

ANTIFREEZE LIQUID

SPECIALLY FORMULATED LIQUID ANTIFREEZE, BASED ON MONO-ETHYLENE GLYCOL. WHEN MIXED WITH THE COOLING WATER LOWERS THE FREEZING POINT

FEATURES & BENEFITS:

- An easy-to-use liquid based on mono-ethylene glycol
- Excellent stability with hard water
- Contains no silicates or other mineral salts that will form sludge
- Very good compatibility with seals
- Does not contain harmful components such as silicates, phosphates, amines and borates
- In combination with NCLT an excellent protection of all metals which are present in the modern engine and in the cooling systems
- Will not affect the hoses and gaskets
- Very good resistance against foaming
- Excellent protection against aluminum cylinder heads

APPLICATIONS:

ANTIFREEZE LIQUID is recommended for almost all cooling systems of internal combustion engines and other heat transfer systems. ANTIFREEZE LIQUID can safely be used in cooling systems manufactured from cast iron, aluminum or a combination of these.

DIRECTIONS FOR USE:

ANTIFREEZE LIQUID can be used throughout the year in cooling systems. ANTIFREEZE LIQUID still needs to be diluted with good quality make-up water in the recommended ratio. Fill the reservoir in accordance with the following table:

| Resistant to: | Parts product | Parts water |
|---------------|---------------|-------------|
| -5°C | 1 | 3 |
| -10°C | 1 | 2 |
| -20°C | 1 | 1 |
| -40°C | pure | |

STANDARD PACKING

ANTIFREEZE LIQUID is usually available in plastic cans of 25 L and plastic drums of 200 L.

APPLICATIONS:

AIRCOOLERCLEANER can be applied by immersion, circulation or injection. For immersion and circulation, cleaning time is reduced considerably by heating the chemical to maximum 50°C. If the air coolers are very dirty it may be advisable to use undiluted product by means of circulation method to thoroughly clean the system before commencing AIRCOOLERCLEANER injection treatment.

IMMERSION METHOD

(Generally, AIRCOOLERCLEANER is used undiluted).

The dismantled parts to be cleaned are laid in a tank specially designed for the purpose, which has been filled with undiluted AIRCOOLERCLEANER. Movement is achieved by means of compressed air. Wash surface with high-pressure water hose or compressed air. The product can be reused for several cleanings. Cleaning time: 5-12 hours.

CIRCULATION METHOD

For in-place cleaning - generally AIRCOOLERCLEANER is used undiluted. See figure A.

Arrange to collect AIRCOOLERCLEANER at bottom of unit with drain back to drum.

1. Circulate by pump and/or spray (airless spray or steady low-pressure flow - do not atomise) on deposits through access doors. A perforated pipe placed between tubes is effective for reaching normally inaccessible tubes.
2. Thoroughly saturate deposits and allow to stand for one hour minimum.
3. Wash off with high-pressure water hose and drain to collecting tank.
4. Dry with compressed air.

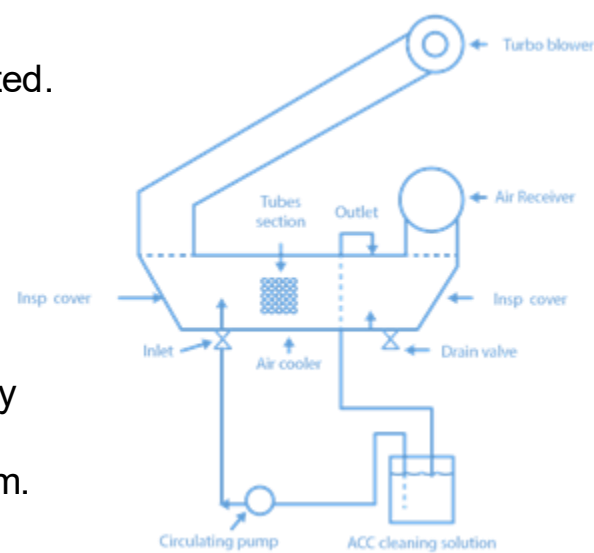


Figure A

CLEANING FUEL OIL HEATERS OR LUBE OIL COOLERS

See figure B.

