## OIL COOLER COMPONENTS FOR REMOVAL AND INSTALLATION

COPT -- O3

No.1 Heat Insulator ♦Gasket No.1 Exhaust Manifold **♦**Gasket 39 (400, 29) 20 (200, 14) ♦Gasket Air Pipe 21 (210, 15) ◆Gasket 21 (210, 15) ◆Gasket Oil Cooler 17 (170, 12) ♦Gasket - Relief Valve 21 (210, 15) Spring ♦Gasket Plug 49 (500, 36) Oil Pressure Switch N·m (kgf·cm, ft·lbf) : Specified torque ♦ Non-reusable part P10452

EG

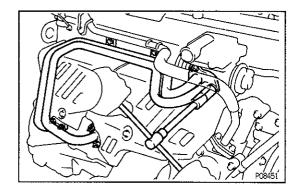
EG284-01

## **OIL COOLER REMOVAL**

(See Components for Removal and Installation)

1. DRAIN ENGINE COOLANT

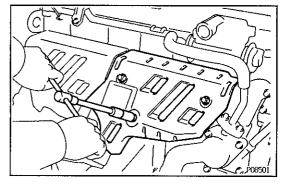
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## 2. (Europe)

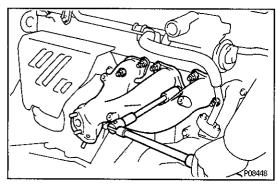
#### **REMOVE AIR PIPE**

Remove the two bolts, six nuts, air pipe and three gaskets.

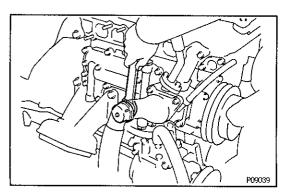


### 3. REMOVE NO.1 EXHAUST MANIFOLD

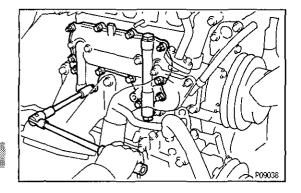
(a) Remove the three bolts and No.1 heat insulator.



(b) Remove the six nuts, exhaust manifold and gasket.

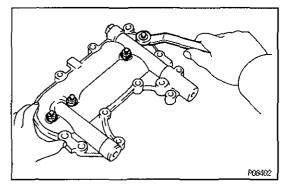


# 4. (1FZ-FE) REMOVE OIL PRESSURE SWITCH



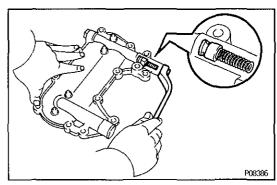
# 5. REMOVE OIL COOLER AND OIL COOLER COVER ASSEMBLY

Remove the ten bolts, two nuts, oil cooler and oil cooler cover assembly and gasket.



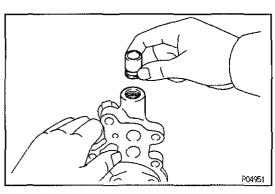
### 6. SEPARATE OIL COOLER AND OIL COOLER COVER

Remove the four nuts, oil cooler and two gaskets from the oil cooler cover.



#### 7. REMOVE RELIEF VALVE

Remove the plug, gasket, spring and relief valve.

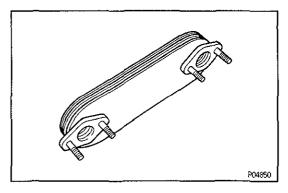


## **OIL COOLER INSPECTION**

EGONS -- C

#### 1. INSPECT RELIEF VALVE

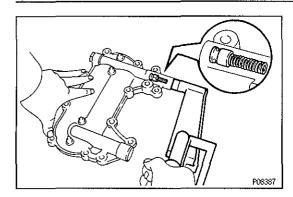
Coat the valve with engine oil and check that it falls smoothly into the valve hole by its own weight. If it doesn't, replace the relief valve. If necessary, replace the oil cooler cover.



#### 2. INSPECT OIL COOLER

Check the oil cooler for damage or clogging. If necessary, replace the oil cooler.

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## OIL COOLER INSTALLATION

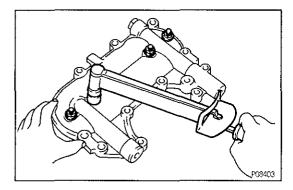
(See Components for Removal and Installation)

1. INSTALL RELIEF VALVE

Install the relief valve, spring and a new gasket with the plug.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

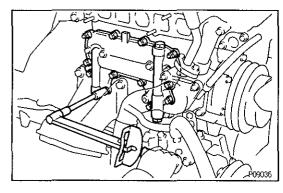




2. ASSEMBLE OIL COOLER AND OIL COOLER COVER

Install two new gaskets and the oil cooler to the oil cooler cover with the four nuts.

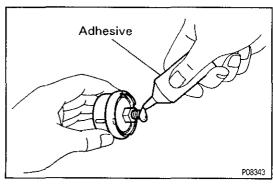
Torque: 17 N·m (170 kgf·cm, 12 ft·lbf)



3. INSTALL OIL COOLER AND OIL COOLER COVER ASSEMBLY

Install a new gasket, the oil cooler and oil cooler cover assembly with the ten bolts and two nuts.

Torque: 21 N·m (210 kgf·cm, 15 ft·lbf)



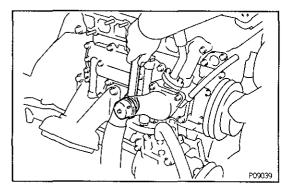
4. (1FZ-FE)

#### **INSTALL OIL PRESSURE SWITCH**

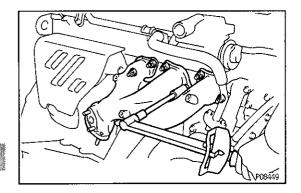
(a) Apply adhesive to two or three threads of the oil pressure switch.

Adhesive:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent



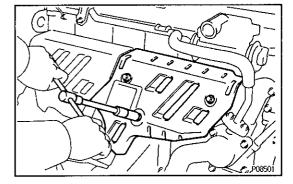
(b) Install the oil pressure switch.



## 5. INSTALL NO.1 EXHAUST MANIFOLD

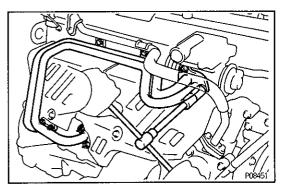
(a) Install a new gasket and the exhaust manifold with the

Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)



(b) Install the heat insulator with the three bolts.

Torque: 20 N·m (195 kgf·cm, 14 ft·lbf)



## 6. INSTALL AIR PIPE

Install three new gaskets and air pipe with the two bolts and six nuts.

Torque: 20 N·m (200 kgf·cm, 14 ft·lbf) for Bolt Torque: 21 N·m (210 kgf·cm, 15 ft·lbf) for Nut