

Discovery Water Ingress Manual

TECHNICAL INFORMATION



CIRCULATE TO:-		SUBJECT	issue 2
SERVICE MGR.	X		
RECEPTION	X		
WORKSHOP	X		
PARTS	X	'E' Post Trim Area - Water Ingress	
MODEL			
Discovery		AFFECTED VEHICLES	
		LP	
		LH	
		LJ	081991 onward
		LD	

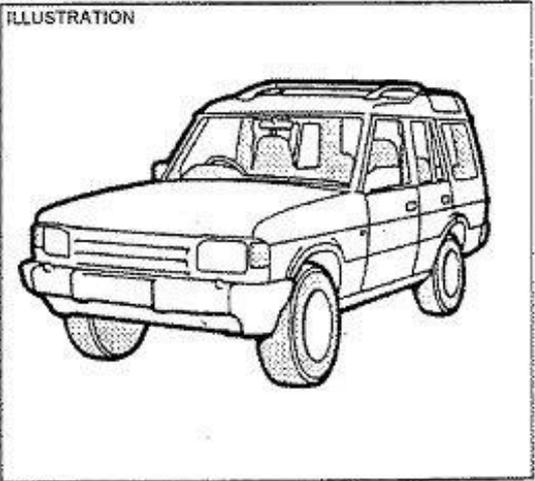
DETAIL

Investigations have shown that on some vehicles water can enter into the vehicle around the 'E' post, there can be several causes for water ingress in this area, all known water ingress paths and fixes are detailed on the flow chart attached.

ACTION REQUIRED
Upon customer complaint of water ingress around the 'E' post, follow the flow chart overleaf.

PARTS INFORMATION

Not applicable



PROCEDURE

See flow chart overleaf

WARRANTY
Normal warranty policy and procedures apply

COMP. CODE
9L4N

SRO
76.11.89/31 Attend 'E' post water ingress on vehicles without rear inward facing folding seats 00.75 hour
76.11.89/32 Attend 'E' post water ingress on vehicles with rear inward facing folding seats 1.25 hour

TECHNICAL INFORMATION



Page 2 of 4	SUBJECT 'E' Post Trim Area - Water Ingress	
MODEL Discovery	AFFECTED VEHICLES LP LH LJ LD	081991 onward 

WATER EVIDENT IN 'E' POST AREA - DIAGNOSTIC CHART

*Remove Quarter trim & alpine light trim.
* Visually check for evidence of leak.
*If necessary hose water over roof/rear header/alpine light/fixd glass.

Continue

Continue

Water drips from alpine light
(see illustration, arrow B)

Continue

Water evident on rear right hand floor
carpet

Continue

Reseal alpine light glass to rubber and rubber to
body on outside surface

Continue

Check fixed glass sealing and reseal as
necessary (see illustration arrow C)

Continue

Always water test to confirm resolution
There may be other leaks!
Always dry off joints before applying sealants

Always water test to confirm resolution
There may be other leaks!
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sealants

Continue

Check for cracks around flange see 'E' on
illustration, reseal each side of flange.
The flange has been moved inside can't
rail to improve water ingress concerns from
Vins 199607 and 530346

TECHNICAL INFORMATION



Page 3 of 4	SUBJECT 'E' Post Trim Area - Water Ingress	
MODEL Discovery	AFFECTED VEHICLES LP LH LJ 081991 onward LD	

