Tri Glide Trunk Door Water Intrusion Diagnostics

This Tech Tip is intended to aid in locating and correcting water intrusion issues in the trunk of Tri Glide models. The majority of these leaks can be resolved through adjustment of the door latches, but there are several potential paths for water intrusion.

If properly set up the trunk interior should remain free from water during all types of wet riding conditions. The trunk however, can allow small amounts of water to enter under circumstances such as: direct spray from high pressure or high volume washing, or residual water from riding / washing entering the trunk area when the door is opened.

The following pages provide a systematic diagnostic procedure to assist you in isolating and resolving water intrusion issues. There are also two short videos to aid in diagnostic and repair. Use the links below.

Trunk Leak Tips

Latch Adjustment and Diagnostics

Areas of Water Intrusion	Inspection to determine Intrusion Origins
Determine where water leak originates from: If necessary, systematically mask potential leak paths to help determine origination of leak. A. Door Seal B. Lock Barrel C. License Plate Mount or Light D. Tour Pack or Fender Mounting E. Wire Harness Passage	Look for water intrusion location and volume: - High amounts of water entry would indicate a door seal problem - Water dripping to the center of the trunk would indicate a leak from the Lock Barrel or Tour Pack Mount (no wetness near door opening) - Water along the back vertical wall and wetness on the trunk liner would indicate a leak from the wire harness passage - Water coming from under the trunk door cover may indicate a leak around the license plate mounting bracket or handle/license plate light mounting screws.

Tri Glide Trunk Water Intrusion Diagnostic Steps

Failure Origin	Potential Failure	Inspection	Corrective Action	Issue
A1	Door Latches not working properly	Test latches with trunk door open by manually closing each latch and actuating with the lock barrel.	Check cable sheath for damage Check latch bracket at sheath attachment	Cable out of position or damaged causing latch not to close.
		Close the door and tug firmly on the door handle/license plate light. Watch for movement in upper corners to verify the latches are working properly. Close the door until it is resting on the latches; you should be able to feel the door contact both latches simultaneously. If not the latch pins need adjustment. Use the link on page one to view a video about latch adjustment.	Measure and set latch pin placement to 1.5" (see fig **A**) Slowly close door and check that both latch pins contact the latches at the same time Adjust latch pins as needed Check sealing pressure using a 2-3" wide strip of paper between door and across the top edge of the door There should be resistance felt when trying to pull the paper out and you should not be able to slide the paper from side to side Adjust latch pins as needed for both latches to engage and good sealing pressure If there are problems achieving both measure gap between latch and door seal (see fig **A-1**) Gap should measure between 0.060 – 0.090". If not in range refer to additional information in the linked video. If leak persists lightly powder the door seal, close door and run water over the trunk, leaks will wash the powder from the seal helping locate the source of the leak.	An improperly working latch will reduce the contact pressure on the seal and allow water to enter between the seal and door

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Failure Origin	Potential Failure	Inspection	Corrective Action	Issue
A2	Improperly Installed Door Seal	Push seal into corners to determine if the seal is installed into the corners correctly. If there is more than 1/16" deflection related to the body in the corners then the seal is not installed correctly.	Replace Improperly Installed Door Seal (83915-09A) Install per video instructions or Service Bulletin M-1241.	Improperly installed seal may allow water to enter between the seal and body
A3	Damaged Door Seal	Visually inspect the door seal, for rips, cuts, debris, abrasions or other profile anomalies	Replace Damaged Door Seal (83915-09A) Install per video instructions or Service Bulletin M-1241.	Damaged seal may allow water to enter between the seal and the door
A4	Door Seal not adhering to the trunk body	lightly pull on the seal at various locations to verify that seal is bonding properly to the trunk opening	Remove existing Door Seal Clean and prep trunk opening for new door seal Install new door seal (83915-09A) Install per video instructions or Service Bulletin M-1241.	Improperly bonded seal may allow water to enter between the seal and body opening
A5	Poor Door or Body Profile (Warped Surface)	Lightly grease door seal edge, close and reopen door, look for contact witness mark from greased seal	If door and seal do not make complete contact please take digital photos of the issue and then contact Tech Service.	Improper Door alignment will cause an inconsistent seal contact with the door and allow water to enter between the seal and door
A6	Lanyards	Lanyards must fall to inside of hinges. Eyelets must rotate freely. Kinked or damaged lanyards could get caught in seal.	Replace lanyards (83344-09). Teach customer to look at lanyards when closing door and make sure they are inside hinges.	Lanyards get caught on wrong side of hinges and possibly in seal. Eyelets contact inner door cover holding door out.
A7	Rough Door Surface	Inspect mating door surface to verify it is clean and undamaged	Repair door surface or replace door Before replacing door with this issue please take digital photos of the issue and then contact Tech Service.	A poor door contact surface may allow water to enter between the door and seal

