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LUBRICATION SYSTEM

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CHECK & CHANGE OF ENGINE OIL

OIL QUALITY & LEVEL CHECK

WARNING:

- Be sure to perform this inspection when the engine oil is not hot, to prevent you from getting scalded.

1. Park the vehicle on a level surface.
2. Pull out the oil level gauge.

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3. Check the engine oil for deterioration, ingress of water, discoloring or dilution.

If oil quality is poor, change the engine oil.

(As for the procedure, see "CHANGE OF ENGINE OIL AND REPLACEMENT OF OIL FILTER" section.)

4. Wipe off the engine oil from the oil level gauge.
5. Reinsert the oil level gauge as far as it will go.
6. Pull out the oil level gauge again.

7. Ensure that the engine oil level is between the "L" level and "F" level on the oil level gauge.

If the engine oil level is below the "L" level, replenish the specified engine oil to the "F" level after the checking of the oil quality and leakage.

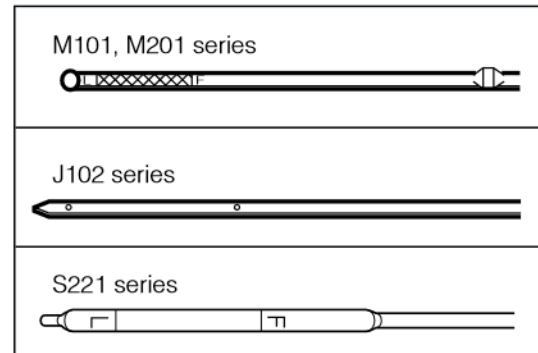
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CAUTION:

- Use API grade SH or higher multi-grade viscosity, fuel efficient oil. (As for the procedure, see "CHANGE OF ENGINE OIL AND REPLACEMENT OF OIL FILTER" section.)

NOTE:

- The amount of oil whose level is between "L" level and "F" level equals to 1.5 liter.



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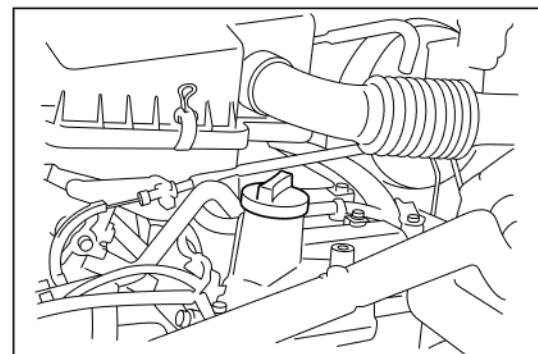
CHANGE OF ENGINE OIL & REPLACEMENT OF OIL FILTER

WARNING:

- Protect your eyes by wearing safety goggles.
- Be very careful not to burn yourself with hot engine oil or hot engine components.

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1. Drain engine oil
 - (1) Park the vehicle on a level surface.
 - (2) Place a suitable container under the oil drain plug.
 - (3) Remove the drain plug and gasket, and drain the engine oil into the placed container completely.
 - (4) Remove the oil filler cap.



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2. Replacement of oil filter

- (1) Place a suitable container under the oil filter.
- (2) Slacken the oil filter with a suitable oil filter wrench or the following SST.

SST: 09228-87201-000

CAUTION:

- Be careful at this time, for the oil may flow out.

- (3) Remove the oil filter by hand.

- (4) Wipe off the engine oil from the oil filter attaching part of the engine.

- (5) Thinly apply engine oil to the O-ring of the new oil filter.

- (6) Screw in the oil filter by hand, until the O-ring of the oil filter contacts the oil filter installing surface.

- (7) Tighten the oil filter three fourth to one complete turn, using a suitable oil filter wrench or the following SST.

SST: 09228-87201-000

CAUTION:

- Do not overtighten the oil filter. Failure to observe this caution will cause oil leakage or damage of the oil pump or oil filter.

3. Filling of engine oil

- (1) Clean the drain plug. Tighten the drain plug to the specified torque with a new gasket interposed.

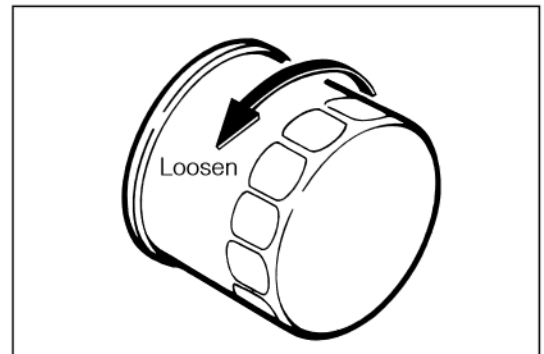
Tightening Torque: 23.6 - 35.4 N·m

- (2) Detach the filler cap. Pour oil into the engine through the filler cap port.

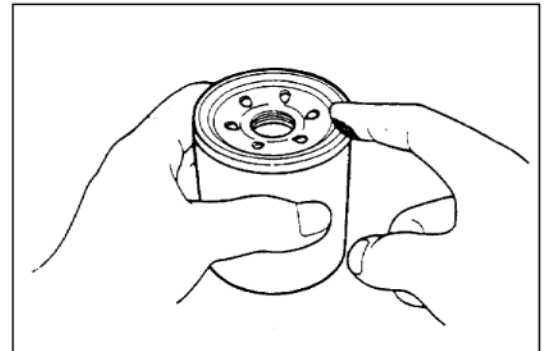
NOTE:

- Use multigrade viscosity, fuel-efficient engine oil of API grade SH or higher.

