

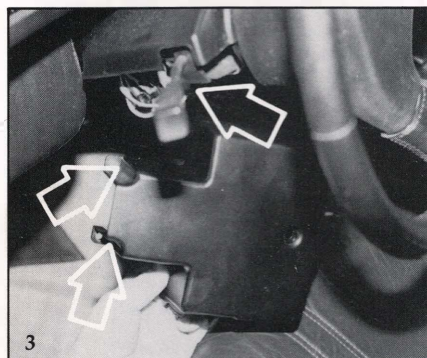
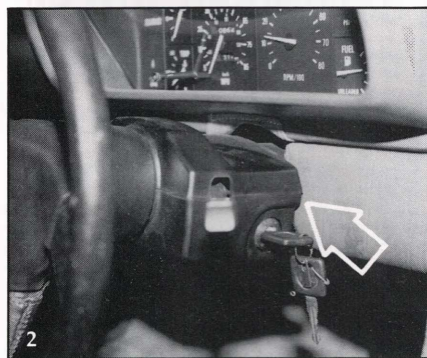
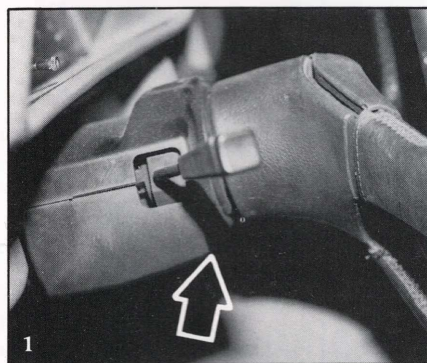
Replacement of the Ignition Switch

by Don Steger, Professional Advisor
Photos by Nancy Steger

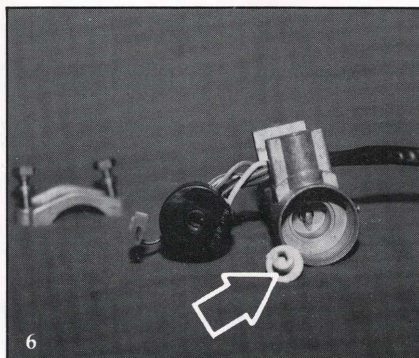
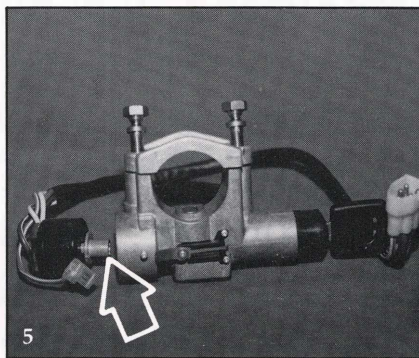
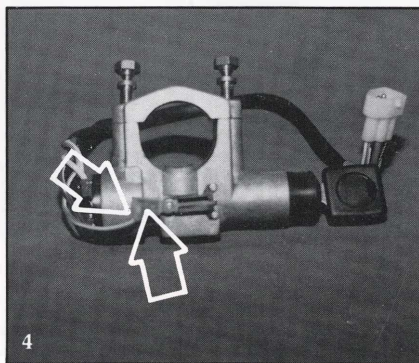
Are you having trouble with the spring loaded portion of the steering column lock assembly? If so you need to replace the ignition switch. This can be done without replacing the entire steering column lock assembly. This procedure is simple and will save you money.

Tools needed:
Medium Phillips screwdriver; Ignition switch (part #106679)

Remove the 3 Phillips screws under the panel located between the steering wheel and dash (photos 1, 2 & 3).



Remove keys and remove lower panels. Next pull off the wire connector (photo 4). This exposes the small Phillips head (photo 4). By loosening up Phillips screw, a round plastic socket supporting the ignition switch, the wires will be able to be removed as one unit (photo 5). Note: In the center of the ignition switch plastic housing, there is a small metal yoke which only fits one way. This piece (yoke) interlocks the ignition switch and the metal portion of the steering column lock assembly (photo 6). At this point replace with the new unit and reverse the process and your difficult 15-minute task will make your ignition switch work as though you have just replaced your whole steering column lock assembly.



Antenna Replacement

by Tom Long

When the antenna mast of the electrically operated antenna on the DeLorean stops going up and down, it's nice to know that a replacement unit is available from the manufacturer of the original. Harada Industries of America (1650 W. Artesia Blvd., Gardena, CA 90248) still makes the fully automatic antenna used for the disappearing act on the rear of the car as Model RXB20. It may not be available from a local distributor, but they have an 800 number that will let you order it from them directly: 1-800-421-2753. However, it may not be necessary to purchase the whole unit because the problem may be just in the mast and that unit is designed to accommodate a replaceable mast: Model RXMB-5 (\$14.76 plus \$2.00 S & H).