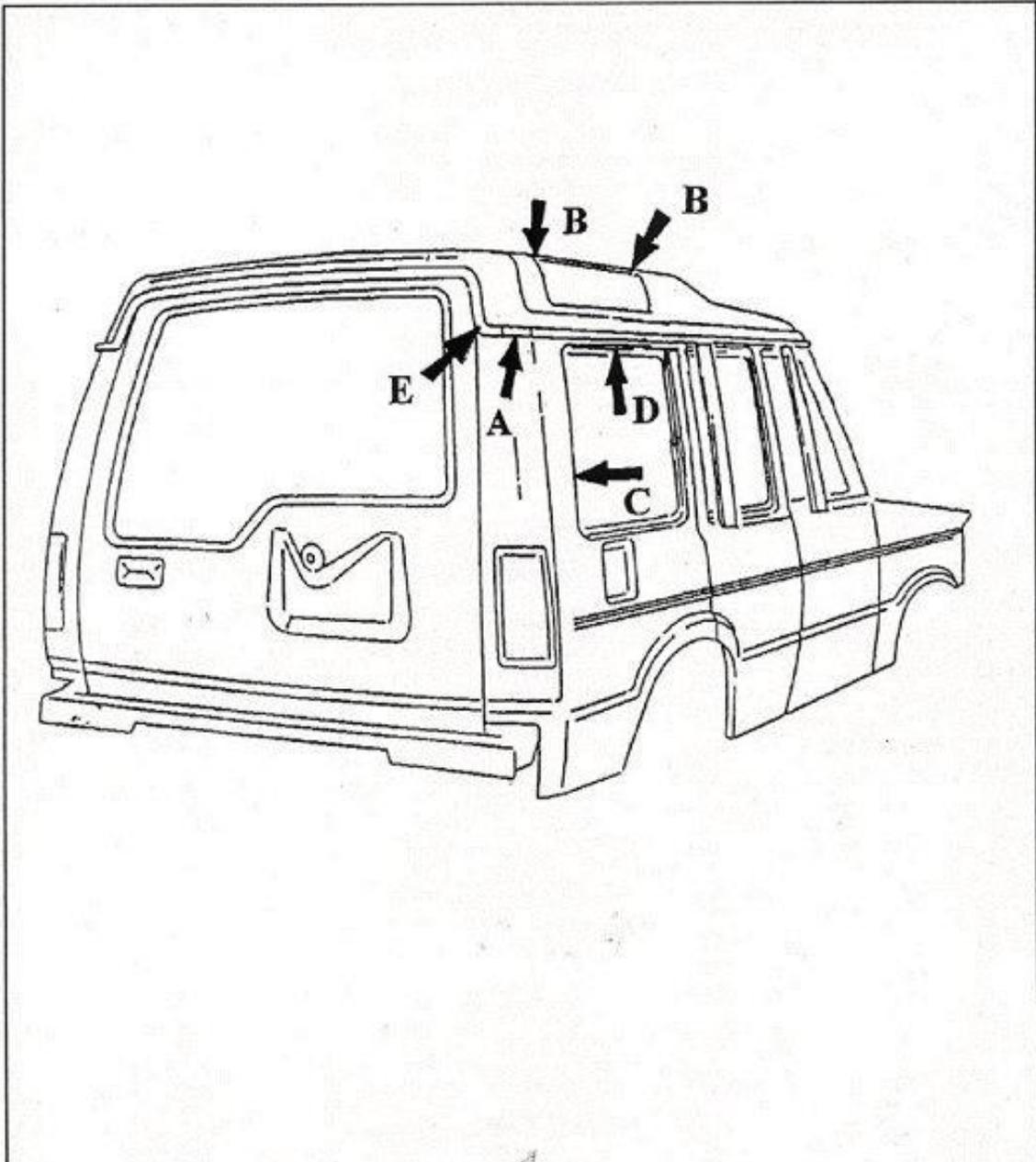
WATER EVIDENT IN 'E' POST AREA-DIAGNOSTIC CHART

