# **Dew Wipe/Strip Replacement**

(Michigan Fiero Club)

# **Tools:**

- 1) Door Panel Remover
- 2) 10mm wrench
   <sup>1</sup>/<sub>4</sub>" wrench
   Cut down philips #2 bit
- 3) Piece of thin cardboard
- 4) Various philips and flat bladed screwdrivers
- 5) Rubber strip
- 6) Masking tape
- 7) <sup>1</sup>/<sub>4</sub>" Hex head screws
- 8) Coat hanger
- 9) Hot glue gun
- 10) Grinder
- 11) Door crank handle remover (not shown)
- 12) Allen wrench set small sizes (not shown)
- 13) Heavy duty, clear packaging tape (optional, not shown)

### **Parts:**

(Double check part number with GM dealer)

#### 1985-88 SEALING STRIP

window outer RH 20606220 1985-88 SEALING STRIP window outer LH 20606221 

 10
 1

 9
 2

 9
 8

 6
 7

 5
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Most of the above tools are cheap to purchase and you will probably use them over and over. If you don't have a grinding wheel, then buy one that attaches to a drill or find someone that does have the tools. The Door Panel and Window Crank removal tools can be found at well stocked auto part stores. New Dew Wipes/Strips are only available from the dealer or other GM parts suppliers (The Fiero Store - 1800-Fiero-GT) and cost about \$20-\$30 for each side. The project shown here was done on a 1988 Fiero GT, driver's side door with power windows, locks and mirrors. Please use extreme care when working with the window glass, as it could scratch, crack or shatter completely. Always protect the window when moving it up and down and protect yourself with safety glasses and proper attire. As always, think twice about your actions and use common sense.

Before starting this project, take a look at the location of the window, relative to the weather-strip seal around the door frame. This is important for lining up the door glass at the end of the process. Notice how much the glass compresses the weather-stripping, and maybe even measure the deflection (Figure 2-1). You will also want become familiar with the general layout of the door. See Figure 23 for a drawing of the major door parts. This will give you an overview of the parts you will be working with.



Figure 2





Figure 4

Figure 3

With a small flat blade screwdriver remove the door handle plug shown in Figure 4, which will give you access to one of the three screws used to attach the handle to the door. Remove the three screws as shown in Figure 3-1 Next, remove the two screw covers on the door handle/lock assembly (Figure 5-1). Use a small flat bladed screwdriver and pry at the middle of one of the vertical sides of the Pegasus cover, which snaps in place. Next pry out the round cover behind the grasp handle. Use a Philips head screwdriver to remove these two screws. To remove the sliding lock (Figure 5-2), use your finger to pull on the slider, from behind. The slider will pop out towards you.

To remove the door handle plate, pull the entire handle in the direction shown in Figure 6-2. Next, slide the lock slider "hook" so the door is locked, which will give you extra room for the next step Once the lock slider "hook" (Figure 6-1) clears the handle plate then pull outward on at the end of the panel at the point marked in Figure 6-3. As you pull it about 45 degrees the door pull will release from the door handle plate. The trick is to pull the door handle plate outward. This rotates the door pull into the correct position and there are slots for the door pull to slide out. Once you do it, you will see how this works. Don't pull the handle in the direction of Figure 6-2 and try to get the door pull to release. You could crack the door handle plate this way. Follow my steps as listed. Once the plate is detached, don't unplug any wires, just let it hang (if you have power locks). Don't forget to unlock the door!



Figure 5



Figure 6

One item I didn't show here is the use of the Window Crank removal tool for non-power window Fieros. The handle is held on by a "C" clip (Figure 23-11). To remove this I recommend you get a Window Crank Removal Tool (Tool #11 - Figure 1). They are low cost and easy to use. Just place the tool between the crank and the inner door panel (aligning the tool up with the shaft of the handle) and just pop the clip out. If you have manual mirrors, locate the remote on the top of the door panel (Figure 23-17). On the door glass

side there is a small Allen screw. Loosen this screw with the proper Allen wrench and push the "ball" part of the remote down into the door frame, just enough to keep it free when removing the door panel.



Figure 7



Figure 8

To remove the door panel you need Tool #1 in Figure 1. Use this like a pry bar. Pry it between the door panel and the metal frame of the door. Try to locate the "christmas tree" plugs (Figure 7) and place it in the fork of the tool. You have to do this by feel, because you can't see the "christmas trees". Next pry off the panel as shown in Figure 9. There are two plugs that are hard to reach. One is near the door handle (Figure 8). Reach in side the opening as shown and feel for the plug. Then hold the plug/metal plate up against the door panel and pull outward. This should release the plug from the door frame. The other plug is located on the "door latch" end of the door at about the same height as the one near the door handle. Use the Door Panel Remover Tool (Tool #1) and try and remove this plug from the frame. With luck you will get them all off in one piece. To get the door handle plate (Figures 5 & 6) through the hole in the inner door panel, turn the plate 90 degrees and slide it thorough the hole (if you have power locks). Don't forget the remote mirror cable. You have to remove the "ball" section from the little black housing. Notice that remote handle is keyed and will only fit in the housing one way.



