130B0–01

REPLACEMENT

1. REMOVE FRONT WHEEL RH

2. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1

(a) Remove the 4 bolts and engine under cover No.1.

3. REMOVE ENGINE UNDER COVER ASSY REAR

(a) Remove the 4 bolts and engine under cover rear.

4. DRAIN ENGINE COOLANT (See Pub. No. RM990E, Page 16–50)

5. REMOVE EXHAUST PIPE ASSY FRONT (See Pub. No. RM990E, Page 15–11)

6. REMOVE RADIATOR SUPPORT SEAL UPPER

(a) Remove the 11 clips and radiator support seal upper.

7. REMOVE WIRE HARNESS (W/ COLD AREA SPECIFICATION)

(a) Remove the wire harness from the fan shroud.

8. REMOVE RADIATOR RESERVE TANK ASSY

(a) Disconnect the radiator reserve tank hose.

(b) Disconnect the water bypass hose No.2 first, and then remove the 3 bolts and radiator reserve tank.

9. REMOVE RADIATOR HOSE NO.1

10. REMOVE FAN AND GENERATOR V BELT (See Pub. No. RM990E, Page 14–189)

13

HINT:

Loosen the 4 nuts for the fan with fluid coupling assy in advance.

11. REMOVE FAN SHROUD

(a) Remove the oil cooler inlet hose and outlet hose from the hose clamp. (Automatic Transmission)

(b) Remove the 4 nuts for the fan with fluid coupling assy and 2 bolts for the fan shroud.

(c) Remove the fan with fluid coupling assy together with the fan shroud.

12. REMOVE FAN PULLEY

13. REMOVE INTERCOOLER PROTECTOR (See page 13–18)

14. REMOVE INTERCOOLER ASSY (See page 13–18)

15. REMOVE AIR CLEANER ASSY

(a) Disconnect the mass air flow meter S/A connector, and remove the wire harness clamp.

(b) Loosen the hose clamp, and remove the air cleaner cap with air cleaner hose No.1.

(c) Remove the air cleaner filter element.

(d) Remove the 3 bolts and air cleaner case sub–assy.

16. REMOVE INTAKE AIR CONNECTOR

(a) Loosen the hose clamp, and disconnect the intake air connector and remove the air hose No.2.

17. REMOVE VISCOUS W/MAGNET CLUTCH HEATER ASSY (W/ COLD AREA SPECIFICATION)

(a) Remove the 2 hoses from the viscous heater assy.

(b) Remove the 2 bolts and viscous heater bracket No.2.

(c) Remove the 2 bolts and the viscous heater assy.

18. REMOVE COMPRESSOR AND MAGNETIC CLUTCH (W/ AIR CONDITIONING)

(a) Disconnect the connector from the cooler compressor.

(b) Remove the 4 bolts and cooler compressor assy.

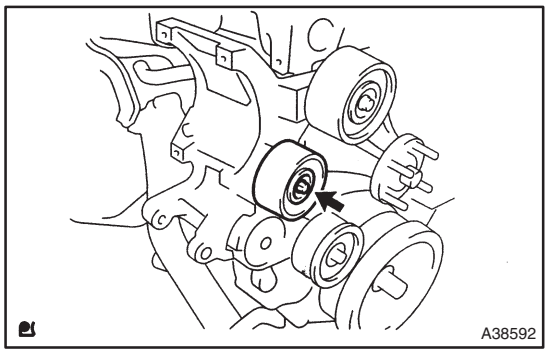
HINT:

It is not necessary to remove the hose from the cooler compressor assy when you remove the assembly. Also, put and hang the removed cooler compressor to an appropriate location of the vehicle with a rope for the following removal process.

19. REMOVE VISCOUS HEATER BRACKET SUB–ASSY (W/ COLD AREA SPECIFICATION)

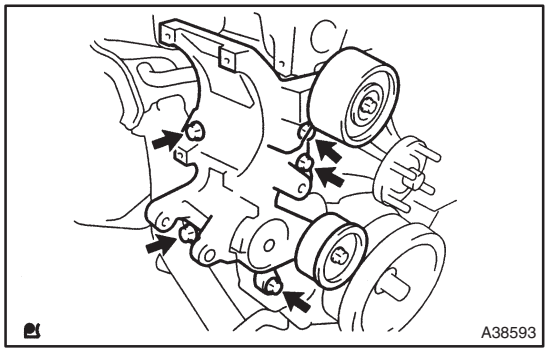
(a) Remove the 4 bolts and viscous heater bracket.

