





# Discovery Water Ingress Manual

CIRCULATE TO:-		<b>TECHNICAL INFORMATION</b>		
SERVICE MGR.	<input checked="" type="checkbox"/>	SUBJECT		issue 2
RECEPTION	<input checked="" type="checkbox"/>	'E' Post Trim Area - Water Ingress		
WORKSHOP	<input checked="" type="checkbox"/>	MODEL		
PARTS	<input checked="" type="checkbox"/>	AFFECTED VEHICLES		
Discovery		LP LH LJ LD		081991 onward
<b>DETAIL</b>  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.				
<b>ACTION REQUIRED</b> Upon customer complaint of water ingress around the 'E' post, follow the flow chart overleaf.				
<b>PARTS INFORMATION</b>  Not applicable		<b>ILLUSTRATION</b>  		
<b>PROCEDURE</b>  See flow chart overleaf		<b>WARRANTY</b> Normal warranty policy and procedures apply		
		<div style="border: 1px solid black; padding: 5px; text-align: center;">                         COMP. CODE  <b>9L4N</b> </div>		
		<b>SRO</b> 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 <b>'E' Post Trim Area - Water Ingress</b>	
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/fixed 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!  
Always dry off joints before applying  
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 <b>'E' Post Trim Area - Water Ingress</b>	
MODEL  Discovery	AFFECTED VEHICLES LP LH LJ 08/1991 onward LD	

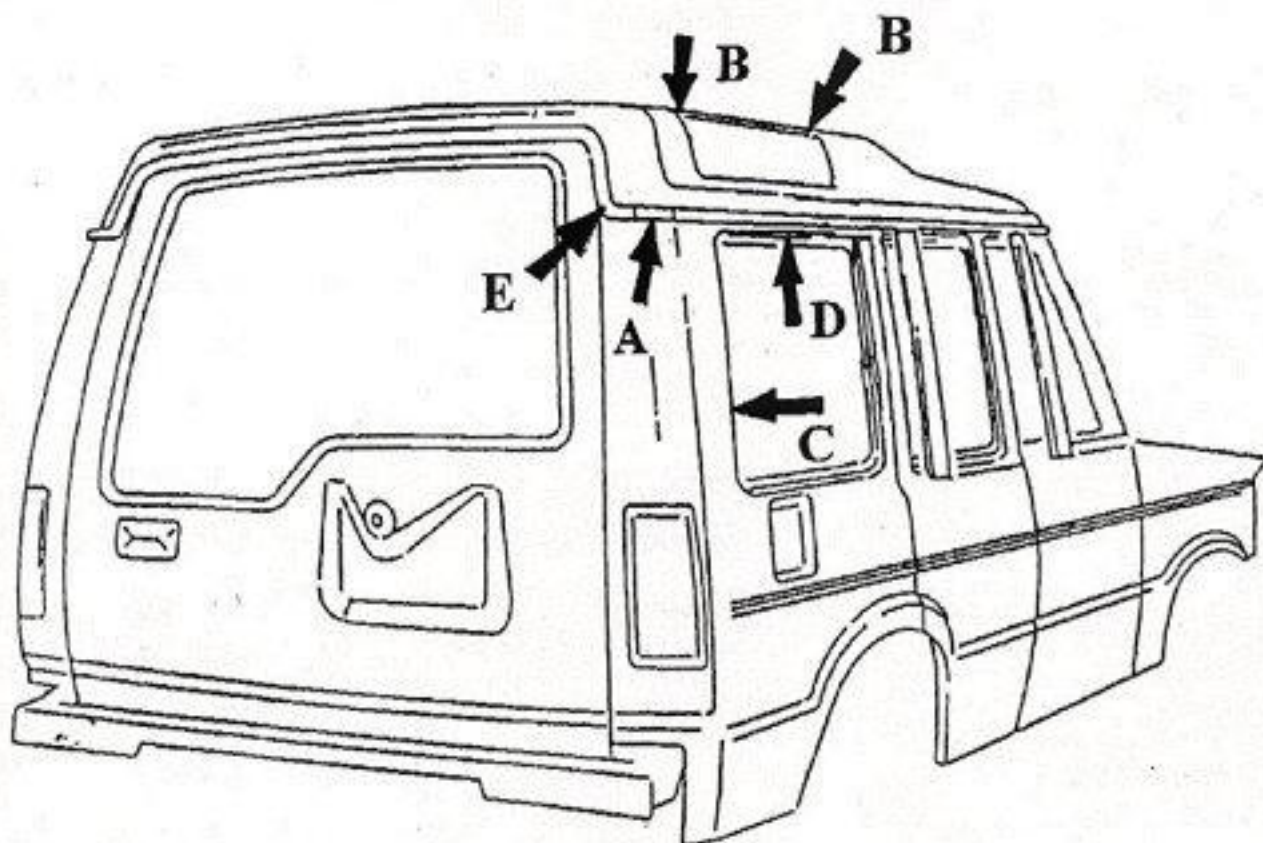
## WATER EVIDENT IN 'E' POST AREA-DIAGNOSTIC CHART

