TECHNICAL BULLETIN
LM501-001v4
20 APR 2006

This reissue replaces all previous versions. Please destroy all previous versions. Only refer to the electronic version of this TSB in TOPIx.
This bulletin supersedes TSB L8784bu and LM501-001v3/2005 dated 08 NOV 2005, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page). Only refer to the electronic version of this TSB in TOPIx.

SECTION: 501-02 (Body System - 76)

Range Rover (LM) - Wind Noise Diagnostics Aid

AFFECTED VEHICLE RANGE:

Range Rover (LM)

MARKETS:

All

CONDITION SUMMARY:

Situation:

The customer may complain of wind noise, evident from a variety of locations.

This version 4 has been issued for a change in the Summary, Parts Required, Labour Times and Service Procedure.

Cause: Various areas of the vehicle have been identified as causing wind noise:

- **A high-pitched hiss from the windshield 38 - 50mph (60-80km/h).**
- **Buzzing from the windshield around 70mph (112km/h).**
- **A noise from the top corners of the windshield.**
- **A high-pitched whistle noise from the front of the vehicle at speeds in excess of 81mph (130km/h).**
- **A hiss or leakage noise at speeds of 40mph (64km/h) upwards from around the A-pillar and door mirror area.**
- **Buzzing sound from the rear of vehicle or centre of the headlining.**
- **High level of wind noise from A-pillar area around 70mph (112km/h). Most likely if the side finisher has previously been removed for windshield replacement.**
- **Hissing/Fluttering noise from the top rear corner of the fixed side door glass.**
- **A whistle noise from the centre of the windshield at speeds in excess of 60mph (97km/h).**
- **A general wind noise at speeds in excess of 50mph (80km/h) from the front leading edge of sunroof.**
- **A whistle from the lower windshield area at speeds in excess of 50mph (80km/h) ONLY when the recirc is shut.**
- **A general wind noise from top of B-Post area at speeds in excess of 30mph**

(48km/h).

• A general wind noise and whistle from top of windshield at speeds in excess of 50mph (80km/h).

Action: Should a customer express concern regarding the above, follow the appropriate relative rectification procedure detailed in this bulletin.

PARTS:

CTT500020	Foam pad	Quantity: 1
XCH500020	Rubber strip	Quantity: 1
	Polyurethane sealant - locally sourced	Quantity: 1
79086L	Black expanding clip	Quantity: 1
DYA000040	Grommet	Quantity: 1
DYC500020	Yellow clip	Quantity: 1
MWC9832PMA	Fir Tree Fastener	Quantity: 1

WARRANTY:

Labour Times and Repair/Claim Coding

Operation Description	Operation No.	Time	Causal Part	ACES Condition Code
Windshield upper trim - refit	768189/38	0.10 hours	DCB500050PMD	07
Apply sealant to lower windshield plenum seal	768189/39	0.10 hours	DWD000013PMD (LHD), DWD000024PMD (RHD)	63
Reposition roof molding	764389/33	0.20 hours	DBC000022LML - LH, DBC000032LML - RH	07
Install front signal seal strips	864089/30	0.20 hours	XBD000031 - LH, XBD000021 - RH	07
Seal Mirror Area	763189/39	0.20 hours	CUC000024 - LH, CUC000034 - RH	D8
Seal E-pillar trim	764389/34	0.20 hours	DDH000090PNP – LH, DDH000080PNP – RH	07
Replace A-pillar fasteners	764339	0.10 hours	DCB000334PNP – LH, DCB000324PNP – RH	07
Remove and refit fixed rear door glass	763131	1.50 hours	CVB000151 – LH, CVB000141 – RH	D8
Insert fir-tree clip in passenger side plenum drain quadrant	76108995	0.10 hours	Use the appropriate faulty part	12
Sunroof - align to roof panel and adjust	768482	0.20 hours	Use the appropriate faulty part	12
Free trapped footwell lamp wire	867089/92	0.20 hours	Use the appropriate faulty part	12
Reposition front door glass	763189/48	0.70 hours	Use the appropriate faulty part	12
Reposition roof rail finisher	764289/29	0.10 hours	Use the appropriate faulty part	12

SERVICE PROCEDURE:

A high-pitched hiss from the windshield 38 - 50mph (60-80km/h).

