Disassembly and Assembly SUPPLEMENT FOR 4D32 ENGINE FOR 307 EXCAVATOR Media Number -SENR6234-00 Publication Date -11/01/1995

Date Updated -12/10/2001

Radiator

SMCS - 1353-010

Remove & Install Radiator

Start By:

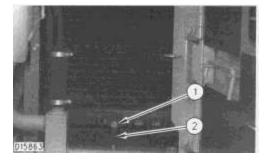
a. remove counterweight *

This operation is in the 307 Excavator Machine Systems Disassembly & Assembly module, SENR6199.

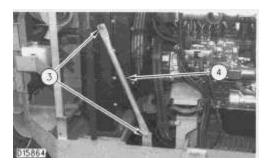


At operating temperature, the engine coolant is hot and under pressure. Steam can cause personal injury. Check the coolant level only after the engine has been stopped and the fill cap is cool enough to touch with your bare hand. Remove the fill cap slowly to relieve pressure in the cooling system. Cooling system conditioner contains alkali. Avoid contact with skin and eyes to prevent personal injury.

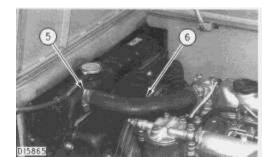
1. Drain the coolant from the cooling system into a suitable container for storage or disposal. The capacity of the cooling system is 14.6 liters (3.8 U.S. gal).



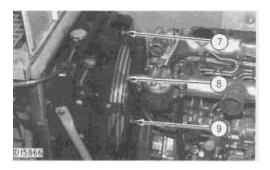
2. Remove hose (2) and drain plug (1).



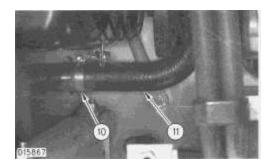
3. Remove two bolts (3) and brace (4).



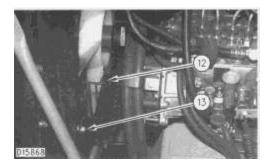
4. Remove two clamps (5) and upper radiator hose (6).



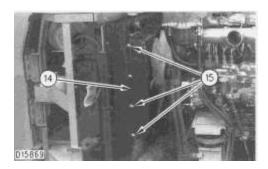
5. Loosen two bolts (9). Remove three bolts (7) and the washers. Remove upper fan guard (8).



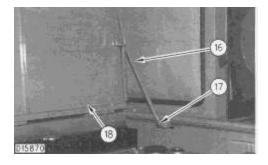
6. Loosen clamp (10), and disconnect lower radiator hose (11) from the radiator.



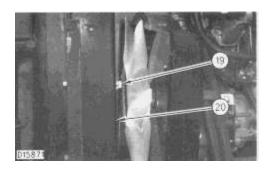
7. Remove three bolts (13), the washers and lower fan guard (12).



8. Remove six bolts (15) and the washers that hold shroud (14) to the radiator. Move the shroud toward the front of the engine over the fan assembly.



9. Remove the bolt and nut (17) from the end of stay rod (16). Move hood (18) out of the way of the radiator.



NOTICE

Do not damage the radiator core when it is removed or installed from the machine.

10. Remove two remaining bolts (19) and the washers that hold radiator core (20) in position. Carefully remove the radiator core by hand.

NOTE: The following steps are for the installation of the radiator.

- 11. Check the condition of the radiator prior to installation. Remove any dirt or debris that may restrict the flow of air through the core. If any of the cooling fins are bent, they should be straightened.
- **12.** Carefully put radiator core (20) in position in the machine. Install two bolts (19) and the washers that hold it.

- 13. Connect stay rod (16) for hood (18) at the back of the cab with the bolt and nut (17).
- 14. Put shroud (14) in position on the radiator. Install six bolts (15) and the washers that hold it.
- 15. Put lower fan guard (12) in position on the shroud. Install three bolts (13) and the washers that hold it.
- **16.** Connect lower radiator hose (11) to the radiator with clamp (10).
- 17. Put upper fan guard (8) in position on the shroud. Install three bolts (7) and the washers that hold it. Tighten two bolts (9) that hold the upper fan guard to the lower fan guard.
- **18.** Install upper radiator hose (6) and two clamps (5).
- 19. Install brace (4) and two bolts (3).
- **20.** Install drain plug (1) and hose (2).
- **21.** Fill the cooling system with coolant to the correct level. See the Operation & Maintenance Manual for the correct filling procedure.

End By:

a. install counterweight *

This operation is in the 307 Excavator Machine Systems Diassembly & Assembly module, SENR6199.