<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</p> <p>Continue</p>		
<p>Water drips from cantrail inner near 'E' post</p> <p>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?</p> <p>Continue</p> <p>Water in front of dam</p> <p>Continue</p> <p>Check roof drain channel for pin holes and reseal as necessary. <b>Do not remove screen. Do not replace screen to repair leak.</b></p> <p>Continue</p> <p>Check windscreen for leaks- reseal as necessary</p> <p>Continue</p> <p>Always water test to confirm resolution -There may be other leaks! Always dry off joints before applying sealants</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?</p> <p>Continue</p> <p>Water behind dam</p> <p>Continue</p> <p>Inspect Zinc tape for pin holes and reseal as necessary (see illustration arrow A)</p> <p>Continue</p> <p>Inspect roof drain channel for pin holes and reseal as necessary</p> <p>Continue</p> <p>Inspect cantrail to bodyside joint for pin holes and reseal as necessary (see illustration arrow D)</p> <p>Continue</p> <p>Always water test to confirm resolution-There may be other leaks! Always dry off joints before applying sealants</p>	<p>Remove rear header trim Inspect tape and joints for pin holes- reseal as necessary</p> <p>Continue</p> <p>Double check alpine light sealing</p> <p>Continue</p> <p>Always water test to confirm resolution -There may be other leaks! Always dry off joints before applying sealants</p>

## TECHNICAL INFORMATION



<b>Page 4 of 4</b>	<b>SUBJECT</b> <b>'E' Post Trim Area - Water Ingress</b>	
<b>MODEL</b>  Discovery	<b>AFFECTED VEHICLES</b>  LP LH LJ 08/1991 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.

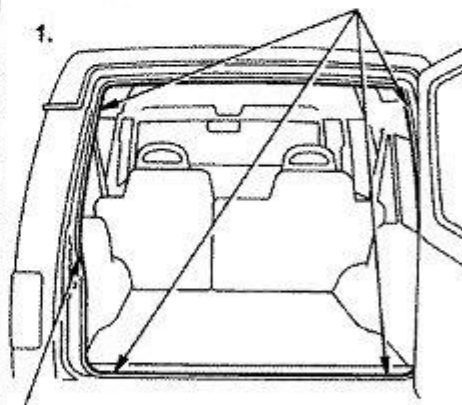
### PARTS INFORMATION

MUC 1008 Butyl Foam Sealer

The Dum Dum (rubberized filler) should be locally sourced

### ILLUSTRATION

1.



### 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



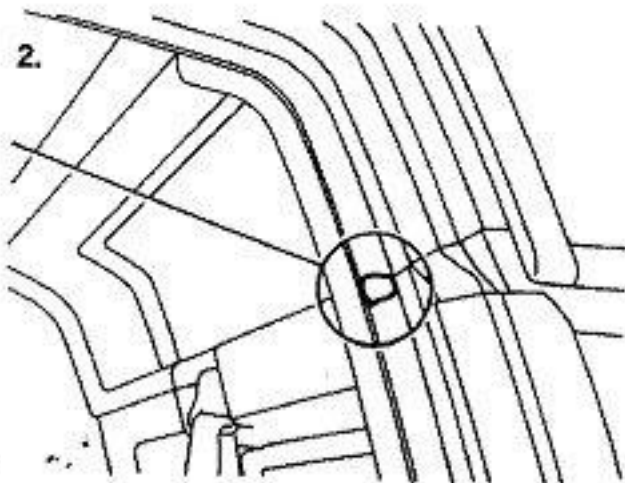
<b>Page 2 of 2</b>	<b>SUBJECT</b> <b>Rear End Door Seal - Water Ingress</b>	
<b>MODEL</b>  <b>Discovery</b>	<b>AFFECTED VEHICLES</b> LP LH LJ All LD	

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.

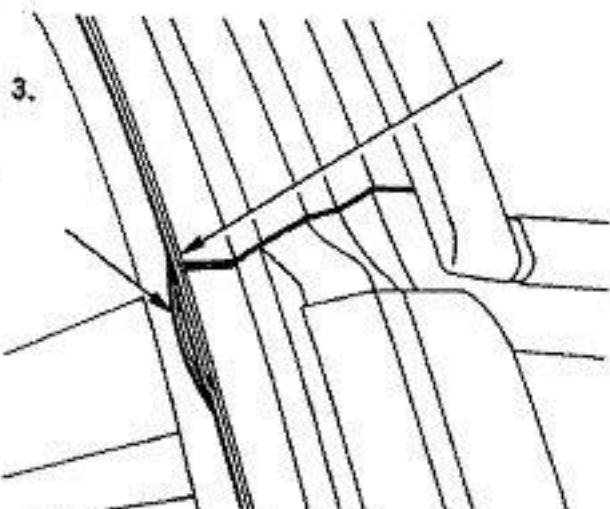
8. Re-fit rear end door tread strip.

9. Re-test for water ingress.

2.



3.



