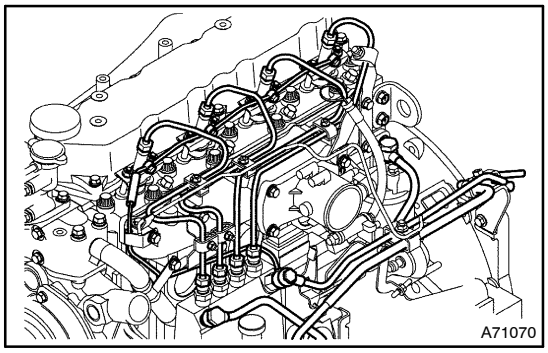
110QU–01

REPLACEMENT

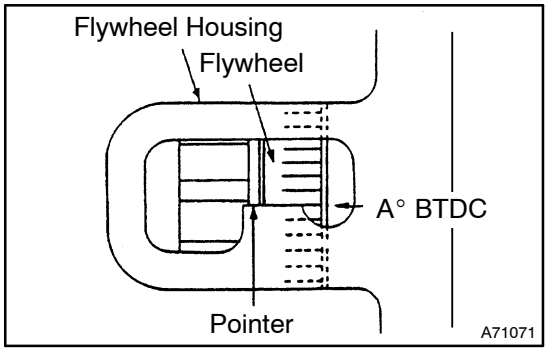
1. DISCONNECT BATTERY NEGATIVE TERMINAL
2. DRAIN FUEL
3. REMOVE OIL LEVEL GAGE SUB–ASSY
4. REMOVE INTAKE AIR PIPE
5. REMOVE INJECTION PIPE SET (See page 11–180)



6. REMOVE FUEL PIPE SET

(a) Remove the illustrated fuel pipe.

7. REMOVE DIESEL FUEL FILTER ASSY (See page 11–177)

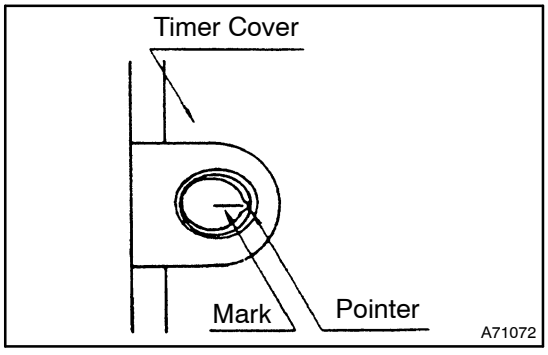


8. REMOVE INJECTION PUMP ASSY

(a) Disconnect the fuel lines, oil lines and engine control lines.

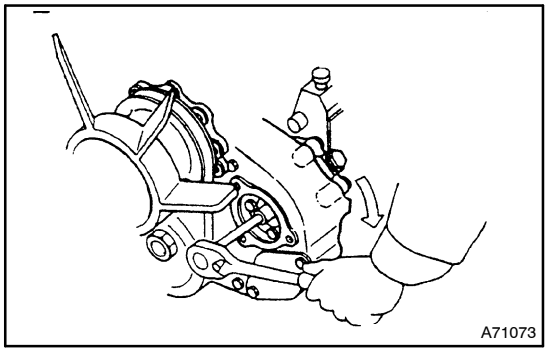
(b) Turn the crankshaft counterclockwise viewed from the flywheel side to align the injection timing marks on the flywheel at A° before top dead center for No. 1 cylinder on compression stroke.

Injection timing A°: 12°



(c) Remove the timing inspection hole plug.

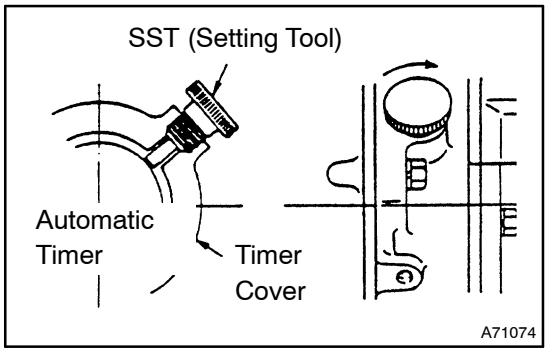
(d) Check that the injection timing mark on the automatic timer is aligned with timer cover pointer.



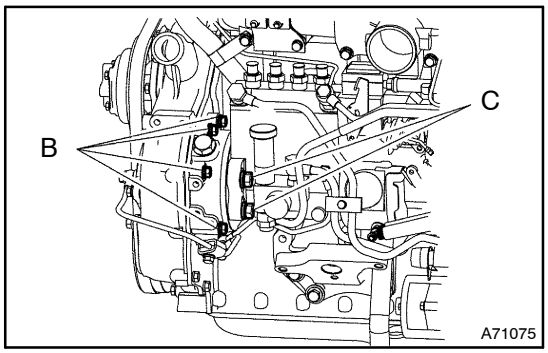
(e) Rotate the drive gear cover clockwise to align the injection timing and then tighten the drive gear fitting bolts.
Torque:
29.42 – 34.32 N·m (300 – 350 kgf·cm, 22 – 25 ft·lbf)

If not, remove the timing gear cover and then loosen the drive gear fitting bolts.

