

WIPER/WASHER SYSTEM

1988 Jeep Cherokee

1988 Wiper/Washer Systems
JEEP

All Models

DESCRIPTION

Jeep vehicles use a 2-speed electric motor, which is a compound wound (series and shunt) type. A crank arm, attached externally to gear shaft, operates linkage which activates wiper blades.

All models have an optional intermittent feature. All models use an electric washer system consisting of a motor, reservoir, and necessary hoses and nozzles.

Some Cherokee and Wagoneer models are equipped with rear wipers. The rear motor is a single-speed motor with an automatic park feature. The circuit is protected by a separate 4.5-amp circuit breaker attached to brake pedal support.

TROUBLE SHOOTING

WIPER INOPERATIVE OR OPERATES AT ONE SPEED ONLY

1) If wiper does not operate on either speed, check for binding or interference of linkage. If okay, place wiper switch on "LO" and then on "HI" setting. Connect a test light between terminals of wiring harness plug that connects to motor.

2) Check for power at White wire with tracer and Black (ground) wire terminal for low speed. Check between Dk. Blue with tracer and Black wire terminal for high speed.

3) If light does not glow, check ignition switch, wiper switch, harness or terminals for open circuits. If light glows, check for loose or misaligned connection between wiring harness plug and motor plug. If okay, replace wiper motor.

WIPERS DO NOT PARK

1) Disconnect motor and connect Gray lead to White lead. Apply 12 volts to Blue lead. Replace motor if it fails to park. If it parks, turn ignition switch on, and wiper switch to "PARK".

2) Connect a test light to Lt. Green wire with tracer and to ground at motor plug.

3) Check continuity between Tan wire with tracer and White wire with tracer.

4) If test light does not glow, check harness connections between motor and instrument panel switch. If okay, replace panel switch. If not okay, repair harness connection.

WIPER MOTOR QUILTS WHILE WIPING

1) With engine idling and blower motor on high, operate wipers at high speed setting for 5 cycles consisting of 3 seconds of water and 57 seconds of drying.

2) If motor struggles to a complete stop, clean glass and replace blades. Repeat test. If motor stops, test circuit breaker in panel switch. If motor stopped suddenly in original test, check circuit breaker. Repeat test. If motor stops, replace motor.

ALL FUNCTIONS OKAY EXCEPT INTERMITTENT WIPE

1) If blades stop and start erratically, test circuit breaker. If okay, check wiper switch continuity. If continuity is present, check continuity of wiring between switch, governor and ground. Repair wiring or replace governor as necessary.

2) If operation is intermittent on low speed only, check for loose connections at governor by disconnecting governor and connecting switch directly to instrument panel harness.

3) If all functions except pulse and mist work, replace governor. If functions are not okay, recheck wiring and replace governor.

WINDSHIELD WASHER DOES NOT OPERATE

1) If motor runs but does not pump, check fluid level. If level is okay, check for split, loose, pinched or kinked hoses. Check for restrictions at nozzles. Check for reversed wire leads to motor.

2) If motor does not run, check for blown fuse. Replace fuse, if necessary. If fuse is okay, disconnect plug at reservoir and check for power by connecting a test light across connector terminals. Energize washer circuit by closing washer and ignition switches.

3) If no power is present, check for open ground wire or defective wiper/washer switch. Repair or replace as necessary. If power is present, reconnect plug to motor and check for tight connection. If motor does not run, replace pump motor.

REMOVAL & INSTALLATION

REAR WIPER SWITCH

Removal & Installation

Remove instrument panel bezel and switch housing panel. Disconnect switch connector, slightly depress switch mounting tabs and remove switch. To install, reverse removal procedure.

REAR WIPER MOTOR

Removal & Installation

1) Remove wiper arm from pivot pin by depressing tab and pulling arm straight out. Disconnect washer hose. Remove pivot pin retaining nut and interior trim panel. Remove rear wiper motor attaching screws and remove wiper motor.

2) To install, reverse removal procedure. Wiper blade should be parallel to window in parked position (3/8-3/4" from bottom of window) and come no closer than 3/16" to window seal when operated on a wet window.

WINDSHIELD WIPER MOTOR

Removal & Installation

Remove wiper arm assemblies by lifting blades off windshield and pulling out tab that locks blade in up position. Remove cowl trim panel. Disconnect washer hose. Remove cowl mounting bracket attaching nuts and pivot pin screws. Disconnect wiring harness and remove wiper motor. To install, reverse removal procedure.