

Wiper/Washer Systems

AMERICAN MOTORS – NON-CONCEALED

Gremlin, Concord, AMX,
Matador 4-Door and Station Wagon

DESCRIPTION

Two speed electric wipers and washers are standard equipment on all series. Optional equipment, available on some series is an intermittent wiper system which provides a pause between wipe cycles for use in light rain conditions. Wiper arms are actuated by a link and pivot assembly attached to wiper motor. Wiper arms move in a tandem link motion, and park on right side of windshield. **CAUTION** – Do not move wiper arms manually from side to side or damage will result.

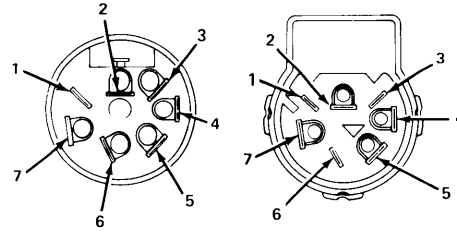
TESTING & TROUBLE SHOOTING

WIPER SWITCH TESTS

1) Check continuity using a test lamp or ohmmeter. Continuity should exist between various switch positions as shown in chart (Fig. 1).

2) Variable resistance between terminals "4" and "5" must be checked with an ohmmeter. The resistance controls governor operation for intermittent wipe. If intermittent wipe is in-

operative, but system will operate at high and low speeds, this resistance should be checked. With switch control knob



| | STANDARD | INTERMITTENT |
|--------------|------------|---|
| Off or Park | 1-2 3-4 | 1-2 4-5 |
| Low Speed | 1-2-3 | 1-2 4-5 to Case 4-5 |
| High Speed | 1-2-5 | 1-2-3 4-5 to Case 4-5 |
| Intermittent | | 1-2 4-5 to Case 4-5 Variable Resist 1.9K to 7K |
| Wash | 1-2 6-7 | 1-2 6-7 |

