

SERVICE BULLETIN

Original Issue Date: **7/97**
 Model: **10-12RY/RZ CC/CZ**
 Market: **Industrial, Mobile**
 Subject: **Engine Fan Hub Bolts**


Kohler Generator Division has received reports of engine fan hub bolts loosening on 10-12RY/RZ and 10-12CC/CZ generator sets. The affected generator sets are in the serial number range 461000-470001.

During the next scheduled maintenance, annual service, or warranty work, check the torque value of the engine fan hub bolts on 10-12RY/RZ and 10-12CC/CZ generator sets.

Use flat rate #2828 for this repair. Normal warranty policies apply. Submit a Warranty Claim (Form K-1500) and refer to this service bulletin. Perform work during normal service time. Travel time and mileage will not be reimbursed. Removal and reinstallation will be allowed for mobile units already installed; see flat rate manual. Warranty reimbursements for this repair will be honored through July 31, 1998.

Perform the following procedure to remove the radiator from the generator set for access to the fan hub bolts. Observe the following safety precautions while performing this procedure.

Disabling generator set. Accidental starting can cause severe injury or death. Turn generator set master switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on the generator set or connected equipment. The generator set can be started by an automatic transfer switch or remote start/stop switch unless these precautions are followed.

⚠ WARNING

<p>Hot coolant and steam. Can cause severe injury or death.</p> <p>Before removing pressure cap, stop generator set and allow it to cool. Then loosen pressure cap to relieve pressure.</p>



Accidental starting. Can cause severe injury or death.

Disconnect battery cables before working on generator set (disconnect negative lead first and reconnect it last).

Checking coolant level. Hot coolant can cause severe injury or death. Allow engine to cool. Release pressure from cooling system before opening pressure cap. To release pressure, cover the pressure cap with a thick cloth; then slowly turn it counterclockwise to the first stop. Remove cap after pressure has been completely released and the engine has cooled. Check coolant level at tank if generator set is equipped with a coolant recovery tank.

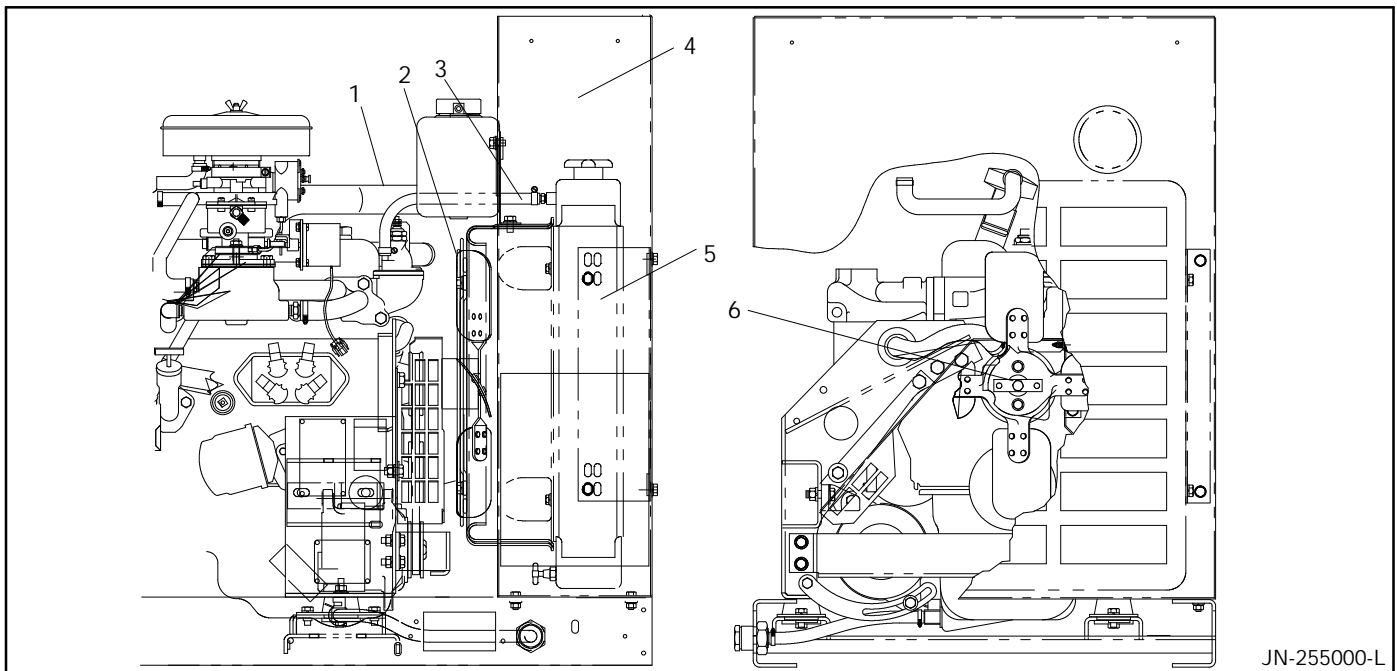
Routing	Service Manager	Sales Manager	Parts Manager	Technician No. 1	Technician No. 2	Technician No. 3	Return This to
Initial Here							