For best results AIRCOOLERCLEANER should be circulated through the heat exchange unit for 6-8 hours, depending on the amount of deposits present and the length of time since the last cleaning. When the product is used as a preventive maintenance item periodically, circulating times can be substantially reduced.

AIRCOOLERCLEANER solution can be saved and reused until it becomes thoroughly contaminated. Flushing unit with kerosene before using AIRCOOLERCLEANER will prevent excessive dilution. During cleaning, solids may accumulate in reservoir drum. These solids may be removed by allowing the solution to settle and decanting clean liquid from the top. When cleaning action of AIRCOOLERCLEANER has been reduced by excessive dilution with fuel oil, the material can then be dumped into the bunker tanks and then burned.

For circulating AIRCOOLERCLEANER a pump with a large discharge volume should be used to insure rapid flow through the unit. A 50 or a 200 L drum fitted with a wooden cover containing an opening for the discharge pipe can be used as a reservoir. Use enough product to fill the unit, piping and enough additional material to keep the reservoir one third full. Take pump suction from the reservoir and discharge into the lowest connection on the heat exchanger. Pipe the overflow from the highest point on the heat exchanger back into the reservoir.

A fine mesh screen should be adapted to the reservoir return to remove large pieces, which become dislodged during the cleaning operation. To avoid the dislodging of loosened particles, a method of back-flushing can be used as indicated in schematic drawing showing recommended hood-ups for use of AIRCOOLERCLEANER.

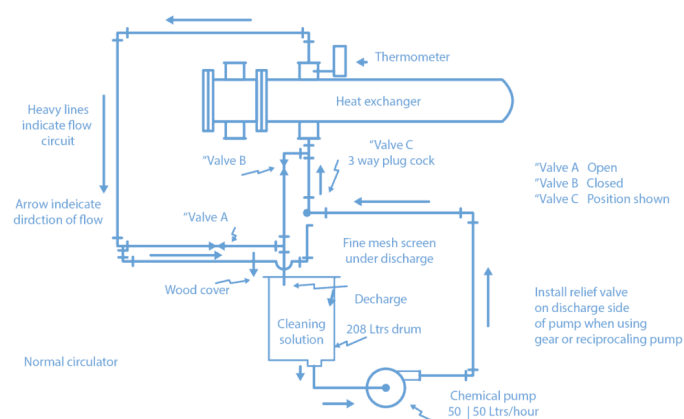


Figure B

INJECTION METHOD USING AIR COOLER CLEANER (DAILY) UNDERWAY

Dilute with water as per dosage diagram. See figure C.

Simple, safe application AIRCOOLERCLEANER is provided by use of the SHERAN CHEMICALS AIRCOOLERCLEANER Injection System. This system consists of a steel 6 L dosage tank, complete with all necessary valves, an atomizer and required fittings for 6x8 mm copper tubing. The dosage tank may be installed in any appropriate place in the engine room. Copper tubing (6x8 mm) is fitted from the dosage tank to the atomizer, from the dosage tank to the casing on the pressure side of the turbo blower (equalising line), and from the ships compressed air system to the atomizer.

By means of SHERAN CHEMICALS special AIRCOOLERCLEANER Injection system a mixture of AIRCOOLERCLEANER and fresh water in a ratio of 1:3 (observe the mixture ratio exactly) is injected into the air channel between the turbo blower and the air cooler. This is followed by a second injection of fresh water only.