Fig. 1 Continuity Test Chart for Wiper Switches

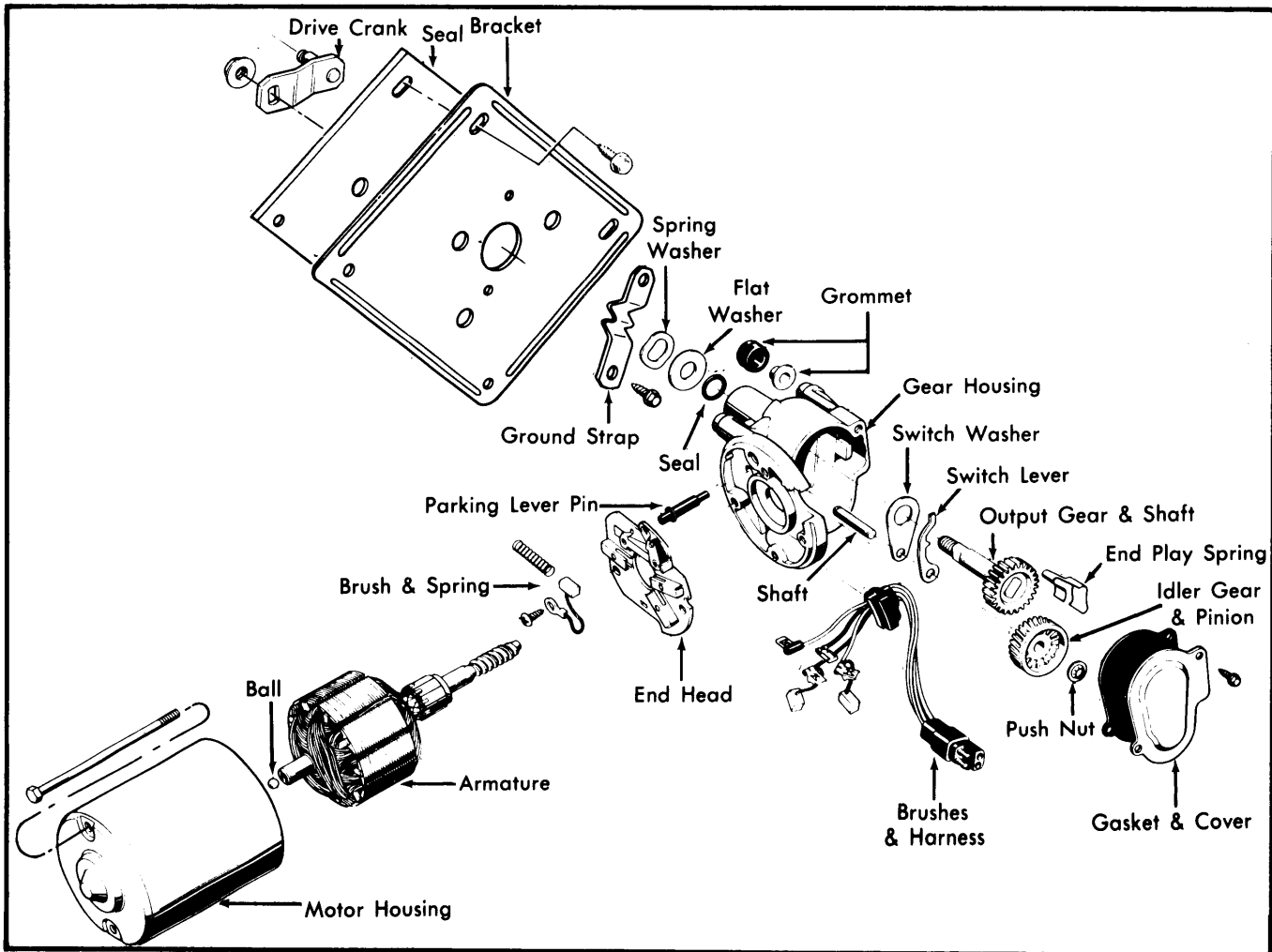


Fig. 2 Exploded View of AMC Wiper Motor & Transmission

AMERICAN MOTORS – NON-CONCEALED (Cont.)

rotated to full counterclockwise position, ohmmeter should indicate 5,600 to 8,400 ohms. As control knob is rotated in a clockwise direction, resistance should decrease to minimum of 100 to 900 ohms.

3) If continuity and resistance do not exist as specified, replace switch.

WIPER MOTOR TEST

All Series – Remove wiper arms and blades. Disconnect motor lead. Connect negative lead of ammeter to positive battery post. Connect other ammeter lead to White wire terminal (low speed) of motor harness. Current draw should be about one amp, but not more than three amps. Next contact the Blue wire terminal (high speed), current should be about the same.

WIPER MOTOR PARK TEST

All Series – Disconnect motor from harness connection. Temporarily connect a hot lead to either the white or blue wire to move wipers up from cowl. Insert a jumper wire from the white to black wire terminals. Contact a hot lead to red wire terminal of motor harness. Motor should operate until wipers have reached normal park position.

INTERMITTENT GOVERNOR DIAGNOSIS

To accurately check the intermittent governor would require electronic testing equipment. If the intermittent wipe cycle is not satisfactory, check the related components such as motor, control switch, and connecting wires. All components working properly would indicate a new governor must be installed.

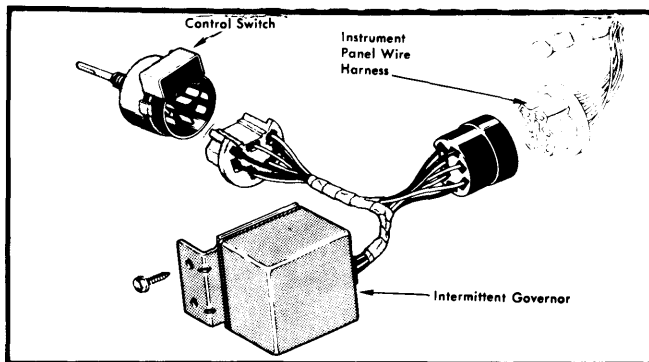


Fig. 3 Windshield Wiper Instrument Panel Wiring Showing Intermittent Governor

COMPONENT REPLACEMENT

WIPER MOTOR

All Series – Remove wiper arms and blades. Remove four screws holding motor to dash panel. Separate wiper motor harness connector at motor. Pull motor and linkage out from opening to expose drive link-to-crank stud retaining clip. Raise up lock tab of clip with a flat bladed screwdriver and slide clip off stud. Remove motor. To replace, reverse removal procedure.

