

SMCS - 1064

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**Note:** An aftercooler that circulates fresh water or treated water may require cleaning less often than an aftercooler which circulates salt water. The maintenance interval for an aftercooler which circulates fresh water or treated water should be evaluated when the aftercooler is cleaned and tested after the first 1000 hours of engine operation. The interval will vary depending on operating conditions.

## Clean the Aftercooler Core

Remove the core. Refer to the Disassembly and Assembly Manual, "Aftercooler - Remove" for the procedure.

1. Turn the aftercooler core on one side to remove debris. Remove the debris that is accessible.

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### NOTICE

**Do not use a high concentration of caustic cleaner to clean the core. A high concentration of caustic cleaner can attack the internal metals of the core and cause leakage. Only use the recommended concentration of cleaner.**

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2. Back flush the core with cleaner.

Caterpillar recommends the use of Hydrosolv liquid cleaner. Table 1 lists Hydrosolv liquid cleaners that are available from your Cat dealer.

Hydrosolv Liquid Cleaners <sup>(1)</sup>		
Part Number	Description	Size
1U-5490	Hydrosolv 4165	19 L (5 US gal)
174-6854	Hydrosolv 100	19 L (5 US gal)

Table 1

<sup>(1)</sup> Use a two to five percent concentration of the cleaner at temperatures up to 93°C (200°F). Consult your Cat dealer for more information.

3. Steam clean the core to remove any residue. Flush the fins of the aftercooler core. Remove any other trapped debris from the inside and from the outside of the core.

**Note:** Do not use high pressure when the fins are cleaned. High pressure can damage the fins.

4. Wash the core with hot, soapy water.

5. Flush the core thoroughly to remove residue and remaining debris. Flush the core with clean, fresh water until the water that is exiting the core is clear and free of debris.



### WARNING

**Personal injury can result from air pressure.**

**Personal injury can result without following proper procedure. When using pressure air, wear a protective face shield and protective clothing.**

**The maximum air pressure for cleaning purposes must be reduced to 205 kPa (30 psi) when the air nozzle is deadheaded.**

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6. Dry the core with compressed air. Direct the air in the reverse direction of the normal flow.

**Note:** Remove, discard, and replace all simrit seals in the compressor outlet piping.

## Test the Aftercooler Core

1. Inspect the core for trapped debris and cleanliness. If necessary, remove the debris and repeat the cleaning procedure.
2. Inspect the core for damage and perform a pressure test to detect leaks. Many shops that service radiators are equipped to perform pressure tests.
3. Plug both ends of the aftercooler core and pressurize the core to 205 kPa (30 psi). Submerge the core in water. Look for bubbles which are being emitted from the core. The bubbles are evidence of leaks.

4. If any leaks are found, do not attempt to repair the core.

Install a core that is clean and a core that passes the pressure test in step 3. Refer to the Disassembly and Assembly Manual, "Aftercooler - Install" for the procedure.

For more information on cleaning the core, consult your Cat dealer.

2XR1-UP, 3GS1-UP, 6BW1-UP, 9HP1-UP, 9WR1-UP, 9ZF1-UP, AX21-UP, AX31-UP, C1J1-UP, C1Z1-UP, C7B1-UP, C7D1-UP, C7P1-UP, C7X1-UP, C7Z1-UP, C931-UP, C9A1-UP, C9B1-UP, C9Y1-UP, CA91-UP, CKH1-UP, CP91-UP, CSN1-UP, CYG1-UP, CYN1-UP, DDS1-UP, DES1-UP, DSJ1-UP, DTP1-UP, GBM1-UP, GEN1-UP, GES1-UP, GEX1-UP, GM21-UP, GM31-UP, GPN1-UP, GPS1-UP, GTB1-UP, HAZ1-UP, HPT1-UP, J2K1-UP, JHL1-UP, JKX1-UP, JLE1-UP, K1M1-UP, KJT1-UP, M7A1-UP, M7G1-UP, MG41-UP, MGS1-UP, MX41-UP, NAX1-UP, NAY1-UP, NBB1-UP, NFL1-UP, P7L1-UP, PC71-UP, PGN1-UP, PGZ1-UP, PHW1-UP, PLE1-UP, PPM1-UP, PWT1-UP, PYZ1-UP, RLA1-UP, RNC1-UP, RND1-UP, RNE1-UP, RNF1-UP, RNR1-UP, RNX1-UP, RNY1-UP, RNZ1-UP, RPM1-UP, RSD1-UP, RTK1-UP, RXB1-UP, SDN1-UP, SJB1-UP, SLT1-UP, SSM1-UP, SSW1-UP, SWE1-UP, T2P1-UP, T2R1-UP, T3T1-UP, TNA1-UP, TPJ1-UP, WJB1-UP, WKB1-UP, X9X1-UP, X9Y1-UP, Z9X1-UP, ZP21-UP, ZP31-UP

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