## ELECT-16, Checking Starter Operation

## **Procedure**

1. If the starter does not turn, the battery should be first checked using <u>ELECT-15</u>. If the battery is determined to be good, check the operation of the starter as follows:

## **CAUTION**

I personally don't recommend testing the starter while it is in the vehicle. Realize that the engine will turn during starter testing and you should not apply a jumper to the starter while you are under the vehicle.

- a. Raise the vehicle on jack stands. Make sure that the transmission is not engaged in any gear.
- b. Make up two heavy gauge jumper wires (minimum 12 gauge wire) approximately 3 feet in length.
- c. Connect one jumper to the small terminal on the starter solenoid (not the terminal with the wire going to the starter motor).
- d. Connect the other jumper to the large positive terminal on the starter. Make sure you don't let the other end of this jumper touch any of the metal on the car as it is connected directly to the positive terminal on the battery.
- e. Make sure you are not underneath the car. Make sure you aren't touching any metal on the car. Momentarily touch the ends of the two jumpers to check the operation of the starter.
- f. If the starter operates normally, the problems lies in the ignition switch or wiring from the ignition switch to the starter.
- g. If the starter still does not operate, the problem is in the starter and it should be removed and taken to a service center or auto parts store for testing. The most likely cause of the failure is the starter solenoid (bendix). This can be replaced without replacing the entire starter. However, from past experience the price of a new bendix isn't much less than the price of a complete new starter.

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