

TO: SERVICE MANAGER TECHNICIANS
PARTS MANAGER

No. 95-14

Cooling Systems Maintenance

Models

All Hino diesels

Situation

A build up of silicate will occur in the cooling system over time if system is not maintained annually. This silicon build up from the coolant coats the bundles in the heat exchanger and reduces the efficiency of the heat exchanger.

Recommendation

It is recommended to clean the cooling system every year. Use a suitable coolant system cleaning solution to do this.

1. Add cleaning solution to cooling system and run engine for 30 minutes to circulate. Drain system when engine cools down.
2. Flush the cooling system with plain water to get all the contaminants out of system.

IMPORTANT: Premix coolant and distilled water to 50/50 mixture OUTSIDE of the engine. A low silicate antifreeze like the Quicksilver Premixed Marine Engine Coolant (P/N 92-813054A2) is recommended.

3. Fill the system slowly to help purge the air from the cooling system. When system is full, open the turbocharger vent screw to purge any air that could be trapped in the system.
4. Check coolant level in the heat exchanger and add if necessary.
5. Start the engine. Operate at 2000 RPM, to allow engine to slowly reach operating temperature. Do not operate at full throttle. Bring engine speed back to idle, shut engine off and allow to cool.
6. Open the turbocharger vent screw, again. An air-free stream of coolant will flow from the vent screw when the air has been purged from the system.
7. Recheck the coolant level in the heat exchanger. Tighten all drains securely.

Run the boat and verify that the overheat condition has been eliminated. If the problem still exists then the heat exchanger bundle must be removed and taken to a radiator shop to be cleaned. After the heat exchanger is removed, it is recommended all gaskets that were disturbed be replaced, to avoid possible leaks.