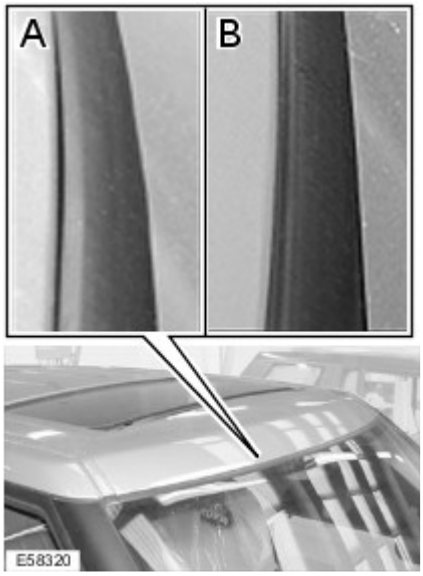
Caused by a gap between the windshield top finisher and the edge of the roof (refer to 'A' in illustration of step 1).

All Derivatives.

1. **CAUTION: Protect the windshield top finisher to ensure no damage occurs.**

   NOTE: Ensure a gap is NOT created between the bottom edge of the finisher and the windshield.

   Using a nylon block and rubber mallet, gently move the windshield top finisher upwards to close the gap to the roof until a touch condition is achieved along its entire length ('B' in illustration).

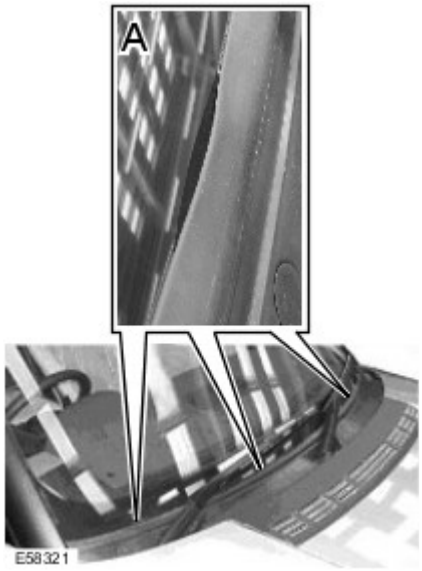


Buzzing from the windshield around 70mph (112km/h).

Caused by a gap between the windshield lower finisher and the windshield (refer to 'A' in illustration of step 1).

All Derivatives.

1. Lift wipers away from the windshield for access.



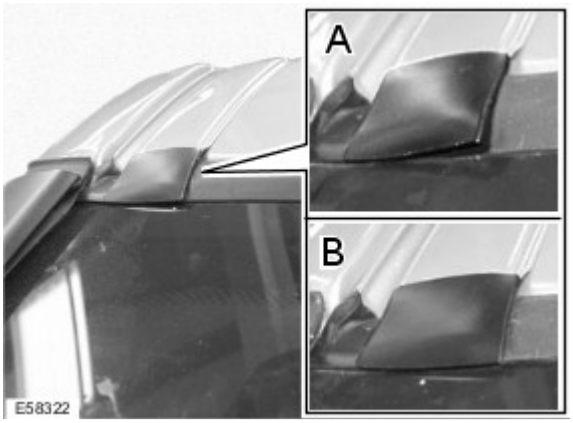
2. Clean the contact point between the plenum seal and the windshield along the entire length of the plenum seal.
3. Apply sealant between the plenum seal and the windshield to ensure the entire length of the plenum seal and any gap(s) are completely sealed.
4. Remove excess sealant.
5. Lower wiper blades into position.

A noise from the top corners of the windshield.

Caused by a gap between the windshield and the roof molding (refer to 'A' in illustration of step 1).

All Derivatives.

