

INJECTION PUMP ASSY (1CD-FTV)

REPLACEMENT

1106A-01

1. REMOVE FRONT WHEEL RH
2. REMOVE ENGINE UNDER COVER RH
3. DRAIN ENGINE COOLANT (See page 6-19)
4. REMOVE HOOD SUB-ASSY
5. REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1
(See page 4-75)
6. REMOVE FAN AND GENERATOR V BELT
(See page 4-114)
7. SEPARATE ENGINE MOUNTING BRACKET NO.2 RH
(See page 4-114)
8. REMOVE CRANKSHAFT PULLEY
(See page 4-114)
SST 09213-54015 (91651-60855), 09330-00021, 09950-50013 (09951-05010, 09952-05010, 09953-05010, 09953-05020, 09954-05030)
9. REMOVE TIMING BELT NO.2 COVER
(See page 4-114)
10. REMOVE TIMING BELT NO.1 COVER
(See page 4-114)
11. REMOVE TIMING BELT GUIDE
(See page 4-114)
12. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET
(See page 4-114)
13. SET NO.1 CYLINDER TO TDC/COMPRESSION (See page 4-114)
14. REMOVE TIMING BELT
(See page 4-114)
15. REMOVE FRONT WIPER ARM HEAD CAP
16. REMOVE FR WIPER ARM LH
(See page 6-9)
17. REMOVE FRONT WIPER ARM HEAD CAP
18. REMOVE FR WIPER ARM RH
(See page 6-9)
19. REMOVE COWL TOP VENTILATOR LOUVER SUB-ASSY
(See page 6-9)
20. REMOVE WIPER LINK ASSY
(See page 6-9)
21. REMOVE COWL TOP PANEL SUB-ASSY OUTER
 - (a) Remove the 7 bolts and cowl top panel outer.
22. REMOVE RADIATOR RESERVE TANK ASSY
23. REMOVE ENGINE COVER SUB-ASSY NO.1

24. REMOVE AIR TUBE NO.1

(See page 13-6)

25. REMOVE INJECTION PIPE SUB-ASSY NO.1

(See page 11-23)

26. REMOVE INJECTION PIPE SUB-ASSY NO.2

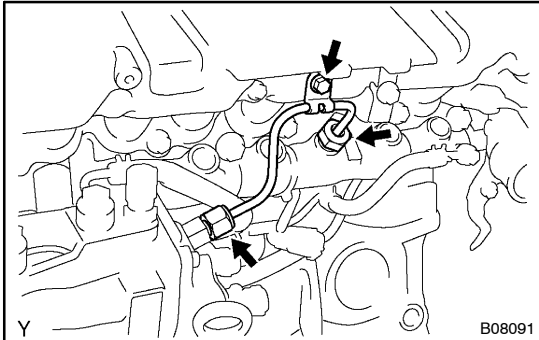
(See page 11-23)

27. REMOVE INJECTION PIPE SUB-ASSY NO.3

(See page 11-23)

28. REMOVE INJECTION PIPE SUB-ASSY NO.4

(See page 11-23)

**29. REMOVE FUEL INLET PIPE SUB-ASSY**

- (a) Remove the pipe clamp bolt from the intake manifold.
- (b) Using SST, remove the fuel inlet pipe from the common rail side.
SST 09023-12900
- (c) Using SST, remove the fuel inlet pipe from the pump side.
SST 09023-12700

NOTICE:

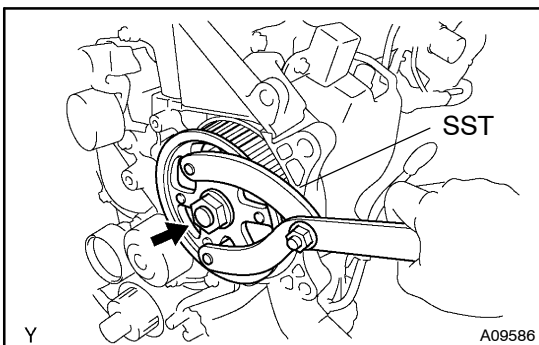
After removing the fuel pipe, affix the gum tape on the pump, common rail, and the whole injector installation area of the cylinder head cover for preventing dust from coming into them.

