



Wiper/Washer

– How the Circuit Works

Low Speed

With the ignition switch in ON (II) or START (III), battery voltage is applied to the windshield wiper motor through the windshield wiper motor relay. When you move the wiper switch to LO, the low speed winding of the motor is grounded through the low contact of the wiper/washer switch, and the wipers run at low speed.

Park/Off

When you turn off the wiper switch, ground is provided for the low speed winding of the windshield wiper motor. The ground is provided through the wiper switch, intermittent wiper relay, and the cam switch on the motor to G301. The wipers run at low speed until the cam switch on the motor moves to PARK, removing the ground. The wipers then stop in the park position.

High Speed

When you move the wiper switch to HI, the high speed windings of the windshield wiper motor are grounded through the HI contact of the wiper/washer switch, and the wipers run at high speed.

Intermittent

'96-'98:

When you move the wiper switch to INT, battery voltage is applied through fuse 23 through the windshield wiper/washer switch to the driver's multiplex control unit which energizes the windshield wiper intermittent relay by applying a ground signal to the relay coil.

'99-'04:

The contacts of the windshield wiper motor relay are closed with the ignition switch in ON (II) or START (III). When you move the wiper switch to INT, battery voltage is applied through fuse 58 through the windshield wiper/washer switch to the driver's multiplex control unit which energizes the windshield wiper intermittent relay by applying a ground signal to the relay coil.

The wiper sweep time interval is controlled by vehicle speed and the resistance of the intermittent dwell time controller. The resistance of the controller varies from 0 to 30k ohm. The vehicle speed sensor sends a signal directly to the driver's multiplex control unit. Vehicle speed will determine the rate of the wiper cycle. If you set the intermittent time to the shortest delay, the wipers will change from intermittent to low speed operation at a driving speed above 20km/h (12 mph).

Mist

When you push the wiper/washer lever down and hold it, the high speed winding of the windshield wiper motor is grounded through the MIST contact in the wiper/washer switch. The wipers sweep at high speed until the lever is released. The PARK/OFF function then takes over and the wipers stop in the PARK position.

Washer

When you pull the wiper/washer lever toward you, battery voltage is applied to the windshield washer motor and the driver's multiplex control unit. The driver's multiplex control unit grounds the coil of the intermittent wiper relay. The relay, in turn, provides ground to the low speed windings of the wiper motor. The washer motor pumps washer fluid onto the windshield and the wipers run at low speed until you release the lever. The wipers make one more sweep after the lever is released.

Refer to the Service Manual (Section 23, Electrical) for testing and troubleshooting procedures.