10-12RY/RZ

1. Place the generator set master switch in the OFF position.
2. Disconnect the generator set engine starting battery, negative (-) lead first.
3. Allow the generator set to cool. Drain the coolant into a suitable container.
4. Remove the top, left, and right radiator guards.
5. Disconnect the upper and lower radiator hoses from the radiator.
6. Disconnect hose from the thermostat housing to radiator from the radiator.
7. Disconnect coolant level switch lead from switch in radiator, if equipped.
8. Remove wire fan guard from radiator shroud.
9. Disconnect and remove radiator assembly from generator set skid.
10. Remove fan by removing two fan bolts and fan support strap and bolt.
11. Verify bolts securing fan spacer to water pump are torqued to 72 in. lbs. (8 Nm). See Figure 3.
12. Reinstall fan onto fan spacer. Install and torque two outside fan bolts to 108 in. lbs. (12 Nm).
13. Install center fan bolt and strap. Torque center fan bolt to 168 in. lbs.(19 Nm).
14. Reinstall radiator assembly to generator set skid.
15. Reinstall wire fan guard to radiator shroud.
16. Reconnect coolant level switch lead to switch in radiator, if equipped.
17. Reconnect hose from the thermostat housing to the radiator.
18. Reconnect upper and lower radiator hoses to the radiator.
19. Reinstall the left, right, and top radiator guards.
20. Close the petcock valve on the bottom of the radiator.
21. Fill the cooling system with fresh coolant. Dispose of all waste materials (engine oil, fuel, coolant, etc.) in an environmentally safe manner. Contact local authorities for disposal procedures and location.
22. Check that the generator set master switch is in the OFF position.
23. Reconnect the generator set engine starting battery, negative (-) lead last.
24. Test run the generator set for a few minutes and check for leaks.
25. Stop generator set and tighten connections to stop leaks, if required.
26. Allow generator set to cool and check radiator coolant level. Add coolant if required.

NOTE

Pay special attention to the coolant level. After draining the coolant, allow time for complete refill of the engine water jacket. Check coolant level as prescribed in the Prestart Checklist of the Operation Manual.



