Please read these instructions completely before beginning installation.

**KIT CONTENTS**

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**CAUTION:** To prevent injury, allow vehicle to cool before attempting installation and/or disassembly.

It is recommended to service part #4050 automatic by-pass valve during a regularly-scheduled oil change. Follow vehicle factory service manual to drain engine oil.

**Part 1: Optional - Remove by-pass valve**
1. If by-pass valve is installed in a location where the actuator cap is easily accessible, then the thermostat can be serviced without removing the by-pass valve from the motorcycle. Otherwise: loosen the four hose clamps and slide them back over the hose, away from the by-pass valve body.
2. Remove each hose end from by-pass valve body.

**Part 2: Replace the thermostat**
3. Remove the thermostatic actuator from the by-pass valve body by unscrewing the actuator cap. Discard the removed parts.
   **TIP:** Two short lengths of stiff wire locked in hand-held vice grip pliers are effective for removing the actuator.
4. Check that the new thermostat components are aligned **A-B-C-D** as shown in top-right photo, or assemble as needed.
5. Insert the new thermostatic actuator assembly into the by-pass hole, large spring end first.
6. Tighten actuator until it stops.
   **TIP:** Actuator cap has fine aluminum threads. To prevent thread damage perform a “Higby cut” when threading: turn actuator cap counter-clockwise until you hear/feel a “click” of thread engagement, then proceed in turning clockwise to tighten.

**Part 3: Reinstall by-pass valve**
7. Push hose ends back over hose fittings on by-pass valve body.
8. Slide hose clamps over hose fittings, past the barb.
9. Secure hose over the fittings with hose clamps so the hose cannot pull over the barb on the fitting.
   **NOTE:** Over-tightened hose clamps may cut into oil lines and cause oil leaks.
10. Fill and check engine oil level per vehicle’s factory service manual.

**Part 4: Final inspection**
11. Inspect the oil hoses to ensure there are no tight bends that may restrict oil flow and that they are not contacting any moving parts. If necessary secure the new hoses to the frame with plastic zip-ties.
12. Start the engine and let it idle. Check all oil hose connections for any leakage. Tighten any hose clamps that may be leaking.

**Warning:** Installation should only be attempted by those with mechanical skills and experience working on vehicles. Standard safety precautions consistent with the tools and dangers of automotive work should be followed to protect from injury. Specifically, wear protective equipment, take care to stabilize the vehicle on a level surface or supportive lift, and allow vehicle to cool before attempting installation; failure to comply can result in injury and/or damage to equipment.