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

## TECHNICAL INFORMATION

LAN  
-ROV

MODEL	AFFECTED VEHICLES	
Discovery	LP	
	LH	
	LJ	AM
	LD	



### 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 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

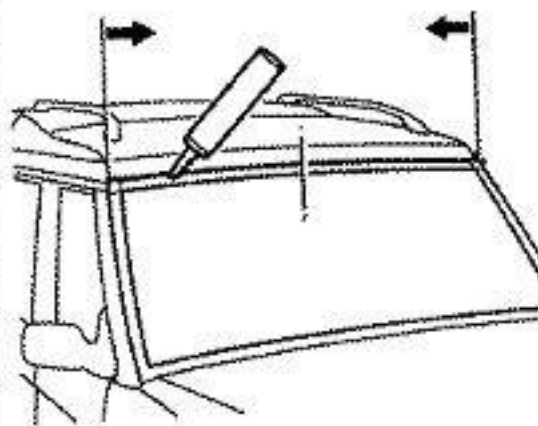
BHM 705L Sealant

### 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.

### ILLUSTRATION



### WARRANTY

Normal warranty policy and procedures apply.

COMP. CO.

8G1N

SRO

76.81.39 Seal windscreen for leak 0.30 hours

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

## TECHNICAL INFORMATION



Issue 2

MODEL

Discovery fitted with Electric / Manual Sunroof

SUBJECT

Sunroof -Water Ingress

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 has been amended to replace previous sunroof issues.

### ACTION REQUIRED

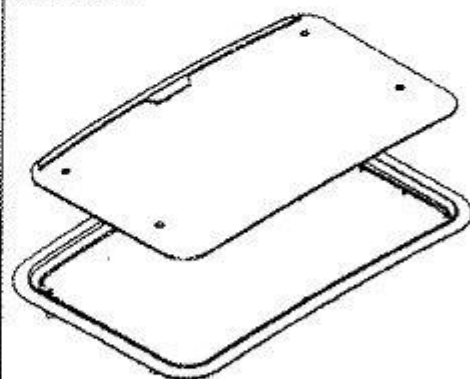
Upon customer complaint, ensure sunroof is fully closed, water test the affected sunroof to identify the source of the leak, and follow the appropriate action detailed below.

### 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**



<b>Page 2 of 3</b>	<b>SUBJECT</b> <b>Sunroof - water ingress</b>
<b>MODEL</b>  <b>Discovery fitted with Electric/Manual Sunroof</b>	<b>AFFECTED VEHICLES</b> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">                     LP                      LH                      LJ                      LJ                 </div> <div>                     Upto 174805                      Upto 505712                 </div> <div style="margin-left: 20px;">  </div> </div>

## **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)**

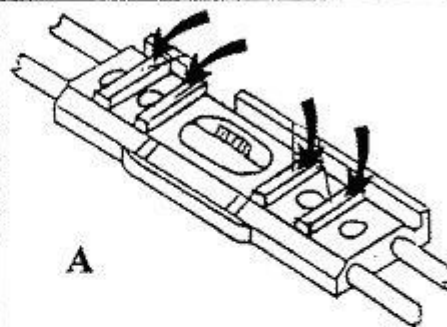
Underside view between upper frame and guide tube.

### **GUIDE TUBE UNMODIFIED (ILLUSTRATION B)**

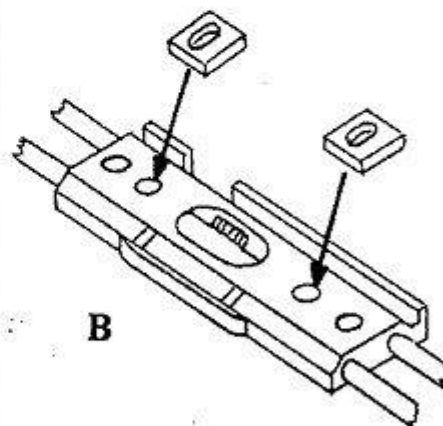
Underside view between upper frame and guide tube.

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 reseal the guide tube assembly.



**A**




**B**

Continued.....

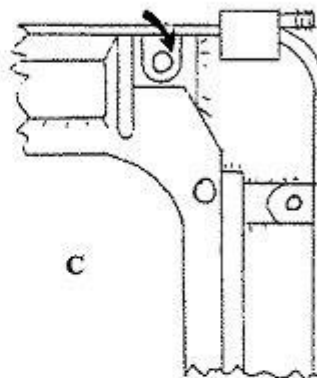
# **TECHNICAL INFORMATION**



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

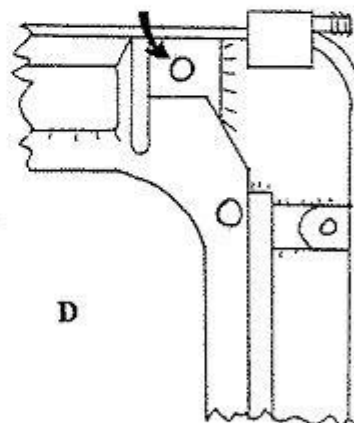
## **MODIFIED LOWER TRAY ILLUSTRATION 'C'**

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.

