

Liquids for the RFS-500 can be supplied by filling the included 6 liter containers, or by connecting tubing to other sources.

The refilling process has three main steps:

1. Old coolant is forced from the assembly using a liquid rinse
2. The rinse is evacuated using compressed air
3. New coolant is pumped into the system

A residual amount of rinse liquid may persist in a cooling system after air purging. Therefore, the type of liquid used for rinsing should be compatible in the short-term with the flushed components and replacement coolant. For Koolance products and coolant, tap water is generally fine.

NOTE: Tap water sources with high hardness (mineral levels) used for rinsing may decrease the lifespan of the RFS-500 unit more rapidly. Consider filtered water as an alternative.

6L Liquid Container Supply

The 6L containers are keyed to the "Rinse" and "Refill" positions on the RFS-500. They are not interchangeable.

The containers attach to the RFS-500 simply by pushing down so their bottom fittings engage. Be sure each container is on the correct side of the RFS-500 before installing them.

Temporarily install the containers onto the refilling station so they can be identified (Rinse vs. Refill).



Consider labeling the containers once they are identified. Detach both from the RFS-500 by pulling down on the female fitting's lock ring.

Fill the containers with the desired rinse and coolant liquids. Reattach them to the RFS-500.



Before operating the refilling station, unscrew the air relief ports on both 6L containers.

Alternative Liquid Supplies

Rinse and refilling liquids can alternatively be drawn from other containers by connecting directly to the RFS-500 supply fittings.



Two Koolance QD4 male fittings (not included) should be purchased for external containers which match the intended tubing size.

When connecting to external liquid sources, the refilling station's pumps may need assistance during initial priming. Temporarily position the RFS-500 so it is lower than the supply containers. After a small quantity of liquid has been pushed through each pump (See "Operation"), the refilling unit can be elevated.

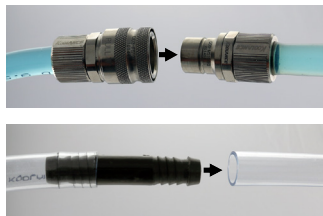


Compressed Air Connection

A push-connection in front accepts an 8mm (5/16in) OD tube for purging the rinse liquid. **Compressed air being supplied must not exceed 5kgf*cm2 (71psi).**

Outlet Liquid Connection

A QD3 female quick disconnect fitting (not included) should be purchased for the appropriate tubing diameter going to the system(s) to be serviced. This will connect with the RFS-500 outlet.



The outlet tubing will be attached to each cooling loop during servicing.

If the assemblies do not incorporate quick disconnect fittings, a barbed coupler can be used to make these temporary connections (however, there will be coolant spillage).

Operation

A coolant line will be tapped into for service. If the assembly has no quick disconnect fittings for a dry break, a safe tubing line should be chosen to cut or disconnect.



(If absent, this is an opportunity to add quick disconnects to the cooling loop for future servicing needs.)



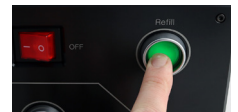
Connect one end of the cooling loop's tubing to the RFS-500's outlet. Place its remaining open tube end into a collection container or drain (per local disposal regulations).

Power on the RFS-500 station and press the "Rinse" button until most of the old coolant is forced from the cooling loop.



Hold the air "Purge" button until most of the rinse liquid has been evacuated from the cooling loop.

Hold the "Refill" button to force new coolant into the loop.



When new coolant has reached the drain line, stop refilling. Block the drain tube from the assembly with a plug or clamp (or detach the quick disconnect, if available). **Now open the cooling loop's fill port for air to exit during final filling.** This is usually on the reservoir.

Hold "Refill" again until the loop and reservoir are adequately full. To avoid spillage from the reservoir fill port, it is safer to stop the RFS-500 early and complete coolant filling by hand.

