



INSTALLATION INSTRUCTIONS

Part # SK4000
Service Kit for
Manual By-pass Valve

Please read these instructions completely before beginning installation.

KIT CONTENTS

QTY.	DESCRIPTION
1	Decal
1	External retaining ring
2	O-ring for oil control knob



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

It is recommended to service part # 4000 manual by-pass valve during a regularly-scheduled oil change. Follow vehicle factory service manual to drain engine oil.

Part 1: Disassembly

1. 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.
3. Remove the old external retaining ring from the oil control knob.
4. Pull the oil control knob out of the by-pass valve body.
5. Remove old O-rings from oil control knob.

Part 2: Replace servicable parts

6. Install new O-rings onto oil control knob and lubricate with oil.
7. Insert oil control knob through the by-pass valve body.
8. Install new external retaining ring onto oil control knob, and ensure that the retaining ring snaps into place, seated securely within its retention groove.
9. If desired, remove old decal and apply new decal, aligning the decal's "Oil Flow" arrows parallel with the score in the oil control knob.

Part 3: Reinstall by-pass valve

10. Push hose ends back over hose fittings on by-pass valve body.
11. Slide hose clamps over hose fittings, past the barb.
12. 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.

13. Fill and check engine oil level per vehicle's factory service manual.

Part 4: Final inspection

14. 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.
15. 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.