



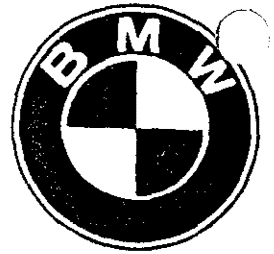
# SERVICE

SERVICE BULLETIN 4-79-4NS

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## OIL COOLER FOR BMW MOTORCYCLES

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### GROUP II - ENGINE

BMW has now developed an oil cooler for installation to the R100RS machines as special equipment. This system can be installed on any /7 series model. An accessory installation kit will soon be available for this purpose under Part No. 11-42-1-335-396.

The accessory kit does not include the special fairing center (grill) section developed for R100RS and R100RT machines with oil coolers. These pieces will be available separately.

The oil cooler insures that the oil remains within a more favorable temperature range, even with high demands placed on the engine for long periods. The oil cooler is controlled by a thermostat located in the valve assembly (2) which is installed in place of the normal oil filter cover. The thermostat opens at approximately 80°C (176°F) oil temperature and is fully open by approximately 110°C (230°F).

### ENGINE OIL CHANGE

Engine oil change without a filter change requires no special actions and can be carried out as indicated in the owners manual. See owners manual for service intervals.

### ENGINE OIL AND FILTER CHANGE

Engine oil change including renewing the oil filter requires an additional procedure to insure that the cooling system is drained of old oil and subsequently refilled and bled. See owners manual for service interval recommendations.

NOTE: The Following Parts Are Required For This Service.

1. Oil cooler bleed bolt, Part No. 11-42-1-335-394.
  2. Oil filter for use with oil cooler system, Part No. 11-42-1-335-385.
1. Drain the engine oil by removing the drain plug from the

4-79-4NS

OIL COOLER FOR BMW MOTORCYCLES

bottom of the oil pan.

2. Remove the 6x10mm Hex Bolt (12) from the bottom of the thermostat and insert the temporary bolt (11) Part No. 07-11-9-963-034. This longer bolt manually opens the thermostatically controlled valve allowing oil in the cooler to drain.
3. Remove the 3 Hex Bolts holding the thermostat valve assembly (2) to the side of the engine casing, allowing access to the oil filter canister.
4. Renew the oil filter (15) and re-install the thermostat valve assembly to the engine housing insuring all three O-Rings are in place.

CAUTION: Use only special oil filter Part No. 11-42-1-335-385. Install with the recessed center hole facing outwards.

5. Add engine oil to crankcase. The total oil capacity, including cooler, is 2.5 liters (2.6 US Quarts).
6. Remove both spark plugs and re-insert them into the ignition cables. Ground the spark plugs to avoid damage to the ignition system components.
7. Switch on the ignition and turn the engine with the starter motor. When the low oil pressure warning light goes out, the cooler has been filled and bled.
8. Restore the thermostat to normal operation by removing the special bleed Hex Bolt (11) Part No. 11-42-1-335-394 and inserting the standard 6x10mm (12) bolt, with new copper sealing ring, Part No. 07-11-9-963-034.

CAUTION: Failure to replace the special bleed bolt with the standard 6x10mm Hex Bolt could lead to serious engine damage from failure to reach normal operating temperature and excessive oil pressure in the cooler during cold starts.

4-79-4NS

OIL COOLER FOR BMW MOTORCYCLES

Note that the filling and bleeding procedure for the oil cooler must also be carried out when-ever any work involving separation of the oil circuit components (oil cooler, hoses, or pick-up) is performed.

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