INTERMITTENT GOVERNOR

All Series – The electronic governor is contained in a two inch cube which is attached to an instrument panel bracket adjacent to wiper control switch. The longer, six inch lead plugs into the wiper control switch, and the four inch lead plugs into instrument panel harness. Remove bracket attaching screws and

carefully separate governor connectors from switch and from main harness. To install, reverse removal procedure.

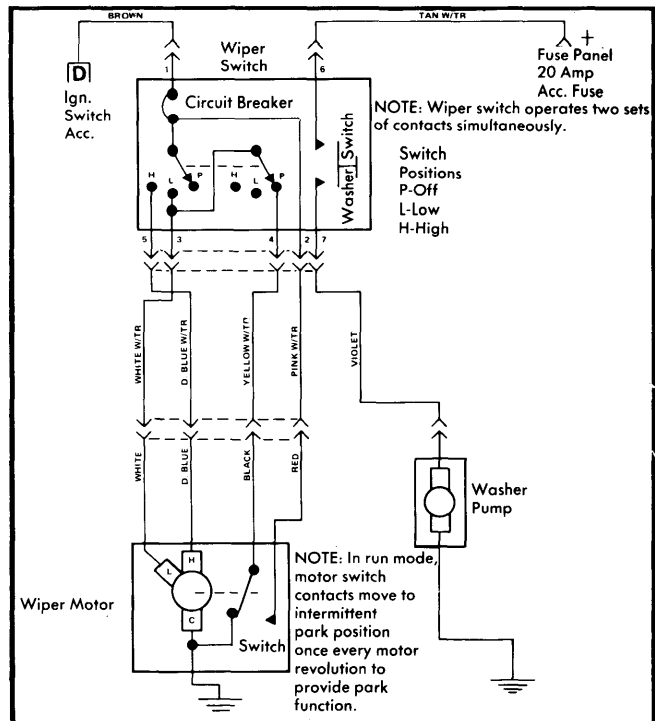


Fig. 4 AMC Non-Concealed Standard Wiper System Wiring Diagram

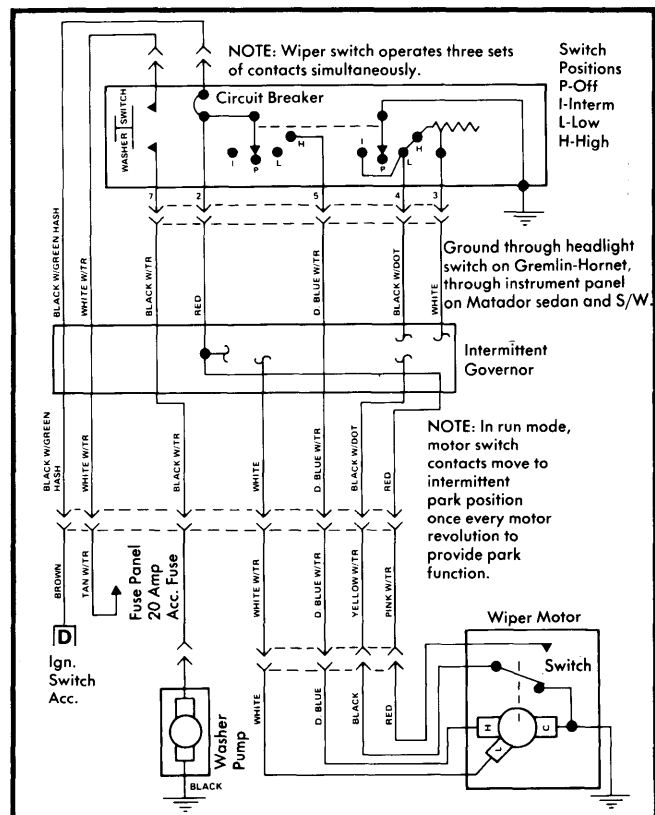


Fig. 5 AMC Non-Concealed Intermittent Wiper System Wiring Diagram