30. REMOVE INTAKE SHUTTER ASSY

(See page 10-14)

31. REMOVE INTAKE MANIFOLD

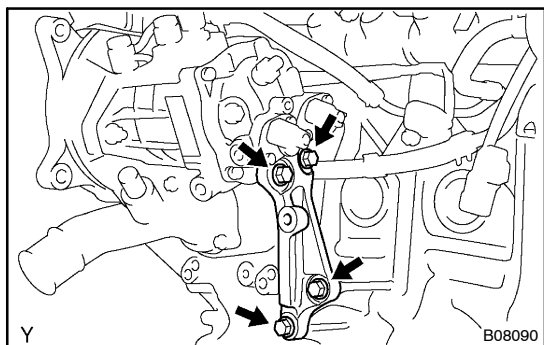
- (a) Loosen 2 common rail bolts.
- (b) Remove the intake manifold. (See page 4-91)

**32. REMOVE INJECTION PUMP DRIVE PULLEY**

- (a) Using SST, remove the pulley nut.
SST 09960-10010 (09962-01000, 09963-01000)

33. REMOVE OIL LEVEL GAGE GUIDE

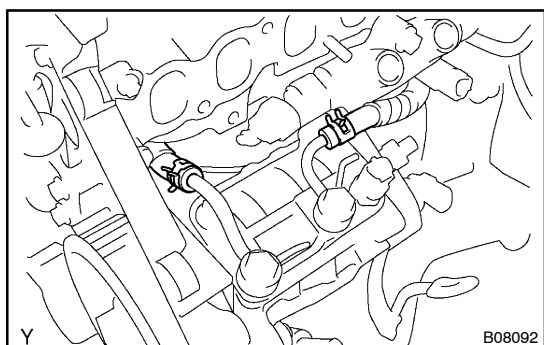
(See page 17-17)



34. REMOVE INJECTION PUMP STAY NO.1

- (a) Remove the 4 bolts and supply pump stay.

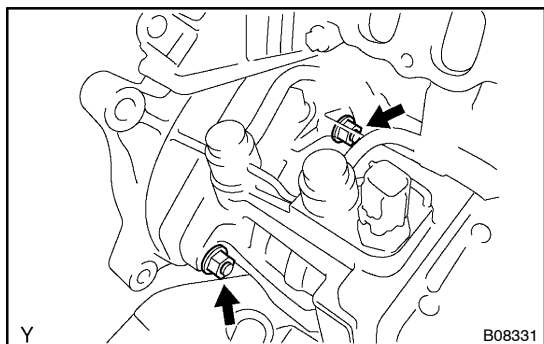
35. REMOVE INJECTION PUMP ASSY



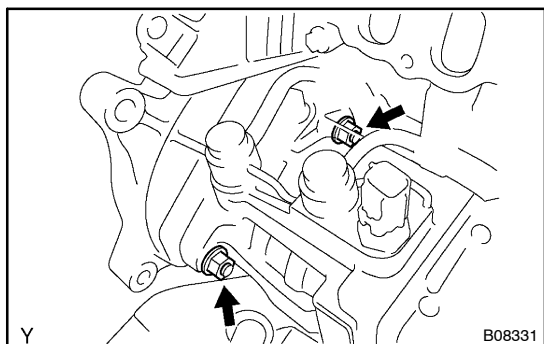
- (a) Disconnect the 2 fuel hoses from the pump.

NOTICE:

After disconnecting the fuel hose, affix the gum tape on the No. 2 fuel pipe for preventing dust from coming into them.



- (b) Remove the 2 nuts and pump.

