

Rain Leak Area Under Cowl Cover

Foam gasket dries out with age.

I recently learned about a leak problem that is becoming more common as our NC (2006 and newer) Miatas age. This could eventually apply to all NC Miatas as they get older. This issue is caused by a thin foam gasket drying out and leaking rain into the passenger compartment.

There is a black plastic Cowl cover on 2006 and newer Miatas that runs all of the way across the bottom of the windshield, and extends under the rear of the hood. This is held in place by a screw at each end. This screw is found under an oval black plastic cap at each end of the Cowl cover. The screw runs down into a white plastic sort of "Grommet", which is set in the sheet metal of the car body.

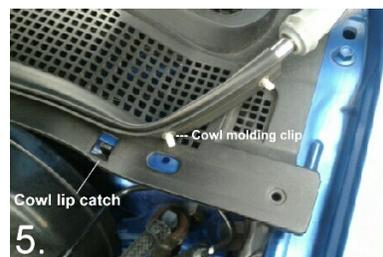
This problem is caused by the thin foam seal under the top of this plastic grommet which can be seen in the top left of picture 3. The foam is drying out, and during a hard rain some water leaks down onto the front floor mat. The water then starts to cause metal parts under the dash to rust. See the location of the "grommets" in picture #1 of the Driver's side, and #2 of the Passenger's side.



I decided to replace mine, and I am glad I did as the foam rubber was starting to dry out. I bought two each of the oval black plastic caps and the white "grommets". See Picture #3. My total parts bill for all 4 pieces was under \$10.00. If interested in replacing yours, the Mazda part number for the black plastic cap is: E016-50-796. The white plastic "Grommet" as Mazda calls them is: BJ0J-50-798. You need 2 of each as the black caps normally break when removing them. You can get them here at the Lancaster Mazda parts web page with a 20% discount: <http://www.ltmdiscounttoyotaparts.com/>

To replace these grommets, start with the hood closed and remove the oval caps at each end of the cowl cover, and then remove the Phillips head screws. Flex the wiper arm upward to make it easier to remove. Take the passenger's side windshield wiper off by removing the black rubber cap and remove the nut holding the arm in place. Next open the hood to remove the driver's side windshield wiper.

Along the front edge of the cowl cover is a hollow rubber molding which seals up against the underside of the hood. There are small white plastic clips which go down thru the cowl cover and into the sheet metal of the cowl itself. See picture #5. Get your fingers under the cowl lip and squeeze the end of the white plastic clips while pushing up to remove the molding. Then pull the cowl cover forward lifting the front edge up slightly. There are clips under the windshield and under the cowl cover front lip that will loosen when you pull it forward & up. When these clips are loose, you can fold the cowl upward in the middle (See picture #4) to pull it into the engine compartment. Watch for the wiper fluid tubing on the passenger's side so you do not damage it.



The white plastic grommets are a little tough to remove, so be careful not to damage or bend the sheet metal around the hole. DO NOT try to pry them out. Carefully lift up one end, grab it with pliers, and quickly pop it upwards. If you do bend the sheet metal around the square hole, carefully flatten it now. The new grommets have a new gasket with them. I suggest you put a little "Silicone Form-A-Gasket" around the opening, between the gasket on the grommet and also the underside of the grommet itself. (Covering both sides of the foam) Sealing the joint with this form-a-gasket will help insure this does not have to be done again at a later date. If you use the form-a-gasket, let it sit at least an hour before you start to reassemble things so the silicone can start to cure.

After the Silicone Form-A-Gasket is cured, carefully slide the black plastic cowl cover back into place. When the cowl cover is almost back into it's final position, lift the front of the cowl cover a little to get the clips along the back edge of the cowl cover to go under the bottom edge of the windshield. Be careful you do not bend those rear "under windshield" clips, or the cowl cover will not stay down in place. If you do bend one of the rear clips, you will know because you will not be able to push the cowl back in place. Once the cowl cover is back in place, make sure the clips along the front edge of the cowl cover (See Picture #5) are under the metal cowl lip.. Now put the hollow rubber molding back in place.

Put the screws in place at each end of the cowl cover. Note there is a center raised area on the top of the white plastic grommet, and also a matching raised center area on the underside of the screw. Make sure you have the cowl cover oval opening sitting down along side the raised section of the grommet. After you tighten the screw, the cowl cover should be free to move side to side. This will keep the cowl cover from breaking as it expands in the summer and contracts in the winter. Many of us had this cracking on the previous model Miata's cowl covers.

Now put the driver's side windshield wiper in place and just lightly snug it. Close the hood and do the same for the passenger's side wiper. With the hood closed, run the wipers back and forth a couple times to be sure they are in the proper location. Adjust as needed. When you are satisfied with the side to side travel of the wipers, tighten the wiper bolt nuts, and put the black rubber caps on the wiper nuts. You are now DONE!

As always, feel free to ask if you have any questions.

Zoom-Zoom! Bill Latsha