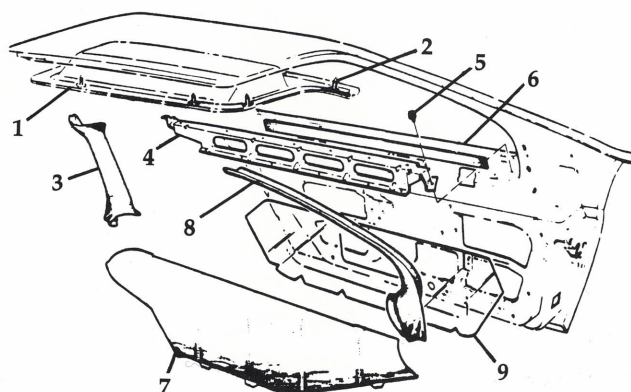
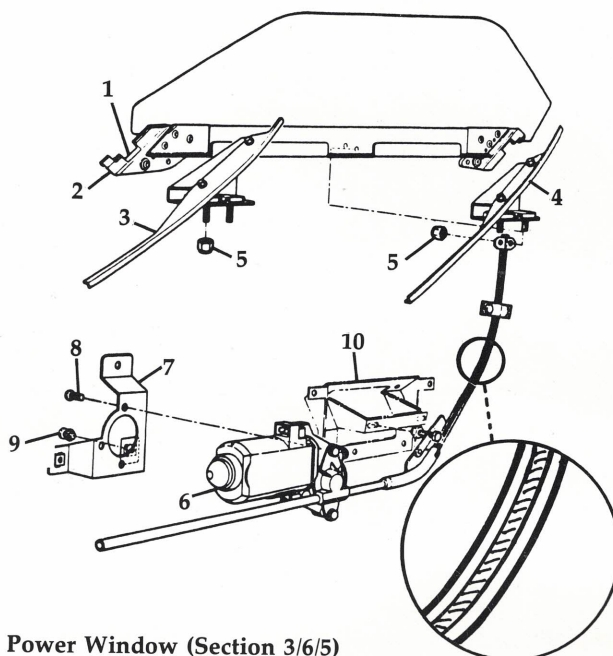




Door (Section 8/7/1)

- | | |
|------------------------|-------------------|
| 1. Trim Pad | 6. Seal |
| 2. Fir Tree (Key Hole) | 7. Trim Pad |
| 3. Trim Pad | 8. Trim Pad |
| 4. Support Bracket | 9. Panel, Sealing |
| 5. Sems Screw | |



Power Window (Section 3/6/5)

- | | |
|--------------------|-----------------------------|
| 1. Glass / Carrier | 6. Lift Motor / Tube Assy. |
| 2. Assembly | 7. Window Motor Bracket |
| 3. Guide, Front | 8. Screw M6 |
| 4. Guide, Rear | 9. Sems Screw |
| 5. Aeronut M6 | 10. Handle, Support Bracket |

Procedure for Adjusting Alignment of Small Window in a DeLorean Door

By: Don Steger,
Professional Technical Advisor

Photographs by: Kjell Myhre, V.P.
Technical Director

We will attempt to describe and put into pictures some problems of repairing and servicing DeLorean electric windows. The problem experienced in our sample DeLorean is located in the left door; the window does not close completely. Don Steger, our professional advisor from Swedish Autoservice, has substantial experience in servicing this type of malfunction.

The problem has been quite common. One notices a gap in the front

(Continued on page 26)

