

DRY SYSTEMS TECHNOLOGIES®

OPERATION AND MAINTENANCE MANUAL

DST DRY SYSTEM®

SECTION F  
COOLING SYSTEM FILLING  
PROCEDURE

**To be performed by the machine operator**

M301-021-01

DRY SYSTEMS TECHNOLOGIES®

[WWW.DRYSYSTEMSTECH.COM](http://WWW.DRYSYSTEMSTECH.COM)

Phone: 630-427-2051 \* Fax: 630-427-1036

E-mail: [eng@drysystemstech.com](mailto:eng@drysystemstech.com)

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## OPERATION AND MAINTENANCE MANUAL PART F, M301-021-01

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### COOLING SYSTEM FILLING PROCEDURE FOR THE DST DRY SYSTEM™

The DST Dry System™ is fitted with a cooling system that incorporates a surge tank, a recovery bottle, and several vent lines to assure that the system has no trapped air. The system is self purging, once it is filled initially. As with all cooling systems, a mixture of 50% ethylene glycol and 50% treated (clean) water should be used for best performance. Never add untreated mine water to the cooling system. The following is the filling procedure for the system.

#### COOLING SYSTEM FILLING PROCEDURE

- Carefully open the pressure cap on the surge tank, after the system has cooled down and is not under pressure. (There is no radiator cap on the radiator itself) CAUTION: DO NOT ATTEMPT TO OPEN PRESSURE CAP WHEN COOLANT IS STILL HOT OR UNDER PRESSURE. INJURY OR BURNS COULD RESULT.
- Add a mixture of 50% Ethylene Glycol and 50% filtered water, or a 50/50 premixed solution into the surge tank, until the tank is completely full and the vent lines are filled with coolant.
- Replace the pressure cap firmly and start the engine. Idle for 1-2 minutes to purge the remaining air from the system. Check for leaks.
- Carefully open the pressure cap on the surge tank and top off the surge tank with a mixture of 50% Ethylene Glycol and 50% filtered water.
- Repeat steps 3 and 4 if necessary.
- Replace the pressure cap firmly. Fill the overflow bottle one quarter way with a mixture of 50% Ethylene Glycol and 50% filtered water
- Check the coolant level after about one hour of operation. If coolant is significantly lower, the cause for the coolant loss must be investigated. A normal loss in coolant due to temperature changes will be compensated by a rise or drop of the coolant in the overflow bottle. The surge tank should never contain air.

CAUTION: DO NOT ATTEMPT TO OPEN PRESSURE CAP WHEN COOLANT IS STILL HOT OR UNDER PRESSURE. INJURY OR BURNS COULD RESULT. DO NOT OPERATE SYSTEM WITH LOW COOLANT. ENGINE DAMAGE MAY RESULT. USE ONLY A MIXTURE OF 50% ETHYLENE GLYCOL AND 50% CLEAN (FILTERED) WATER AS COOLANT. NEVER ADD MINE WATER TO THE COOLING SYSTEM.