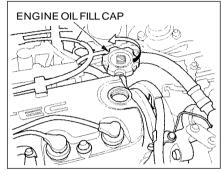


## **Engine Oil**

### Adding Oil



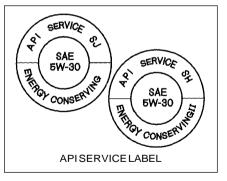
To add oil, unscrew and remove the engine oil fill cap on top of the valve cover. Pour in the oil, and replace the engine oil fill cap. Tighten it securely. Wait a few minutes and recheck the oil level. Do not fill above the upper mark; you could damage the engine.

## **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.

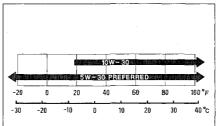
A fuel-efficient oil is recommended for your Honda. This is shown on the API Service label by the words "Energy Conserving " or "Energy Conserving 11." This oil is formulated to help your engine use less fuel. The API Service label also tells you the service classification of the oil. Always use an oil that is labeled "API Service SJ" or "API Service SH." This service rating may include other classifications, such as CD. These additional classifications are not a problem, as long as the label also carries the SJ or SH classification. An oil that is only classified SG is not recommended.



The oil container may also display the API Certification mark. Make sure it says "For Gasoline Engines."



The SAE numbers tell you the oil's viscosity or weight. Select the oil for your car according to this chart.



**Ambient Temperature** 

An oil with a viscosity of 5W-30 is preferred for improved fuel economy and year-round protection in your Honda. You may use a 10W-30 oil if the temperature in your area never goes below  $20^{\circ}$ F (  $-7^{\circ}$ C).

#### Synthetic Oil

You may use a synthetic motor oil if it meets the same requirements given for conventional motor oil; energy conserving, a service classification of SJ or SH, and the proper weight as shown on the chart. When using synthetic oil, you must follow the oil and filter change intervals given in the maintenance schedule.

#### Additives

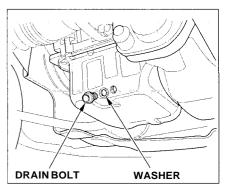
Your Honda does not need any oil additives. Purchasing additives for the engine or transmission will not increase your car's performance or longevity. It only increases the cost of operating your car.

## Changing the Oil and Filter

Always change the oil and filter according to the time and distance (miles/kilometers) recommendations in the maintenance schedule. The oil and filter collect contaminants that can damage your engine if they are not removed regularly.

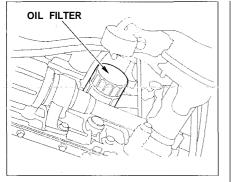
Changing the oil and filter requires special tools and access from underneath the car. The car should be raised on a service station-type hydraulic lift for this service. Unless you have the knowledge and proper equipment, you should have this maintenance done by a skilled mechanic.

1. Run the engine until it reaches normal operating temperature, then shut it off.



2. Open the hood and remove the engine oil fill cap. Remove the oil drain bolt and washer from the bottom of the engine. Drain the oil into an appropriate container.

CONTINUED



3. Remove the oil filter and let the remaining oil drain. A special wrench (available from your Honda dealer) is required to remove the filter.

- 4. Install a new oil filter according to instructions that come with it.
- Put a new washer on the drain bolt, then reinstall the drain bolt. Tighten it to: 44 N.m (4.5 kgf.m , 33 lbf.ft)
- Refill the engine with the recommended oil.
  Engine oil change capacity (including filter):

(U.S.: LX, Special Edition, Canada: LX) 3.8 ℓ (4.0 US qt, 3.3 Imp qt)

(U.S.: EX, Canada: EX-R) 4.3 & (4.5 US qt, 3.8 lmp qt)

- 7. Replace the engine oil fill cap. Start the engine. The oil pressure indicator light should go out within five seconds. If it does not, turn off the engine and reinspect your work.
- 8. Let the engine run for several minutes and check the drain bolt and oil filter for leaks.
- 9. Turn off the engine, let it sit for several minutes, then check the oil level. If necessary, add oil to bring the level to the upper mark on the dipstick.

