Thermo-Bob 3[™] Installation Manual

'H511' Kit Husqvarna TE449/ TE511 2011-2014

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Thermo-Bob 3[™] Installation: H511 Kit

Proper installation is critical: if you are not familiar with or feel uncomfortable with heated, pressurized liquid cooling systems, you should have a professional install the kit. Improper installation can cause engine overheating and possible engine damage.

Overview of installation: Drain the engine coolant into a suitable container, don't drain it when it's hot, keep it away from pets as it's toxic, refill the cooling system after all parts are installed, double-check that all clamps are tight, and verify that the radiators are full after the first heat-and-cool cycle.

Figures 1 and 2 on the next page shows a completed installation. Details are described below:

- Remove a 1 7/8" (48mm) section of the factory radiator hose that connects the engine exit to the radiators as shown in Figure 1. Before installing the Thermo-Bob in this section of hose, slide the supplied bypass hose onto the brass barb on the Thermo-Bob and place a supplied small clamp onto the bypass hose and tighten appropriately. Think about how you'd like this clamp to be oriented for future access, just in case.
- 2) Install two of the large supplied clamps onto the open ends of the freshly-cut factory hose, slide the Thermo-Bob into the upper hose as shown in Figure 1, and tighten the two large clamps appropriately.
- 3) Now move to the left side of the bike. Remove a 5/8 inch (16 mm) long section of the factory lower hose that exits the bottom of the left radiator and insert the supplied bypass tee as shown in Figure 2. Use the other two supplied large clamps, and tighten appropriately.
- 4) Cut the supplied bypass hose (colored blue in Figures 1 and 2) to an appropriate length (measure twice, cut once!) for it to attach to the brass barb on the bypass tee as shown in Figure 2. TIP: After determining the proper length and cutting the hose, slide the remaining supplied small clamp onto the bypass hose first, then dip the end of the hose in a cup of coolant and wipe off the outside. This will lubricate the inside of the bypass hose, making it easier to slide on to the brass barb on the bypass tee.
- 5) Slide the clamp down over the bypas tee's brass barb and tighten appropriately.
- 6) 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.
- 7) 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:

- The Thermo-Bob housing has an additional threaded port for a KOSO or TRAIL TECH temperature sending unit (BSPP 1/8-28). Since the sensor uses two wires internally, 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.
- 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 rings in the natural occurrence of all running engines.



Figure 1: View from Right side of bike.

Figure 2: View from Left side of bike.