

18 Horn, Wiper, and Blower Motor Circuits

CAUTION: If steering wheel removal is required for diagnosis or repair of the horn circuit, follow service information procedures for disarming the airbag circuit prior to steering wheel removal, and for the specified test equipment to use.

PEARSON Advanced Automotive Electricity and Electronics James D. Halperman © 2013 Pearson Higher Education, Inc. Pearson Education, Inc., Upper Saddle River, NJ 07458

18 Horn, Wiper, and Blower Motor Circuits

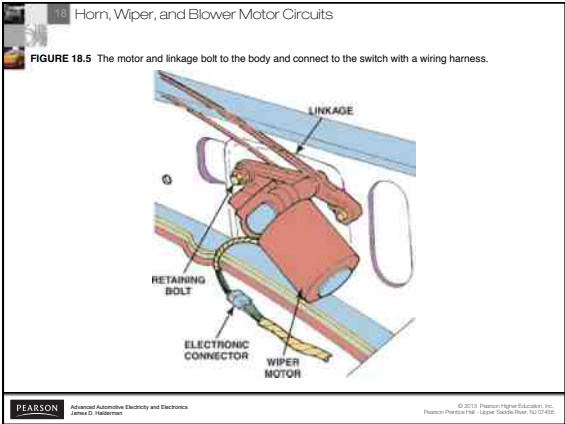
FIGURE 18.3 Horns typically mount to the radiator core support or bracket at the front of the vehicle.

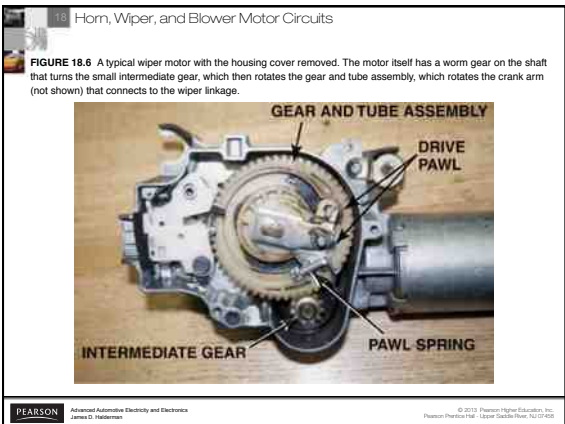
PEARSON Advanced Automotive Electricity and Electronics James D. Halperman © 2013 Pearson Higher Education, Inc. Pearson Education, Inc., Upper Saddle River, NJ 07458

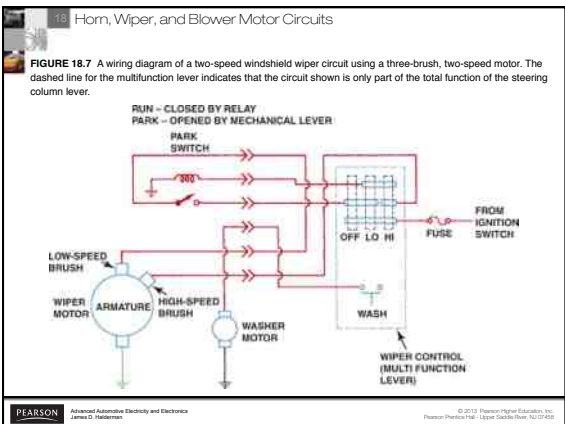
18 Horn, Wiper, and Blower Motor Circuits

FIGURE 18.4 A circuit diagram is necessary to troubleshoot a windshield wiper problem.

PEARSON Advanced Automotive Electricity and Electronics James D. Halperman © 2013 Pearson Higher Education, Inc. Pearson Education, Inc., Upper Saddle River, NJ 07458







18 Horn, Wiper, and Blower Motor Circuits

FREQUENTLY ASKED QUESTION

How Do Wipers Park?

Some vehicles have wiper arms that park lower than the normal operating position so that they are hidden below the hood when not in operation. This is called a *depressed park position*. When the wiper motor is turned off, the park switch allows the motor to continue to turn until the wiper arms reach the bottom edge of the windshield. Then the park switch reverses the current flow through the wiper motor, which makes a partial revolution in the opposite direction. The wiper linkage pulls the wiper arms down below the level of the hood and the park switch is opened, stopping the wiper motor.

PEARSON Advanced Automotive Electricity and Electronics James D. Halperin © 2013 Pearson Higher Education, Inc. Pearson Education, Inc., Upper Saddle River, NJ 07458

18 Horn, Wiper, and Blower Motor Circuits

FIGURE 18.11 The wiper motor and linkage mount under the cowl panel on many vehicles.

COWL PANEL
WIPER MOTOR ASSEMBLY
PLENUM

PEARSON Advanced Automotive Electricity and Electronics James D. Halperin © 2013 Pearson Higher Education, Inc. Pearson Education, Inc., Upper Saddle River, NJ 07458

18 Horn, Wiper, and Blower Motor Circuits

FIGURE 18.12 A single wiper arm mounts directly to the motor on most rear wiper applications.

REAR WIPER MOTOR

PEARSON Advanced Automotive Electricity and Electronics James D. Halperin © 2013 Pearson Higher Education, Inc. Pearson Education, Inc., Upper Saddle River, NJ 07458