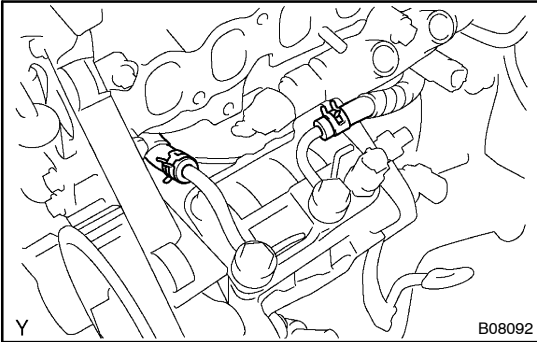


36. INSTALL INJECTION PUMP ASSY

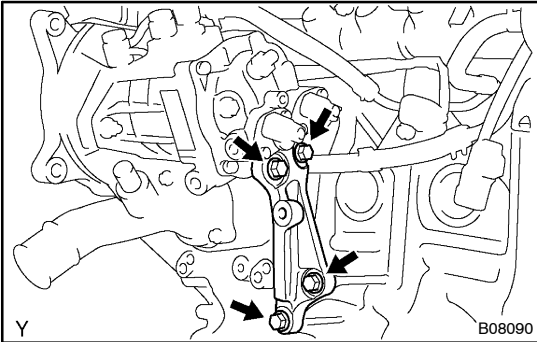
- (a) Install the pump with the 2 nuts.

Torque: 21 N·m (214 kgf·cm, 15 ft·lbf)

- (b) Remove the gum tape from the No. 2 fuel pump.



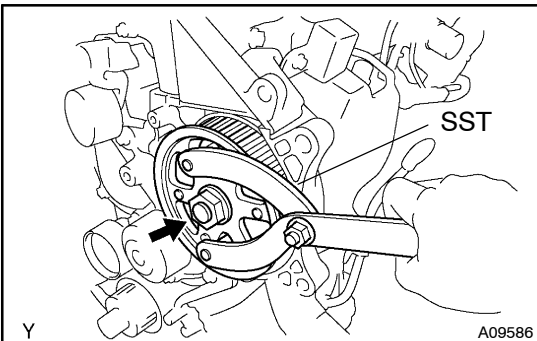
- (c) Connect the 2 fuel hoses to the pump.



37. INSTALL INJECTION PUMP STAY NO.1

- (a) Tighten the 2 bolts at the supply pump side until 2 or 3 threads of a screw.
- (b) Stick the supply pump stay to both of the cylinder block and supply pump and torque the cylinder block side.
Torque: 21 N·m (214 kgf·cm, 15 ft·lbf)
- (c) Torque the supply pump side.
Torque: 21 N·m (214 kgf·cm, 15 ft·lbf)

38. INSTALL OIL LEVEL GAGE GUIDE (See page 17-17)



39. INSTALL INJECTION PUMP DRIVE PULLEY

- (a) Align the pulley set key with the groove of the drive pulley, and slide on the timing pulley.
- (b) Using SST, install the pulley nut.
SST 09960-10010 (09962-01000, 09963-01000)
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

40. INSTALL INTAKE MANIFOLD

- (a) Install intake manifold. (See page 4-91)
- (b) Tighten 2 common rail bolts.
Torque: 43 N·m (440 kgf·cm, 16 ft·lbf)

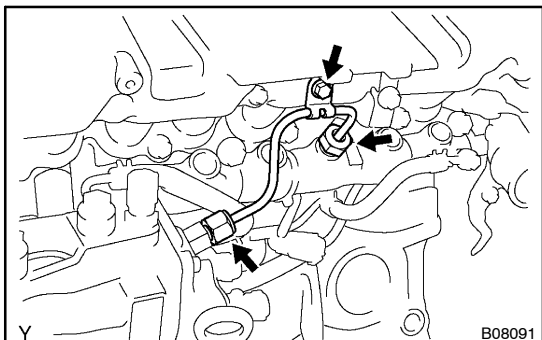
41. INSTALL INTAKE SHUTTER ASSY (See page 10-14)

