Cooling System

The engine in your Honda contains a number of aluminum parts. Therefore, it requires an antifreeze/coolant specifically formulated to protect the aluminum parts from corrosion. Failure to use a suitable antifreeze/coolant may seriously shorten the life of the engine as the result of rapid corrosion damage. Some antifreeze/coolants, although labeled for use in engines containing aluminum, may not provide adequate protection for your engine.

Therefore, use only a Honda **RECOMMENDED** antifreeze/coolant.

CHECK WITH YOUR AUTHORIZED HONDA DEALER.

For best corrosion protection, the mixture of coolant and water must be maintained year-round at 50/50. Concentrations less than 50% coolant may not provide sufficient protection against corrosion and freezing. Concentrations of greater than 60% coolant will impair cooling efficiency and are not recommended. Low-mineral drinking water or distilled water should be mixed with the antifreeze/coolant. Coolant loss should be replenished by a mixture containing the proper concentration of antifreeze and water.

Do not mix different antifreeze/coolants.

Do not use additional rust inhibitors or anti-rust products, as they may not be compatible with the radiator coolant.

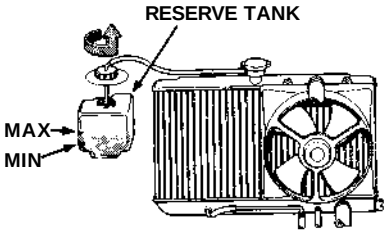
ENGINE DAMAGE CAUSED BY IMPROPER COOLANT USAGE IS NOT COVERED BY THE NEW CAR WARRANTY.

(cont'd)

Cooling System (cont'd)

Checking Coolant
Check the coolant level in the reserve tank when the engine is at normal operating temperature.

- If the level is below the MAX mark, but still visible, add a 50/50 solution of antifreeze and water to bring it up to MAX.
- If there is no coolant in the reserve tank, the cooling system should be checked for leaks and repaired if necessary. Coolant must then be added to the radiator.



⚠WARNING

Do not remove the radiator cap when the engine is hot; the coolant is under pressure and could severely scald you.

CAUTION:

Radiator coolant will damage paint. Quickly rinse any spilled coolant from painted surfaces.

Wait until the engine is cool, then turn the radiator cap counterclockwise until it stops. DO NOT PRESS DOWN WHILE TURNING THE CAP. After any remaining pressure has been relieved, remove the cap by pressing down and again turning it counterclockwise. Add enough coolant to fill the radiator, and reinstall the cap. Be sure to tighten it securely. Fill the reserve tank up to the MAX mark with the engine cold.

Maintenance
1. Check the freeze protection level of the coolant with a hydrometer.
2. Keep the front of the radiator free of dirt and debris.
3. Check hoses and hose clamps regularly.

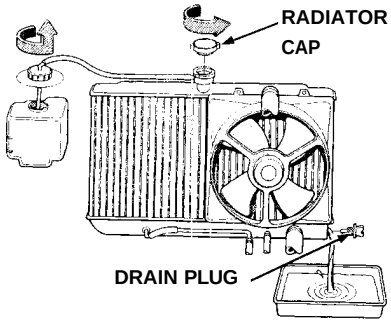
Replacing Coolant

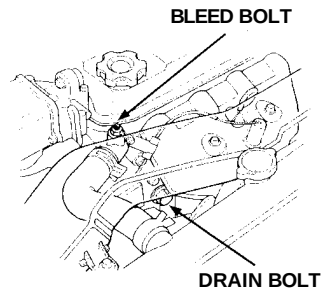
Replace coolant at 36 months or 45,000 miles (72,000 km), whichever comes first. Thereafter, replace every 2 years or 30,000 miles (48,000 km), whichever comes first.

RADIATOR COOLANT
REFILL CAPACITY:

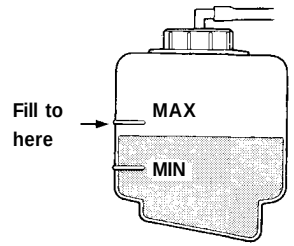
Manual Transmission	
(CIVIC WAGON):	4.1 ℓ (1.08 US gal, 0.90 Imp gal)
(4WD):	4.0 ℓ (1.06 US gal, 0.88 Imp gal)
Automatic Transmission	
(CIVIC WAGON):	4.0 ℓ (1.06 US gal, 0.88 Imp gal)
(4WD):	4.5 ℓ (1.19 US gal ,0.99 Imp gal)
Plus reserve tank	0.4 ℓ (0.11 US gal, 0.09 Imp gal)

1. Set the heater temperature control dial to maximum heat.
2. Remove the radiator cap and drain plug when the radiator is cool, and drain the radiator.





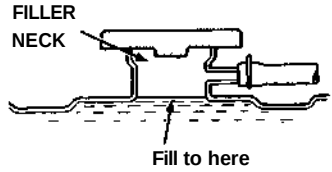
3. Remove the drain bolt from the front side of the cylinder block, and drain the engine and heater.
4. Apply non-hardening sealant to the drain bolt threads, then reinstall the bolt and tighten it securely.
5. Tighten the radiator drain plug securely.
6. Mix the recommended antifreeze with an equal amount of low-mineral or distilled water and fill the reservoir to maximum, as illustrated.