NOTICE:
Do not remove the drive gear fitting bolts.

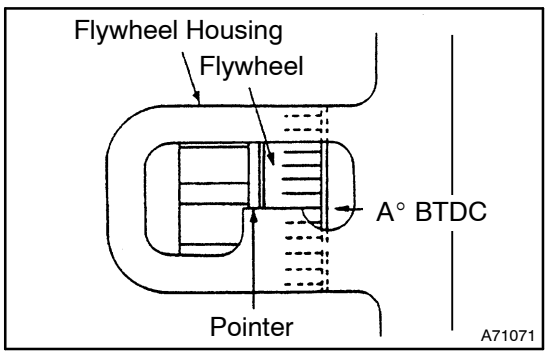


(f) Lock the automatic timer with a SST.
SST S0951–22100



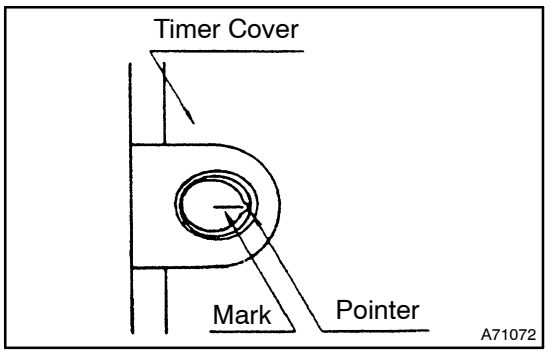
(g) Loosen the timer cover fitting bolts (B) and then remove the injection pump with timer cover.

NOTICE:
Do not loosen the injection pump body fitting nuts (C).



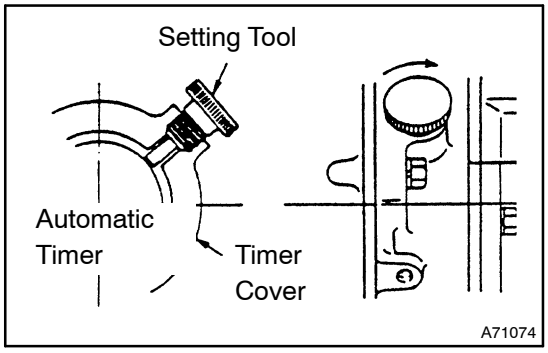
9. INSTALL INJECTION PUMP ASSY

(a) Check that the injection timing mark on the flywheel is aligned with flywheel housing pointer.
Injection timing A°: 12°

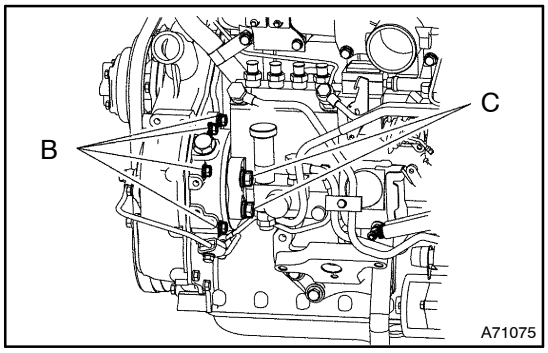


(b) Check that the injection timing mark on the automatic timer is aligned with timer cover pointer.

If not, adjust the injection timing.

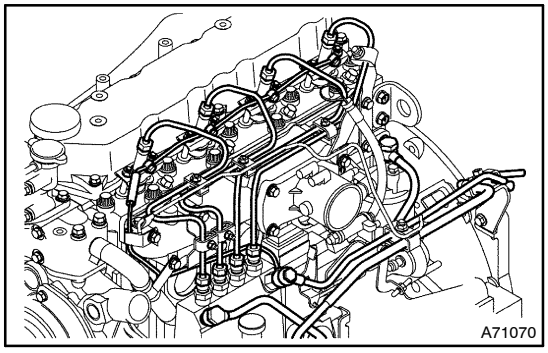


(c) Lock the automatic timer with a SST.
SST S0951–22100



(d) Install the injection pump with timer cover.
Torque:
18.64 – 25.49 N·m (190 – 260 kgf·cm, 14 – 18 ft·lbf)
(e) Remove and install the timing inspection hole plug.
(f) Connect the fuel lines, oil lines and engine control lines.

10. INSTALL DIESEL FUEL FILTER ASSY (See page 11–177)



11. INSTALL FUEL PIPE SET
(a) Install the fuel pipes.

12. INSTALL INJECTION PIPE SET (See page 11–180)
13. INSTALL INTAKE AIR PIPE
14. INSTALL OIL LEVEL GAUGE SUB–ASSY
15. ADD FUEL
16. BLEED FUEL (See page 11–177)
17. CONNECT BATTERY NEGATIVE TERMINAL
18. INSPECT FOR FUEL LEAKS