

**Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.**

## Description

DH series mobile oil coolers are used for high-efficiency oil cooling in hydraulic systems. Units utilize the latest in heat transfer technology to reduce the physical size and provide the ultimate in cooling capacity. By maintaining a lower oil temperature, hydraulic components and fluids work better and have a longer life expectancy.

## General Safety Information

1. **Do not exceed** the pressure rating of the oil cooler, nor any other component in the hydraulic system.
2. **Do not exceed** the published maximum flow rates as the potential can result in damage to the hydraulic system.
3. Release all oil pressure from the system before installing or servicing the oil cooler.
4. These oil coolers are **not** suitable for use in hydraulic systems operating with water-glycol or high water base fluids without a corrosion inhibitor suitable for aluminum and copper component protection.

**Unpacking** After unpacking the unit, inspect for any loose, missing or damaged parts. Any minor damage to the cooling fins can generally be corrected by gently straightening them.

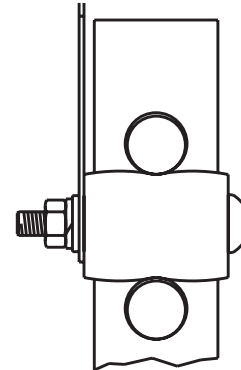
## Installation

**WARNING Do not exceed the maximum pressure of 300 PSI, or the maximum temperature of 350°F as oil cooler failure can occur.**

1. These hydraulic oil coolers should be installed on either the low pressure return line, or a dedicated recirculation cooling loop.
2. Turn off the hydraulic system and drain any oil from the return lines before installing these coolers.
3. Installation of a fast acting relief/bypass valve is recommended to protect the oil cooler from excessive pressure and/or oil flow rates.
4. These coolers are normally installed in front of the engine radiator to obtain the coolest possible air flow.
5. There are no restrictions as to how the unit may be mounted; however, the unit must be flooded with oil to obtain the full cooling potential.
6. Mount the unit with the brackets\* by installing them between any two adjacent exchanger tubes. Use the most convenient tubes for your specific location. See figure 1 below for details.

**Figure 1**  
**Shock Mounting Kit**

*\*(brackets are optional)*



**CAUTION** If pipe sealant is used on threads, the degree of resistance between mating parts is less, and there is an increased chance for cracking the heat exchanger fittings. Do not overtighten.

## Operation

Once unit is installed, the system may be operated normally. If the source of cooling air is other than the main engine fan, be sure that the fan is running.

## Maintenance

1. Performance information should be noted on newly installed units so that any reduction in effectiveness can be detected.
2. Inspect the unit regularly for corrosion and dirty or clogged heat transfer surfaces. Dirt and dust can be removed by washing, brushing, or blowing out with compressed air. A steam cleaner is also effective in cleaning dirty or greasy surfaces. **Do not use caustic cleaners.**
3. The oil chamber may become filled with sludge accumulation and require cleaning. It is recommended that the unit be flooded with a commercial solvent, and left to soak for one-half hour. Repeated soakings and back flowing may be required, depending on the amount of sludge accumulated.

## Trouble Shooting Chart

Symptom	Possible Cause	Corrective Action
Not cooling adequately	Not enough air flow	Consult specifications and adjust if required
	Unit is fouled	Clean exchanger (see maintenance)
	Unit is undersized	Check specifications and change size if necessary
Leaking at connections	Not tight	Tighten carefully
	No thread sealant	Remove pipe, apply thread sealant and reinstall