(cont'd)

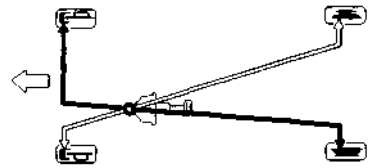
Cooling System (cont'd)

7. Loosen the air bleed bolt in the thermostat housing, then fill the radiator to the filler neck with the coolant mixture. Tighten the bleed bolt as soon as coolant starts to run out in a steady stream without bubbles.



8. With the radiator cap off, start the engine and let it run until warmed up (fan goes on at least twice). Then, if necessary, add more coolant mix to bring the level back up to the filler neck.
9. Put the radiator cap on, then run the engine again and check for leaks.

Brake System Design



The diagonally-separated dual service brake system is designed so half the system will still provide braking action if the other half fails.
Stopping the car after losing the brake fluid from half the system will require more pedal pressure and pedal travel than normal. Also, the distance required to stop will be longer using only half the brake system. If the brakes fail suddenly, downshift to a lower gear for increased engine braking, and pull off the road as soon as possible.

⚠WARNING

- **It is dangerous to drive your car with a problem in either the brake electrical or hydraulic system; have your dealer check both systems if you suspect brake trouble.**
- **Do not ride the brakes. In other words, don't put your foot on the brake pedal unless you intend to brake. This causes excessive brake wear and can damage, or lead to loss of braking effectiveness through overheating. Your brake lights may also confuse drivers behind you.**
- **Driving through deep water may affect the brakes.**
  Check their effectiveness by pressing the brake pedal gently.
  If the car does not slow down at the normal rate, continue gently applying the brakes, while maintaining a safe speed, until they dry out and normal performance returns.

Brake Wear

Both front and rear brakes should be inspected for wear at the intervals shown in the Maintenance Schedule on page 60.
When the brakes require maintenance, use only genuine Honda replacement parts or their equivalent.

(cont'd)

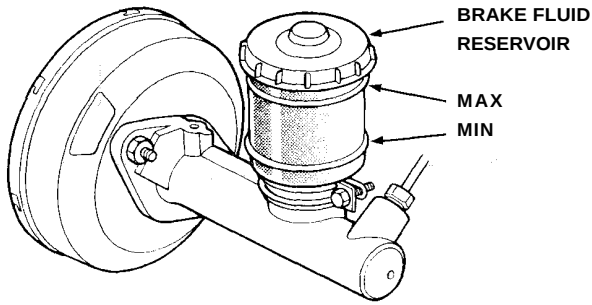
Brakes (cont'd)

Front Brake Wear Indicators
Your car is equipped with audible brake wear indicators. When the brake pads need to be replaced, the wear indicators will make a "screeching" sound or a high pitch chirp.

NOTE:
Due to some driving habits or climates, brakes may "squeal" when you first apply them or when you have them partially applied; this is normal, and does not indicate excessive wear. The wear indicator makes a "screeching" sound while the brakes are applied.

Brake Fluid
Check the fluid level in the brake reservoir periodically; it should be between the MAX and MIN marks on the reservoir.
If the level is near the MIN mark, add fluid to raise it to the MAX mark. Do not overfill. Use only brake fluid manufactured to DOT 3 or DOT 4 specifications (see reservoir cap) from a sealed container. Follow the manufacturer's instructions printed on the can.

NOTE:
A low brake fluid level may be an indication of brake pad wear or of brake fluid leakage. You should have your brakes checked if the brake fluid level in the reservoir is low before re-filling it.



CAUTION:
The arrow on the reservoir cap must be pointing forward after the cap is installed. Make sure the brake warning switch wiring doesn't get caught between the cap and top edge of the reservoir.

Power Steering(4WD or CIVIC WAGON with Automatic)

The power steering on your car provides easy handling while parking and maneuvering in traffic, without loss of road "feel" at highway speeds. An engine-driven hydraulic pump provides full power assist at low speeds and decreasing assist as the car goes faster.

CAUTION:

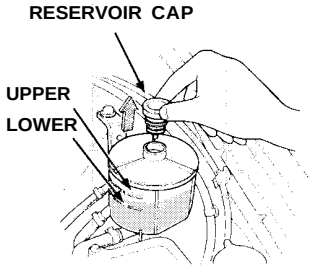
If the power steering system should fail, or if the engine should stall, the car can still be steered. However, much greater effort will be required, particularly in sharp turns at low speed.

NOTE:

You may feel a slight clunk or knock when turning the wheel with the engine off. This is a normal condition due to the design of the system.

Power Steering Fluid

Check the power steering fluid level with the engine cold and the car parked on level ground. Make sure the fluid level is between the upper and lower marks on the reservoir. If the level has dropped close to or below the lower mark, check for leaks before adding fluid to the upper mark. Do not overfill.



CAUTION:

Use only genuine Honda power steering fluid. The use of other fluids such as A.T.F. or other manufacturer's power steering fluid will damage the system.