1114L–01

REPLACEMENT

1. DISCONNECT BATTERY NEGATIVE TERMINAL

2. DRAIN FUEL

3. CHECK INJECTOR COMPENSATION CODE (see page 05–13)

4. REMOVE ENGINE SIDE COVER SUB–ASSY LH

(a) Remove the bolt and engine side cover.

5. REMOVE VENTILATION PIPE NO. 2

(a) Loosen the 2 clamps and disconnect the 2 hoses from the ventilation pipe.

(b) Remove the 3 bolts and ventilation pipe from the cylinder head.

6. REMOVE INTAKE AIR CONNECTOR PIPE

(a) Loosen the 2 hose clamps and remove the intake air connector pipe.

7. REMOVE OIL FILLER CAP SUB–ASSY

8. REMOVE CYLINDER HEAD COVER NO. 2

(a) Remove the 2 bolts and cylinder head cover.

9. REMOVE CYLINDER HEAD COVER SUB–ASSY

(a) Disconnect the 4 injector connectors.

(b) Remove the 2 bolts and cylinder head cover.

(c) Remove the cushion, stay and gasket from the cylinder head cover.

(d) Remove the 4 gaskets from the 4 injectors.

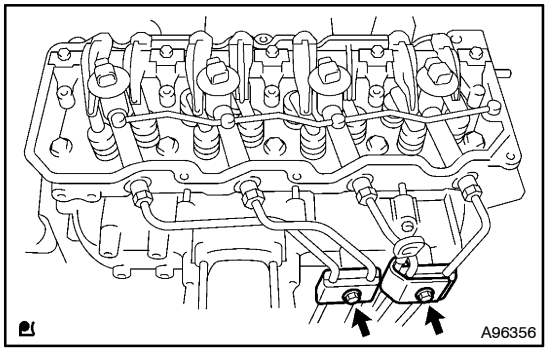
10. REMOVE BREATHER PIPE

(a) Loosen the 2 clamps and disconnect the 2 hoses from the oil separator.

(b) Remove the 2 bolts and breather pipe.

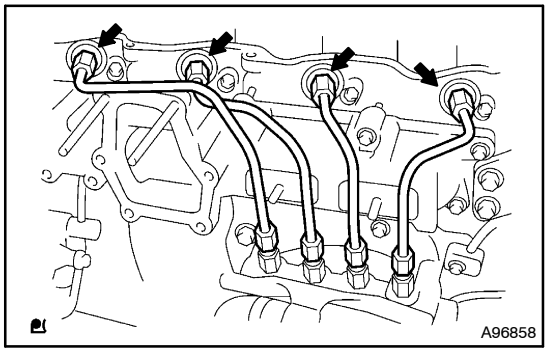
11. REMOVE BRACKET

(a) Remove the 4 bolts and bracket.



12. REMOVE INJECTION PIPE CLAMP NO. 1

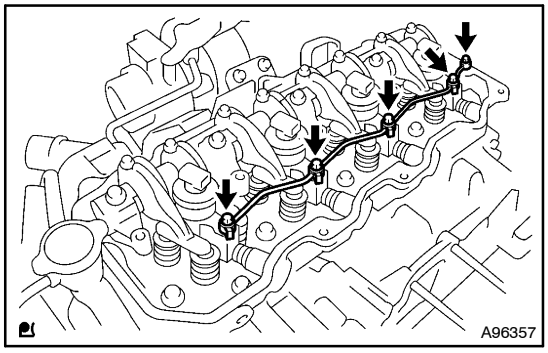
(a) Remove the 2 nuts and 2 clamps.



13. REMOVE INJECTOR ASSY

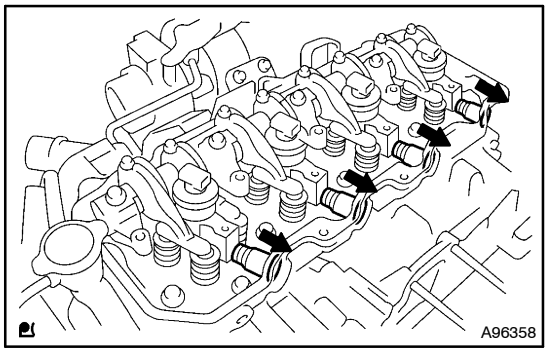
(a) Using SST, disconnect the fuel injection pipe's 4 nuts from the injectors.

