

PURGING AND FILLING A GLYCOL LOOP

THIS SAME SETUP CAN ALSO BE USED FOR SILICONE FLUID OR DYALA OIL
If possible it is best to fill a system when it is cold - a cloudy day or at night. Use extreme caution if you fill it when the sun is out as the liquid can get very hot!

The collector loop should be purged with water prior to filling. This can be done with a garden hose hooked to valve A with valve B open and draining the purged water. This will get all solder flux and other impurities out of the system. After the system is purged it should be drained. After purging and draining use the setup shown at the right.

Using high temperature washing machine hoses connect a pump to the drain fill valves and bucket as shown in the diagram. An inexpensive pump that can be chucked into an electric drill works in most situations. You will find them at most home centers. Fill the bucket with a 50/50 solution of propylene glycol and water. Open both valve A and B if they are not already open. Start the pump and pump the solution into the system through valve A. You should see air bubbles coming back into the bucket through the hose connected to valve B. Add more solution to the bucket if necessary always making sure to add equal parts of propylene glycol and water. When the system is full, the liquid will flow into the bucket. Keep pumping for a few minutes until the liquid coming from valve B no longer has any air bubbles in it. Keep the hoses connected and while still pumping let any air out of the system at the top point in the system - either the pressure relief valve or the air vent. When all of the air is out of the system close valve B and watch your pressure gauge. Pump the system up to between 10 and 25 PSI or the maximum pressure of your pump. The higher the pressure the higher the boiling point of the liquid. Close valve A and disconnect the hoses slowly to catch any spills. The system is ready to run

BUCKET FILLED WITH
50/50 SOLUTION OF
PROPYLENE GLYCOL
AND WATER

