

**RV Water Heater
BY-PASS KIT
ITEM #P23503LFVP**

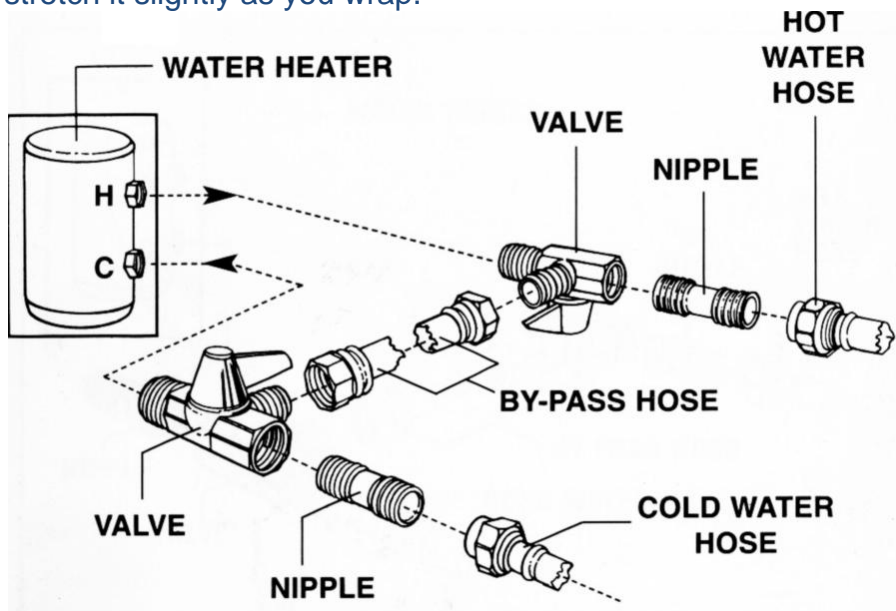
PRELIMINARY STEPS

By-passing the water heater when winterizing will save at least 6 gallons of antifreeze. Installation of this kit requires good access to the rear of the water heater.

If access is not through a cabinet or special access panel, it is recommended that the kit be installed by a dealer.

BEFORE STARTING THE INSTALLATION

1. All RV Water heaters provide a 1/2" threaded female connection for the IN (cold) and (hot) water lines. Most RV manufacturers have added 1/2" threaded pipe nipples to provide male connectors for the water lines.
2. Disconnect external water hose. Turn water pump and water heater OFF. Close all cold water faucets.
3. Open all hot water faucets in the RV and drain the water heater. Leave drain open.
4. Familiarize yourself with the two brass diverter valves supplied with the kit. Water flows straight through the valve for normal operation. It is diverted to the side port when by-passing the water heater. The straight through male fittings should be wrapped carefully with several layers (3 or 4) of the PTFE tape supplied with the kit. Wrap clockwise while looking into the opening, and stretch it slightly as you wrap.



INSTALLING THE KIT

1. Disconnect the two water lines from the water heater. Mark the top (hot) line to ensure proper reconnection. If nipples were NOT used in original connections, skip to step 3.
2. Carefully remove nipples from water heater for reuse. If the threads become damaged, purchase new nipples. Wrap threads on one end of the nipples with PTFE tape as previously discussed and screw the unwrapped end of each nipple into the brass diverter valves. Tighten 1 turn past finger tight. Be careful to protect the end threads of the nipples when tightening. Damaged threads will create leaks.
3. Screw the PTFE tape covered ends of the brass valves into the water heater connections. Tighten well, leaving the two by-pass side ports directly facing each other.
4. Connect the by-pass hose provided to the two by-pass side ports. Tighten 1/2 turn past finger tight. Do not over tighten. (No PTFE tape is needed for these fittings.)
5. Reconnect original water lines to the brass diverter valves or nipples, as applicable. Tighten well.

TESTING FOR LEAKS

1. With both brass diverter valves turned to the BY-PASS position, (handles should line up with by-pass hose), apply water pressure to the RV water system.
2. Close all hot water faucets when they start running.
3. With all faucets closed, carefully inspect all fittings around the brass diverter valves for leaks.
4. Close hot water drain and reposition both brass diverter valves to the NORMAL position. Open (1) hot water faucet. When water heater tank is full, the faucet will run steadily.
5. Close the faucet and again check for leaks.