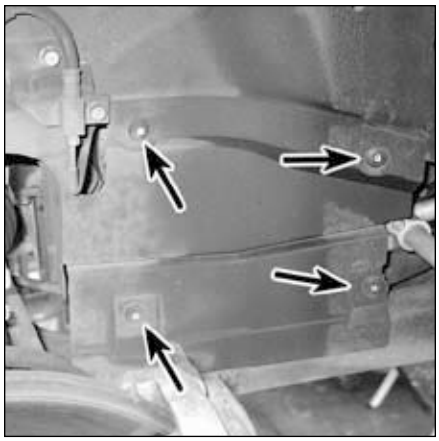


22.2 Remove fasteners from the front of the inner fender liner and pull it back for access (see Chapter 11), then remove this splash shield from the right fenderwell to gain access to the drivebelt tensioner (two rear pushpins not visible in this photo)

in the overall operation of the engine and its components. Due to its function and material make up, the belt is prone to wear and should be periodically inspected. The belt drives the alternator, power steering pump (all models except the 3.7L V6), water pump (four-cylinder models) and air conditioning compressor. Although the belt should be inspected at the recommended intervals, replacement may not be necessary for more than 100,000 miles.

Check

Refer to illustrations 22.2 and 22.4

2 Since the drivebelt is located very close to the right-hand side of the engine compartment, it is possible to gain better access by raising the front of the vehicle and removing the right-hand wheel, then removing the splash shield in the right fenderwell **(see illustration)**. Be sure to support the front of the vehicle securely on jackstands.

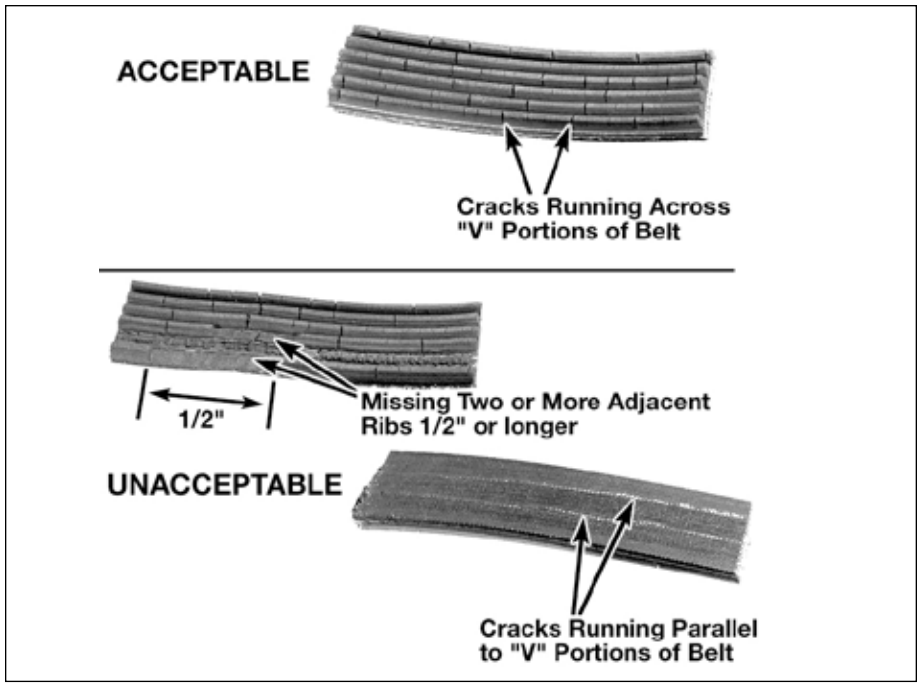
3 With the engine stopped, inspect the full length of the drivebelt for cracks and separation of the belt plies. It will be necessary to turn the engine (using a wrench or socket and bar on the crankshaft pulley bolt, working clockwise only) in order to move the belt from the pulleys so that the belt can be inspected thoroughly. Twist the belt between the pulleys so that both sides can be viewed. Also check for fraying, and glazing which gives the belt a shiny appearance. Check the pulleys for nicks, cracks, distortion and corrosion.

4 Note that it is not unusual for a ribbed belt to exhibit small cracks in the edges of the belt ribs, and unless these are extensive or very deep, belt replacement is not essential **(see illustration)**.

Replacement

Refer to illustration 22.6

5 Disconnect the cable from the negative terminal of the battery (see Chapter 5). Loosen the right front wheel lug nuts, then raise the front of the vehicle and support it on jackstands. Remove the right front wheel and the splash shield **(see illustration 22.2)**.