If your problem is that the old mast has been bent or broken, order an RXMB-5 replacement mast from Harada before you even start the job because it may be possible to replace the mast without even removing the unit from the car. Also, the instructions that follow will be easier for you to understand if you have the replacement mast in front of you. The new mast comes with a new nylon serrated "cord" and a thin wall tube that makes a sliding connection to the mast.

REPLACING THE ANTENNA MAST WITHOUT DISMANTLING THE ANTENNA (The instructions following immediately are paraphrased from information and figures provided by Harada.)

1. Remove just the octagonal portion of the antenna mounting nut per Fig. A. Note: the mounting nut consists of both an outer (octagonal) and inner nut. The inner nut holds the antenna on the car (mounting bracket).

2. To remove the antenna mast, activate the antenna switch to the up position. After the mast is fully up, it can be pulled out of the unit by hand. The contact spring (Fig. B) located at the bottom of the mast should also be removed, but it is not absolutely essential. Slip a pen knife under the thin lip and pry it up and out.

3. Insert the new mast assembly into the antenna housing per Fig. C.

a. Face the serrated side of the plastic cable towards the motor side of the unit.
b. Plastic cable can be inserted freely to approximately 12 inches and then it will stop.

ANTENNA (FROM PAGE 27)

c. Electrically operate the antenna to the down position as you feed the plastic cable in until you feel it catch onto the gear mechanism of the drum housing.
d. If the plastic cable does not mesh with the gear, twist the cable slightly clockwise or counter clockwise until the cable is pulled into the housing while the motor is in operation.

4. After the cable goes into the housing 12 to 25 inches, stop the motor.

5. Insert the mast section into the antenna housing and install the contact spring provided with the new mast by sliding it down over the mast per Fig. D. Be sure that the flanged side of the contact spring is at the top.

6. Remount and tighten the antenna mounting nut, thereby capturing the contact spring and preventing the mast from being pulled all the way out.

7. Operate the antenna up and down several times and it will automatically adjust itself to operate between the fully up and fully down position.

How do you get to the antenna unit for repair or replacement? It is located behind a panel in the engine compartment. Re-

move four hex head bolts and then you'll find that the fuel vapor canister that is mounted on the panel prevents it from coming out simply. The trick is to rotate the panel 90 degrees clockwise to get clearance and then it lifts out of the way and gives access to the antenna unit. Be sure that the antenna is retracted almost fully. This may take some pushing on the mast while the antenna is supposed to be retracting. In my car, there is a sheet metal bracket holding the antenna that is fastened to the rear of the car with one nut and there is a supporting metal strip coming up from the bottom of the car to one of the screws holding the antenna unit to the bottom of the bracket. It is easier to remove the metal strip from the floor of the car. Now the antenna unit lifts out, but the control wires and the shielded antenna lead extend forward to the area just behind the driver's seat under the shelf. It can be reached just as if you were getting to the fuses and relays behind the passenger seat. Unplug the control wires and the antenna lead and then use electrical tape to fasten them to a string or a heavy wire so that they can be pulled through