Figure 9

If you have problems with the "Christmas Tree" tabs (Figure 10-1) or the metal plate (Figure 10-2) the two tabs are mounted to, then use hot glue (Figure 10-3) to reattach them. Notice: the tab on the very bottom, "door latch" end of the door panel, is cut off (The point is missing). This is important as if you replace this tab, be sure to cut it down. Otherwise the tab will be too long and the window mechanism will hit it. After assembly, and testing the window operation you hear a "clunk", check this tab... you may have to trim it.



Figure 10

Once you have the inner door panel off, you can begin to tackle the various parts of the window. You need to remove the hard, black rubber covers ("triangles" as I like to call them) located at the front and back of the window. Locate the forward (door hinge side) "triangle" at the base of the window. Remove the three screws as shown in Figure 11-1. Then remove the cover. Proceed to remove the rearward cover, located at the base of the window on the latch end of the door. Remove the two screws and the cover, as show in Figure 12-1.



Figure 11



Figure 12

Next remove the Philips head screws that hold the Dew Strip Retainer (Figure 13-1). To remove the Inner Dew Strip, just grab and pull up; it is not attached to anything (Figure 13-2).



Figure 13





Figure 15

Figure 14

To help you position the window in the correct location after reassembling the Dew Strips you need to mark the locations of the two 10mm Adjusting bolts (Figure 14-1). These two bolts (attached to felt pieces) control the inward and outward movement of the window, and help to keep it from rattling. With a piece of masking tape, mark the location of the little flange near the bolt. Tape right across the opening. Now punch out the hole you taped over. This will allow you to move the adjuster in and out, but still keep track of the original position (Figure 15-1) Now remove the bolts and allow the felt adjusters to fall down. You should be careful as to not let them slide out of your sight. To retrieve them, you will use a coat hanger with a hook at the end. With the adjusters out of the way the window will have more movement, allowing for the extra room needed to remove the Dew Strip screws. Your door should look like Figure 16, no Inner Dew Strip, bolts or



Figure 16

brackets left, just the marking tape. Part of the Outer Dew Strip is attached to the mirror, which must be removed. This requires a 10mm wrench. Locate the two studs/nuts at the base of the mirror (Figure 17-1). Use your wrench to remove the nuts (careful not to drop them in the door) and then wrap the mirror in a rag, letting it hang from the control cable, or if you have power mirrors, unhook the connector, if you can.



Figure 17

Now to remove the Outer Dew Strip. Get your <sup>1</sup>/<sub>4</sub>" Philips bit and grind off about 3/16" or so. You want to shorten it just a little. With that done take your <sup>1</sup>/<sub>4</sub>" wrench and tape the bit to the open end or box end (you may have to move it around to best fit the area, so don't tape it too much. Next, wrap your wrench in masking tape, to keep it from scratching the window. Locate the Philips head screws that hold the Dew Strip in place. Two of them will be hidden behind the door glass. You can see them, but can't reach them (Figure 18-1). This is where your new tool comes into play. Get your piece of protective cardboard and place the wrench onto the Philips screw, you may have to turn your wrench around and such to get the best fit (Figure 18-2), moving your cut down bit as needed. Once you get the wrench onto the Philips screw, put your cardboard/paper between the wrench and the door glass. Use the door glass to hold the wrench against the Philips screw and turn the screw. You may have to try this a few times to get it to work.

An alternative, you can try, is to get some CLEAR heavy duty packaging tape. Cut a piece about 4 inches long and fold over one inch so you have something to grab for removal. Now stick this tape on the door glass, opposite of the Philips screw. You can use the window to hold the wrench against the glass AND you can see everything (Figure 18). The object is to still protect the glass from scratches. If your tape gets scratched or ripped, just replace it and continue to remove the screw.



Figure 18

Be careful not to drop the screws. If you do, you will have to fish around inside the bottom of the door. It is not fun, but you can find the screws with patience,(small hands help here, but be careful of the sharp edges). Many of the screws are accessible with just a standard Philips head screw driver. Once you remove all the screws, lift off the old Outer Dew Strip. If you compare the old Dew Strip with the new one, you will see the wear as in Figure 19.