22.4 Small cracks in the underside of a V-ribbed belt are acceptable - lengthwise cracks, or missing pieces that cause the belt to make noise, are cause for replacement

6 Note how the drivebelt is routed, then remove the belt from the pulleys. On four-cylinder engines, use a wrench on the center of the pulley and turn the tensioner clockwise to release the drivebelt tension. On V6 engines, insert a 3/8-inch drive ratchet or breaker bar into the tensioner hole and pull the handle to release the drivebelt tension **(see illustration)**. Once tension has been released, remove the belt from the pulleys.

7 Fit the new drivebelt onto the crankshaft, alternator, power steering pump, and air conditioning compressor pulleys, as applicable, then turn the tensioner back and locate the drivebelt on the pulley. Make sure that the drivebelt is correctly seated in all of the pulley grooves, then release the tensioner.

8 Install the splash shield and wheel, then lower the car to the ground. Tighten the lug nuts to the torque listed in this Chapter's Specifications.

Water pump (3.0L V6 engine) and power steering pump (3.7L V6 engine) drivebelt replacement

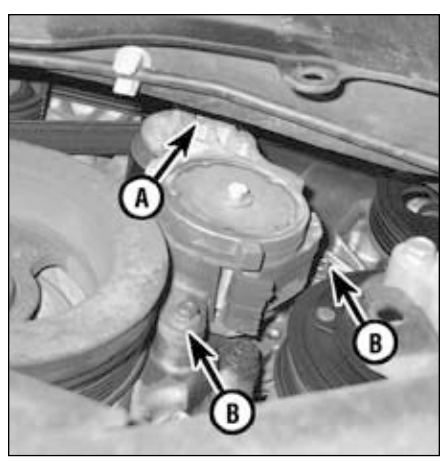
Refer to illustration 22.10

Note: *On 2004 and earlier models, a spring loaded tensioner is used on the water pump drivebelt (see Steps 5 through 8 for replacement).*

Note: *For 3.7L engines, special belt removal (#49-UN30 312521) and installation (#49-UN30 312523) tools are available from Mazda.*

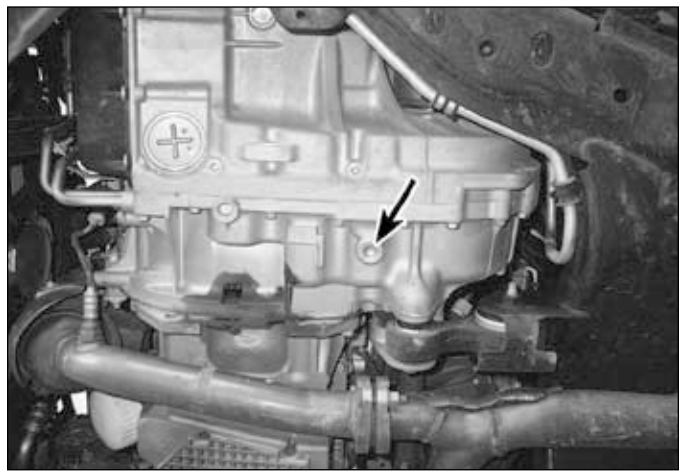
9 The water pump drivebelt on the 3.0L V6 engine is driven by a pulley attached to the left end of the front cylinder bank exhaust camshaft. The belt and pulley are protected by a cover. The power steering drivebelt on the 3.7L V6 engine is driven by the crankshaft pulley. The belts are of a unique design, called a "stretchy belt," which provides tension without the use of a mechanical tensioner.

10 Disconnect the cable from the negative terminal of the battery (see Chapter 5). If you're replacing the water pump drivebelt on a 3.0L V6, remove the cover from over

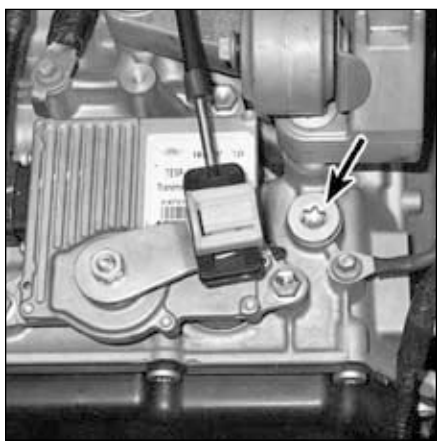


22.6 To remove the drivebelt on a V6 model, insert a 3/8-inch drive ratchet or breaker bar into the square hole (A) and rotate the tensioner arm to relieve belt tension. (B) are the tensioner mounting bolts (typical 3.0L shown, other models similar)