<p>*Remove quarter trim and alpine light trim. *Visually check for evidence of leak. *If necessary hose water over roof / rear header / alpine light / fixed glass Continue</p>		
<p>Water drips from cantrail inner near 'E' post Continue</p>		
<p>Hose water onto roof driprail only Is leak still evident?</p>		
Yes	Yes	No
<p>Remove the drip rail trim. Dam the roof drain channel above the B-C post. Fill driprail with water behind dam then repeat with water in front of dam. When does leak occur? Continue</p>	<p>Remove the drip rail trim. Dam the roof drain channel above the B-C post. Fill driprail with water behind dam then repeat with water in front of dam. When does leak occur? Continue</p>	<p>Remove rear header trim Inspect tape and joints for pin holes- reseal as necessary Continue</p>
Water in front of dam	Water behind dam	Double check alpine light sealing
Continue	Continue	Continue
<p>Check roof drain channel for pin holes and reseal as necessary. Do not remove screen. Do not replace screen to repair leak. Continue</p>	<p>Inspect Zinc tape for pin holes and reseal as necessary (see illustration arrow A) Continue</p>	<p>Always water test to confirm resolution -There may be other leaks! Always dry off joints before applying sealants</p>
<p>Check windscreen for leaks- reseal as necessary Continue</p>	<p>Inspect roof drain channel for pin holes and reseal as necessary Continue</p>	
<p>Always water test to confirm resolution -There may be other leaks! Always dry off joints before applying sealants</p>	<p>Inspect cantrail to bodyside joint for pin holes and reseal as necessary (see illustration arrow D) Continue</p>	
	<p>Always water test to confirm resolution-There may be other leaks! Always dry off joints before applying sealants</p>	

TECHNICAL INFORMATION



Page 4 of 4	SUBJECT 'E' Post Trim Area - Water Ingress	
MODEL Discovery	AFFECTED VEHICLES LP LH LJ 081991 onward LD	



CIRCULATE TO:-	
SERVICE MGR.	X
RECEPTION	X
WORKSHOP	X
PARTS	X

TECHNICAL INFORMATION



MODEL Discovery	SUBJECT Rear End Door Seal - Water Ingress
AFFECTED VEHICLES	
LP LH LJ All LD	



DETAIL

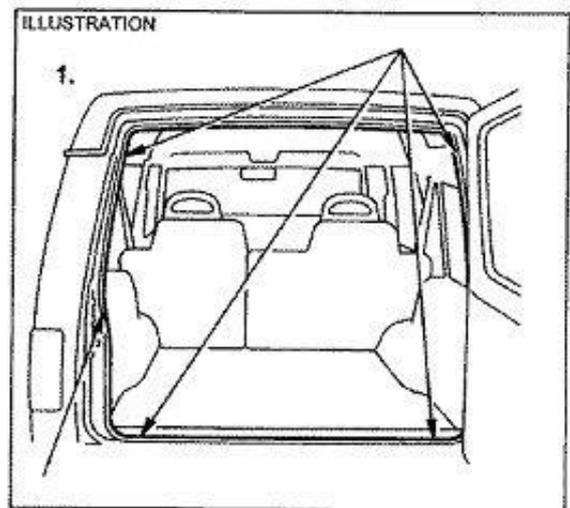
As part of ongoing quality improvements a new double bubble seal has been introduced onto the rear tail door. Early indications have identified a potential water leak from this area due to seals fitting incorrectly on a misformed seal flange. Investigations by Land Rover engineers have found that following procedure overcomes this issue on all vehicles.

ACTION REQUIRED
 In the event of a water ingress on the rear end door follow the procedure detailed below.

PARTS INFORMATION

MUC 1008 Butyl Foam Sealer

The Dum Dum (rubberized filler) should be locally sourced



- PROCEDURE**
1. Remove rear end door tread strip.
 2. Remove rear end door seal from failed vehicle.
 3. Using a craft knife, cut any excess trim tape that has been wrapped around the rear end door aperture see illustration 3.
 4. Dress any flanges that appear to have panel mismatch to obtain a tight finish see illustration 1&2.
 5. Smooth in Butyl around the four areas where the panel meets and form a channel to obtain a smooth finish for the foam tape see illustration 1&2.
 6. Carefully apply the foam tape around the aperture as close as possible to the edge of the panel. Remove backing paper, smooth out, avoid any creases see illustration 1.