# NOTICE

Improper disposal of engine oil can be harmful to the environment. If you change your own oil, please dispose of the used oil properly. Put it in a sealed container and take it to a recycling center. Do not discard it in a trash bin or dump it on the ground. Adding Engine Coolant



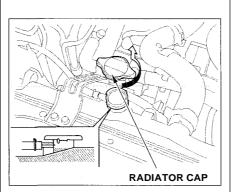
If the coolant level in the reserve tank is at or below the MIN line, add coolant to bring it up to the MAX line. Inspect the cooling system for leaks. This coolant should always be a mixture of 50 percent antifreeze and 50 percent water. Never add straight antifreeze or plain water. Always use Genuine Honda antifreeze/coolant. If it is not available, you may use another major-brand non-silicate coolant as a temporary replacement. Make sure it is a highquality coolant recommended for aluminum engines. However, continued use of any non-Honda coolant can result in corrosion, causing the cooling system to malfunction or fail. Have the cooling system flushed and refilled with Honda antifreeze/coolant as soon as possible. If the reserve tank is completely empty, you should also check the coolant level in the radiator.

## A WARNING

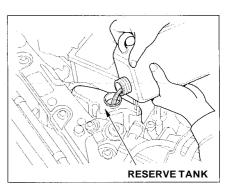
Removing the radiator cap while the engine is hot can cause the coolant to spray out, seriously scalding you.

Always let the engine and radiator cool down before removing the radiator cap.

1. Make sure the engine and radiator are cool.



- 2. Turn the radiator cap counterclockwise, without pressing down on it, until it stops. This relieves any pressure remaining in the cooling system.
- 3. Remove the radiator cap by pushing down and turning counterclockwise.



- 4. The coolant level should be up to the base of the filler neck. Add coolant if it is low.
- 5. Put the radiator cap back on. Tighten it fully.
- 6. Pour coolant into the reserve tank. Fill it to halfway between the MAX and MIN marks. Put the cap back on the reserve tank.

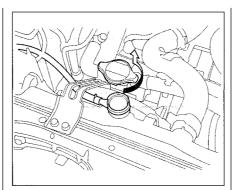
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Do not add any rust inhibitors or other additives to your car's cooling system. They may not be compatible with the coolant or engine components.

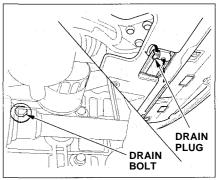
### **Replacing Engine Coolant**

The cooling system should be completely drained and refilled with new coolant according to the time and distance recommendations in the maintenance schedule. Only use Genuine Honda antifreeze/coolant.

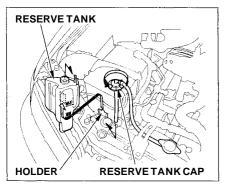
Draining the coolant requires access to the underside of the car. Unless you have the tools and knowledge, you should have this maintenance done by a skilled mechanic.



- Start the engine. Turn the heater temperature control dial to maximum heat and turn off the engine. Open the hood. Make sure the engine and radiator are cool to the touch.
- 2. Remove the radiator cap.



3. Loosen the drain plug on the bottom of the radiator. The coolant will drain through the splash guard. Remove the drain bolt and washer from the engine block.



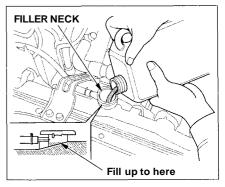
4. Remove the reserve tank from its holder by pulling it straight up. Drain the coolant, then put the tank back in its holder.

5. When the coolant stops draining, tighten the drain plug in the bottom of the radiator. Put a new washer on the drain bolt, then reinstall the drain bolt in the engine block. Tighten it securely.

Tightening torque: 83 N.m (8.5 kgf.m, 61 lbf.ft)

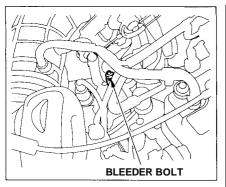
6. Mix the recommended antifreeze with an equal amount of purified or distilled water in a clean container. The cooling system capacity is:

With 5-speed manual transmission: 5.4 ℓ (1.43 US gal, 1.19 Imp gal) With automatic transmission: 5.3 ℓ (1.40 US gal, 1.17 Imp gal)



7. Pour coolant into the radiator up to the base of the filler neck.

CONTINUED



8. Loosen the bleeder bolt on top of the engine. Tighten it again when coolant comes out in a steady stream with no bubbles.



9. Refill the radiator to the base of the filler neck. Start the engine and let it run until it warms up (the radiator cooling fan comes on at least twice).

- 10.Turn off the engine. Check the level in the radiator, add coolant if needed. Install the radiator cap, and tighten it fully.
- 11.Fill the reserve tank to the MAX mark. Install the reserve tank cap.