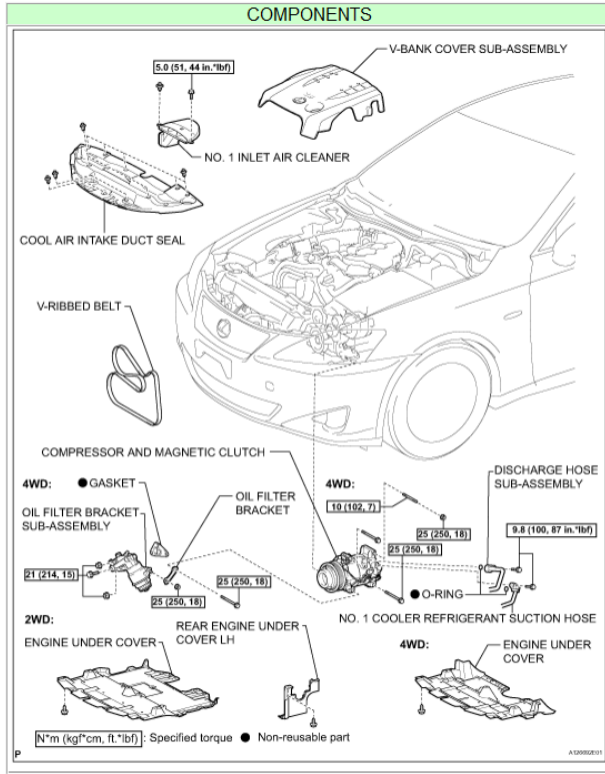


2007 Lexus IS 250 RWD V6-2.5L (4GR-FSE)

Vehicle Level → Engine, Cooling and Exhaust → Cooling System → Water Pump → Service and Repair ←