1. Remove the roof molding and refit, ensuring correct fore/aft position to achieve a good flush fit.



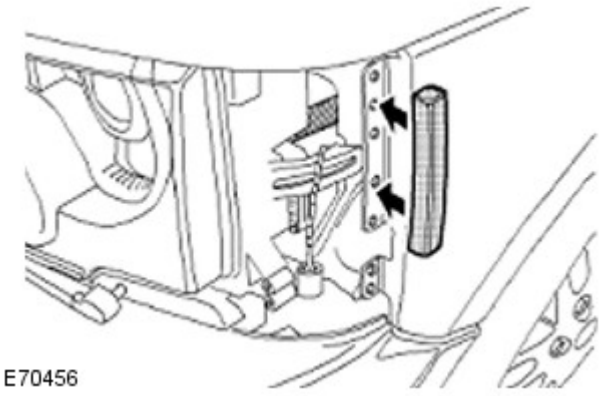
2. The rear end of the roof molding should be lined up with the rear edge of the roof. For additional information, refer to Range Rover (LM) Workshop Manual Section Exterior fittings, Roof moulding (76.43.68).

A high-pitched whistle noise from the front of the vehicle at speeds in excess of 81mph (130km/h).

Caused by a gap between the direction indicator lamp and the wing.

All derivatives up to VIN 106721

1. Remove the left-hand and right-hand front indicator lamp assembly For additional information, refer to Range Rover (LM) Workshop Manual Section 86.2 - Lighting , Lamp assembly side and indicator (86.40.29).
2. Clean the fender where the adhesive rubber strip is to be installed (see illustration E70456).



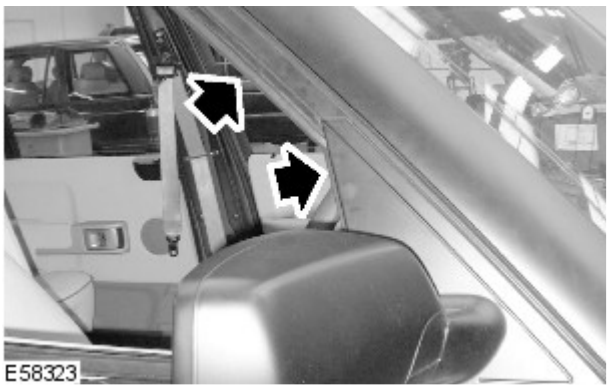
3. Remove protective backing from the adhesive rubber strip and secure to the fender (see illustration E70456).
4. Install the left-hand and right-hand front indicator lamp assemblyFor additional information, refer to Range Rover (LM) Workshop Manual Section 86.2 - Lighting , Lamp assembly side and indicator (86.40.29).

A hiss or leakage noise at speeds of 40mph (64km/h) upwards from around the A-pillar and door mirror area.

Caused by a noise path between the door mirror and the door. Noise may be present even if no gap exists.

All derivatives up to VIN 152789.

1. Lower the front window.
2. Carefully ease out approximately 200mm of the glass run seal.



3. Stick the foam pad (see parts required section) onto the back of the glass run seal directly over the angle in the seal (shaded in illustration). Ensure the foam extends equidistant either side of the angle, and that it does not overhang either side of the seal.

4. Carefully fit the glass run seal to the door.

5. **NOTE: Ensure the window 'one shot' mode is operating correctly. For additional information, refer to TSB L8869bu/2003.**

Repeat for the opposite side.

6. If the window 'one shot' mode is not operating correctly, refer to the following steps:

1. Carefully ease out approximately 200mm of the glass run seal to expose the door seal channel (refer to illustration in step 2).

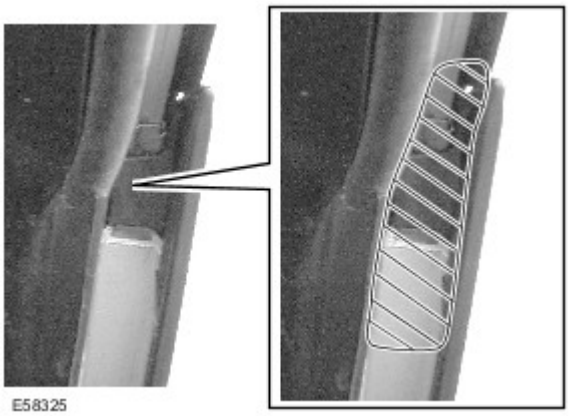
2. Remove the foam pad from the glass run seal.