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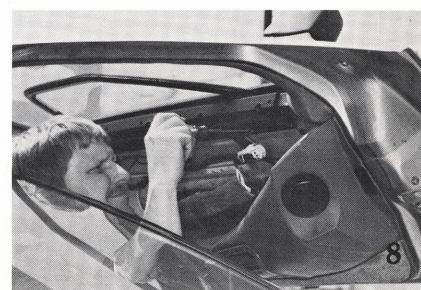
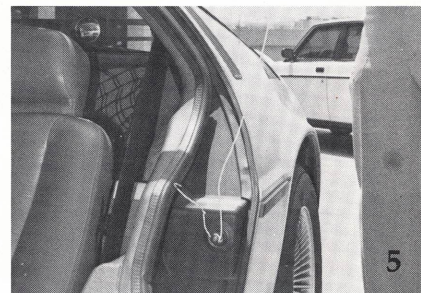
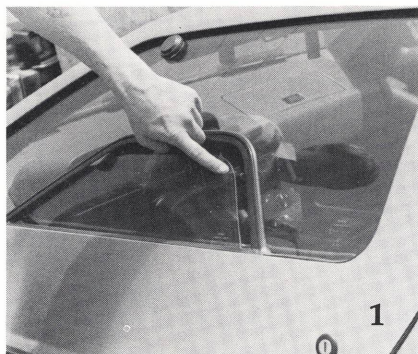
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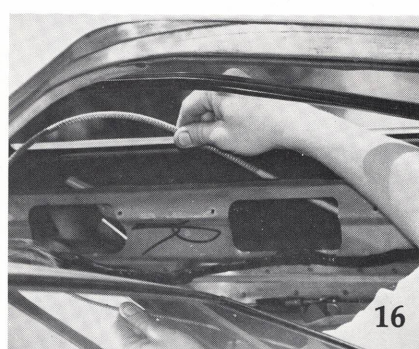
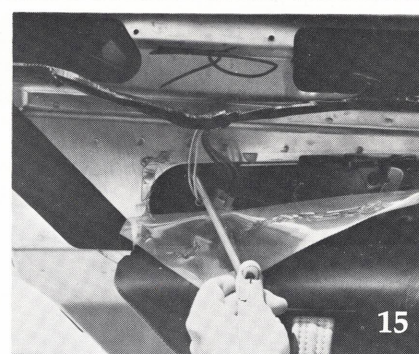
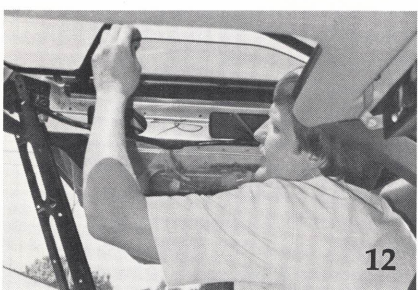
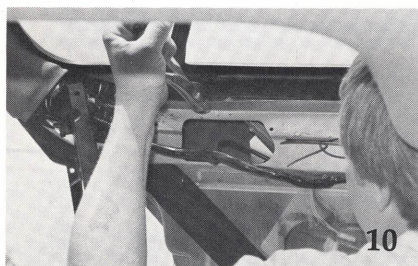
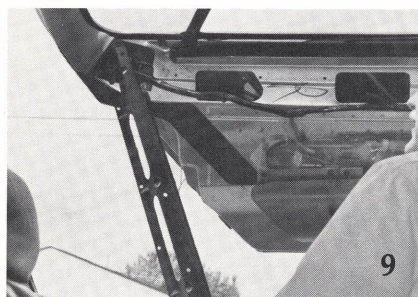
portion (Photo #2) of the smaller window which is due to the window being off the guides. We will detail removing the panels and the window, adjusting the guides, and getting the window back into position so it will seat properly. One primary problem is that the runners which guide the window up and down have a tendency to move from their original position. You may notice the runners are too far forward. When closing the window, it continues to go backwards at the end of the run. The window comes off the guide because it goes back further than the guides should permit. Eventually it will pop off the *front* window guide leaving a gap as the window is closed. You may notice that there is a very large gap in the rear of the window. (Photo #1) As the window is being closed, the rear has a tendency to go up at an angle and off the guide. To begin, open the door and remove the panel on the inside of the car to gain access to the window. (Photos #3 and #4) For easier access to work on the door, modify a coat hanger and secure as shown. (Photos #5 and #6) This will avoid having to stand up and bend over backwards. Tie one end of the coat hanger to the striker pin on the car, and the other end to the door, inside the door latch in the locked

position. Preferably, it would be best to use a wire thicker than a coat hanger, however a coat hanger is adequate.

NOTE: Upon completion of the job, be sure to remember to reverse this procedure returning the latch to the unlocked position utilizing the inside or outside door handle.

Twist the wire and insert it through the door latch. Crawl inside the car with the door approximately halfway down. Turn the ignition to ON and roll down the window, then turn ignition OFF. Pull the upper panel off the door. (Photo #3) Underneath the top panel, approximately where shown, (Photo #3) there are some plastic pegs (fir trees) seated in mounting holes. Wrap your fingers underneath the panel and slowly work toward each end, and pull up just slightly, not too hard. (Photo #4) With one hand at the front of the door in the corner by the mirror, grab hold of the very corner and pull up slightly, rotating it toward the rear of the vehicle. At the other end of the panel remove the "spoon-shaped" retainer by lifting it upward toward the window. (Photo #7) Prior to removing the window you need to unclip the wire harness. There are two clips.

These are metal clips that actually hold onto the wire harness. You have to remove the wire harness from underneath these two clips to take off the next supporting bracket. Next, you will need a Phillips screwdriver. There are eight screws holding a black support bracket just below the main window. (Photo #8) Start at the front and unscrew all the screws except the one in the rear. Just loosen slightly the last one in the back corner of the door. Release the bracket from the front and allow it to swing out of the way. (Photo #9) This bracket rests against the window and guides it into the large window.



Next, with a pair of pliers, bend the inside panel of the door, behind the support bracket, (Photo #10) outward $\frac{1}{4}$ to $\frac{1}{2}$ inch to make it easier to pull the window in and out. It has no effect on the operation of the window and cosmetically you'll never be able to see it. This procedure was taught in DeLorean School and can remain like this permanently. *Anyone who is working on this process should be aware that the stainless steel in some areas on this door is like a razor blade. Be extremely careful and do not drag your hand across any part.* Next, slowly roll the window up and notice how loose it is because of the lack of

