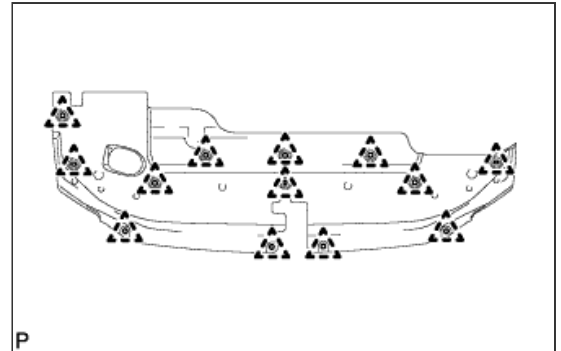


## EGR VALVE > REMOVAL

for Preparation [Click here](#)

### 1. REMOVE UPPER RADIATOR SUPPORT SEAL

- a. Remove the 13 clips and upper radiator support seal.

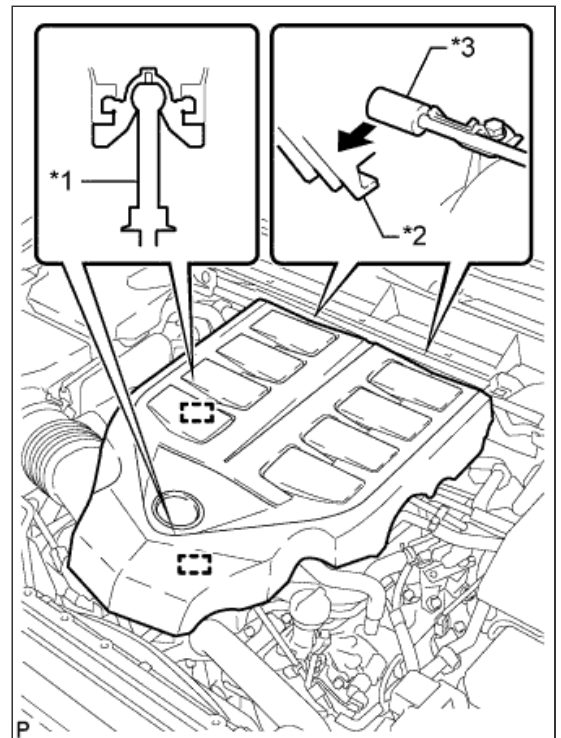


### 2. REMOVE V-BANK COVER SUB-ASSEMBLY

- a. Raise the front of the V-bank cover to detach the 2 pins. Then detach the 2 V-bank cover hooks from the No. 1 V-bank cover bracket and remove the V-bank cover.

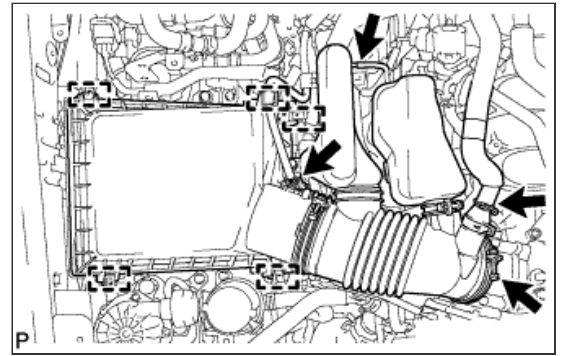
#### Text in Illustration

*1	Pin
*2	Hook
*3	No. 1 V-bank Cover Bracket



### 3. REMOVE AIR CLEANER CAP AND HOSE

- a. Disconnect the mass air flow meter connector, No. 1 air hose and No. 2 ventilation hose and detach the wire harness clamp.
- b. Loosen the hose clamp.
- c. Detach the 4 clamps and remove the air cleaner cap and hose.