20. REMOVE GENERATOR ASSY (See Pub. No. RM990E, Page 19–40)



21. REMOVE IDLE PULLEY ASSY

(a) Remove the bolt and idle pulley assy.



22. REMOVE COMPRESSOR MOUNTING BRACKET NO.1

(a) Remove the 5 bolts and compressor mounting bracket No.1.

23. REMOVE VENTILATION PIPE

(a) Remove the bolt and ventilation pipe.

24. REMOVE INTERCOOLER SUPPORT BRACKET

(a) Remove the 2 bolts and intercooler support bracket.

25. REMOVE INTERCOOLER SUPPORT BRACKET NO.2

(a) Remove the 2 bolts and intercooler support bracket No.2.

26. REMOVE OIL LEVEL GAUGE GUIDE

(a) Remove the oil level gauge first, and then remove the oil level gauge guide.

27. REMOVE FRONT FENDER SEAL

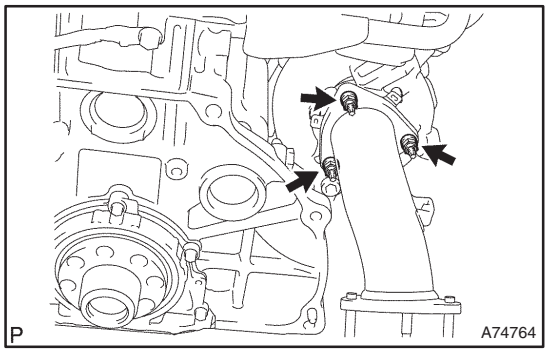
(a) Remove the 5 clips and front fender seal.

28. REMOVE TURBO INSULATOR NO.1

(a) Remove the 3 bolts and turbo insulator No.1.

29. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1

(a) Remove the 3 bolts and exhaust manifold heat insulator No.1.

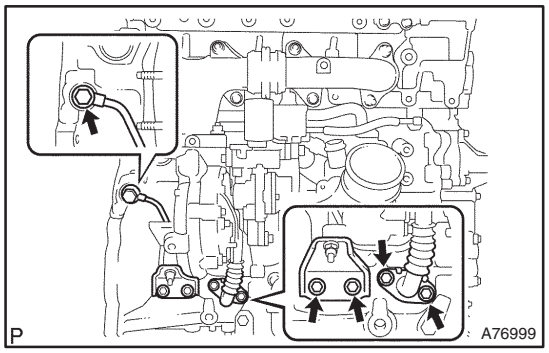


30. REMOVE TURBINE OUTLET ELBOW

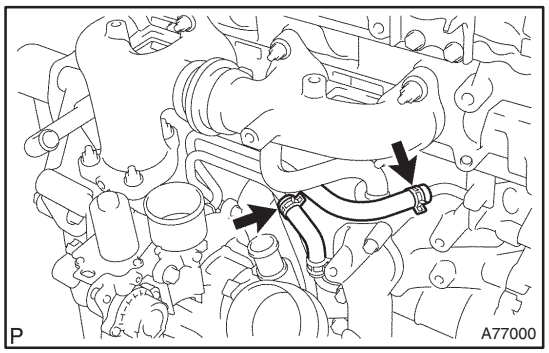
(a) Remove the 3 nuts and turbine outlet elbow.

31. REMOVE TURBOCHARGER SUB–ASSY

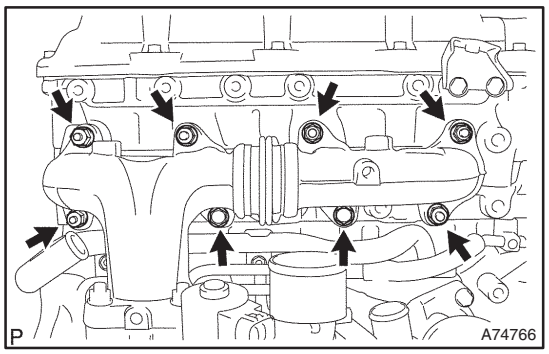
(a) Disconnect the 2 connectors and remove the harness clamp.



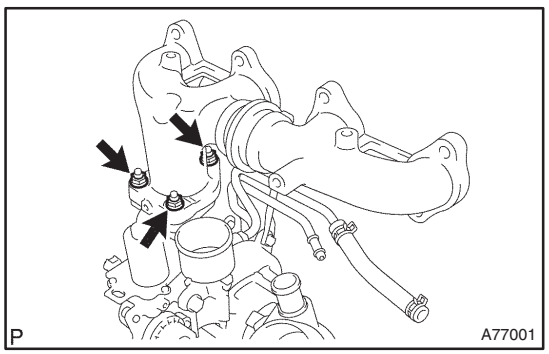
(b) Remove the 2 bolts for the turbocharger stay.
(c) Remove the 2 bolts for the turbo oil inlet pipe.
(d) Remove the turbo oil inlet pipe union bolt.



