

**CAUTION / NOTICE / HINT****CAUTION:**

- Prolonged and repeated contact with engine oil will result in the loss of natural oils from the skin, leading to dryness, irritation and dermatitis. In addition, used engine oil contains potentially harmful contaminants which may cause skin cancer.
- Wear protective clothing and gloves. Avoid contact with used oil. If contact occurs, wash the area thoroughly with soap or waterless hand cleaner. Never use gasoline, thinners, or solvents to wash the skin.
- In order to protect the environment, dispose of used oil and used oil filters at designated disposal sites only.

**PROCEDURE****1.DRAIN ENGINE OIL**

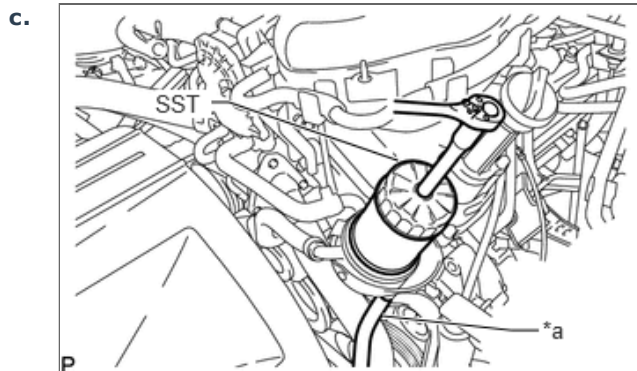
- Remove the oil filler cap.
- Remove the oil pan drain plug and gasket, and then drain the engine oil into a container.
- Clean and install the oil pan drain plug together with a new gasket.

**Torque:****40 N\*m (408 kgf\*cm, 30 ft.\*lbf)****2.REMOVE OIL FILTER SUB-ASSEMBLY****15601**

- Remove the drain pipe cap.
- Install a drain hose to the oil filter bracket assembly.

**HINT:**

- Put a disposal container beneath the drain hose to collect the oil from the oil filter cover.
- Drain hose inside diameter: 8 mm (0.315 in.)
- Drain hose length: 900 mm (2.95 ft.)

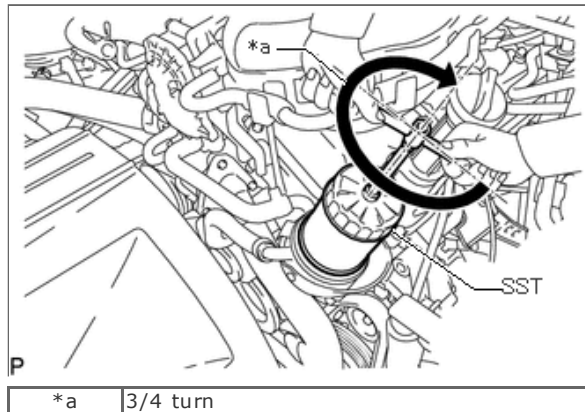


|    |            |
|----|------------|
| *a | Drain Hose |
|----|------------|

Using SST, remove the oil filter sub-assembly.

**SST****09228-07501****3.INSTALL OIL FILTER SUB-ASSEMBLY****15601**

- a. Check and clean the oil filter sub-assembly installation surface.
- b. Apply clean engine oil to the gasket of a new oil filter sub-assembly.
- c. Lightly screw the oil filter sub-assembly into place by hand. Tighten it until the gasket contacts the seat.
- d.



Using SST, tighten the oil filter sub-assembly. Depending on the space available, choose from the following.

#### SST

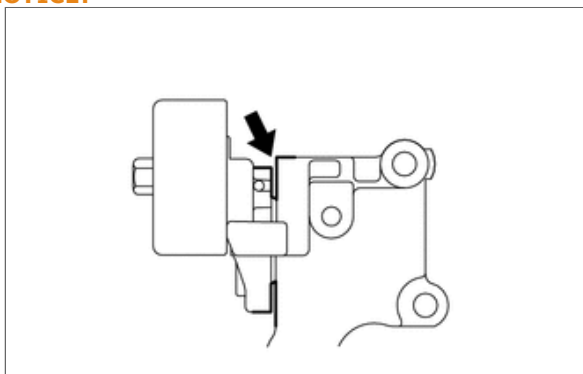
**09228-07501**

- i. If enough space is available, use a torque wrench to tighten the oil filter sub-assembly.  
**Torque:**  
**18 N\*m (184 kgf\*cm, 13 ft.\*lbf)**
  - ii. If enough space is not available to use a torque wrench, tighten the oil filter sub-assembly 3/4 of a turn by hand or with a common wrench.
- e. Remove the drain hose from the oil filter bracket assembly.
  - f. Install the drain pipe cap.

## 4.ADD ENGINE OIL

- a. Add new engine oil.

#### NOTICE:



Do not allow engine oil to adhere to the moving parts of the belt tensioner, as this may cause malfunctions. If engine oil is on the location indicated by the arrow, replace the belt tensioner.

#### Standard Oil Grade:

| Oil Grade   | Oil Viscosity (SAE) |
|---|---------------------|
| API grade SL "Energy-Conserving", API grade SM "Energy-Conserving", API grade SN "Resource-Conserving" or ILSAC multigrade engine oil | 5W-30<br>10W-30     |
| API grade SL, SM or SN multigrade engine oil  | 15W-40<br>20W-50    |

**Standard Oil Capacity:**

| Item                                       | Specified Condition                   |
|--|---------------------------------------|
| Drain and refill without oil filter change | 5.1 liters (5.4 US qts, 4.5 Imp. qts) |
| Drain and refill with oil filter change    | 5.4 liters (5.7 US qts, 4.8 Imp. qts) |
| Dry fill                                   | 6.4 liters (6.7 US qts, 5.6 Imp. qts) |

- b.** Install the oil filler cap.

**5.INSPECT FOR OIL LEAK**

- a.** Start the engine. Make sure that there are no oil leaks from the area that was worked on.

**6.CHECK ENGINE OIL LEVEL**

[Click here](#)Engine / Hybrid System>1GR-FE LUBRICATION>LUBRICATION SYSTEM>ON-VEHICLE INSPECTION