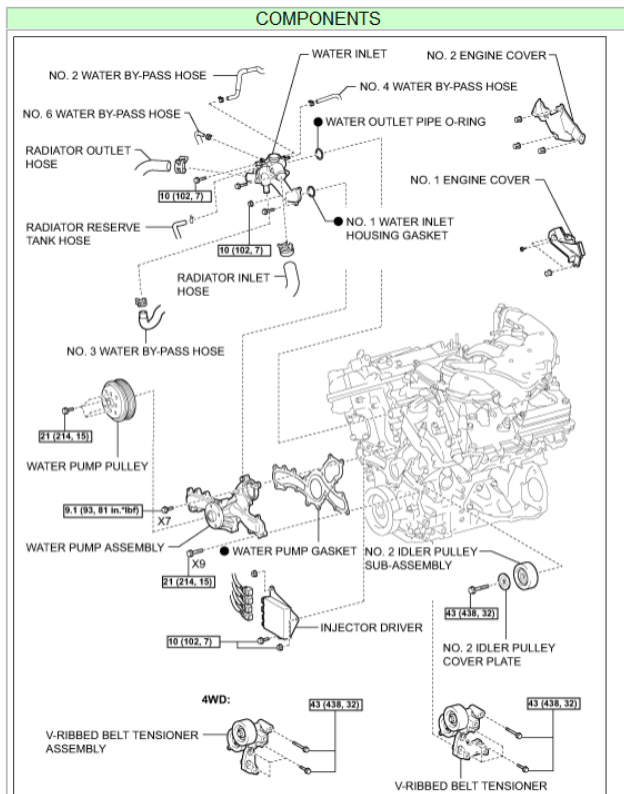
Service and Repair

WATER PUMP



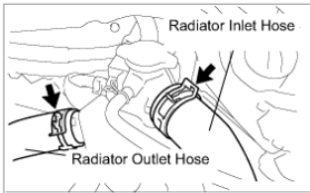
Zoom

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REMOVAL

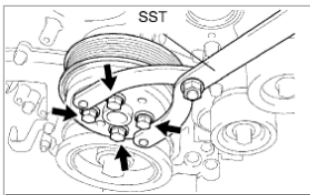
1. REMOVE COOL AIR INTAKE DUCT SEAL
2. REMOVE V-BANK COVER SUB-ASSEMBLY
3. REMOVE NO. 1 INLET AIR CLEANER
4. DISCHARGE REFRIGERANT FROM REFRIGERATION SYSTEM
5. REMOVE V-RIBBED BELT
6. REMOVE ENGINE UNDER COVER
7. REMOVE REAR ENGINE UNDER COVER LH (for 2WD)
8. DRAIN ENGINE COOLANT
9. DRAIN ENGINE OIL
10. REMOVE OIL FILTER BRACKET (for 4WD)
11. REMOVE OIL FILTER BRACKET SUB-ASSEMBLY (for 4WD)
12. REMOVE NO. 1 COOLER REFRIGERANT SUCTION HOSE
13. DISCONNECT DISCHARGE HOSE SUB-ASSEMBLY
14. REMOVE COMPRESSOR AND MAGNETIC CLUTCH (for 2WD)
15. REMOVE COMPRESSOR AND MAGNETIC CLUTCH (for 4WD)
16. REMOVE V-RIBBED BELT TENSIONER ASSEMBLY



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17. DISCONNECT [RADIATOR HOSE](#)
 - a. Disengage the 2 clamps and disconnect the [radiator](#) inlet hose and radiator outlet hose.

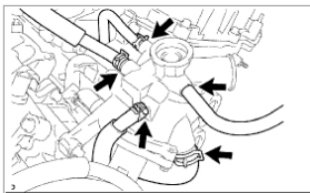
18. REMOVE NO. 1 ENGINE COVER
19. REMOVE INJECTOR DRIVER
20. REMOVE NO. 2 ENGINE COVER



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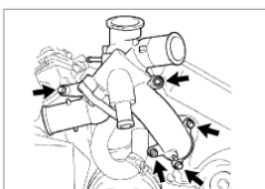
21. REMOVE WATER PUMP PULLEY
 - a. Using SST, hold the water pump pulley. SST 09960-10010 (09962-01000, 09963-00700)
 - b. Remove the 4 bolts and water pump pulley.

22. REMOVE WATER INLET

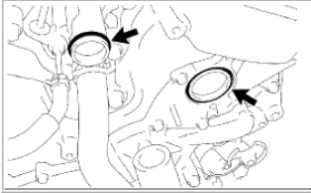


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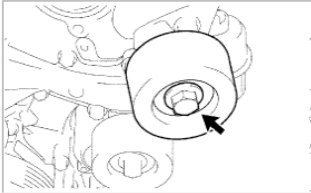
- a. Disconnect the 5 hoses.



b. Remove the 4 bolts, nut and water inlet.

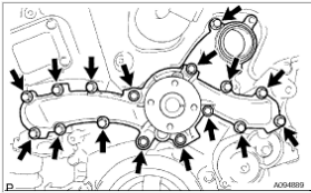


c. Remove the water inlet housing gasket and water outlet pipe O-ring.



23. REMOVE NO. 2 IDLER PULLEY SUB-ASSEMBLY

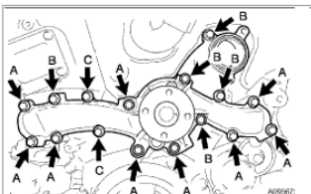
a. Remove the bolt, No. 2 idler pulley cover plate and No. 2 idler pulley sub-assembly.



24. REMOVE WATER PUMP ASSEMBLY

a. Remove the 16 bolts, water pump assembly and water pump gasket.

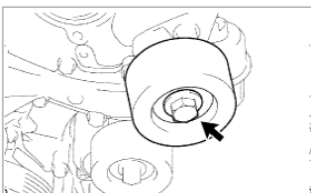
INSTALLATION



1. INSTALL WATER PUMP ASSEMBLY

a. Install a new water pump gasket and the water pump assembly with the 16 bolts. Torque: **21 Nm (214 kgf-cm, 15 ft. lbs.)** for bolts A **9.1 Nm (93 kgf-cm, 81 inch lbs.)** for bolts B and C **NOTICE:**

- Be sure to replace 2 bolts C with new ones or reuse them after applying adhesive 1344.
- Make sure that there is no oil on the threads of the A bolts.