WARRANTY
 Normal warranty policy and procedures apply

COMP. CODE
9J1N

SRO
 76.81.31 Rear end door seal 0.4 hours (UK)

TECHNICAL INFORMATION



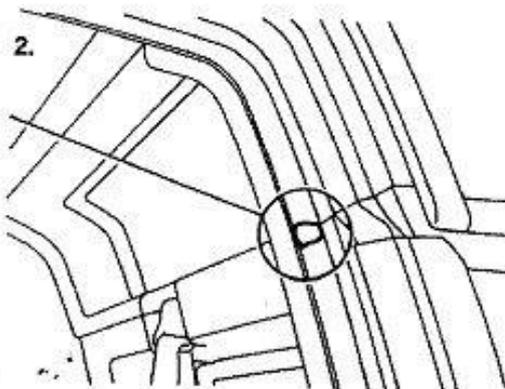
Page 2 of 2	SUBJECT Rear End Door Seal - Water Ingress	
MODEL Discovery	AFFECTED VEHICLES LP LH LJ All LD	

7. Working in an anti-clockwise direction feed the door seal on by hand, the joint of the door seal must be in the centre of the door aperture at the bottom. Ensure all the corners are of a tightfit and the foam and the trim tape have not been disturbed or snagged. Hammer the door seal onto the aperture tightly.

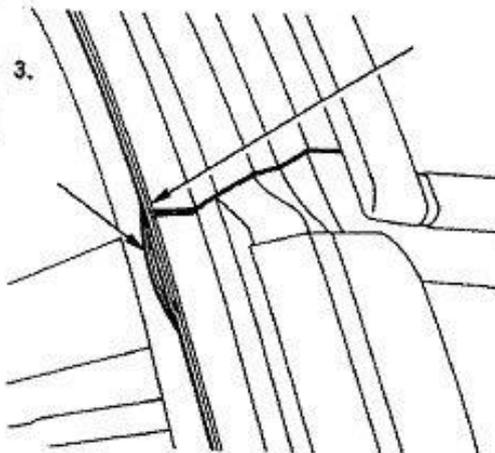
8. Re-fit rear end door tread strip.

9. Re-test for water ingress.

2.



3.



CIRCULATE TO:-	
SERVICE MGR	X
RECEPTION	X
WORKSHOP	X
PARTS	X

TECHNICAL INFORMATION



SUBJECT		
Upper Windscreen Rubber - Water Ingress		
MODEL	AFFECTED VEHICLES	
Discovery	LP LH LJ LD	ALL

DETAIL

To overcome water ingress through the upper section of the windscreen seal a process has been developed to introduce a supplementary sealing operation behind the seal. Should a vehicle exhibit water ingress from this area follow the procedure below.

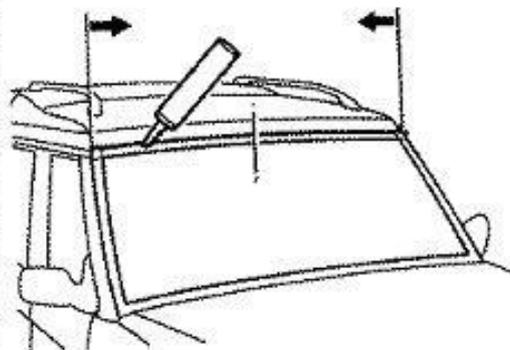
ACTION REQUIRED

Upon customer complaint of water ingress from the top windscreen rubber follow the process detailed below.

PARTS INFORMATION

BHM 705L Sealant

ILLUSTRATION



PROCEDURE

Peel back the windscreen rubber at the top for access.
Thoroughly clean area to be sealed using cleaner provided.
Locate sealant nozzle between top windscreen rubber and roof panel, extrude bead of sealant (continuous) from the centre of the vehicle towards the corners (see illustration opposite).
Finish sealing in the corner.
Clean off any excess sealant from the windscreen/ rubber and paint.