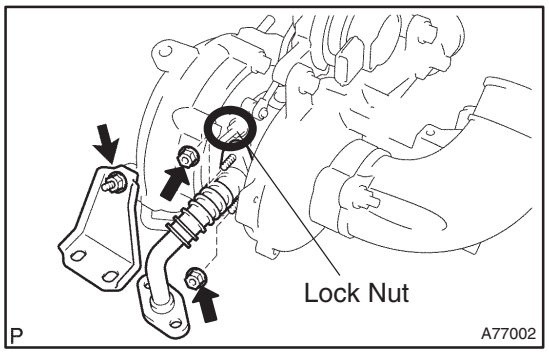
(e) Disconnect the turbo water hoses No. 1 and No. 2.



(f) Remove the 6 nuts, plate washers and 2 bolts for the exhaust manifold.
(g) Remove the exhaust manifold w/ turbocharger.



(h) Remove the 3 nuts, exhaust manifold from the turbocharger and gasket.

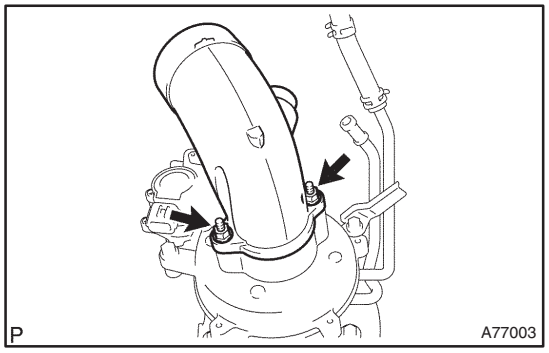


(i) Remove the nut and turbocharger stay from the turbocharger.

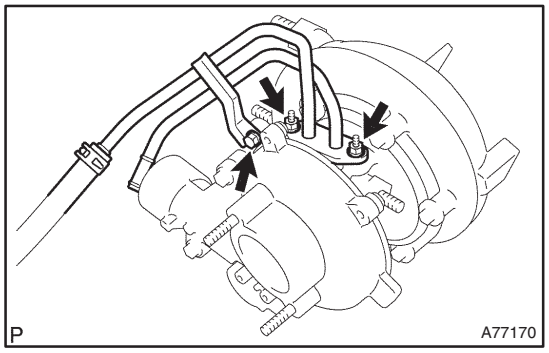
(j) Remove the 2 nuts, gasket and the inlet pipe from the turbocharger.

NOTICE:

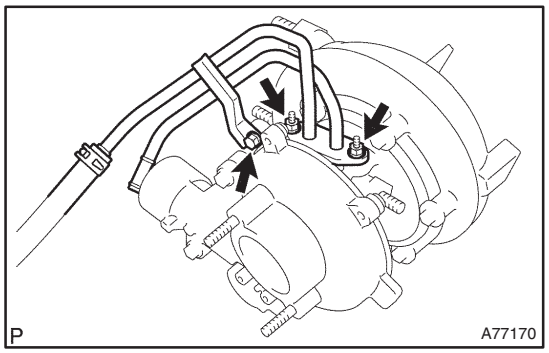
Do not loosen or remove the lock nut of the stopper bolt.



(k) Remove the 2 nuts, gasket and the inlet elbow from the turbocharger.



(l) Remove the bolt, 2 nuts, gasket and turbo water pipe No.1 from the turbocharger.



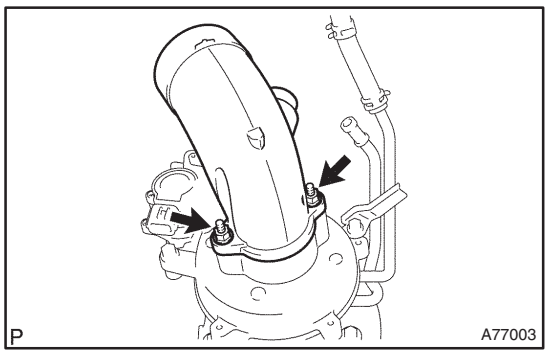
32. INSTALL TURBOCHARGER SUB–ASSY

(a) Install a new gasket and turbo water pipe No.1 with the bolt and 2 nuts to the turbocharger.

