FIGURE 69.1 A typical automatic transmission dipstick (fluid level indicator). Many uses a clip to keep it from being forced upward due to pressure changes inside the automatic transmission. A tight seal also helps keep water from getting into the fluid, which can cause severe damage to the clutches and bands.

FIGURE 69.2 The “cold” mark on most automatic transmission dipsticks indicates the level is about 0.5 quart (0.5 liter). Always follow the instructions stamped or printed on the dipstick.
FIGURE 69.3 This 4-cylinder General Motors vehicle has a stall speed of about 2350 RPM. Notice that the gear selector is in drive and the speedometer is reading zero.

FIGURE 69.4 Sometimes the location of a transmission fluid leak is easy to see, but with others it can be difficult to find the exact location. Look closely at places where O-rings or gaskets are used, as these are the most common areas where fluid leaks occur.

FIGURE 69.5 A black light being used to locate the source of an automatic transmission fluid leak.
FIGURE 69.6 Draining the fluid from an automatic transaxle by allowing the fluid to flow into a container after most of the retaining bolts have been removed.

FIGURE 69.7 This is a normal amount of wear material in the bottom of an automatic transmission pan.

FIGURE 69.8 Always check that the filter is secured by a clip or other fastener to keep it from dropping out of location.
FIGURE 69.9 A fluid exchange machine uses the engine and/or transmission pump to force the fluid into the machine, where the old fluid is used to push against a diaphragm, which then forces new fluid back through the transmission. A sight glass is used to show the technician the fluid, so the process can be stopped when only clean, new fluid is seen flowing through the cooler lines.

FIGURE 69.10 In this case, the cork-rubber gasket is glued to the pan strip ready to be installed. The retaining bolts need to be tightened in sequence, but be aware that overtightening will cause a leak. Also, some manufacturers recommend using only an RTV sealer, but never use an RTV sealer and a gasket together.

FIGURE 69.11 The transmission range (TR) switch is located on the top or side of the transmission or transaxle and is used to signal the transmission control module the position of the gear selector.