Care point: angle the sealant away from the painted panel.

WARRANTY

Normal warranty policy and procedures apply

COMP. CODE

8G1N

SRO

76.81.39 Seal windscreen for leak 0.30 hour

CIRCULATE TO:-	
SERVICE MGR.	X
RECEPTION	X
WORKSHOP	X
PARTS	X

TECHNICAL INFORMATION



Issue 2

MODEL
Discovery fitted with Electric / Manual Sunroof

AFFECTED VEHICLES

LP
LH
LJ Upto 174805
LJ Upto 505712



DETAIL

A small number of reports have been received that identify water ingress through both front and rear sunroofs. The reports indicate 2 areas of concern, 1) water drips from the water dam and appears to drip from the sunroof handle / motor and headlining, this may be due to the absence of the water dam gasket. The water dam gasket will be fitted to all sunroofs by the manufacturers from Vin number 148332

2. Water ingress between the sunroof glass and glass seal

Following recent improvements to the sunroof, which increases the glass seal crush to eliminate water going between the sunroof glass and seal, a spacer kit will be required to ensure interchangeability between the modified and pre-modified lower tray and guide tube assembly.

NOTE: This bulletin replaces 76/13/95/EN, the information contained within this bulletin been amended to replace previous sunroof issues.

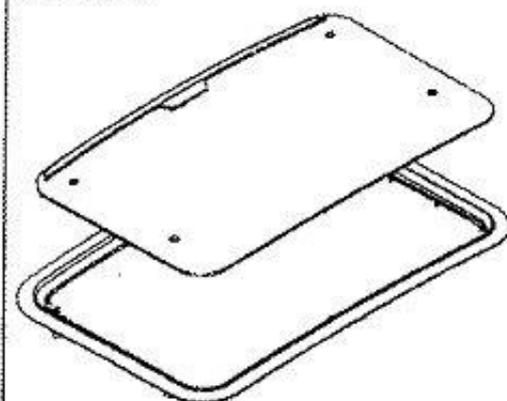
ACTION REQUIRED

Upon customer complaint, ensure sunroof is fully closed, water test the affected sunroof to identify the source of the leak, and follow the appropriate action detailed below.

PARTS INFORMATION

- STC 1684 Glass panel assembly for fix No 1
- STC 3194 Spacer kit (4 off spacers) for fix No 2

ILLUSTRATION



PROCEDURE

- Process for fix No 1** Gasket missing from the water dam, refer to the workshop manual section 76 sunroof Electric/Manual.
1. Remove front inner sunroof catch cover and check for water ingress.
 2. Remove 2 off torque head bit fixings (size TX 20) and remove the sunroof catch body.
 3. Using a torch and probe check if the water dam gasket is present (the gasket can be identified by the cross hatching on the surface, or a probe can be inserted inside the catch, if glass contact is made the gasket is missing).
 4. If the gasket is missing replace the glass panel with a new assembly see parts information.
 5. If the gasket is present re-fit catch, re-tighten catch fixings to 2 Nm.
 6. Ensure a 5mm gap exists between the front edge of the sunroof and inside edge of the upper frame.
 7. When the new sunroof assembly is fitted, check the sunroof operation and re-test for water ingress.

WARRANTY

Normal warranty policy and procedure apply.

COMP. CODE
**9D6N 8G5N
9S6N**

SRO
.25 hour 76.82.64/65 Glass panel renew (electric)
00.35 hour
76.83.05/06 Glass panel renew (manual) 00.35 hour
76.82.89/27 Check water dam gasket 00.05 hour
76.82.89.28 Fit new type spacers 00

TECHNICAL INFORMATION



Page 2 of 3	SUBJECT Sunroof - water Ingress
MODEL Discovery fitted with Electric/Manual Sunroof	AFFECTED VEHICLES LP LH LJ Upto 174805 LJ Upto 505712



Process for fix No 2

Following recent improvements to the sunroof lower tray STC 1686 and the guide tube assembly STC 1683, a spacer kit Part No STC 3194 (containing 4 white spacers) will be required if either the sunroof lower tray or the guide tube assembly are changed in vehicles prior to the Vins given.