SST 09023–12900

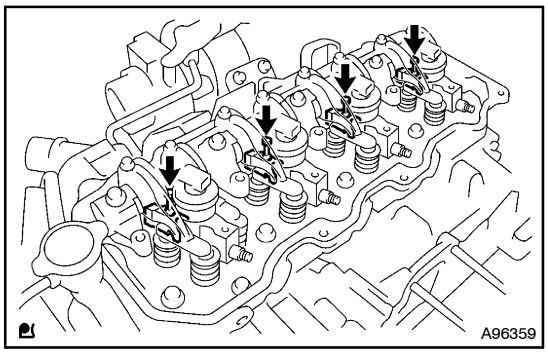


(b) Remove the 5 union bolts and nozzle leakage pipe No. 1.
(c) Remove the 5 gaskets from the nozzle leakage pipe No. 1.

NOTICE:
When removing the nozzle leakage pipe, place a shop rag under the pipe to protect the cylinder head from the fuel remaining inside the pipe.



(d) Using a screwdriver, move the 4 nozzle holder seals as shown in illustration.



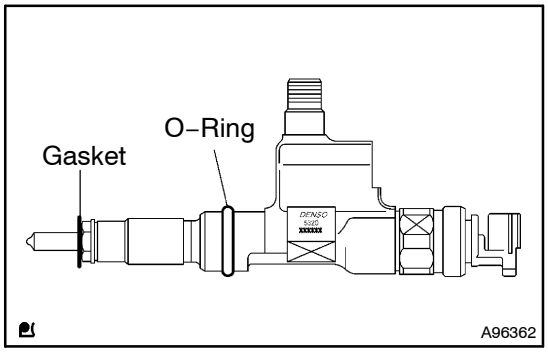
(e) Remove the 4 bolts and 4 nozzle holder clamps.
(f) Remove the 4 injectors.
(g) Remove the 4 O–rings from the injector assy.

NOTICE:
When replacing the injector, store them in the correct order so that they can be returned to the original locations when reassembling.

(h) Remove the 4 gaskets from the cylinder head.

14. REGISTER INJECTOR COMPENSATION CODE (WHEN REPLACING NEW INJECTOR) (See page 05–17)

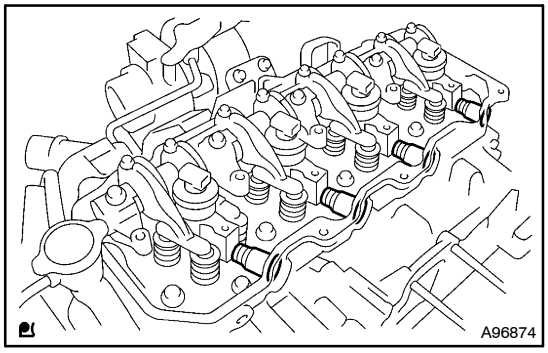
HINT:
Each injector has characteristic fuel injecting behavior.



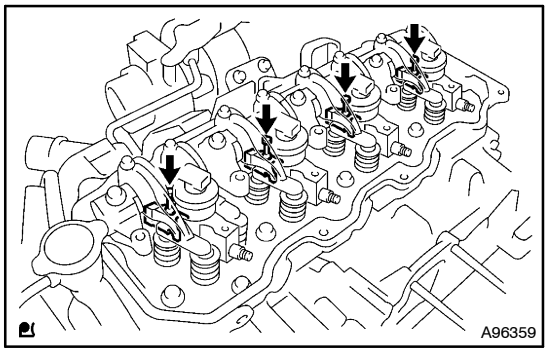
15. INSTALL INJECTOR ASSY

(a) Apply a light amount of engine oil to the O–rings to each injector.
(b) Install a new O–ring to each injector.
(c) Install a new gasket to each injector.
(d) Install the 4 injectors to the cylinder head.

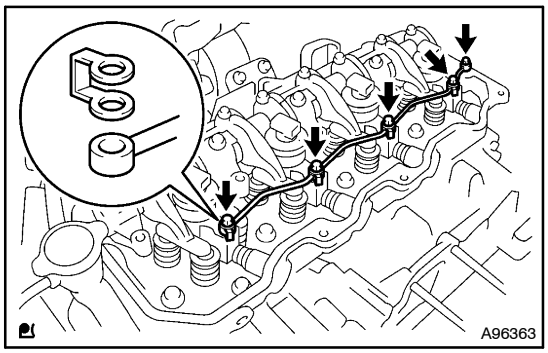
NOTICE:
Fit the injectors to the gaskets.



