

## SERVICE PARTS PACKAGE - WIPER MOTOR

|  |                |
|--|----------------|
| 1. Motor Mounting Grommets, Spacers, Mounting seal and Output Seal Package | All Two Speed  |
| 2. Motor Housing Assembly Package  |                |
| 1. Armature Package  | All Two Speed  |
| 2. Gear Box Assembly Package   | with Concealed |
| 3. Resistor Assembly Package   | Wipers         |

|   |                           |
|---|---------------------------|
| 1. Gear Box Assembly Package                                  | All Two Speed             |
| 2. Armature Package   | with Non-Concealed Wipers |
| 3. Resistor Assembly Package                                  |                           |
| 1. Park Switch Latch, Gear and Gasket Package                 | All Three Speed           |
| 2. Motor Mounting Grommets, Spacers and Mounting Seal Package |                           |

## MOTOR INSTALLATION (H-N-R-W-X-S-P-D-C MODELS)

(1) Position motor on the three studs on dash panel. Make certain rubber gasket and spacers between motor and dash panel are properly positioned.

(2) Install the three nuts that mount motor to dash panel and connect wiring to motor. Make sure ground strap is installed under one nut.

(3) Index the flats on the crank arm to mate with flats on the motor shaft. Start the crank arm nut

being careful that the crank arm remains indexed. Hold the crank arm with a second wrench (to prevent overloading the motor gears) and tighten the nut to 95 inch-pounds.

(4) Connect battery ground cable and test operation of wiper motor.

(5) Install cowl screen, making sure washer hoses are not pinched by cowl screen.

(6) Carefully install wiper arm and blade assemblies, (see Wiper Arm Adjustments).

## TWO SPEED WINDSHIELD WIPER MOTOR

## SERVICE PROCEDURES

## TWO-SPEED WINDSHIELD WIPER MOTOR SYSTEM TEST

The following is a list of general wiper motor system problems, the tests that are to be performed to locate the faulty part, and the corrective action to be taken. Refer to proper section of service manual, if problem is diagnosed at the instrument panel switch or wiring.

**Condition**

**MOTOR WILL NOT RUN IN ANY SWITCH POSITION.**

**Procedure**

(1) Place panel switch in low speed position.

(2) Listen to motor. If you cannot hear it running, proceed to Step No. 3. If you can hear it running, check motor output shaft. If output shaft is not turning, replace gearbox assembly. If it is turning, drive link to output shaft or linkage is not connected properly. Replace worn parts and reconnect.

(3) Connect a voltmeter or a test lamp between motor Terminal L and ground (See Fig. 4). If there is approximately 12 volts at Terminal L or test lamp lights and panel switch circuit breaker is not cycling, problem is:

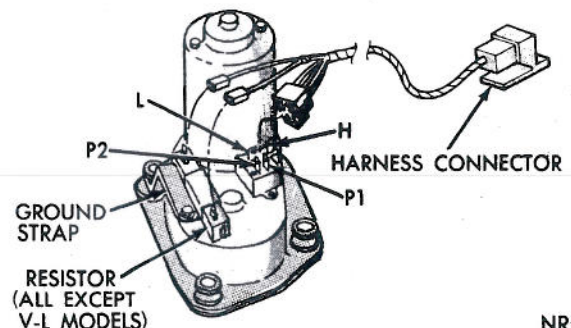
(a) An open ground circuit. On H-N models make sure the ground strap is making good contact. On

R-W-X-S-P-D-C models connect a jumper wire from P<sub>2</sub> to ground (See Fig. 4). If motor runs, panel switch is not grounded, panel switch is faulty or there is an open in wiring.

(b) Common brush is not making a good contact with commutator. Remove motor housing and free-up or reposition spring on common brush. Refer to motor repair section for disassembly and reassembly procedures.

(c) Armature has an open circuit. Remove motor housing and replace armature. Refer to motor repair section for motor disassembly and reassembly procedures.

(4) If circuit breaker is cycling so that 12 volts are observed or test lamp lights at Terminal L only part of time, problem is:



NR530D

**Fig. 4—Two Speed Motor Terminal Identification**