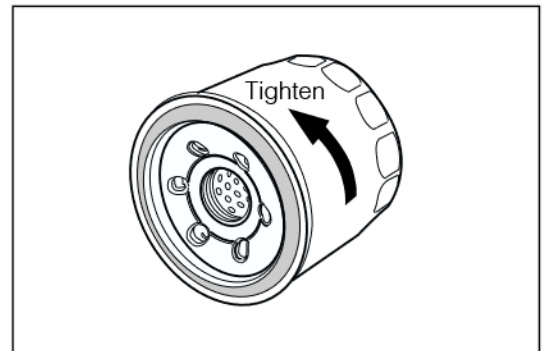
Oil capacity		Model	M101, M201	J102	S221
Whole			4.1 ℓ	3.6 ℓ	4.1 ℓ
Oil pan (Low/Full)			2.0 ℓ / 3.5 ℓ	1.5 ℓ / 3.0 ℓ	1.7 ℓ / 3.2 ℓ
Oil change	with oil filter replacement		3.6 ℓ	3.2 ℓ	3.4 ℓ
	without oil filter replacement		3.3 ℓ	3.0 ℓ	3.1 ℓ



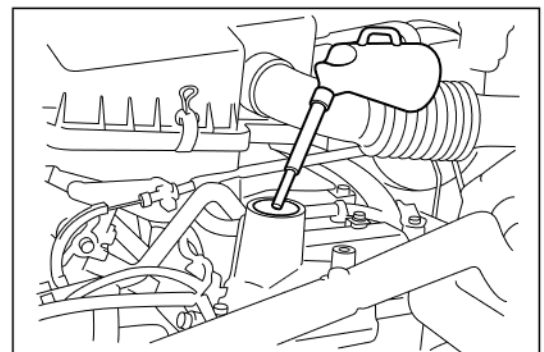
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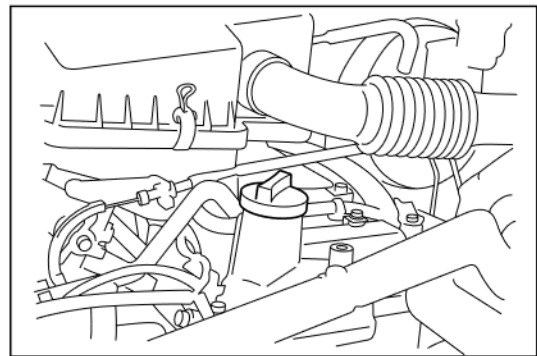
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(3) Close the oil filler cap.

WARNING:

- Securely install the oil filler cap. Failure to observe this warning will cause a fire.

(4) Check the oil level. (Refer to the “ENGINE OIL QUALITY & LEVEL CHECK”.)



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OIL PRESSURE WARNING LAMP

Check to see if the oil pressure warning lamp will be illuminated when the ignition switch is turned on.

NOTE:

- If the warning lamp will not illuminate, check to see if the bulb in the combination meter is burnt out.
- If the warning lamp is illuminated when the engine has started, perform the oil pressure check.
(In advance, be sure to check that the engine oil is at a sufficient level.)



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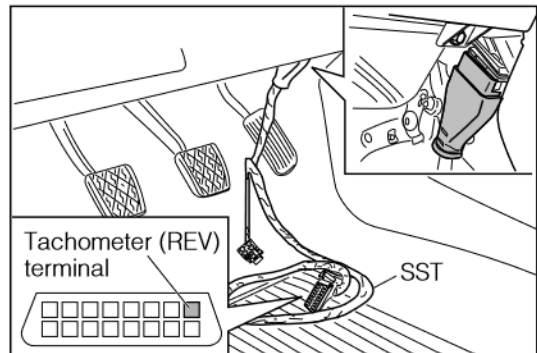
OIL PRESSURE CHECK

1. With the ignition switch turned OFF, connect the following SST to the data link connector (DLC) located at the lower section of the instrument panel on the driver's seat side.

SST: 09991-87404-000

2. Connect an engine tachometer to the terminal REV, using the following SST.

SST: 09991-87402-000



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3. Disconnect the connector of the oil pressure switch.

4. Remove the oil pressure switch from the cylinder block.

5. Install the oil pressure gauge.

NOTE:

- The oil pressure gauge is available as the SST.

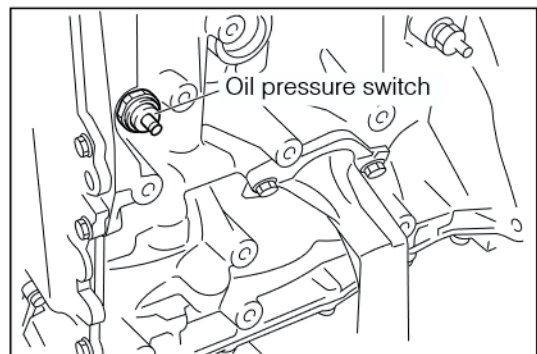
SST: 09990-87702-000

6. Measurement of oil pressure.

Start the engine and measure the oil pressure. Ensure that the oil pressure conforms to the specified value.

At 700 rpm: 39 kPa

At 3000 rpm: 225 kPa



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If the measured value fails to conform to the specified value, check and repair the oil pump. Also, check to see if each oil clearance is within the specified value, as required.

When the warning lamp goes on even if the oil pressure is normal, replace the oil pressure switch.

7. Remove the oil pressure gauge.

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