Figure 19

Pull the new Dew Strip out of the package and test fit it. Now, using the same technique as you did to removed the old strip (Figure 18), install the new one. To make things easier, you may want to use stainless steel hex headed screws in the area hidden by the door glass. Use a piece of masking tape to hold the screw to the wrench, and use the door glass (protected by cardboard or packaging tape) to hold the screw against the hole. You will need a long arc to start the screw, so start the screw with the wrench/bit almost parallel with the Dew Strip, then using the door glass put pressure on the wrench/screw and turn the wrench clockwise. It should start the screw. If you plan on using the original screws, use a dab of superglue on the tip of the Philips bit to hold the screw to the tool and follow the same technique as with the hex headed screw. Install the remaining the screws.

Next you must locate the two adjusters that were held on with 10mm bolts (Figure 14). Take your coat hanger wire and bend a little hook at one end, about 1/4" for a hook is good. Now use that hook to pull the adjusters back into place and replace the 10mm bolts (Figure 20-1). Using your previous marking/masking tape align the adjusters so they match up with the original locations (Figure 20-2). Just snug up the bolts for now, as you will have to adjust them in at a later time.



Figure 20

Don't forget to reattach the mirror using the 10mm nuts. Be careful not to drop them inside the door. Tighten until snug.



Next you will replace the "triangles" (Figures 21-4, 21-5) These were originally removed in Figure 11 and Figure 12.

Figure 21

Replace the Inner Dew Strip (Figure 21-2). Align it so the "tab" on the Dew Strip aligns with the hole in the door frame (the "tab" can be seen in Figure 21-2, next to the base "2" character). You will see this when you put the inner Dew Strip on. (Basically you are centering the Dew Strip between the two "triangles" (Figures 21-4, 21-5 & Figure 13-2). Next replace the metal bracket used to hold the Inner Dew Strip on.(Figure 21-3 & Figure 13-1)

Next you have to test the function of the window (if you have manual windows, temporarily place the window hand crank on the splined shaft without the "C" clip). With the window up, check for inward/outward movement. If the window is loose (compared to the other door), move the two 10mm adjuster bolts towards the window. Close the door with the window up (since you were fiddling with the door handle/lock slider, make sure the door is <u>unlocked</u> and you have the keys in your pocket!). Does the window seal like it used to? Check to make sure the window moves up and down easily. You may have to start the car and then run the window up and down to give the window lift motor full power (if equipped). With the door closed, check the operation of the motor. If the window is very slow moving up and down, then move the 10mm adjuster bolts away from the door glass, as they are too tight. With some fine tuning of the 10mm bolts you should be able to get the window lined up as before (Figure 2).

Once you have the window working properly, you need to put the inner door panel on. If you have manual mirrors, locate the control cable and feed it into the bracket/retainer on the door panel, noting the "keyed" portion on the control cable and tighten the Allen screw. Check to make sure all the "christmas tree" plugs are connected to the inner door panel and then proceed to line up the door panel. Using fist, gently tap the door panel to set the "christmas tree" plugs into the holes in the door frame. Once you have them all in place you need to attach the top of the panel to the door. You need to grab the Inner Dew Strip retaining strip (Figure 22-1, 21-3, 13-1) and the door panel (Figure 22-2), with your hands. Gently squeeze



Figure 22

the door panel into the groove of the retaining strip (Figure 22). This metal strip is all the holds the inner door panel at the top.

Next you need to reattach the door handle plate (don't forget to tilt the plate as you did in removing it -Figure 6). Once you have the door pull started, you can then insert the "hook" for the lock slide (Figure 6-1). Slide the door handle plate into postion and attach it with the original screws and replace the trim caps. To get the lock slider cap back on, just position it over the metal "hook" and press it into place. For the armrest, reattach it with the original screws and replace the trim cap. As for the window crank (if equipped), attach the "C" clip to the handle then press the handle on to the splined shaft. You will feel it click at the correct depth. That should pretty much do it. Hopefully all will go well. Good luck!



Figure 23

To help familiarize yourself with the door, here is a drawing identifying the major parts of the door

- 1 Outer Dew Strip/Wipe
- 2 Inner Dew Strip retainer. Also holds the top of the inner door panel in place.
- 3 Inner Dew Strip/Wipe
- 4 Inner felt pads used for adjusting the inward/outward position of the window.
- 5 Latch side filler "triangle"
- 6 Hinge side filler "triangle"

- 7 Door pull handle
- 8 Inner door panel
- 9 Trim plug for armrest
- 10 Armrest
- 11 "C" clip for window crank
- 12 Window crank
- 13 Plastic washer for window crank
- 14 Door handle trim plate
- 15 Lock Slider trim piece
- 16 Fiero emblem trim plate
- 17 Mirror manual control retainer

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