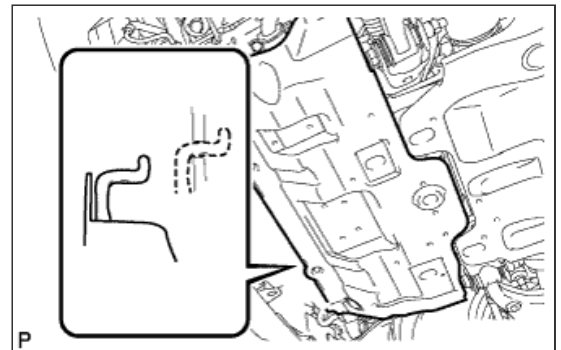


#### 4. REMOVE LOWER FRONT BUMPER COVER

- a. Remove the clip, 5 bolts and lower front bumper cover.

#### 5. REMOVE NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY

- a. Remove the 4 bolts.
- b. Unhook the No. 1 engine under cover from the vehicle body as shown in the illustration.



#### 6. DRAIN ENGINE COOLANT

##### **CAUTION:**

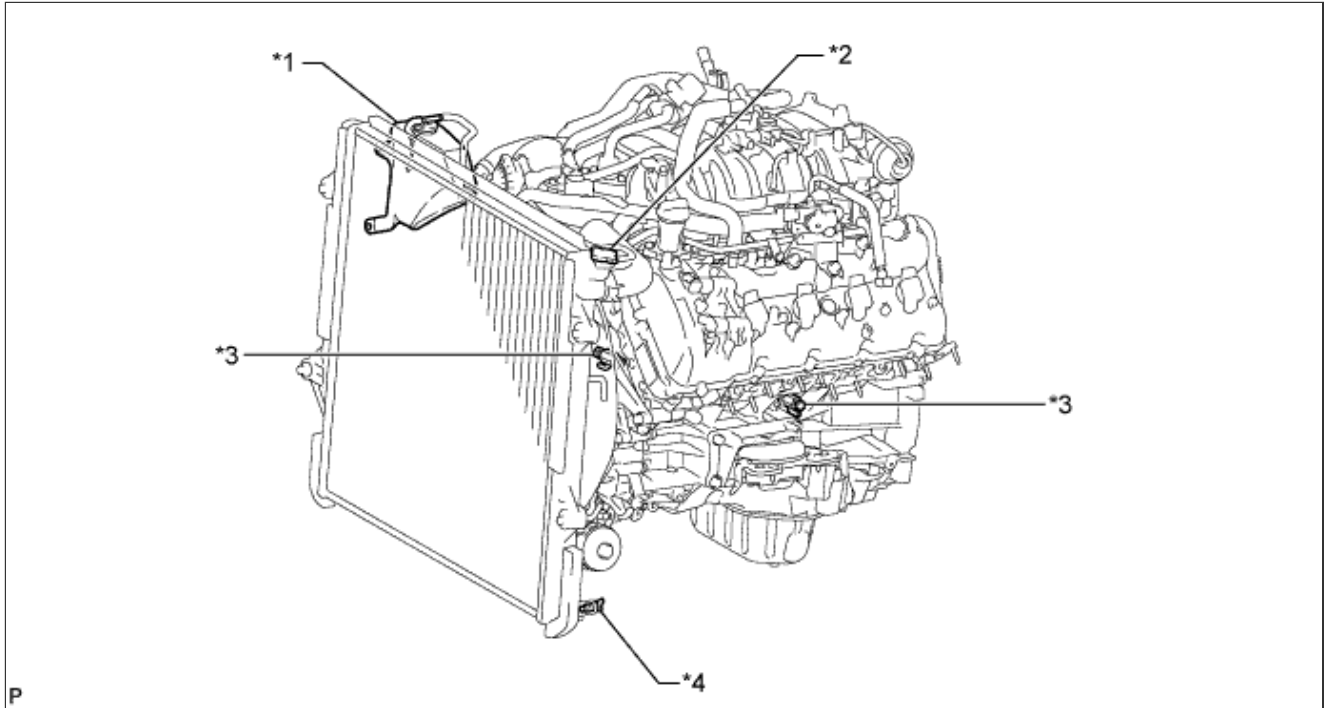
Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.

