VRSC™ CHROME THERMOSTAT HOUSING

General

This chrome thermostat housing kit fits all 2002 and later VRSC model motorcycles.

See the Service Parts illustration for a list of the items contained in this kit.

Installation of this kit will require a Thermostat Removal Tool (HD-45307), available separately from any Harley-Davidson dealer.

⚠️ WARNING

The rider's safety depends upon the correct installation of this kit. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00308a)

NOTE

This instruction sheet references Service Manual information. A Service Manual for your model motorcycle is required for this installation and is available from any Harley-Davidson dealer.

Installation

Prepare Motorcycle

1. Allow cooling system and engine to cool.
2. Remove right side cover and maxi-fuse.

⚠️ WARNING

Do not remove radiator filler cap when engine is hot. the cooling system is under pressure and hot coolant can escape, which could cause severe burns. Allow engine to cool before servicing the cooling system. (00091a)

3. Open seat and remove pressure cap.

⚠️ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

4. Remove left side cover and disconnect the negative battery terminal.
5. Remove left side radiator trim cover.

6. Open coolant drain plug:
   a. **For 2003 and earlier models:** Remove drain plug, drain fluid and replace plug.
   b. **For 2004 and later models:** Loosen radiator drain plug and orient slot in drain plug to drain engine coolant into suitable container.

7. Install radiator drain plug:
   a. **For 2003 and later:** Tighten radiator drain plug to 9-11 Nm (80-97 in-lbs).
   b. **For 2004 and later:** Hand tighten radiator drain plug. Correct torque on the radiator drain plug is 2.3-2.8 Nm (21-24 in-lbs).

8. Replace pressure cap.

9. Replace left side radiator trim cover.

**Removal and Disassembly.**

1. Follow instructions in the Service Manual to remove air-box cover, air filter top, air filter, breather hose, velocity stacks and air filter bottom.

2. Remove pipe clamp and P-clamp from coolant pipes.

3. Loosen lower clamp on thermostat hose to engine coolant pipe. Pull coolant outlet pipe and hose up.

4. Remove fasteners and lock washers holding housing to engine case. Pull thermostat housing off engine.

5. See Figure 2. Disconnect Engine Coolant Temperature (ECT) sensor [90] (6) from wiring harness.

6. Pull thermostat tubes (2) and O-rings (1) out of the engine case.

7. See Figure 3. To remove the thermostat (4) from the housing (3), engage tabs on thermostat with slots of Thermostat Removal Tool (Part No. 45307) and press on end of tool to compress thermostat spring while turning tool 90° counterclockwise (CCW).

**Assembly and Replacement**

1. See Service Parts illustration. Select the chrome housing (3) from the kit.

2. See Figure 2. Install thermostat into chrome housing, engage slots of Thermostat Removal Tool (HD-45307) into tabs of thermostat while compressing thermostat spring. Turn tool 90° clockwise (CW) to lock thermostat into housing.

3. Install the ECT sensor into housing. Tighten to 23 Nm (17 ft-lbs).

4. See Service Parts illustration. With a kit O-ring (1) on each end of the thermostat tubes, push tubes into engine cases.

**NOTE**

To ease assembly, O-rings, tubes, and hoses can be lubricated with fresh clean engine coolant.

5. Verify lower clamp is in place on hose to engine coolant pipe.
6. Connect the ECT sensor to wiring harness.

7. Orient the kit thermostat housing gasket (2) to mating surface on engine case.

8. Push housing pipe into pipe hose and over thermostat tubes in the engine case.

9. Fit housing to engine case. Install and tighten chrome housing fasteners (5) with chrome flat washers (4). Tighten to 9.7 Nm (85 in-lbs).

10. With lower hose clamp in correct orientation, tighten clamp to 3-4 Nm (27-35 in-lbs).

11. Install pipe clamp and P-clamp around coolant pipes. Tighten fasteners to 6-10 Nm (53-88 ft-lbs).

12. Follow the instructions in the Service Manual to install air filter bottom, velocity stacks, O-rings and breather hose.

13. Loosen air bleed plug. Remove pressure cap and through the filler neck, fill the system with Genuine Harley-Davidson Extended Life Antifreeze and Coolant (Part No. 99822-02).

14. Replace the pressure cap.

15. Tighten air bleed plug to 9-11 Nm (80-97 in-lbs).

16. Follow the instructions in the Service Manual to install the air filter, and the air filter top.

**Return Motorcycle to Service**

1. Connect the negative battery cable and install the left side cover.

2. Install the airbox cover.

3. Replace the maxi-fuse and right side cover.

**CAUTION**

When closing the seat, make sure the ignition switch is in the FUEL position. If the ignition switch is in any other position when the seat is closed, the seat latch mechanism could be damaged. (00196a).

4. Turn ignition switch to FUEL and close the seat. Then turn the ignition switch to LOCK.

5. After running engine, check coolant level in overflow bottle with coolant cold and motorcycle on jiffy stand. If the level is below COLD FULL line, remove cap from overflow bottle and add coolant until level reaches COLD FULL line.

6. Continue to run engine, check level and add antifreeze until coolant level remains at COLD FULL line with the motorcycle on the jiffy stand.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description (Quantity)</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>O-ring (4)</td>
<td>11312K</td>
</tr>
<tr>
<td>2</td>
<td>Thermostat gasket</td>
<td>26765-01K</td>
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<tr>
<td>3</td>
<td>Chrome thermostat housing</td>
<td>Not sold separately</td>
</tr>
<tr>
<td>4</td>
<td>Chrome flat washer (2)</td>
<td>94035-03</td>
</tr>
<tr>
<td>5</td>
<td>Chrome socket head cap screw (2)</td>
<td>94411-04</td>
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