Injection procedure as per the injection system diagram is as follows:

1. Fill the dosing tank with the required quantity of AIRCOOLERCLEANER freshwater mixture. Close the tank.
2. Open valve 1 (compressed air for atomizer).
3. Open valve 2 and 3; following equalisation of pressure to the scavenging air line the AIRCOOLERCLEANER / freshwater mixture is injected in about 5-10 minutes.
4. Close valves 1, 2 and 3.
5. Open valve 4 to vent air from the tank.
6. Fill the tank with fresh water. Close the tank. Repeat steps 2-5.

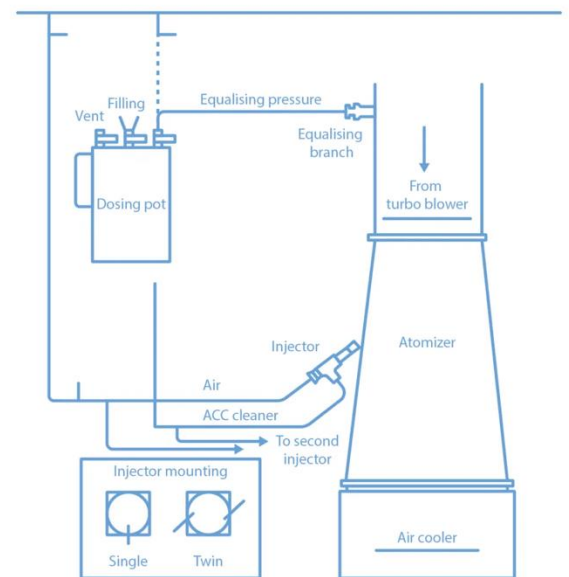


Figure C

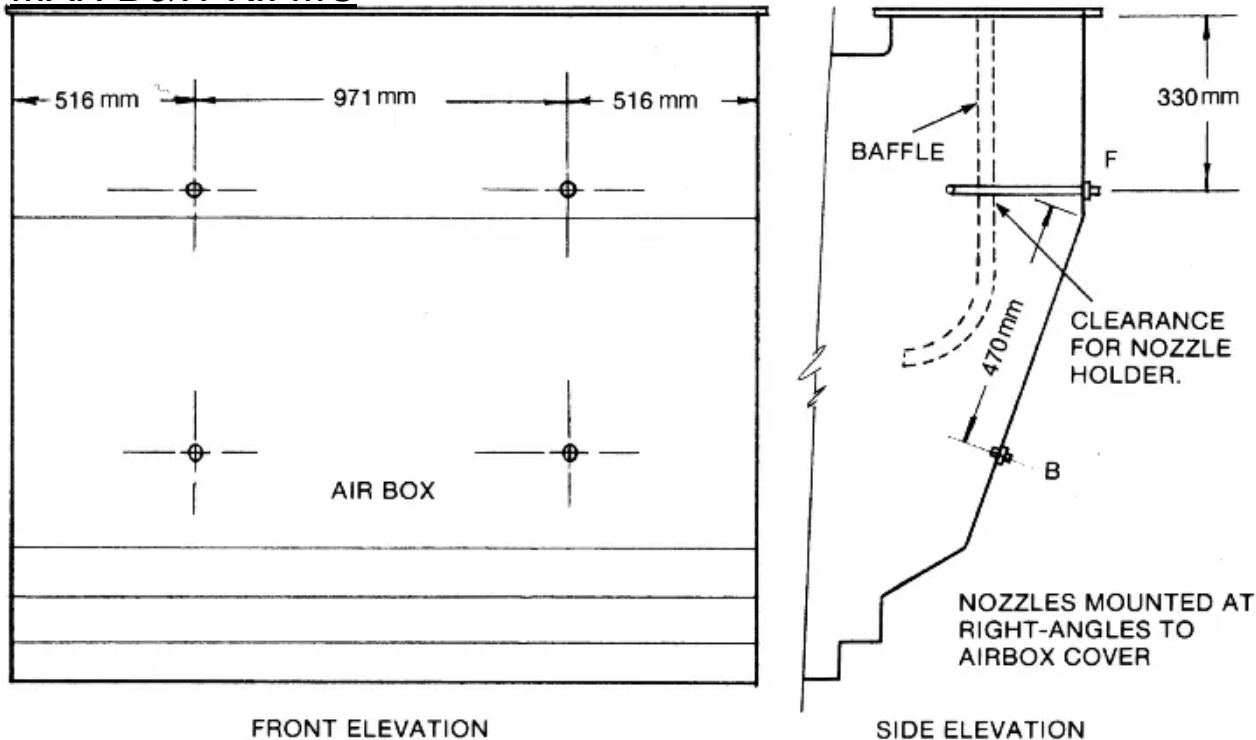
STANDARD PACKING:

AIRCOOLERCLEANER is usually available in steel drums of 25 L.

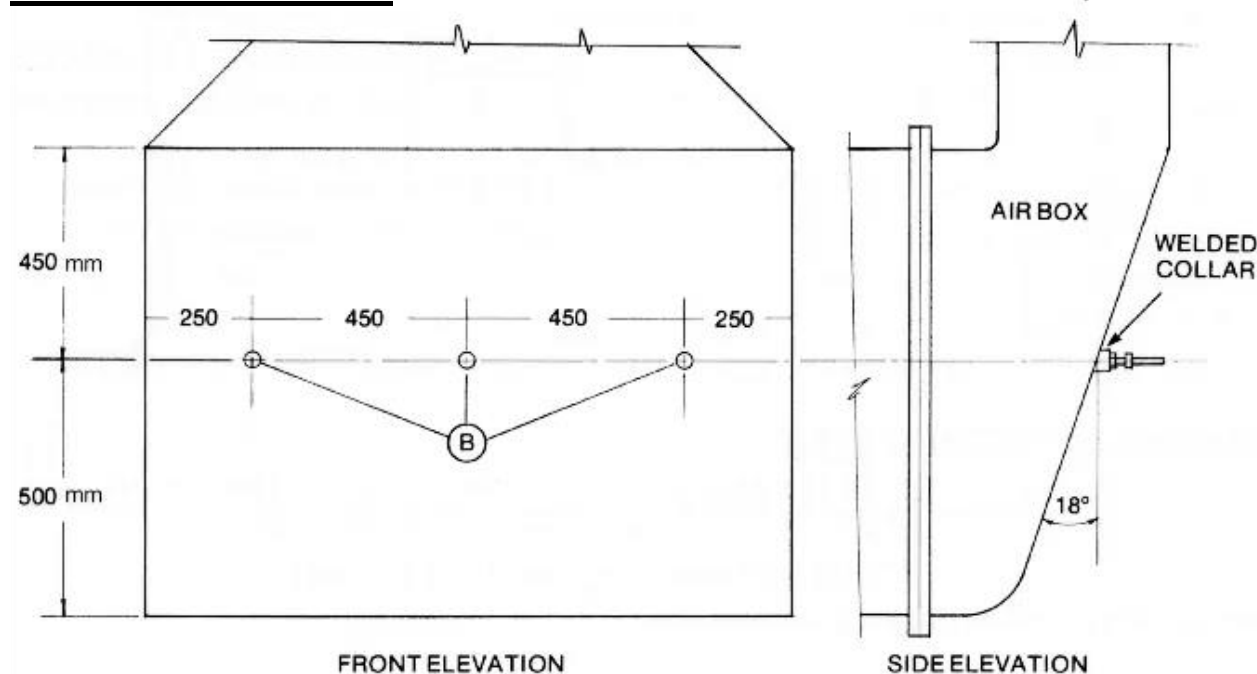
INSTALLATION DRAWINGS:

These installation drawings are only a guide for typical installations. Air trunking dimensions, configuration and baffles arrangement may differ between engines of the same model. Physical inspection is necessary to ensure that nozzles are correctly sited and installed. These drawings are not to scale. All dimensions are in millimeters.