22.10 Removing the water pump belt on a 3.0L V6 engine. Warning: *While doing this, rotate the engine by hand only (do not use the starter)*



23.6 Location of the transaxle drain plug



23.9 The fill plug on 2008 and earlier models with the AW6A-EL is located on the left side of the transaxle (air filter housing must be removed for access)

the pulley. Insert a length of flexible material such as a leather or plastic strap under the belt at the pulley at the end of the camshaft or power steering pump. Have an assistant rotate the engine clockwise by using a socket and breaker bar on the crankshaft pulley bolt, while you feed the remover strap between the belt and the pulley **(see illustration)**. Pull the strap quickly to force the belt from the pulley on the camshaft. **Caution:** *Do not use hard plastic or metal tools to pry the belt off; it is easily damaged.* **Note:** *If the belt is not going to be re-used, you can cut it off.*

11 Water pump belt: Route the new belt under the water pump pulley, then over the pulley on the camshaft, and have your assistant rotate the engine again; the belt should pop over the pulley on the camshaft. Make sure the belt is positioned properly on both pulleys. Reinstall the cover and tighten the fasteners securely.

12 Power steering pump belt (3.7L V6 engine): Route the belt around the crankshaft pulley, then around the back side of the power steering pump. Rotate the engine by hand to pop the belt onto the pulley.

Accessory drivebelt tensioner

13 On four-cylinder models, remove the two bolts securing the tensioner to the engine block and remove the tensioner.

14 On V6 models, remove the two bolts (3.0L engine) or three bolts (3.7L engine) securing the tensioner to the timing chain cover, then detach the tensioner from the cover **(see illustration 22.6)**.

15 Installation is the reverse of removal. Be sure to tighten the tensioner bolt(s) to the torque listed in this Chapter's Specifications.

23 Automatic transaxle fluid change (every 60,000 miles or 48 months)

Refer to illustrations 23.6 and 23.9

Warning: *Never work under a vehicle that is supported only by a jack!*

Note: *For transmission identification, refer to the "Vehicle Identification Numbers" information at the front of this manual.*

1 The automatic transaxle fluid should be changed at the recommended intervals.

2 Before beginning work, purchase the specified transmission fluid (see *Recommended lubricants and fluids* in this Chapter's Specifications).

3 Other tools necessary for this job include jackstands to support the vehicle in a raised position, wrenches, a drain pan, newspapers and clean rags.

4 The fluid should be drained immediately after the vehicle has been driven. Hot fluid is more effective than cold fluid at removing built-up sediment. **Warning:** *Fluid temperature can exceed 350-degrees F in a hot transaxle. Wear protective gloves.*

5 After the vehicle has been driven to warm up the fluid, raise the front of the vehicle and support it securely on jackstands.

6 Place the drain pan under the drain plug in the transaxle pan and remove the drain plug **(see illustration)**. Once the fluid has drained, reinstall the drain plug and tighten it to the torque listed in this Chapter's Specifications.

7 Lower the vehicle.

8 Measure the amount of fluid drained and record this figure for reference when refilling.

9 On 2008 and earlier models equipped with the AW6A-EL 6-speed transaxle, remove the air filter housing (see Chapter 4) for access to the fill plug **(see illustration)**. All other model are refilled through the dipstick tube.

10 With the engine off, add new fluid to the transaxle through the fill plug or dipstick tube until the fluid reaches the lowest notch on the dipstick. Start the engine, cycling the shifter through each gear position between additions). Check the fluid level and continue to add fluid until the level is correct on the dipstick.

11 Repeat Steps 6 through 10 two more times to flush any contaminated fluid from the torque converter.

12 Drive the vehicle a few miles until the fluid is up to normal operating temperature, then recheck the fluid level (see Section 4); it should be in the cross-hatched range (or in the range between the hot operation lines). If not, add fluid a little at a time (cycling the shifter through each gear position between additions) until the level is correct.

13 The old fluid drained from the transaxle cannot be reused in its present state and should be disposed of. Check with your local auto parts store, disposal facility or environmental agency to see if they will accept the fluid for recycling. After the fluid has cooled it can be drained into a container (capped plastic jugs, topped bottles, milk cartons, etc.) for