3. Spirit-wipe the surface surrounding the joint (see illustration).

4. Apply a small amount of sealant in to the base of the angle, ensuring that care is taken to seal the outer most corner, push the sealant firmly into the back of the channel (inset in illustration).

5. Apply sealant until it starts to protrude from the hole at the top of the cheater panel. Wipe off excess sealant.

6. Carefully fit the glass run seal to the door.

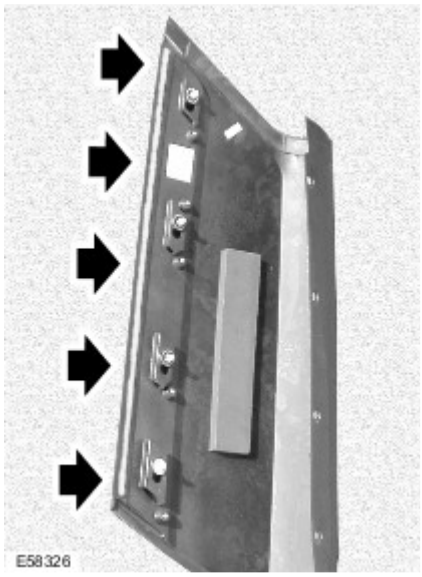


Buzzing sound from the rear of vehicle or centre of the headlining.

Caused by a gap between the E-pillar seal and the quarter-light glass.

All derivatives up to VIN 131067.

1. Remove the E-pillar finisher. For additional information, refer to Range Rover (LM) Workshop Manual Section Exterior fittings, Finisher - 'E' post (76.43.36).
2. Clean quarter-light glass and E-pillar trim finisher.
3. Apply a 2 mm bead of sealant along the entire forward edge of the E-pillar trim finisher seal.



4. Carefully fit E-pillar finisher.
5. Remove excess sealant from E-pillar trim finisher seal and the quarter-light glass.

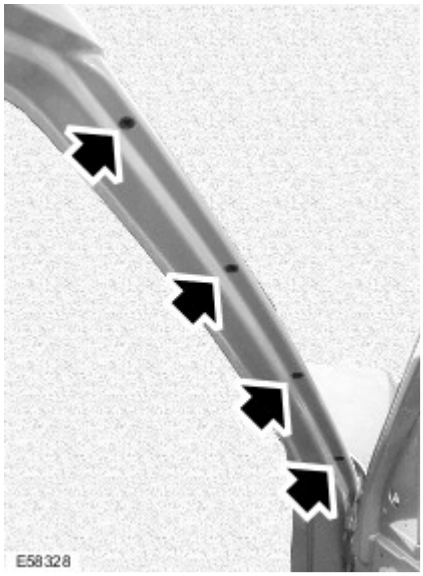
6. Repeat procedure for the other side.

High level of wind noise from A-pillar area around 70mph (112km/h). Most likely if the side finisher has previously been removed for windshield replacement.

Caused by a gap between the side finisher and windshield or rocking/loose side finisher.

All derivatives up to VIN 114820.

1. Remove the windshield side finisher. For additional information, refer to Range Rover (LM) Workshop Manual Section Exterior Fittings, Side finisher - windscreen (76.43.39).
2. Replace the black clips and the grommets. Ensure that new yellow clips are fitted to secure the finisher to the front of the A-pillar.

