

# Thermo-Bob 3™ Installation Manual

## ‘H510’ Kit

Husqvarna TC/TE/SMR 450  
Husqvarna TC/TE/SMR 510

(2006-2010)

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IM\_H510\_V1

## Thermo-Bob 3™ Installation

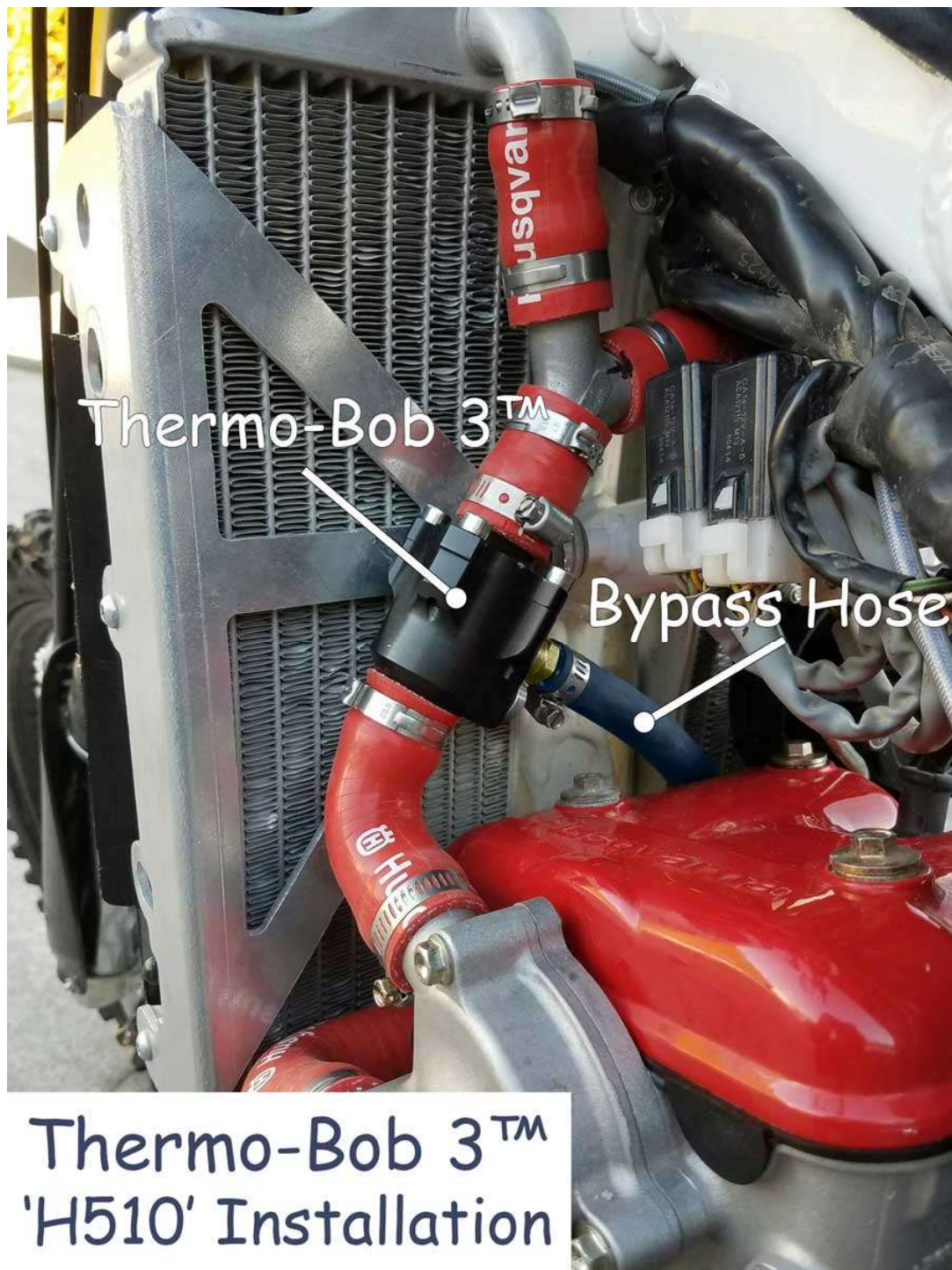
**You know the drill:** Drain the coolant into a suitable container, don't drain it when it's hot, keep away from pets as it's toxic, refill system after all parts are installed, double-check all clamps are tight, verify that radiators are full after first heat cycle.

Cut a 1.9 inch section out of the factory hose leading from the water pump exit going towards the Y fitting, so that you may insert the Thermo-Bob. Make sure the Thermo-Bob is facing with the heads of the bolts facing at an upwards angle, with the brass barb facing towards the lower right side of the bike.

Use two supplied large clamps (not tight yet!) at the Thermo-Bob to loosely secure it. Insert the bypass hose (photoshopped blue for easy ID) onto the brass barb (I recommend dipping the end of the hose in coolant to make sliding onto the brass barb easier) and loosely secure it using a supplied small clamp. Bypass tee installation is discussed on the next page.

Once you are comfortable with hose cutting and Thermo-Bob placement, tighten the two supplied clamps to secure the Thermo-Bob.

Before moving on to bypass tee installation, we should mention that the Thermo-Bob 3 housing has an additional threaded port for a KOSO or TRAIL TECH temperature sending unit (BSPP 1/8-28). Since either sensor uses two wires, an external ground is not required so it's best to use Teflon tape or a good Teflon sealant on the temperature sensor threads during installation to avoid leaks.



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## Bypass Tee Installation

Bypass tee installation details are on this page. The bypass hose is colored blue in the photo on the right for easy identification.

Remove a 5/8 inch section of the Husqvarna hose that travels from the bottom of the right radiator to the lower cylinder. Insert the bypass tee into the factory hose with the brass barb aimed forward and up as shown. Use the remaining two supplied large clamps to loosely secure the tee.

Before sliding the other end of the bypass hose onto the brass barb of the bypass tee, determine if the hose needs to be shortened (measure twice, cut once!!). After cutting to the proper length, slide the remaining small clamp up an inch or so onto the bypass hose, then slide the bypass hose onto the brass barb: then move the clamp down over the barb and tighten.

Verify one more time that all clamps are tightened appropriately. Refill the cooling system. Pour the final 10 fluid ounces in slowly, as air is purging through the small bleed hole in the Thermo-Bob's thermostat. Install the radiator cap.

Re-check that all clamps are tight. Start the engine and let it run for 3 or 4 minutes, running the engine up to 3000 rpm a couple of times over that period to purge any final air into the radiator upper tanks. In this 3-4 minute period, you can inspect the cooling system as it heats for any leaks. Shut off the engine, let the bike completely cool, and remove the radiator cap to top off the system.

### General Notes:

Since these bikes do not have a coolant overflow tank, the first heat cycle after radiator filling will purge a few fluid ounces of coolant onto the ground due to thermal expansion, just like a stock bike.

The Thermo-Bob can be left on the bike year-round, it simply holds up minimum coolant temperatures where you want them to be to allow the engine oil to boil off any water that gets past the piston rings in the natural occurrence of all internal combustion engines.