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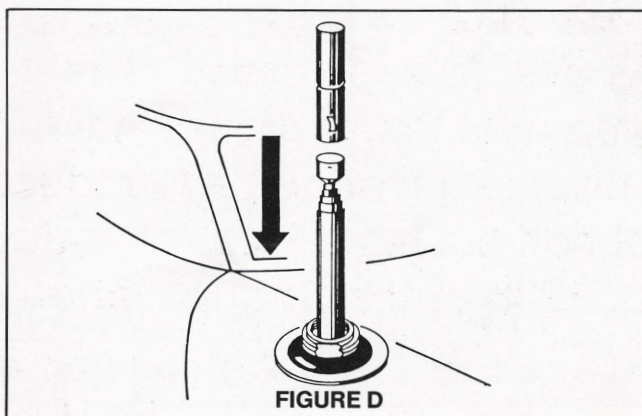
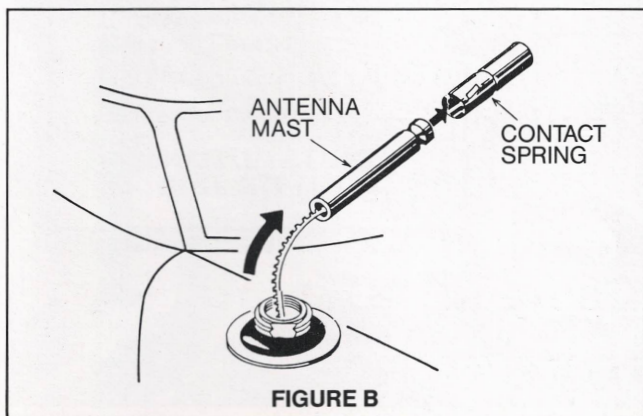
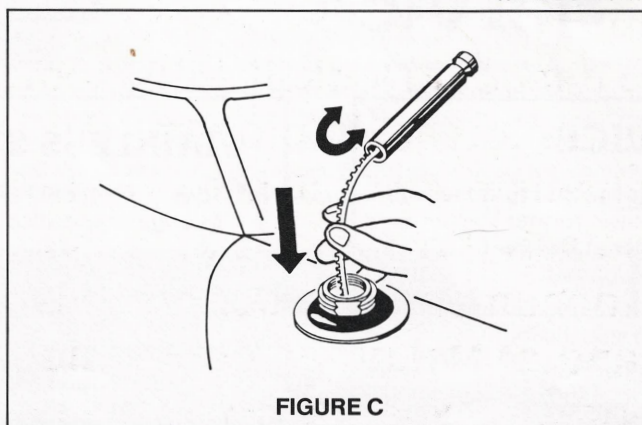
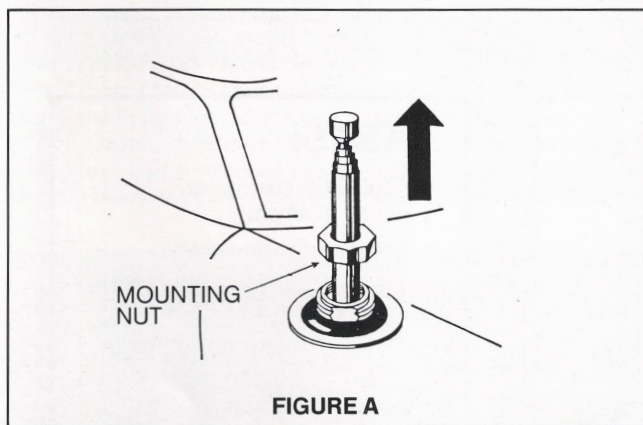
In the last issue of DELOREAN WORLD we failed to mention and recognize R.L. Totman for his "Seat Belt Buzzer" schematic diagram (Fall '87, page 37)

—Ed

the rear fire wall and retrieved when you re-install the antenna. Carefully pull the wires and retrieval line through the fire wall and now you can take the antenna unit, along with the support bracket, to the workbench.

In my case, the reason that the mast would not retract was that a nylon cord that meshes with a gear in the drive unit, thereby pushing or pulling the mast, was broken. By removing a metal canister type cover on the drive unit, a plastic canister underneath which takes up the nylon cord is exposed. Remove a "C" clip to take this off and the broken parts of the nylon cord can be removed. Clean out the plastic canister and re-install it. While you're at it, take the antenna unit out of the mounting bracket. By this point, it should be pretty clear if the problem can be solved with just a replacement mast. Assuming that it is, get a RXMB-5 mast from Harada before proceeding.

CONTINUED ON PAGE 33



ANTENNA (FROM PAGE 29)

Now remove the old mast. It may be necessary to run the mast to its "up" position to disengage the nylon cord from the drive gear in the bottom. This can be done by re-connecting the unit temporarily back of the driver's seat or by applying +12 volts to the brown wire and the negative lead from the battery to the yellow control wire. The mast is retracted by applying the positive 12 volts to the yellow and negative (or ground) to the white control wire. With the mast in the up position and the mounting nut at the top of the mast support tube removed, you should see the top lip of the old thin wall tube. Remove it by prying it up with a knife blade or similar tool. You should be able to take the old mast out of the support tube along with the residual nylon "cord."

To install the replacement mast: Slip the new thin wall tube into the top of the

mast. Now with the gear drive unit stopped in the "up" position, insert the new nylon drive cord with the gear type serrations facing the motor or canister. Push it in as far as it will go—a couple of inches. Now run the drive unit to the down position and it should pull the mast all the way into the tube and wind up the nylon cord

in the plastic canister. Put the top mounting nut back on the top of the mast to hold the thin wall tube in place, then cycle the antenna unit up and down a couple of times and the end positions of the new mast will center themselves automatically. Re-mount the antenna unit

into its support bracket. Tape the control wire connectors and antenna lead to the retrieval cord and fish them back through the rear fire wall. Slide the antenna unit back into the rear compartment and bolt it in place. Put the electrical connections back together and you're ready to roll. 

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