##### **HINT:**

Collect the coolant in a container and dispose of it according to the regulations in your area.

- a. Loosen the radiator drain cock plug.
- b. Remove the radiator cap. Then drain the coolant from the radiator.
- c. Loosen the 2 cylinder block drain cock plugs. Then drain the coolant from the engine.

d. Tighten the 2 cylinder block drain cock plugs.



**Text in Illustration**

*1	Radiator Reservoir	*2	Radiator Cap
*3	Cylinder Block Drain Cock Plug	*4	Radiator Drain Cock Plug

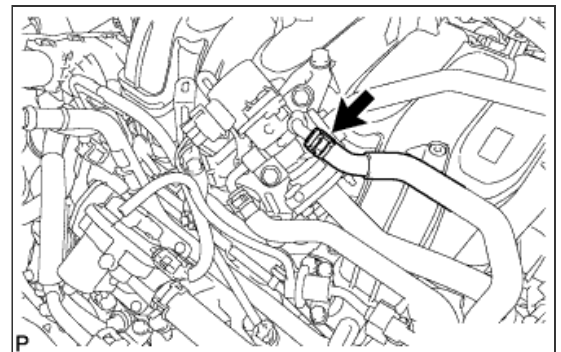
**Torque:**

**13 N\*m{ 130 kgf\*cm , 9 ft.\*lbf }**

e. Tighten the radiator drain cock plug by hand.

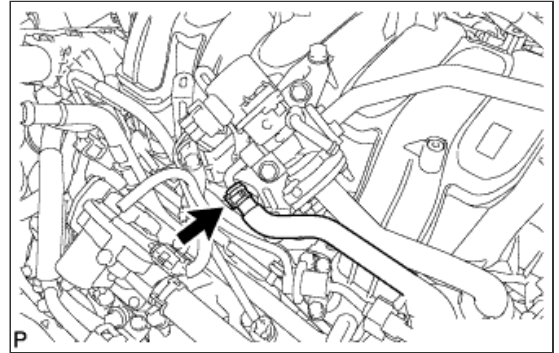
**7. DISCONNECT NO. 12 WATER BY-PASS HOSE**

a. Disconnect the No. 12 water by-pass hose from the EGR valve assembly.



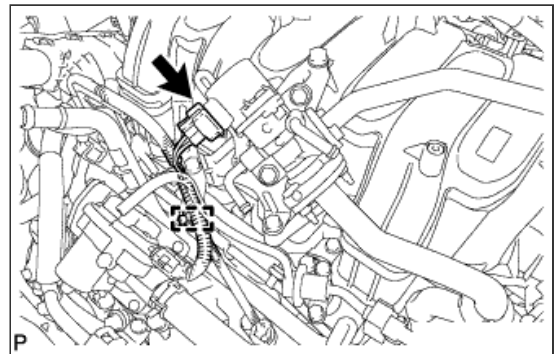
**8. DISCONNECT NO. 13 WATER BY-PASS HOSE**

- a. Disconnect the No. 13 water by-pass hose from the EGR valve assembly.

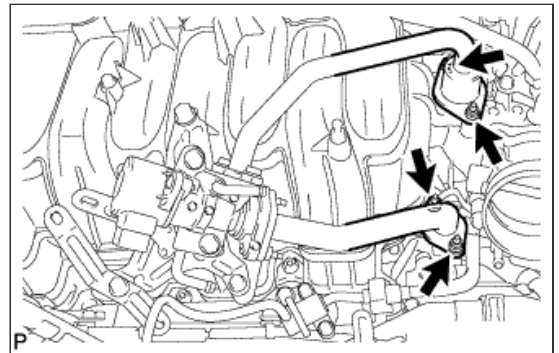


## 9. REMOVE EGR VALVE ASSEMBLY

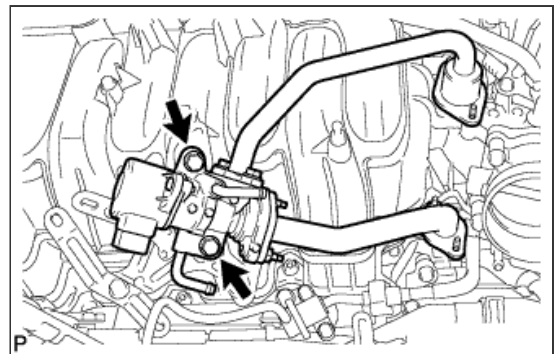
- a. Detach the wire harness clamp and disconnect the EGR valve connector.