1. Upper radiator hose
2. Wire fan guard
3. Thermostat housing hose

4. Radiator guards
5. Radiator assembly
6. Engine fan bolts

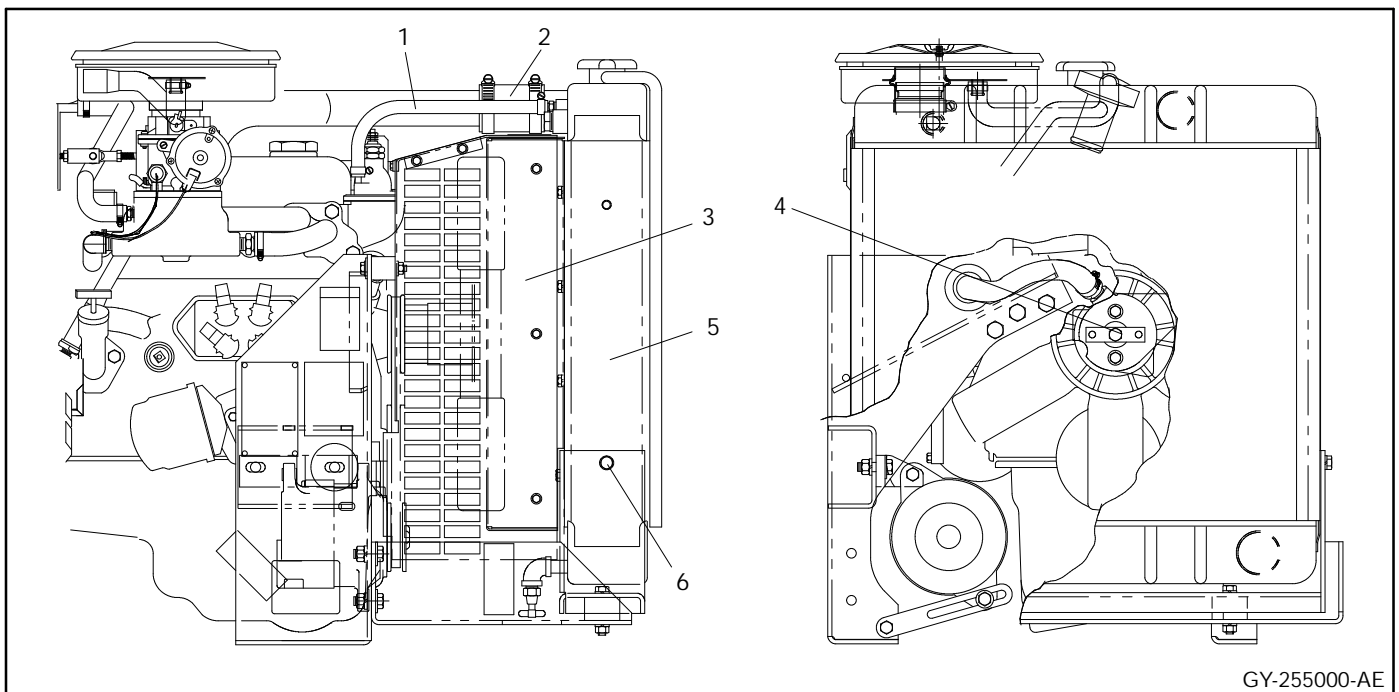
Figure 1. 10-12RY/RZ Radiator Assembly

10-12CC/CZ

1. Place the generator set master switch in the OFF position.
2. Disconnect the generator set engine starting battery, negative (-) lead first.
3. Allow the generator set to cool. Drain the coolant into a suitable container.
4. Remove generator set from compartment, if required.
5. Remove the left, right and top of the fan and belt guards.
6. Disconnect the upper and lower radiator hoses from the radiator.
7. Disconnect the hose from the thermostat housing to the radiator from the radiator.
8. Disconnect and remove radiator from radiator mounting brackets.
9. Remove fan by removing two fan bolts and fan support strap and bolt.
10. Verify bolts securing fan spacer to water pump are torqued to 72 in. lbs. (8 Nm). See Figure 3.
11. Reinstall fan onto fan spacer. Install and torque two outside fan bolts to 108 in. lbs. (12 Nm).
12. Install center fan bolt and strap. Torque bolt to 168 in. lbs. (19 Nm).
13. Reinstall radiator assembly to generator set skid.
14. Reconnect hose from the thermostat housing to the radiator.
15. Reconnect upper and lower radiator hoses to the radiator.
16. Reinstall the top, left, and right sides of the fan and belt guards.
17. Reinstall generator set in compartment, if required.
18. Close the petcock valve on the bottom of the radiator.
19. Fill the cooling system with fresh coolant. Dispose of all waste materials (engine oil, fuel, coolant, etc.) in an environmentally safe manner. Contact local authorities for disposal procedures and location.
20. Check that the generator set master switch is in the OFF position.
21. Reconnect the generator set engine starting battery, negative (-) lead last.
22. Test run the generator set for a few minutes and check for leaks.
23. Stop generator set and tighten connections to stop leaks, if required.
24. Allow generator set to cool and check radiator coolant level. Add coolant if required.

