

Closed-loop Cooling System

Instructions for the internal cleaning of engine glycol systems

Engine coolant system cleaning instructions.

Why should I use Trac's Descaler Concentrate™?

• Scale deposits in an engine's coolant system can dramatically reduce heat transfer. As little as 1/64" of scale build-up can reduce system efficiency by as much as 15%. Although there are many descalers on the market today, most are Hydrochloric acid based and can easily damage a engine. Only *Trac's Descaler Concentrate™* can safely remove scale, rust and lime build-ups from deep within the system, *Trac's Descaler Concentrate™* is 100% biodegradable, safe to both user and equipment, and is completely non-toxic.

How much Trac's Descaler™ do I need?

• To determine how much *Trac's Descaler Concentrate*™ you need, simply multiply the appropriate percentage (from the table below) by the coolant capacity (available through your engine manufacturer).

Build Up	Description	%
Light Scale	Deposits are light in color.	2.5%
Heavy Scale	Rust color throughout the system.	5%



When to use Trac's Descaler Concentrate™?

- As a general rule of thumb, flushing your water system once every three years is considered to be good preventative maintenance. This is even more important when the condition of the coolant is not monitored on a regular base.
- When the engine is overheating and the raw water side has been found to be clean
- If you notice a change in the coolants color, smell, or flow, chances are scale build up is to blame. Left untreated, overtime the engine will overheat.

Cleaning Instructions:

- Completely drain the coolant from engine; making certain to drain all low lying areas and both sides of thermostat.
- Fill engine with fresh water and run for 15 minutes making certain the thermostat opens, then drain completely. Repeat until only clean water drains from the engine.
- Fill the system with a premixed solution of water and Trac's Descaler Concentrate using the concentration chart above.
- Run engine or provide some means of recirculation for 4 hours making certain thermostat opens.
- Drain solution
- Fill engine with fresh water and run for 15 minutes making certain thermostat opens, then drain completely. Repeat until only clean water drains from the engine.
- In a separate bucket, mix 1/4 Lbs. of soda ash for every gallon of water. Fill engine with solution and run for 15 minutes making certain thermostat opens, then drain completely. This will neutralize any remaining descaler in the system. (this step is required by ALL descalers and although important, it is often overlooked. ANY acid, mild or harsh, left in a system will react with the engines coolant and will result in the breakdown of the coolant.)
- Fill the system with the recommended coolant. Done!