Torque:

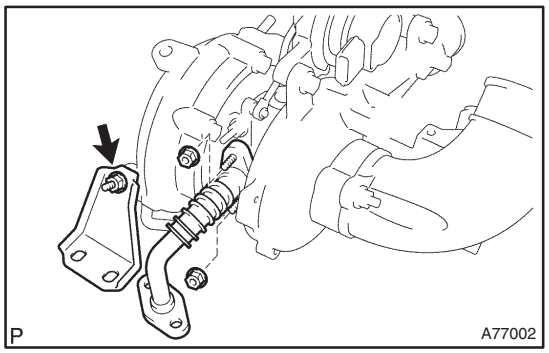
12 N·m (122 kgf·cm, 9 ft·lbf) for nut

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



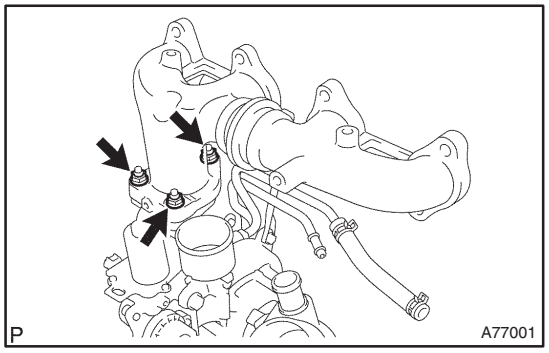
(b) Install a new gasket and compressor inlet elbow with the 2 nuts to the turbocharger.

Torque: 19 N·m (194 kgf·cm, 14 ft·lbf)

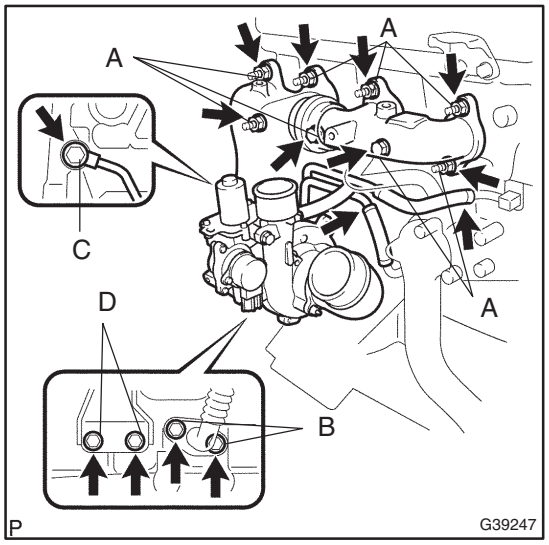


(c) Install a new gasket and turbo oil inlet pipe with the 2 nuts to the turbocharger.
Torque: 13 N·m (133 kgf·cm, 10 ft·lbf)

(d) Install the turbocharger stay with a new nut to the turbocharger.
Torque: 24 N·m (245 kgf·cm, 18 ft·lbf)



(e) Install a new gasket and exhaust manifold to the turbocharger with the 3 nuts.
Torque: 52 N·m (530 kgf·cm, 38 ft·lbf)



(f) Set a new gasket to the engine, and install the exhaust manifold with the 6 nuts, plate washers and 2 bolts.
Torque: 52 N·m (530 kgf·cm, 38 ft·lbf) for bolt, nut A

(g) Install the turbo water hoses No.1 and No.2.

(h) Set a new gasket, and tighten the 2 bolts for the turbo oil inlet pipe.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf) for bolt B

(i) Install a new gasket and the turbo oil inlet union bolt.
Torque: 26 N·m (265 kgf·cm, 19 ft·lbf) for bolt C

(j) Tighten the 2 bolts for the turbocharger stay.
Torque: 24 N·m (245 kgf·cm, 18 ft·lbf) for bolt D

(k) Connect the 2 connectors, and install the harness clamp.

33. INSTALL TURBINE OUTLET ELBOW

(a) Install a new gasket and turbine outlet elbow with 3 new nuts.
Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)

34. INSTALL EXHAUST MANIFOLD HEAT INSULATOR NO.1

(a) Install the exhaust manifold heat insulator No.1 with the 3 bolts.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

35. INSTALL TURBO INSULATOR NO.1

(a) Install the turbo insulator No.1 with the 3 bolts.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

36. INSTALL FRONT FENDER SEAL

(a) Install the front fender seal with the 5 clips.

37. INSTALL OIL LEVEL GAUGE GUIDE

(a) Install a new O–ring to the oil level gauge guide.

(b) Apply oil to the O–ring.

(c) Install the oil level gauge guide with the bolt.