NOTE

Pay special attention to the coolant level. After draining the coolant, allow time for complete refill of the engine water jacket. Check coolant level as prescribed in the Prestart Checklist of the Operation Manual.

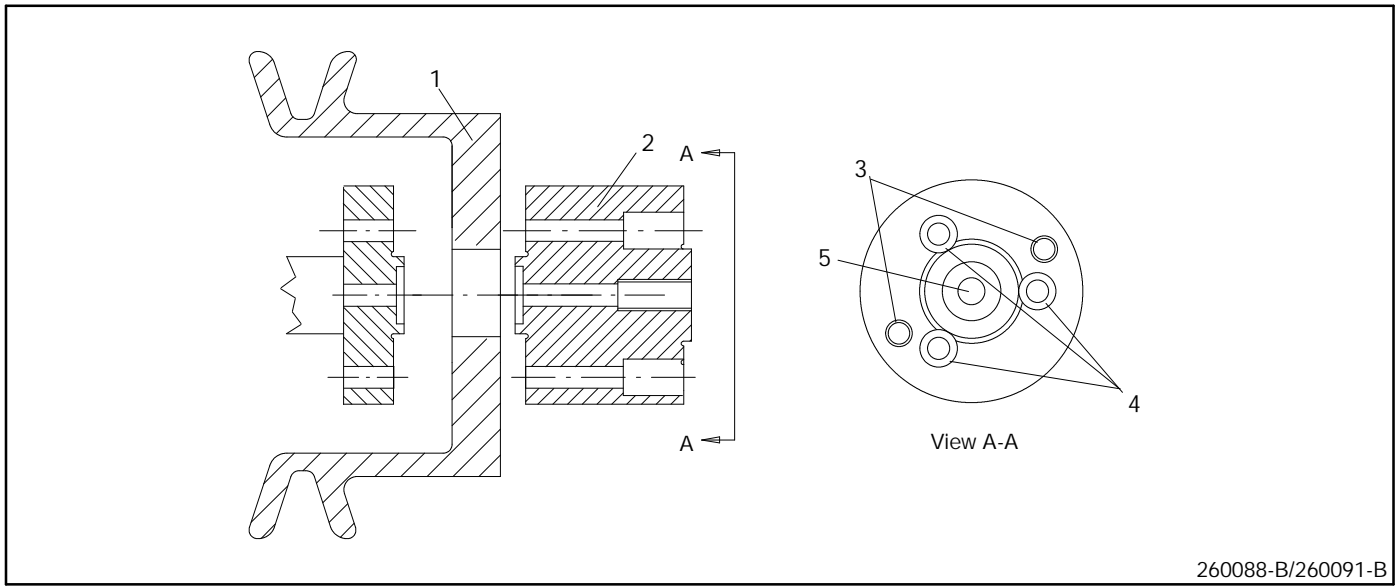


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1. Thermostat housing hose
2. Upper radiator hose
3. Fan and belt guard

4. Engine fan bolts
5. Radiator assembly
6. Radiator mounting bracket bolt

Figure 2. 10-12CC/CZ Radiator Assembly



260088-B/260091-B

- 1. Water pump pulley
- 2. Fan spacer
- 3. Fan mounting bolt holes

- 4. Fan spacer bolt holes
- 5. Bolt and strap hole

Figure 3. Engine Fan Hub