COMMON RAIL ASSY (1KD–FTV)(From August, 2004)

1118L–01

REPLACEMENT

NOTICE:

When removing the injection pipes and fuel inlet pipe, clean them up with a brush and compressed air.

1. **DRAIN ENGINE COOLANT (See Pub. No. RM990E, Page 16–50)**
2. **REMOVE INTERCOOLER PROTECTOR (SEE PAGE 13–18)**
3. **REMOVE INTERCOOLER ASSY (SEE PAGE 13–18)**
4. **REMOVE DIESEL THROTTLE BODY ASSY (SEE PAGE 10–22)**
5. **REMOVE CYLINDER HEAD COVER SUB–ASSY NO.2 (SEE PAGE 14–218)**
6. **REMOVE INJECTION PIPE (SEE PAGE 11–52)**
   SST 09023–12701
7. **REMOVE FUEL INLET PIPE SUB–ASSY**

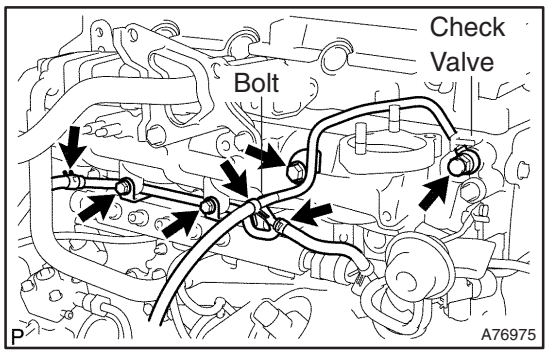
(a) Remove the fuel inlet pipe using SST.

NOTICE:

After removing the fuel pipe, affix the packing tape on the pump, common rail, and the whole injector installation area of the cylinder head cover to prevent dust from coming into them.

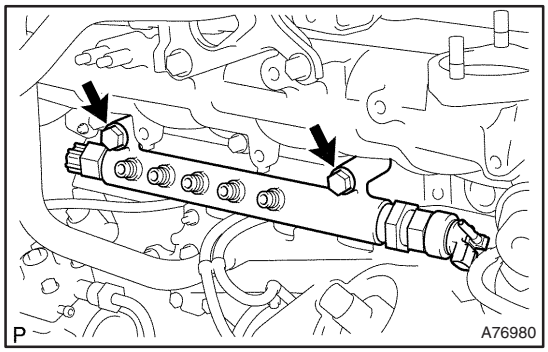
SST 09023–12701

8. **REMOVE OIL FILTER SUB–ASSY (See Pub. No. RM990E, Page 17–71)**
   SST 09228–10002



9. **REMOVE NOZZLE LEAKAGE PIPE ASSY NO.2**

(a) Remove the nozzle leakage pipe assy No.2.
   (1) Remove the oil filter.
   (2) Disconnect the 3 fuel hoses.
   (3) Remove the 3 bolts, check valve, gasket and nozzle leakage pipe assy No.2.



10. **REMOVE COMMON RAIL ASSY**

(a) Disconnect the pressure sensor connector.
(b) Remove the 2 bolts, intake manifold insulator No.2 and common rail.

NOTICE:

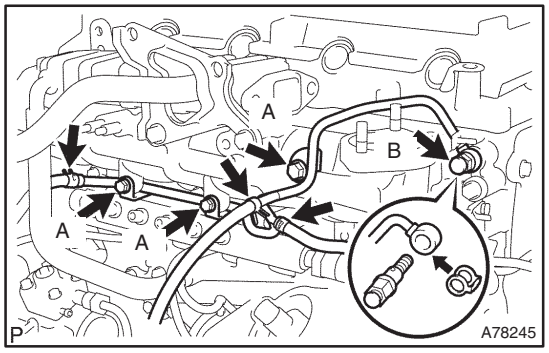
- **Do not remove the pressure limiter.**
- **Do not reuse the fuel pressure sensor.**

11. INSTALL COMMON RAIL ASSY

(a) Install the intake manifold insulator No.2 and common rail with the 2 bolts.
Torque: 38 N·m (387 kgf·cm, 28 ft·lbf)

NOTICE:
Install the intake manifold insulator No.2 with the mark facing upward.

(b) Install the connector.



12. INSTALL NOZZLE LEAKAGE PIPE ASSY NO.2

(a) Install the nozzle leakage pipe assy No.2 with a new gasket, the union bolt, and 3 bolts.
Torque:
21 N·m (214 kgf·cm, 16 ft·lbf) for check valve
13 N·m (129 kgf·cm, 9 ft·lbf) for bolt

(b) Connect the 3 fuel hoses.

13. INSTALL OIL FILTER SUB–ASSY (See Pub. No. RM990E, Page 17–79)
SST 09228–10002

14. INSTALL FUEL INLET PIPE SUB–ASSY

NOTICE:
- **Also, if the common rail is replaced, the fuel inlet pipe should also be replaced.**
- **Be careful not to adhere dusts, dirt or any other materials onto the edges of the fuel inlet pipe.**

(a) Temporarily install the fuel inlet pipe. Tighten the bolt on the common rail side of the fuel inlet pipe first using SST, and tighten the other bolt on the supply pump side likewise.
SST 09023–12701

15. INSTALL INJECTION PIPE (SEE PAGE 11–52)

NOTICE:
- **Also, if the common rail is replaced, the injection pipe No.1, No.2, No.3 and No.4 should also be replaced.**
- **Be careful not to adhere dusts, dirt or any other materials onto the edges of the injection pipes.**

SST 09023–12701

16. INSTALL CYLINDER HEAD COVER SUB–ASSY NO.2 (SEE PAGE 14–218)

17. INSTALL DIESEL THROTTLE BODY ASSY (SEE PAGE 10–22)

18. INSTALL INTERCOOLER ASSY (SEE PAGE 13–18)

19. INSTALL INTERCOOLER PROTECTOR (SEE PAGE 13–18)

(a) Install the intercooler protector with the 5 bolts.
Torque: 7.0 N·m (71 kgf·cm, 62 in.·lbf)

20. ADD ENGINE COOLANT (See Pub. No. RM990E, Page 16–50)

21. CHECK FOR ENGINE COOLANT LEAKS (See Pub. No. RM990E, Page 16–38)

22. BLEED FUEL LINE

(a) Operate the priming pump of the fuel filter assy to fill the system.

23. INSPECT ENGINE OIL LEVEL

24. CHECK FUEL LEAK (SEE PAGE 11–46)