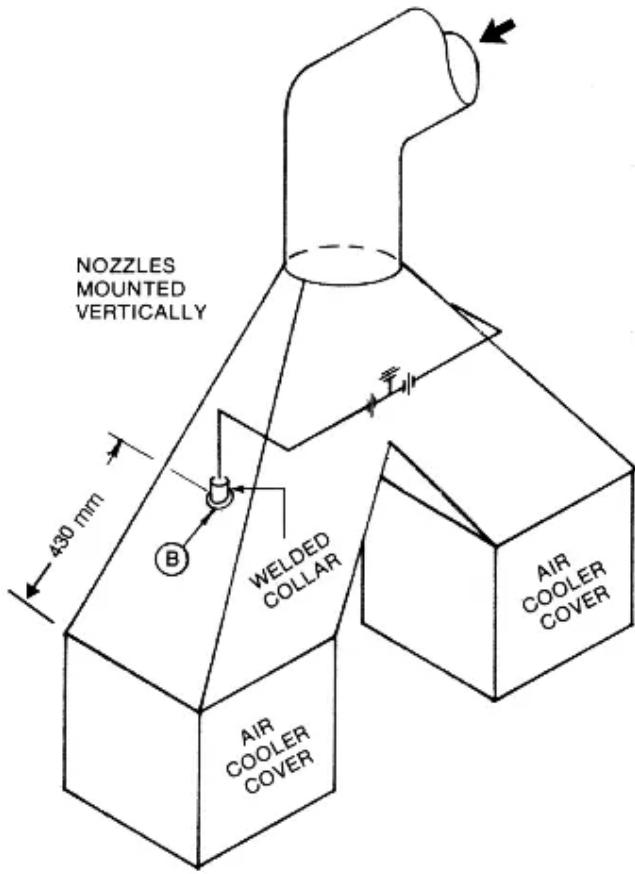
MAN B&W K.. MC



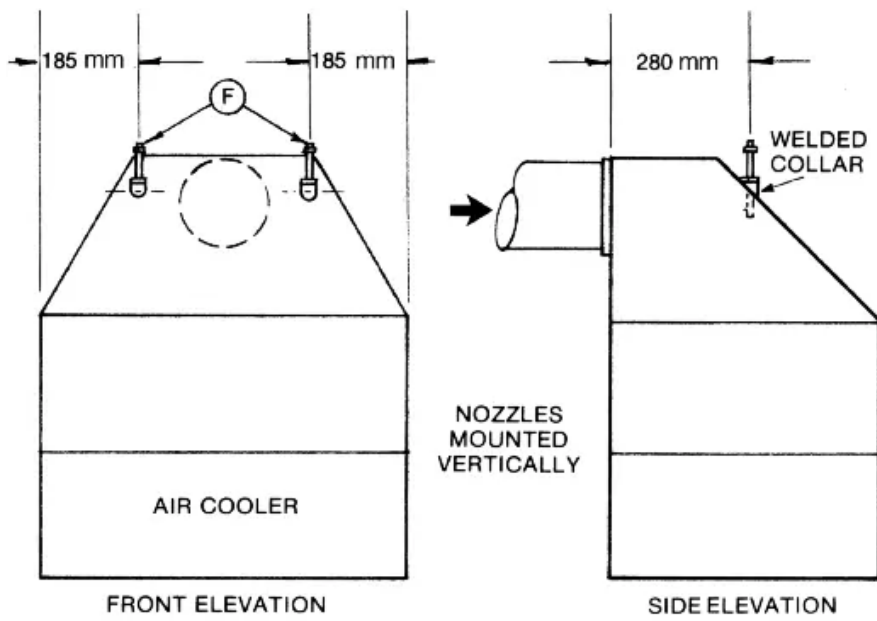
MAN B&W L/S.. MC



STORK-WÄRTSILA 20TM410



DEUTZ TBD 234V8



PIELSTICK

