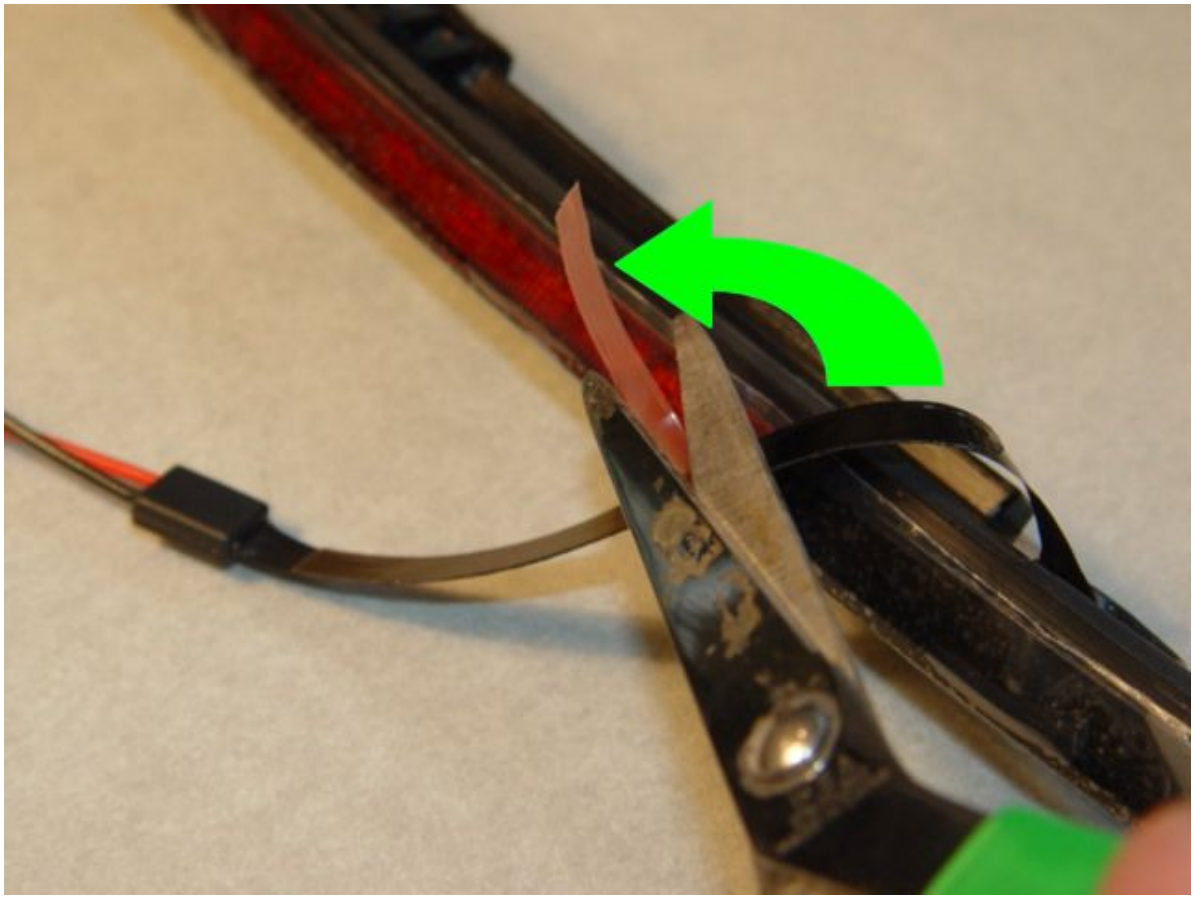

Figure 11

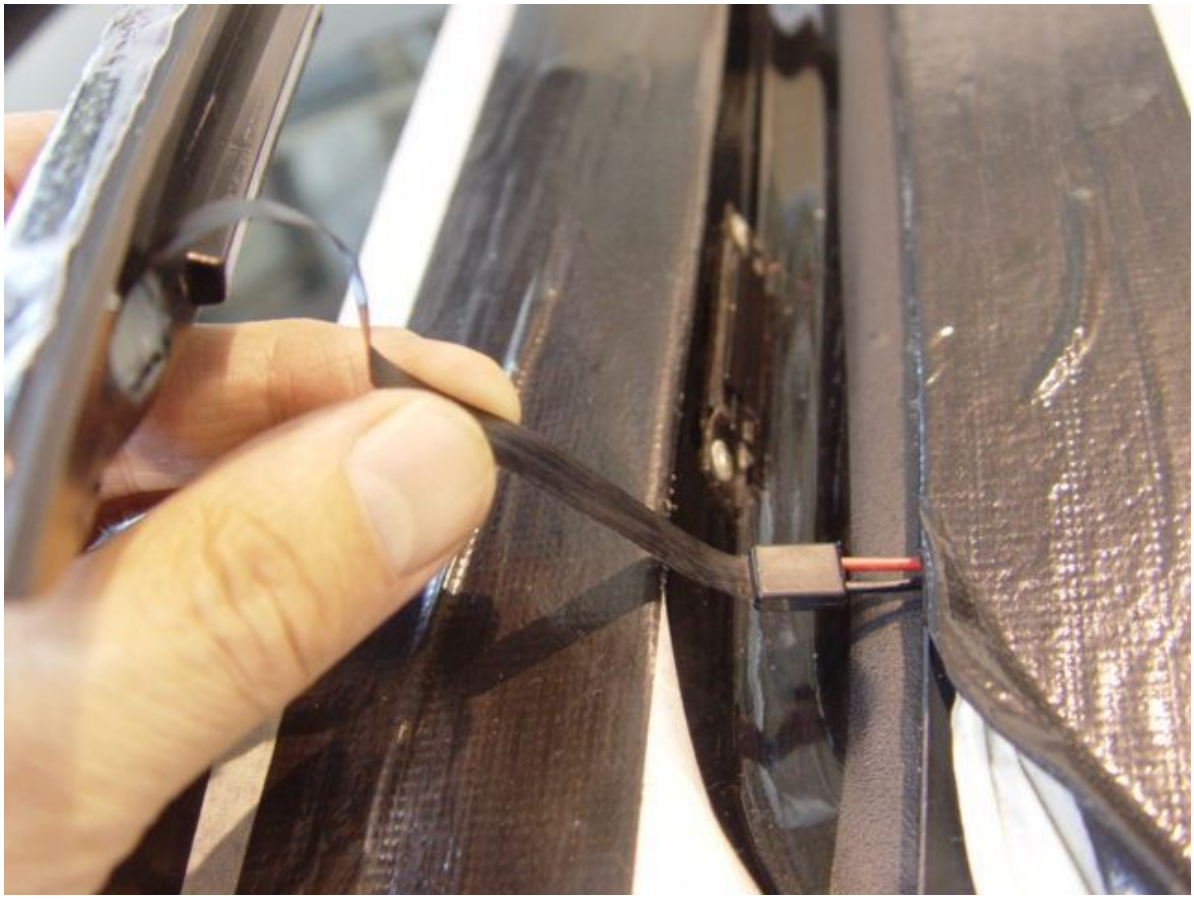

Figure 12

Figure 13

High Mounted Stop Lamp (HMSL) – Service replacement procedure

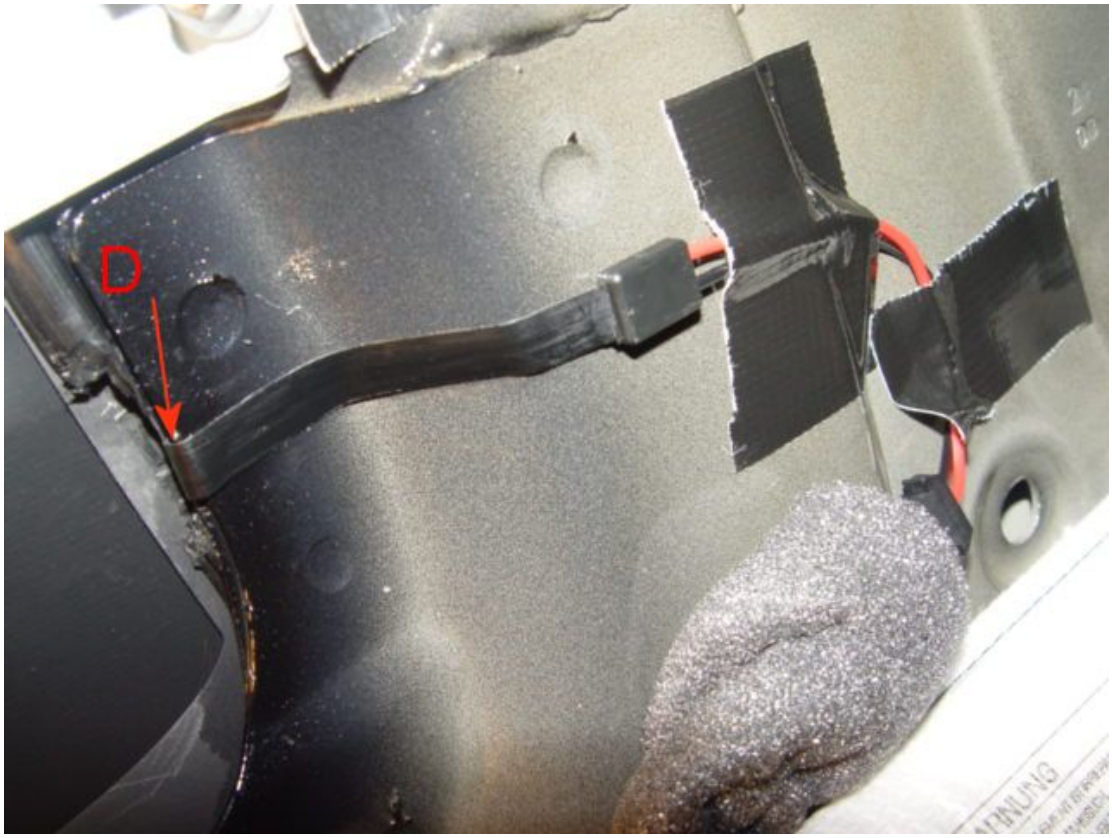

Figure 14

Figure 14a

Figure 15

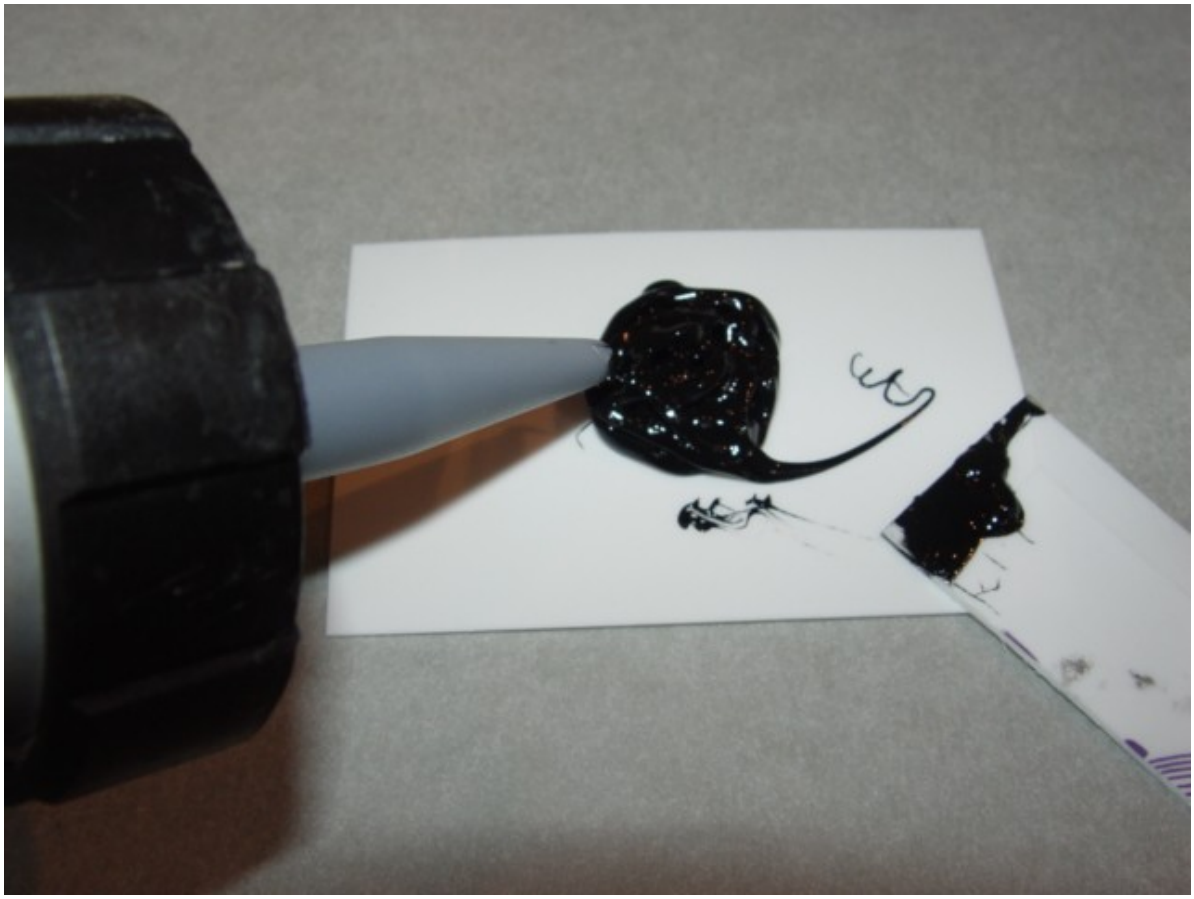

Figure 16

High Mounted Stop Lamp (HMSL) – Service replacement procedure

Figure 17

Torque Specification:

Component	Nm	Kgf m	lbf ft
Headlining retaining bolt	4.5	0.46	3.3

Warranty:

Warranty type	110
Labour Operation Code	94 70 55 99
Damage Service Number	94 70
Time	370 time units

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Parts Information:

New Part Number	Description	Displaced Part Number	Quantity
3W8945097H or 3W8945097L	Service only high mounted stop lamp (HMSL)	3W8945097F	1
Obtain locally	Bare metal primer		
Obtain locally	Screen primer Sika 209C		
Obtain locally	Betafill seam sealer		1
3W8853995	Obscuration strip	N/A	1
3W0945067	Adhesive pad	N/A	1

Policy Type: On component failure

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