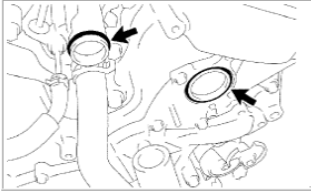
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2. INSTALL NO. 2 IDLER PULLEY SUB-ASSEMBLY

- a. Install the pulley and cover plate with the bolt. Torque: **43 Nm (438 kgf-cm, 32 ft. lbs.)**

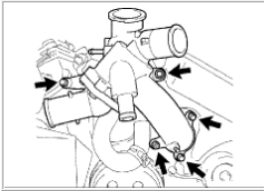
3. INSTALL WATER INLET



Zoom

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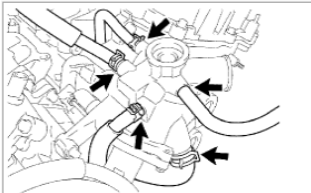
- a. Install a new water inlet housing gasket No. 1 and water outlet pipe O-ring.



Zoom

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- b. Install the water inlet with the 4 bolts and nut. Torque: **10 Nm (102 kgf-cm, 7 ft. lbs.)** NOTICE: Be careful not to allow the O-ring to get caught between parts.



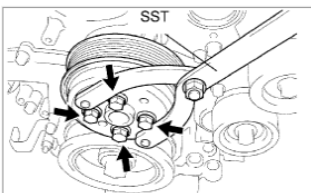
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- c. Connect the 5 hoses.

4. INSTALL WATER PUMP PULLEY

- a. Temporarily install the pulley with the 4 bolts.



Zoom

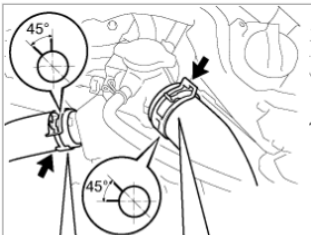
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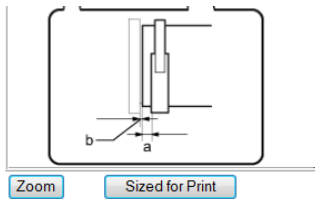
- b. Using SST, hold the pulley and tighten the 4 bolts. SST 09960-10010 (09962-01000, 09963-00700) Torque: **21 Nm (214 kgf-cm, 15 ft. lbs.)**

5. INSTALL NO. 2 ENGINE COVER

6. INSTALL INJECTOR DRIVER

7. INSTALL NO. 1 ENGINE COVER





8. CONNECT [RADIATOR HOSE](#)

a. Connect the [radiator](#) inlet hose and radiator outlet hose to the radiator assembly and secure them with the clips. **HINT:**

- Make sure that the claws on the clips are positioned as shown in the illustration.
 - Dimension a in the illustration (between the hose end and the clip end) should be **less than 1.0 to 5.0 mm**.
 - Connect the hoses until they make contact with each stopper. (Dimension b should be **less than 2.5 mm**).
9. INSTALL V-RIBBED BELT TENSIONER ASSEMBLY
 10. INSTALL COMPRESSOR AND MAGNETIC CLUTCH (for 2WD)
 11. INSTALL COMPRESSOR AND MAGNETIC CLUTCH (for 4WD)
 12. INSTALL OIL FILTER BRACKET SUB-ASSEMBLY (for 4WD)
 13. INSTALL OIL FILTER BRACKET (for 4WD)
 14. CONNECT DISCHARGE HOSE SUB-ASSEMBLY
 15. CONNECT NO. 1 COOLER REFRIGERANT SUCTION HOSE
 16. INSTALL V-RIBBED BELT
 17. INSTALL REAR ENGINE UNDER COVER LH (for 2WD)
 18. INSTALL ENGINE UNDER COVER
 19. INSTALL NO. 1 INLET AIR CLEANER
 20. CONNECT BATTERY TERMINAL
 21. ADD ENGINE OIL
 22. ADD ENGINE COOLANT
 23. CHECK FOR ENGINE OIL LEAKS
 24. CHECK FOR ENGINE COOLANT LEAKAGE
 25. CHARGE REFRIGERANT
 26. START ENGINE
 27. CHECK FOR LEAKAGE OF REFRIGERANT
 28. INSTALL V-BANK COVER SUB-ASSEMBLY
 29. INSTALL COOL AIR INTAKE DUCT SEAL