AUTOMOTIVE BACKGROUND AND OVERVIEW

Figure 1-1 A Ford Quadricycle built by Henry Ford.

Figure 1-2 Most vehicle bodies were constructed with a wood framework until the 1920s.
Figure 1-3  A chassis of a 1950s era vehicle showing the engine, drivetrain, frame, and suspension.

Figure 1-4  Body and terms.

Figure 1-5  Note the ribbing and the many different pieces of sheet metal used in the construction of this body.
**TECH TIP: Treat a Vehicle Body with Respect**

Do not sit on a vehicle. The metal can easily be distorted, which could cost hundreds of dollars to repair. This includes sitting on the hood, roof, and deck (trunk) lid, as well as fenders. Also, do not hang on any opened door as this can distort the hinge area causing the door not to close properly.

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**Figure 1-6** A Corvette without the body. Notice that the vehicle is complete enough to be driven. This photo was taken at the Corvette Museum in Bowling Green, Kentucky.

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**Figure 1-7** A Ford flathead V-8 engine. This engine design was used by Ford Motor Company from 1932 through 1953. In a flathead design, the valves located next to (beside) the cylinders.
FREQUENTLY ASKED QUESTION

What Is the Monroney Label?
The Monroney label is the sticker on the vehicle that lists the manufacturer’s suggested retail price, usually abbreviated MSRP. This law that requires this label on all vehicles is called the Monroney Law, named for the congressman who sponsored the bill, Almer S. Monroney (1902–1980), a U.S. farm representative from Oklahoma from 1939–1951 and a U.S. Senator from 1951 to 1969. Before the Monroney label law was passed in 1958, the price of a vehicle was unknown to new vehicle buyers who had to rely on the dealer for pricing. Besides all of the standard and optional equipment on the vehicle, the Monroney label also includes fuel economy and exhaust emission information. • See Figure 1-8.

Figure 1-8
A Monroney label as shown on the side window of a new vehicle.

Figure 1-9
A dash control panel used by the driver to control the four-wheel-drive system.
Figure 1-10  The alternator is in the heart of the electrical system.

Figure 1-11  Test registration booklet that includes details on all vehicle-related certification tests given by ASE.