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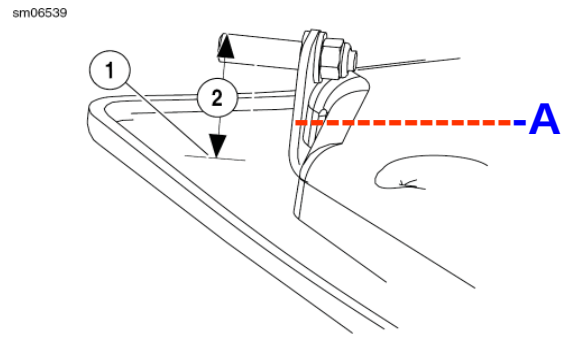
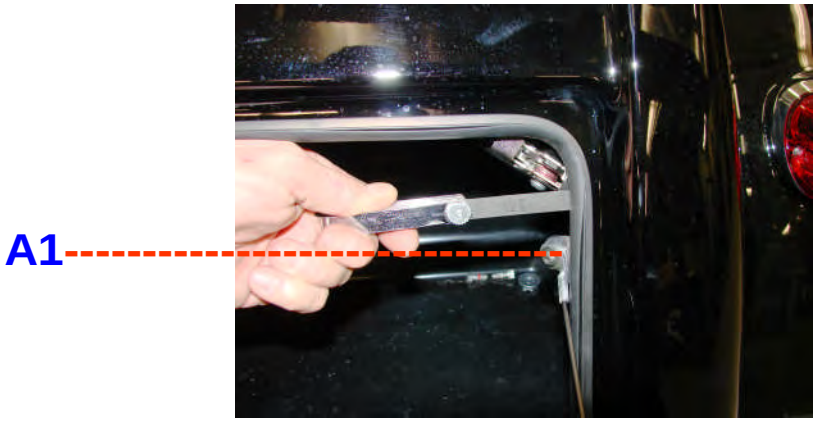
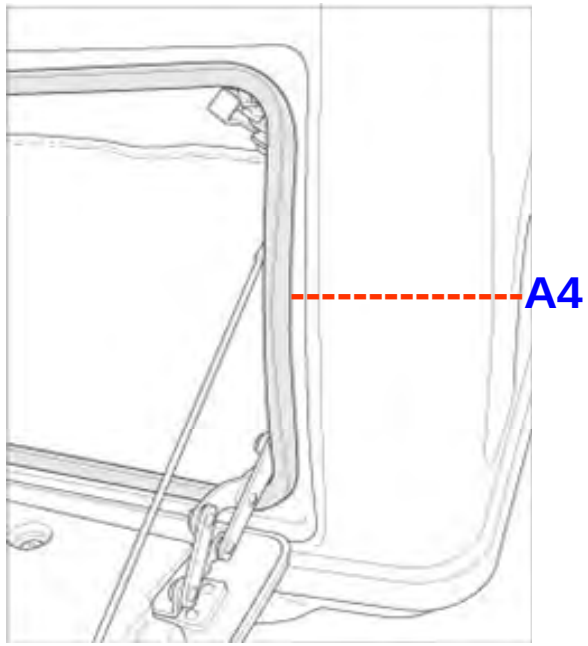
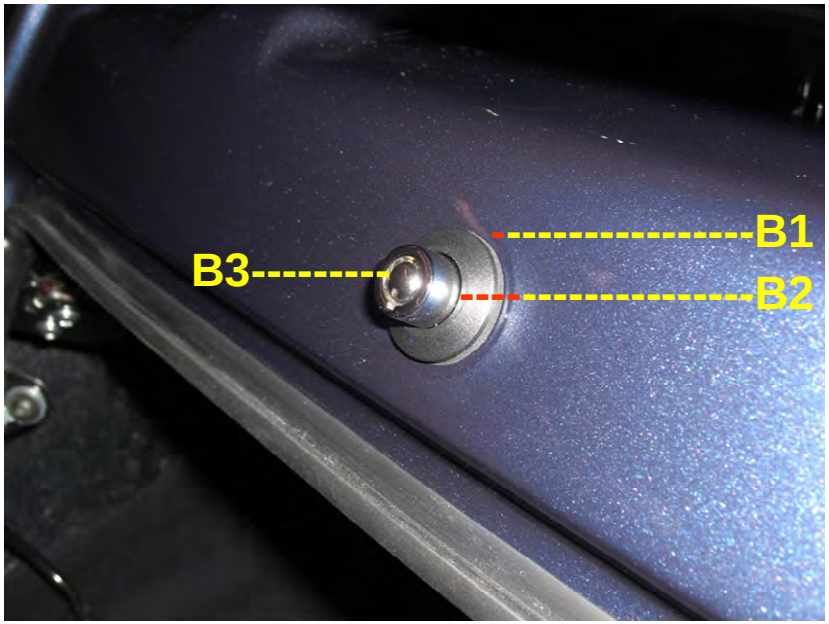
Failure Origin	Potential Failure	Inspection	Corrective Action	Issue
B1	Lock Barrel Gasket	Visually inspect the lock bezel, gasket, and body surface to verify contact between all the components	Remove lock and install a new gasket (8327). If new gasket does not resolve call Tech Service.	A damaged gasket or improper stack will allow water to enter between the lock bezel and body.
B2	Lock Barrel O-Ring	Press lock button and feel for resistance between the lock barrel and internal o-ring. There should be no side-side movement between chrome barrel & plastic bezel.	Remove lock assembly and install new o-ring (10927) and/or new lock bezel (83987-09) The lock bezel part number is in process of being changed to 83987-09 that includes o-ring.	A damaged or missing o-ring may allow water entry between the lock bezel and lock barrel
B3	Lock Tumblers	To verify the leak is through the lock, tape the end of the button and wet the area with a hose. The barrel lock assembly is ***not*** a sealed unit.	Minimal moisture may intrude riding in a downpour. When parking in a downpour or washing the vehicle with a direct spray water will enter through the lock. Educate your customer that in these in circumstances it is advisable to remove personal belongings from the trunk.	The tumblers are not sealed. A small amount of water may pass through the lock with direct spray of water.
C1	Light Opening	Remove door cover and visually inspect grommet and wiring for proper installation and snug fit. Inspect around mounting points.	Properly install grommet and/or add silicone to seal opening or mounting points.	Water may enter through grommet opening.
C2	License Plate Mount	Remove door cover and inspect for water marks coming from the license plate mounts.	Add a bead of silicone around the perimeter of each license plate mount fastener.	Water may enter through the fastener mount standoffs in the door assembly if they are not properly bonded to the door.
D1	Tour Pack Mount	Check for wetness around the bonded brackets on the inside to the top or the trunk area	Add a bead of silicone around the perimeter of each bonded bracket to insure a water tight seal	Improper bonding of the brackets to the body may allow water to enter between the body and the bracket
D2	Fender Mounting Bolts	Check for wetness around the fender washers and nuts inside the trunk area	Add a bead of silicone around the perimeter of each internal blot and hole to insure a water tight seal.	While rare, the clearance between the bolt and body may allow water to enter the trunk.
E1	Wire Harness Passage	Look for wetness and water marks on the inside forward-vertical surface below the wire passage grommet	Ensure grommet is properly installed, add silicone to wire passage area to seal the grommet opening	Water may enter through the wire passage into the trunk area due to a missing or improperly installed grommet



