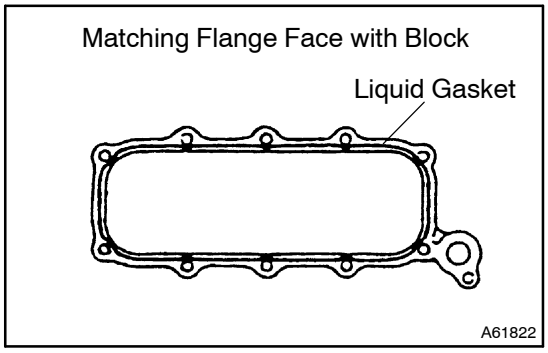
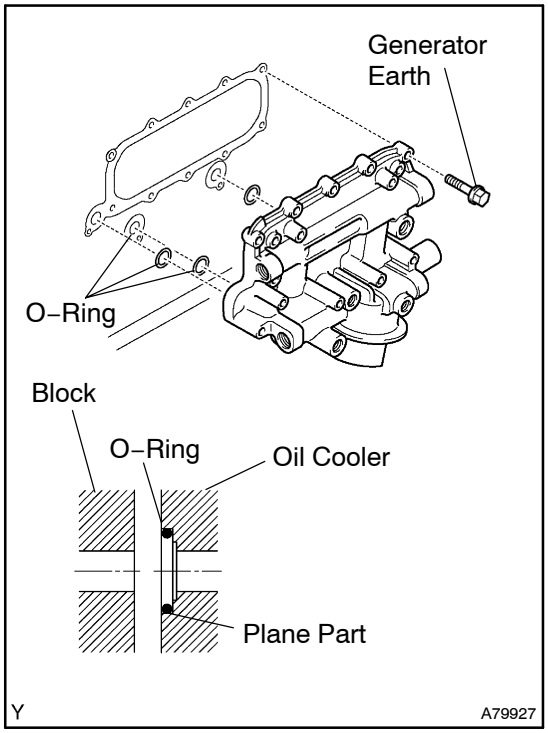
170E6–01

REPLACEMENT

1. DISCONNECT BATTERY NEGATIVE TERMINAL
2. DRAIN ENGINE COOLANT
3. DRAIN ENGINE OIL
4. REMOVE EXHAUST PIPE ASSY FRONT
5. REMOVE VENTILATION PIPE
6. REMOVE OIL W/BRACKET COOLER ASSY
(a) Disconnect the oil pressure switch connector.
(b) Remove the union bolt and gasket, and disconnect pipe and hoses.
(c) Remove the 13 bolts, oil w/bracket cooler assy and O–ring.
7. REMOVE OIL PRESSURE SWITCH
8. REMOVE OIL COOLER ASSY
(a) Remove the nut, and oil cooler element from the oil cooler element cover.
(b) Remove the plug, each valve and spring from the oil cooler element cover.
9. REMOVE DRAIN PLUG
10. INSTALL DRAIN PLUG
Torque:
1st 58.8 N·m (600 kgf·cm, 43 ft·lbf)
2nd 44 N·m (450 kgf·cm, 32 ft·lbf)
11. INSTALL OIL COOLER ASSY
(a) Tighten the nut and install the oil cooler element onto the oil cooler element cover.
Torque: 24.5 N·m (250 kgf·cm, 18 ft·lbf)
(b) Install each valve and the spring onto the oil cooler element cover and tighten the plug.
Torque: 29.5 N·m (300 kgf·cm, 21 ft·lbf)
12. INSTALL OIL PRESSURE SWITCH
(a) Apply adhesive to 2 or 3 threads of the oil pressure switch.
Adhesive:
Part No. 08833–00080, THREE BOND 1344, LOCTITE 242 or equivalent
(b) Install the oil pressure switch.
Torque: 24.5 N·m (250 kgf·cm, 18 ft·lbf)



13. INSTALL OIL W/BRACKET COOLER ASSY
(a) Clean the cylinder block mounting surface of the oil w/ bracket cooler assy.



(b) Insert new O–rings into the O–ring grooves of the oil cooler.

HINT:

Face the flat area of the O–ring toward the oil cooler for installation.

(c) Apply seal packing to the oil cooler housing and install it onto the cylinder block within 20 minutes.
Seal packing: Part No. 08826–00080 or equivalent
Coating width: 1.5 – 2.5 mm (0.059 – 0.098 in.)

HINT:

- If more than 20 minutes have passed since the seal packing is applied, do not assemble the parts. After removing the seal packing completely, reapply it to assemble them.
- When installing the oil cooler, the earth wire of the generator must be tightened with the coolant pipe bracket for turbocharger.

(d) Install new O–rings and oil w/bracket cooler assy with the 13 bolts.
Torque: 24.5 N·m (250 kgf·cm, 18 ft·lbf)

(e) Connect the oil pressure switch connector.

(f) Install the 2 pipes together with the new gaskets and the union bolt to the oil cooler assembly.

14. INSTALL VENTILATION PIPE

HINT:

Apply liquid gasket to the part of the flywheel housing where the pipe is inserted.

15. INSTALL EXHAUST PIPE ASSY FRONT
16. REFILL ENGINE COOLANT
17. ADD ENGINE OIL
18. CONNECT BATTERY NEGATIVE TERMINAL
19. CHECK FOR ENGINE COOLANT LEAKS
20. CHECK ENGINE OIL LEVEL
21. CHECK FOR ENGINE OIL LEAKS