

The Automatic Power Antenna is controlled by a combination of an external electronic relay (Fig. 12) and limit switches which are built into the antenna motor housing. This antenna is actuated when the radio is switched "On" or "Off" (with the ignition switch in "accessory" or "run" positions) or when the ignition switch is turned "On" or "Off" (when the radio switch is left in the "On" position). The antenna mast should extend and retract fully and declutch.

Many antenna problems may be avoided by frequent cleaning of the antenna mast telescoping sections. Clean the antenna mast sections with a clean soft cloth. In the winter, wipe the clean antenna sections with a cloth moistened with light oil.

Before an antenna is removed, the antenna performance should be tested to determine whether it is a reception problem or an operational problem.

Power Antenna Test (Fig. 13)

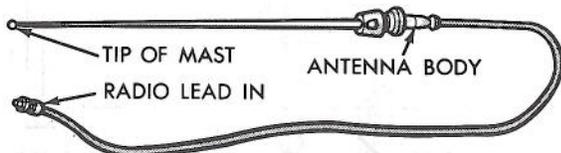
(1) To extend antenna, attach the positive (+) lead of a 12 volt power source to the green antenna lead and the negative (-) lead to the gray antenna lead.

(2) To retract antenna attach the positive (+) lead of a 12 volt power source to the white antenna lead and the negative (-) lead to the green antenna lead.

If the motor will not operate, replace the antenna assembly. If the motor runs freely and the antenna does not extend or retract, the mast or drive assembly is at fault. Remove the mast and verify that all of the drive teeth are intact. If the mast checks good, the antenna assembly should be replaced. If the motor labors and the antenna extends and retracts very slowly, it may be caused by excessive dirt on the telescoping sections or by bent telescoping mast rods. If cleaning and lightly lubricating the antenna sections does not solve the problem, the antenna mast should be replaced.

Upon establishing that the fault is in antenna assembly, it may be traced to one or more of the following conditions:

- (a) Broken lead-in wire or shielding.
- (b) Grounded lead-in wire or mast assembly.



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Fig. 9—Antenna Bench Test Points

(c) Moisture in support tube or lead-in assembly.

(d) Poor connection (antenna lead-in assembly or shielding ground).

Removal (Fig. 14)

(1) Disconnect battery cable at battery negative post.

(2) Remove the right front fender splash shield fasteners and pull shield away from the wheel housing.

(3) Disconnect motor leads at the connector.

(4) Disconnect lead-in cable by twisting at connector (Fig. 10).

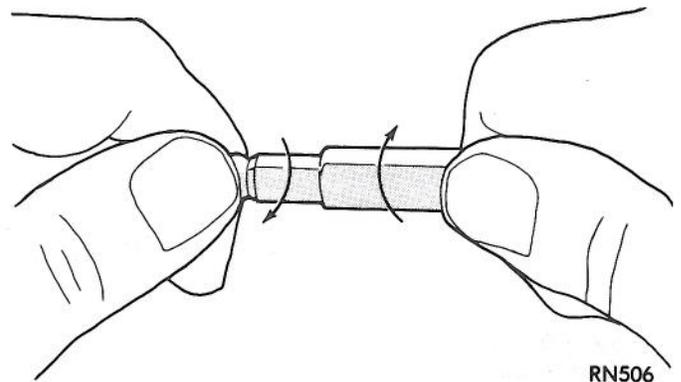
(5) Remove one screw attaching antenna to antenna brace.

(6) Remove cap nut on fender surface with tool C4227.

(7) Remove antenna from under fender.

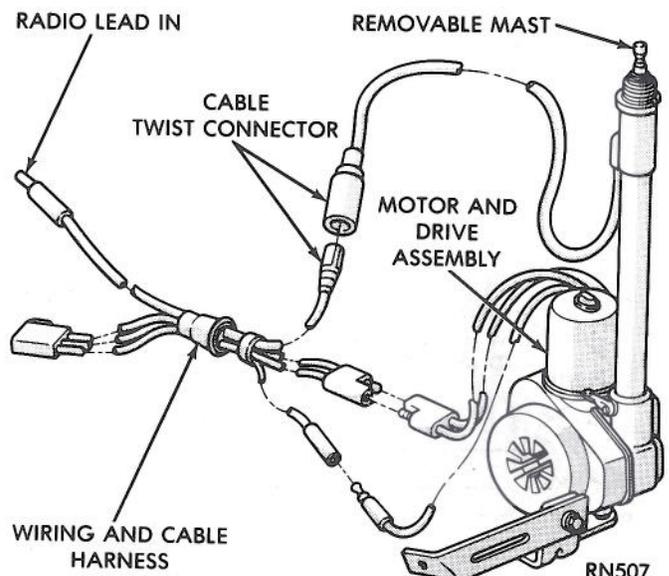
Installation

(1) Position antenna under fender and through fender adapter.



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Fig. 10—Power Antenna Twist Connector



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Fig. 11—Power Antenna Assembly