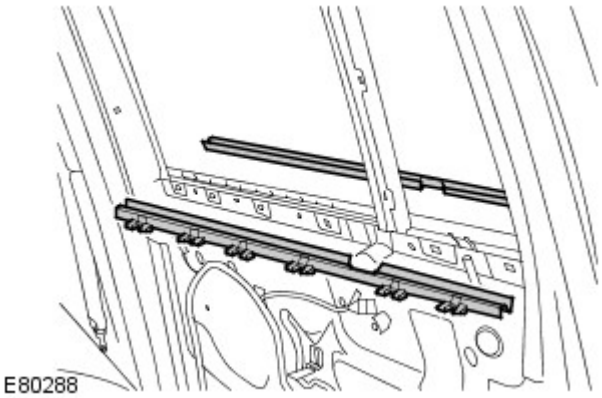


Hissing/Fluttering noise from the top rear corner of the fixed side door glass.

Caused by the rear door fixed quarter-light glass either not bonded or gaps in the bonding.

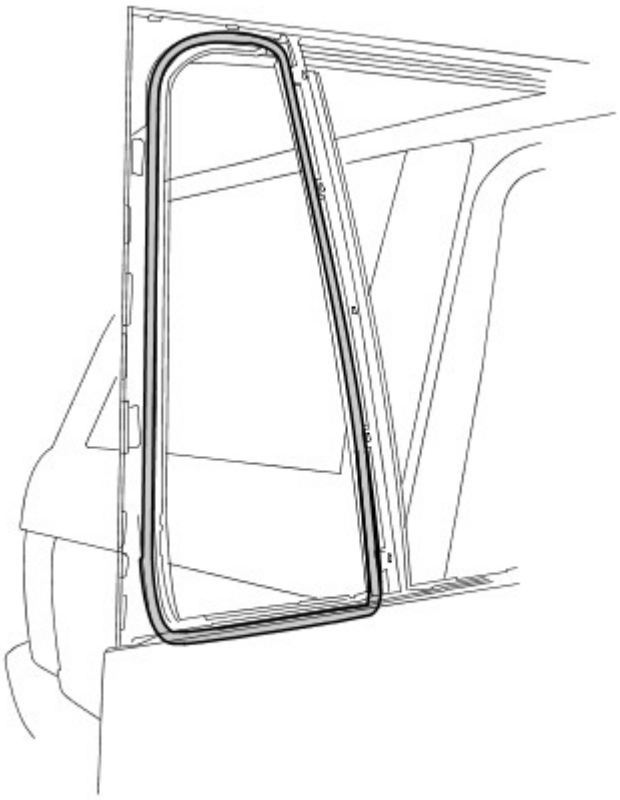
All derivatives.

1. Tape perimeter of fixed side door glass on the interior to confirm cause of customer complaint, ensuring tape is removed after road test.
2. Remove trim casing - rear door. For additional information, refer to Range Rover (LM) Workshop Manual Section Doors, trim casing - rear door (76.34.04).
3. Remove 'garnish' trim.
4. Remove interior waist seal.



5. **NOTE: If fixed side door glass has been correctly bonded the Body-In-White clips should not be visible around the periphery of the fixed side door glass but should be covered by the PU. The illustration, showing the vicinity of the sill button, shows a condition that is not acceptable where there is no PU and the Body-In–White clips are visible.**

   Confirm presence of PU bonding around the perimeter of the fixed side door glass (see illustration of correct PU path) and rectify accordingly.



E80289

6. **NOTE: Rear door fixed quarter-light glass - gaps in the bonding.**

   Identify any gaps in the PU bead and fill using putty, ensuring that the putty is hidden by the obscuration band.

E80290

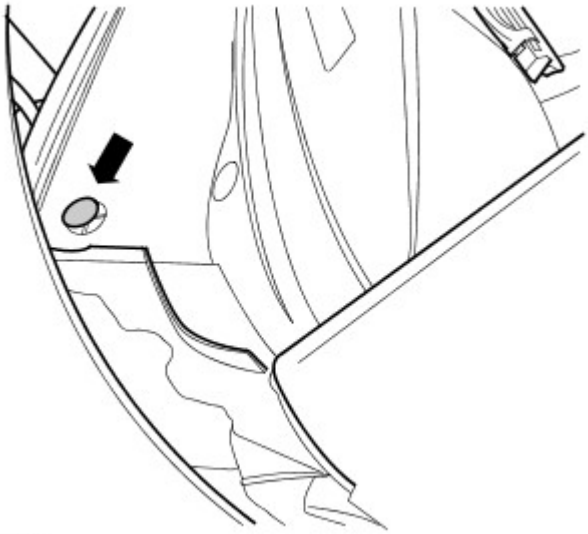
7. If the rear door fixed quarter-light glass not bonded, remove and re-install the rear side door fixed quarter-glass. For additional information, refer to Range Rover (LM) Workshop Manual Section Doors, Quarter light - fixed rear -door (76.31.31).