support that prevents the window from falling out. Use one hand to push the window button and the other hand to guide the window as it is coming up. (Photos #11 and #12) Take one hand and pull on the glass just slightly to clear the black support that goes around the little window, *not on the outside of the door but on the inside.* Grab it with both hands. You'll see both of the white runners (on the carrier). These runners are what guide the window up and down. (Photo #13) The cable is quite long. (Photo #14) Pull it straight out, approximately two feet. Place the window where it will not get broken. *Suggestion: You may want to cover sharp edges of the door with a couple of layers of duct tape.* On this DeLorean we need to adjust one of the two guides that guide the window going up and down. If you loosen the two ten millimeter bolts, (Photo #15) you will notice approximately $\frac{1}{2}$ inch of movement on these guides. If there is too much of a gap in the rear of the window, move the guide back. We want to equalize the gap. A pencil in Photo #15 is pointing to the two ten millimeter bolts inside. The easiest way to reach this is to use a small wrench, a ten millimeter or quarter inch ratchet and socket. On some doors there is a black rubber molding

around the edges in openings of the stainless steel door.

NOTE: Again, we remind you, in some areas of these doors, the stainless steel is razor sharp after it has been cut. It is extremely easy to get a laceration very quickly without realizing it.

Very carefully, loosen the bracket with a ten millimeter wrench. If you have fairly small arms, you can reach up inside. On some doors you may have to move the guide as far as possible. It should be emphasized that if you cannot adjust it back any further than it is already, you may need to remove the bracket from the door, access the inside and elongate the holes that are already in the door. It's somewhat difficult to elongate those holes as stainless steel is not an easy material to cut. You may need a round file. This will give you a sufficient amount of clearance for the window to go up straight. The tough part is doing the front. You may have to remove the lower panel. We are attempting to have the window to go straight up and straight into the slot without very much movement front to rear. In some cases the lower panel should be removed. In order to determine if the lower panel must be removed, put the

(Continued on page 29)

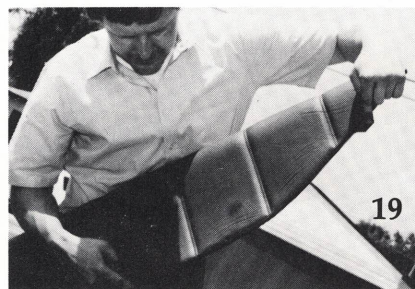
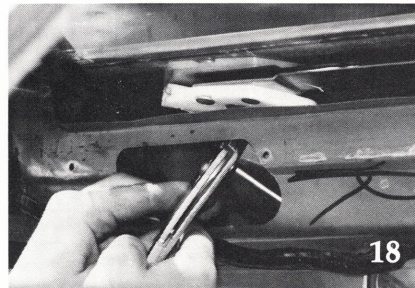
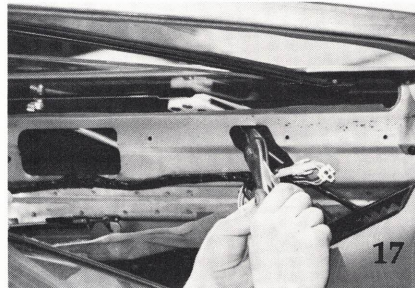
(From page 27)

window back in and see how it fits. Taking the window in and out can be difficult. Take the cable and insert it all the way down the tube. (Photo #16) Start the white runners on the guides. (Photos #17 and #18) Turn the ignition on and tap the window button. Going down, you'll need to get the guides started on the runners. With a pair of pliers, as in Photos #17 and #18, grab each guide and the carrier runner *should* pop right on with little effort. Sometimes it does not go on easily. One of the things you want to be sure of when you're doing this is to get both of the runners started at the same time. Tap the window button until both the front and the rear carrier runners are on the guides. At this time, bend both guides just slightly if necessary until the window goes up and down on both guides freely. Go to the outside of the car with the window raised slightly. There should be an equal amount of gap all the way around the window. Reverse the process and replace the screws. Put a couple of screws on each end and make sure they're both started. After you've started all the screws *with washers*, tighten them all down. Washers are used because the threads diminish toward the head of the screw. These are like sheet metal screws. Place the metal wiring harness back into position and push the plastic back into its original position. At this time, roll the window all the way down. At the bottom of the interior upper panels are two protrusions which fit into corresponding slots in the door. (Photo #19) Take the upper panel, fit the back one in first, then fit in the front one. Next go to the back of the door and carefully install the black "spoon shaped" clip which fits into the panel of the door. (Photo #20) Both front and rear pegs are in their slots, so at this time disconnect the coat hanger from the door. From the outside, look down inside the door. Get all the pegs (fir trees) started in their holes along the top edge just a little bit. (Photo #21) Insert them completely using a firm blow, with the side of your hand. (Photo #22) Some of them will feel a little tighter than others. Looking inside, everything should fit just right. Roll window up. The gap should be equal all the way around. Now when

the window goes up, it will go straight up and seat properly.

Open the door latch and remove the coat hanger wire by lifting the interior

latch. Remove the wire from the rear latch pin and close the door *slowly* to insure the latch has opened completely and is working correctly. □



WARNING

Do Not allow tire companies to use air wrenches on your wheel nuts, because they have **excessive torque** (up to 110 foot pounds) and will break your wheel studs. Wheel nuts should only be tightened by hand to a **maximum of 60 foot pounds**.

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