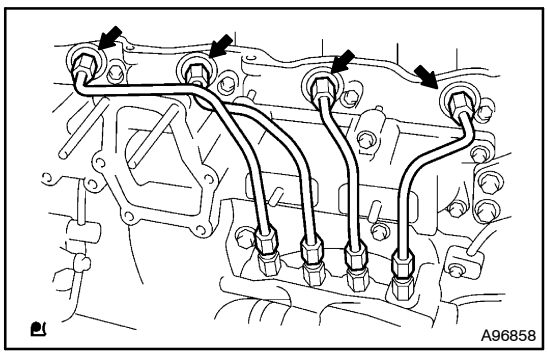
(e) Install the 4 nozzle holder seals and 4 gaskets.



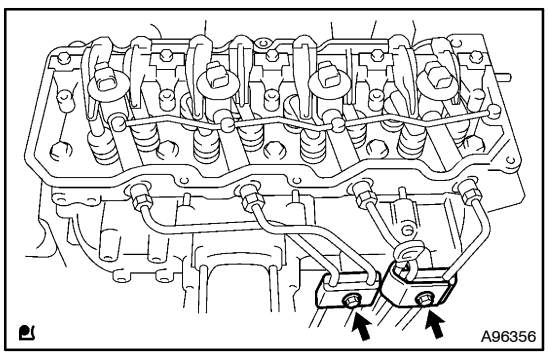
(f) Install the 4 nozzle holder clamps with the 4 bolts.
Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)



(g) Install 5 new gaskets and the nozzle leakage pipe with the 5 bolts.
Torque: 13 N·m (133 kgf·cm, 10 ft·lbf)



(h) Using SST, tighten the nuts of the injection pipes.
SST 09023–12900
Torque: 44 N·m (449 kgf·cm, 32 ft·lbf)



16. INSTALL INJECTION PIPE CLAMP NO. 1

(a) Use the 2 nuts to install 2 clamps around the 4 pipes. Tighten each nut until each clamp's edges make contact with its respective engine side clamp's edges.

17. INSTALL BRACKET

(a) Install the bracket with the 4 bolts.
Torque: 28.5 N·m (290 kgf·cm, 21 ft·lbf)

18. INSTALL BREATHER PIPE

(a) Install the breather pipe with the 2 bolts.
Torque: 28.5 N·m (290 kgf·cm, 21 ft·lbf)

(b) Connect the 2 hoses to the oil separator with the 2 clamps.

(c) Connect the pipe to the cylinder head cover with the clamp.

19. INSTALL CYLINDER HEAD COVER SUB–ASSY

(a) Install the 4 gaskets to the 4 injectors.

(b) Install the gasket, stay and cushion to the cylinder head cover.

(c) Install the cylinder head cover to the cylinder head with the 2 bolts.
Torque: 28.5 N·m (290 kgf·cm, 21 ft·lbf)

(d) Connect the 4 injector connectors.

20. INSTALL CYLINDER HEAD COVER NO. 2

(a) Install the cylinder head cover with the 2 bolts.
Torque: 28.5 N·m (290 kgf·cm, 21 ft·lbf)

21. INSTALL OIL FILLER CAP SUB–ASSY

22. INSTALL INTAKE AIR CONNECTOR PIPE

(a) Install the connector pipe with the 2 hose clamps.
Torque: 5.0 N·m (51 kgf·cm, 44 in.·lbf)

23. INSTALL VENTILATION PIPE NO. 2

(a) Install the ventilation pipe to the cylinder head with the 3 bolts.
Torque: 28.5 N·m (290 kgf·cm, 21 ft·lbf)

(b) Connect the 2 hoses to the ventilation pipe with the 2 clamps.

24. INSTALL ENGINE SIDE COVER SUB–ASSY LH

(a) Install the engine side cover with the bolt.
Torque: 11.5 N·m (117 kgf·cm, 8 ft·lbf)

25. ADD FUEL

26. BLEED AIR FROM FUEL SYSTEM (See page 11–5)

27. CONNECT BATTERY NEGATIVE TERMINAL

28. CHECK FOR FUEL LEAKS (See page 11–2)