A whistle noise from the centre of the windshield at speeds in excess of 60mph (97km/h).

Caused by airflow over the passenger side plenum drain tube.

All derivatives.

1. Tape over plenum drain tube to confirm cause of customer complaint, ensuring tape is removed after road test.
2. Insert Fir-tree clip Land Rover part Number MWC9832PMA in to the in-board front drain quadrant.



E79974

A general wind noise at speeds in excess of 50mph (80km/h) from the front leading edge of sunroof.

Caused by poor sunroof profile.

All derivates (with sunroof).

1. Tape leading edge of sunroof to confirm cause of customer complaint, ensuring tape is removed after road test.
2. Carry out procedure - sunroof, align to roof panel & adjust.For additional information, refer to Range Rover (LM) Workshop Manual Section 76.6 - Sunroof, Align to roof panel and adjust (76.84.82).

A whistle from the lower windshield area at speeds in excess of 50mph (80km/h) ONLY when the recirc is shut.

Caused by trapped footwell lamp wire in recirc snail shell.

All derivatives.

NOTE: In the event of a concern of a noise from behind the instrument panel when the Heating Ventilation Air Conditioning (HVAC) is in recirculation or automatic mode, evident at road speeds of above 60mph (100km/h), refer to Technical Bulletin - Range Rover (LM) - Noise From HVAC System LM412-003.

1. Whilst reproducing the complaint operate recirc to confirm cause of complaint.
2. Remove pollen filter to access snail shell and free trapped wire.

A general wind noise from top of B-Post area at speeds in excess of 30mph (48km/h)

Caused by front door glass set too far forward.

All derivatives.

1. With the window fully closed, check whether the top corner radius of the window glass, adjacent to the B-Pillar, is visible. If visible this confirms that the window glass is set too far forward, proceed to step 3, otherwise continue to step 2.

2. Using a blunt plastic implement, gently probe the top rear edge of the seal, as indicated in the illustration E70461, to assess the overlap of the seal over the glass.

1. If the glass can be felt then it is unlikely that improper window glass alignment is the cause of the complaint.

2. If the glass cannot be felt then proceed to step 3 to rectify alignment.

3. Lower window by approximately 260mm, so as to position window glass to gain access to torx bolts securing glass.

4. Remove front door casing for access only For additional information, refer to Range Rover (LM) Workshop Manual Section 76.1 - Doors, Trim casing - Front door (76.34.01).

5. Partially release plastic sheet, sufficient to gain access to torx bolts securing glass and temporarily secure in position as per illustration E70463.

6. **NOTE: If attempts are made to move the glass rearwards without lifting the glass out of the clamps, the glass may return to original position due to elasticity of the rubber clamps.**

Loosen torx bolts and lift glass out of clamps, move glass rearwards, and lower glass back into clamps before securing front glass to 10 Nm (7lbf.ft).

7. Confirm operation of window glass, by temporarily connecting the harness to ensure window glass has not been set too far rearwards, preventing the glass raising fully.

8. Replace plastic sheet, ensuring a good seal to the door panel.

9. Install front door casing. For additional information, refer to Range Rover (LM) Workshop Manual Section

76.1 - Doors, Trim casing - Front door (76.34.01).

10. Confirm correct operation of door mounted switchpack/speakers.

A general wind noise and whistle from top of windshield at speeds in excess of 50mph (80km/h).

Caused by leading edge of roof rail finisher lifting.

All derivatives.

1. Unclip roof rail finisher, move back and reclip.