MODIFIED GUIDE TUBE (ILLUSTRATION A)

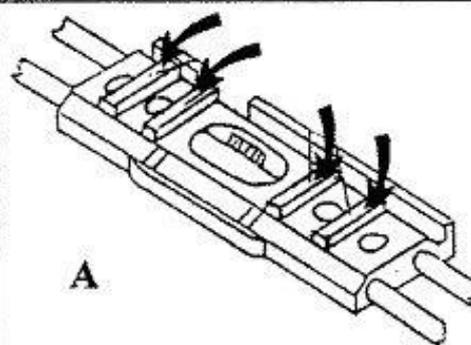
Underside view between upper frame and guide tube.

GUIDE TUBE UNMODIFIED (ILLUSTRATION B)

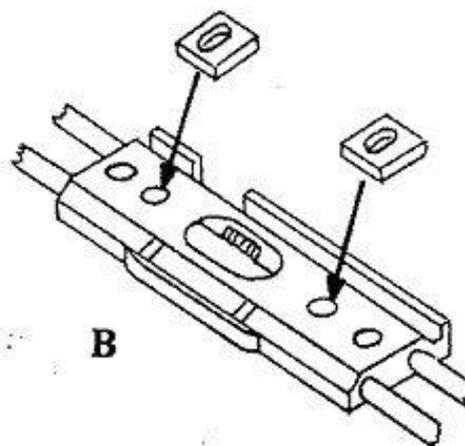
Underside view between upper frame and guide tube.

When fitting a modified lower tray to an unmodified guide tube x 2 spacers must be fitted to the guide tube.

Gently lift the guide tube assembly off the two locating pegs on the upper frame to gain enough clearance to insert the spacers over the two inboard holes as indicated then reseat the guide tube assembly.



A



B

Continued.....

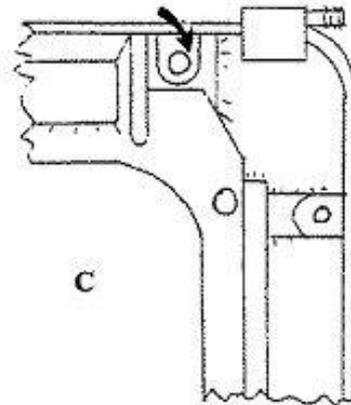
TECHNICAL INFORMATION



Page 3 of 3	SUBJECT Sunroof - water ingress	
MODEL Discovery fitted with Electric/Manual Sunroof	AFFECTED VEHICLES LP LH LJ Upto 174805 LJ Upto 505712	

MODIFIED LOWER TRAY ILLUSTRATION 'C'

Underside view look for 'U' shaped impression around corner hole as shown opposite.



LOWER TRAY UNMODIFIED 'D'

Underside view no impression around hole as shown opposite.

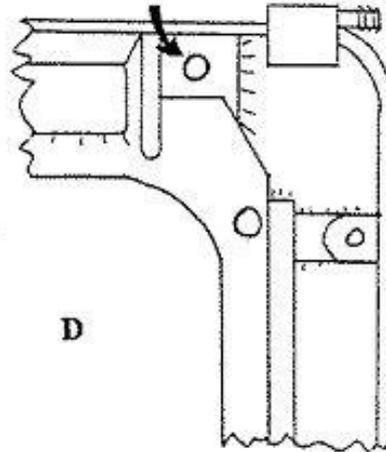


ILLUSTRATION 'E'

Fit x 4 spacers as indicated opposite to the inside of the lower tray.

When fitting a modified guide tube assembly to an unmodified lower tray x 4 spacers must be fitted to the inside of the lower tray as indicated opposite.

