



The check valve in this kit provides 2 to 3 psi back pressure within the bypass loop which will normally provide enough flow through the block and head to regulate temperature within the normal range when using standard O.E.M. thermostats as well as one of the MMI aftermarket thermostat kits. A manual valve is also provided to close the bypass more completely if operating conditions require. The kit is designed to work in freshwater cooled and raw water cooled engines.

**STEP 1:** Remove the by-pass hose where it attaches to the inlet of the thermostat housing.

**STEP 2:** Remove the 90 degree hose barb from the inlet of the thermostat housing and replace it with the 90 degree street-el provided in kit.

**STEP 3:** Install the rest of the fittings and valves as shown in the picture below. Be sure the arrow on the check valve points toward the thermostat housing, and that the 90 degree hose barb at the bottom of the assembly points toward the "T" fitting in the water jacket side plate. Use any good quality sealer on the threaded fittings except for Teflon tape which tends to shed small pieces of tape into the cooling system.

**STEP 4:** Re-connect the hose from the "T" fitting to the 90 degree hose barb below the check valve, adjusting the length of the hose as necessary.

**NOTE:** If this kit is being installed on an engine without the 1/4" spacer between the head and thermostat housing, the assembly may have to be slanted forward a bit to provide a better alignment with the "T" fitting in the center of the water jacket side plate.

**STEP 5:** Start engine and check for normal flow of water exiting the exhaust system and a temperature in the range of 160 to 175 degrees, depending on raw water temperature.

### MMI KITS - PACKING LIST LATE MODEL BY-PASS RESTRICTION KIT

- (1) 3/8" brass street el (90 degree)
- (1) 3/8" check valve
- (1) 3/8" ball valve
- (2) 3/8" close brass nipples
- (1) 3/8" by 1/2" 90 degree hose barb
- (2) hose clamps
- (4") rubber hose