42. INSTALL INJECTION PIPE SUB-ASSY NO.1 (See page 11-23)

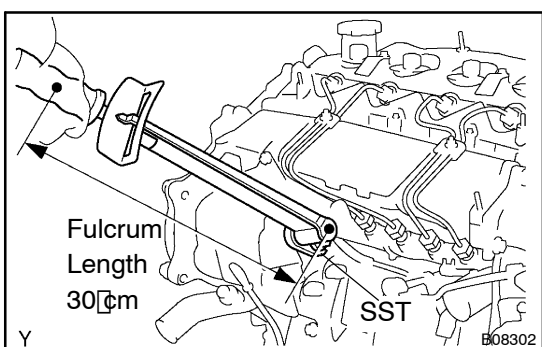
43. INSTALL INJECTION PIPE SUB-ASSY NO.2 (See page 11-23)

44. INSTALL INJECTION PIPE SUB-ASSY NO.3 (See page 11-23)

45. INSTALL INJECTION PIPE SUB-ASSY NO.4 (See page 11-23)

46. INSTALL FUEL INLET PIPE SUB-ASSY

- (a) Remove the gum tape from the common rail and supply pump.
- (b) Temporarily tighten the inlet pipe and pipe clamp bolt.



- (c) Using SST, tighten the inlet pipe from the common rail side.

Torque:**37 N·m (377 kgf·cm, 27 ft·lbf) for use with SST****41 N·m (418 kgf·cm, 30 ft·lbf)**

SST 09023-12900

HINT:

Use a torque wrench with a fulcrum length of 30 cm (11.81 in.).

- (d) Using SST, tighten the inlet pipe from the pump side.

Torque:**31 N·m (316 kgf·cm, 23 ft·lbf) for use with SST****34 N·m (347 kgf·cm, 25 ft·lbf)**

SST 09023-12700

HINT:

Use a torque wrench with a fulcrum length of 30 cm (11.81 in.).

- (e) Tighten the pipe clamp bolt.

Torque: 7.4 N·m (75 kgf·cm, 55 ft·lbf)**47. SET NO.1 CYLINDER TO TDC/COMPRESSION (See page 14-114)**

SST 09960-10010 (09962-01000, 09963-01000)

48. INSTALL TIMING BELT

(See page 14-114)

49. CHECK VALVE TIMING (See page 14-114)**50. INSTALL TIMING BELT GUIDE**

(See page 14-114)

51. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET

(See page 14-114)

52. INSTALL TIMING BELT NO.1 COVER

(See page 14-114)

53. INSTALL TIMING BELT NO.2 COVER

(See page 14-114)

54. INSTALL CRANKSHAFT PULLEY

(See page 14-114)

SST 09213-54015 (91651-60855), 09330-00021

55. INSTALL ENGINE MOUNTING BRACKET NO.2 RH

(See page 14-114)

56. INSTALL FAN AND GENERATOR V-BELT**57. ADJUST (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
(See page 14-75)**58. INSTALL FRONT WHEEL RH**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

59. INSTALL ENGINE COVER SUB-ASSY NO.1

Torque:

8.0 N·m (82 kgf·cm, 71 in·lbf) for Bolt

12 N·m (122 kgf·cm, 8.9 ft·lbf) for Nut

60. INSTALL COWL TOP PANEL SUB-ASSY OUTER**61. INSTALL WIPER LINK ASSY**

(See page 66-9)

62. INSTALL FR WIPER ARM RH

(See page 66-9)

63. INSTALL FR WIPER ARM LH

(See page 66-9)

64. INSPECT HOOD SUB-ASSY

(See page 75-1)

65. ADJUST HOOD SUB-ASSY

(See page 75-1)

66. ADD COOLANT (See page 16-19)**67. CHECK ENGINE COOLANT LEAK (See page 16-13)****68. INSPECT FUEL LEAK (See page 11-23)**