Engine Oil and Filter

Checking
Check the engine oil a couple of minutes after shutting the engine off, with the car parked on level ground. Remove the dipstick (orange marking) and wipe it clean. Re-insert it all the way down, then pull it out and read the level. The level should be between the upper and lower marks.

Adding
If the level has dropped close to the lower mark, add oil until it is even with the upper mark.
1. Turn the engine oil fill cap counterclockwise to remove. Add oil, then check the level again. Do not overfill.
2. Reinstall the cap and twist clockwise until it stops.

CAUTION:
Be sure the engine oil fill cap is correctly replaced before starting the engine.

Recommended Oil
Oil is a major contributor to your engine's performance and longevity. Always use a premium-grade detergent oil. You can determine an oil's SAE viscosity and Service Classification from the API Service label on the oil container. It should look like this:
The numbers in the middle tell you the oil's SAE viscosity or weight. Select the oil for your car according to this chart:
(Except GSR)

![Ambient Temperature Graph](image)

An oil with a viscosity of 5W-30 is preferred for improved fuel economy and year-round protection in your Acura. You may use a 10W-30 oil if the climate in your area is limited to the temperature range shown on the chart.

(GSR)

![Ambient Temperature Graph](image)

An oil with a viscosity of 10W-30 is preferred for improved fuel economy and year-round protection in your car. You may use a 5W-30 oil if the climate in your area is within the temperature range shown on the chart.

A fuel-efficient oil is recommended for your Acura. This is shown on the API Service label by the words "Energy Conserving II." This oil is formulated to help your engine use less fuel.

The API Service label also tells you the service classification of the oil.

Always use an oil that says "API Service SG." This service rating may also include other designations, such as CD. These additional classifications are not a problem, as long as the label also carries the SG classification. An oil that is only classified SF is not recommended.

**Changing Oil and Filter**

Engine oil and the filter should be changed together every 6 months or 7,500 miles (12,000 km), whichever comes first. The filter is located on the engine block, below the intake manifold.

**CAUTION:**

The oil filter cannot easily be removed from above the engine. For this reason it is recommended that the oil filter change be done by a skilled mechanic.
Engine Oil and Filter (cont'd)

1. Start the car to warm up the engine, then shut it off.
2. Remove the engine oil fill cap and drain bolt, and drain the oil.

**WARNING**
A warmed-up engine and the oil in it are hot; be careful not to burn yourself.

3. Remove the oil filter and let the remaining oil drain out.
4. Install a new filter according to the instructions on or with the filter.
5. Reinstall the drain bolt with a new washer and tighten it securely. Refill the engine with the recommended oil, to the upper mark on the dipstick.

**ENGINE OIL CHANGE CAPACITY**
(including filter):
(Except GSR)
3.8 l (4.0 US qt, 3.3 Imp qt)
(GSR)
4.0 l (4.2 US qt, 3.5 Imp qt)
6. Reinstall the engine oil fill cap securely.
7. Start the engine and make sure oil is not leaking from the drain bolt or the filter.
8. Shut off the engine and recheck the oil level.

**NOTE:**
Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

**CAUTION:**
Used motor oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.
Transmission oil/fluid must be checked with the engine off and the
car on level ground.

**WARNING**
- If the engine has been running, some engine components may
  be hot enough to burn you.
- (US Cars)
  On cars equipped with an air conditioning, keep hands away
  from the radiator fan. The fan may start automatically without
  warning and run for up to 15 minutes, even after the engine is
  turned off.

**CAUTION:**
If the oil/fluid level is low, check for possible leaks before adding
oil. Do not overfill.

Since the transmission and differential are in the same housing, you
are actually checking both oil/fluid levels in one procedure. Change
transmission oil/fluid according to the Maintenance Schedule on
page 103.

5-Speed Manual Transmission
Remove the oil filler bolt (beside the right axle). Feel inside the bolt
hole with your finger. If the oil is up to the bottom edge of the hole,
the oil level is correct. If it is not, slowly add oil until it runs out of
the hole, then reinstall the bolt and tighten it securely with a wrench.

5-SPEED MANUAL TRANSMISSION
OIL CHANGE CAPACITY: 2.3 l (2.4 US qt , 2.0 Imp qt)

Use only SF or SG grade motor oil when adding or changing transmis-
sion oil. (cont'd)
Use the proper viscosity oil for the climate in which you drive:

**Automatic**
The automatic transmission fluid level is checked (with the engine off and the car on level ground) using the dipstick (with the yellow marking) in the right end of the transmission housing. Remove the dipstick and wipe it off.

Insert the dipstick and remove it. The fluid level should be between the upper and lower marks.
If necessary, add fluid and recheck. Use Honda Premium Formula Automatic Transmission Fluid or an equivalent DEXRON® II Automatic Transmission Fluid (ATF) only when adding or changing fluid. After checking the fluid level, push the dipstick in securely.

**AUTOMATIC TRANSMISSION**
**FLUID CHANGE CAPACITY:** 3.0 l (3.2 US qt, 2.6 Imp qt)
The engine in your Acura 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 an antifreeze/coolant recommended by the Acura Automobile Division. CHECK WITH YOUR AUTHORIZED ACURA 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 coolant. ENGINE DAMAGE CAUSED BY IMPROPER COOLANT USAGE IS NOT COVERED BY THE NEW CAR WARRANTY.

Checking Engine 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.

(cont’d)
Cooling System (cont'd)

**WARNING**
- Do not remove the radiator cap when the engine is hot; the coolant is under pressure and could severely scald you.
- (US Cars)
  On cars equipped with an air conditioning, keep hands away from the radiator fan. The fan may start automatically without warning and run for up to 15 minutes, even after the engine is turned off.

**CAUTION:**
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 Engine 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.

**ENGINE COOLANT REFILL CAPACITY:**
- Including reserve tank: 0.5 l (0.13 US gal, 0.11 Imp gal)

**5-speed manual transmission**
- (Except GSR): 5.1 l (1.35 US gal, 1.12 Imp gal)
- (GSR): 5.0 l (1.32 US gal, 1.10 Imp gal)
- Automatic transmission: 4.9 l (1.29 US gal, 1.08 Imp gal)
1. Set the heater temperature control dial to maximum heat.
2. Remove the engine splash guard from under the engine.
3. Remove the radiator cap and loosen the drain plug when the radiator is cool, and drain the radiator.

4. Remove the drain bolt from the front side of the cylinder block, and drain the engine and heater.
5. Apply non-hardening sealant to the drain bolt threads, then reinstall the bolt and tighten it securely.
6. Tighten the radiator drain plug securely.
7. Mix the recommended antifreeze with an equal amount of low-mineral or distilled water and fill the reservoir to maximum, as illustrated.
8. Loosen the air bleed bolt in the water outlet, 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.
9. 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.
10. Put the radiator cap on, then run the engine again and check for leaks.
Brakes

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 hazardous 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 103. When the brakes require maintenance, use only genuine Honda replacement parts or their equivalent.
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-pitched 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
Replace the brake fluid every 2 years or 30,000 miles (48,000 km), whichever comes first.
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.

(cont’d)
ABS Fluid (US: GS/GSR, Canada: LS/GS/GSR)
Check the fluid level in the ABS reservoir periodically. To check, drive the car for a few minutes to equalize fluid pressure in the system. The level 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 from a sealed container. Follow the manufacturer's instructions printed on the can. If the level is more than 10 mm (0.4 in) above the MAX mark, it may indicate a malfunction of the ABS. Have an authorized Acura dealer check the system as soon as possible.