- b. Remove the 4 nuts.



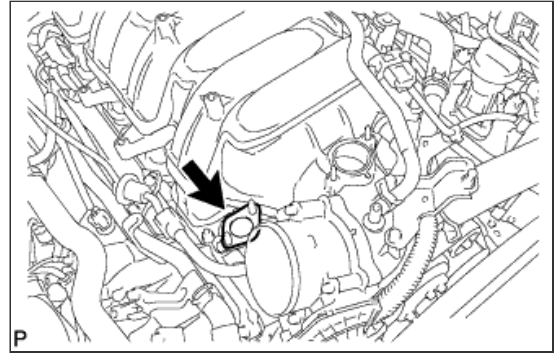
- c. Remove the 2 bolts and EGR valve.



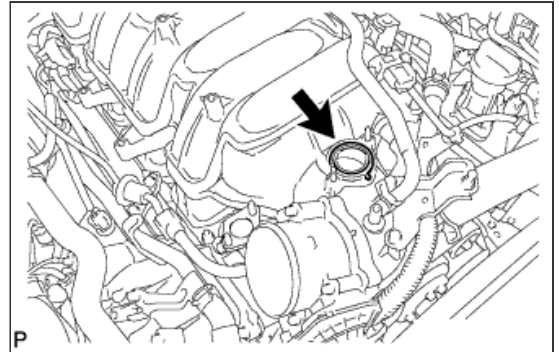
- d. Remove the gasket from the No. 2 EGR pipe.

**NOTICE:**

Be careful not to damage the surfaces that contact the gasket.



- e. Remove the gasket from the intake manifold.

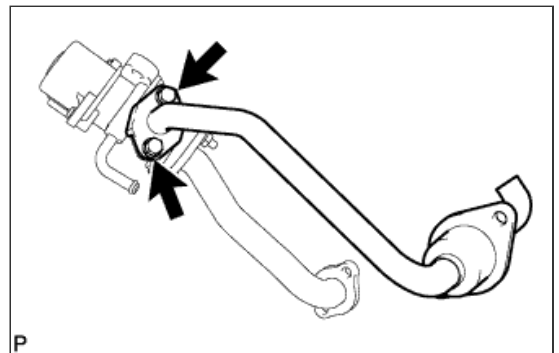


**10. REMOVE EGR INLET**

- a. Remove the 2 bolts, EGR inlet and gasket.

**NOTICE:**

Be careful not to damage the surfaces that contact the gasket.

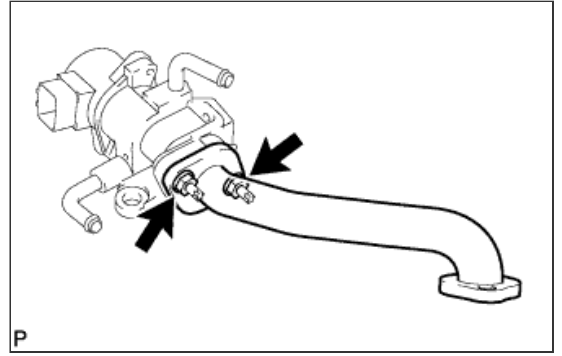


**11. REMOVE NO. 3 EGR PIPE SUB-ASSEMBLY**

- a. Remove the 2 nuts, No. 3 EGR pipe and gasket.

**NOTICE:**

Be careful not to damage the surfaces that contact the gasket.



## 12. REMOVE EGR VALVE BRACKET

- a. Remove the 3 bolts and EGR valve bracket.