Torque: 8.0 N·m (82 kgf·cm, 71 in.·lbf)

(d) Install the oil level gauge.

38. INSTALL INTERCOOLER SUPPORT BRACKET NO.2

(a) Install the intercooler support bracket No.2 with the 2 bolts.

Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)

39. INSTALL INTERCOOLER SUPPORT BRACKET

(a) Install the intercooler support bracket with the 2 bolts.

Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)

40. INSTALL VENTILATION PIPE

(a) Install the ventilation pipe with the bolt.

Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

41. INSTALL COMPRESSOR MOUNTING BRACKET NO.1

(a) Install the compressor mounting bracket No.1 with the 5 bolts.

Torque: 21 N·m (214 kgf·cm, 16 ft·lbf)

42. INSTALL IDLE PULLEY ASSY

(a) Install the idle pulley with the bolt.

Torque: 45 N·m (459 kgf·cm, 33 ft·lbf)

43. INSTALL GENERATOR ASSY (See Pub. No. RM990E, Page 19–40)

44. INSTALL VISCOUS HEATER BRACKET SUB–ASSY (W/ COLD AREA SPECIFICATION)

(a) Install the viscous heater bracket with the 4 bolts.

Torque: 47 N·m (479 kgf·cm, 35 ft·lbf)

45. INSTALL W/ MAGNETIC CLUTCH COMPRESSOR ASSY (W/ AIR CONDITIONING)

(a) Install the cooler compressor assy with the 4 bolts.

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)

(b) Connect the connector to the cooler compressor assy.

46. INSTALL VISCOUS W/MAGNET CLUTCH HEATER ASSY (W/ COLD AREA SPECIFICATION)

(a) Install the viscous heater assy with the 2 bolts.

Torque: 45 N·m (459 kgf·cm, 33 ft·lbf)

(b) Install the viscous heater bracket No.2 with the 2 bolts.

Torque: 45 N·m (459 kgf·cm, 33 ft·lbf)

(c) Install the 2 hoses.

47. INSTALL INTAKE AIR CONNECTOR

(a) Connect the intake air connector, and install the air hose No.2.

(b) Fasten the hose clamp.

Torque: 6.5 N·m (66 kgf·cm, 58 in.·lbf)

48. INSTALL AIR CLEANER ASSY

(a) Install the air cleaner case sub–assy with the 3 bolts.

Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

(b) Install the air cleaner filter element and air cleaner cap with air cleaner hose No.1.

(c) Connect the intake air flow meter S/A and install the wire harness.

49. INSTALL INTERCOOLER ASSY (See page 13–18)

50. INSTALL INTERCOOLER PROTECTOR

(a) Install the intercooler protector with the 5 bolts.

Torque: 7.0 N·m (71 kgf·cm, 62 in.·lbf)

51. INSTALL FAN PULLEY

52. INSTALL FAN SHROUD

(a) Temporarily place the fan shroud together with the fan with fluid coupling assy to the correct location inside the engine compartment first.

(b) Install the fan shroud to the radiator with the 2 bolts.

Torque: 5.0 N·m (51 kgf·cm, 44 in.·lbf)

(c) Install the fan with fluid coupling assy to the water pump with the 4 nuts.
Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)
(d) Install the oil cooler inlet hose and outlet hose to the hose clamp. (Automatic Transmission)

53. INSTALL FAN AND GENERATOR V BELT (See Pub. No. RM990E, Page 14–189)

54. INSTALL RADIATOR HOSE NO.1

55. INSTALL RADIATOR RESERVE TANK ASSY

(a) Install the water bypass hose No.2.
(b) Install the radiator reserve tank with the 3 bolts.
Torque: 5.0 N·m (51 kgf·cm, 44 in.·lbf)
(c) Install the radiator reserve tank hose.

56. INSTALL WIRE HARNESS (W/ COLD AREA SPECIFICATION)

(a) Install the wire harness to the fan shroud.

57. INSTALL RADIATOR SUPPORT SEAL UPPER

(a) Install the radiator support seal upper with the 11 clips.

58. INSTALL EXHAUST PIPE ASSY FRONT (See Pub. No. RM990E, Page 15–11)

59. INSTALL FRONT WHEEL RH
Torque: 112 N·m (1142 kgf·cm, 83 ft·lbf)

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

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

62. CHECK FOR ENGINE OIL LEAKS

63. CHECK FOR EXHAUST GAS LEAKAGE

64. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1

(a) Install the engine under cover No.1 with the 4 bolts.
Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)

65. INSTALL ENGINE UNDER COVER ASSY REAR

(a) Install the engine under cover rear with the 4 bolts.
Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)