1. Inner surface of door
2. Adjustment dimension

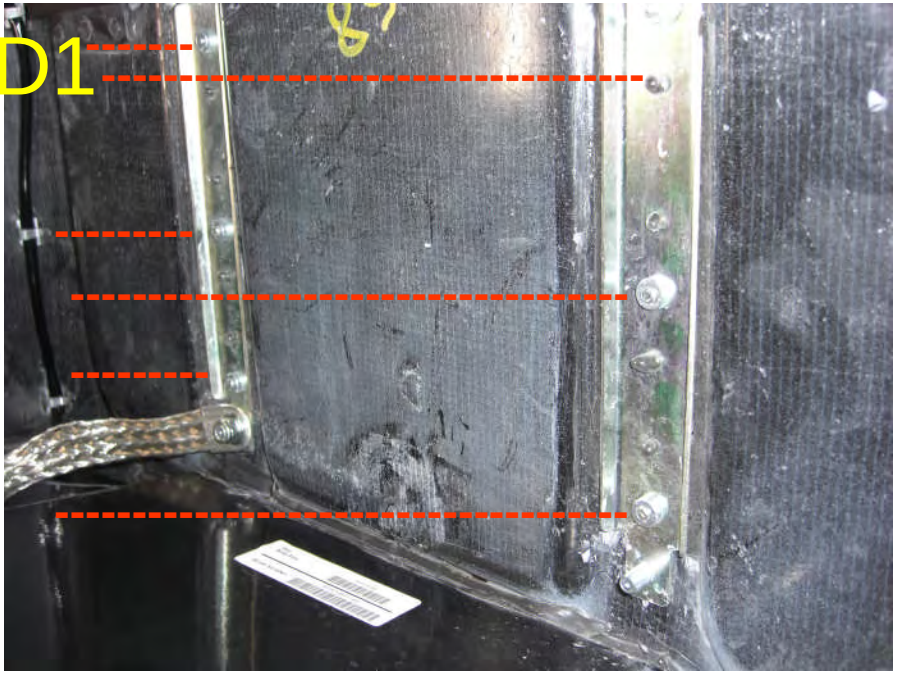


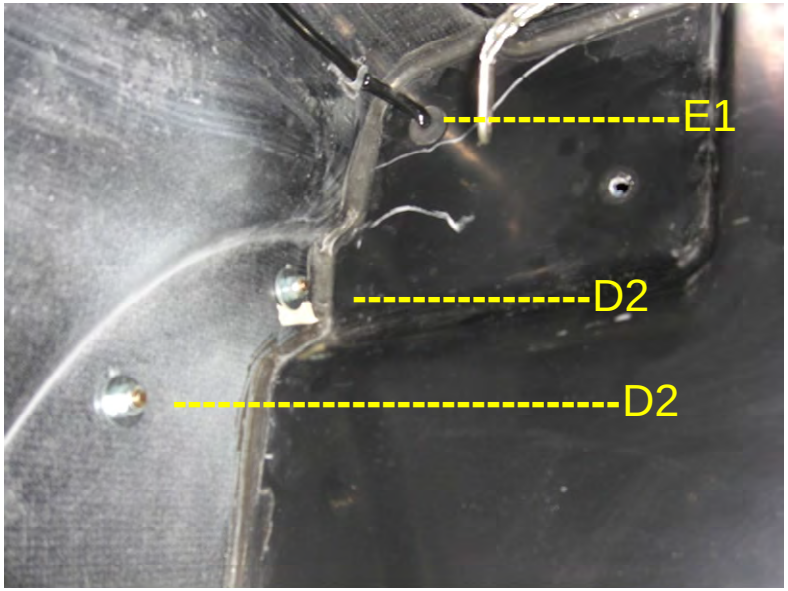



B1
B3
B2


C1
C2


D1


D1


E1
D2
D2