

**BMW Service**  
**Quality Service for your Quality Automobile**



MAINTENANCE SERVICES SHOULD BE PERFORMED  
BY YOUR AUTHORIZED BMW DEALER  
OR ANY OTHER QUALIFIED AUTOMOTIVE SERVICE OR  
REPAIR ESTABLISHMENT WHICH IS COMPETENT TO  
PROVIDE SUCH SERVICES AND WHICH CAN BE RELIED  
UPON TO USE PROPER PARTS AND PRACTICES

## Description of maintenance routines

### Engine Oil Specifications

Change engine oil all the year around every 7.500 miles or 12.000 km or at least twice a year, before and after the winter.

Use only HD - oils for petrol engines, API class "SE" or "SF". The rating on class "SF" oils are higher.

Which SAE grade is used depends on the air temperature range of the season.

The chart indicates the SAE grades to be used depending on the predominant air temperature.

The temperature limits set by the SAE grades may be exceeded for a short period.

### Engine oil change:

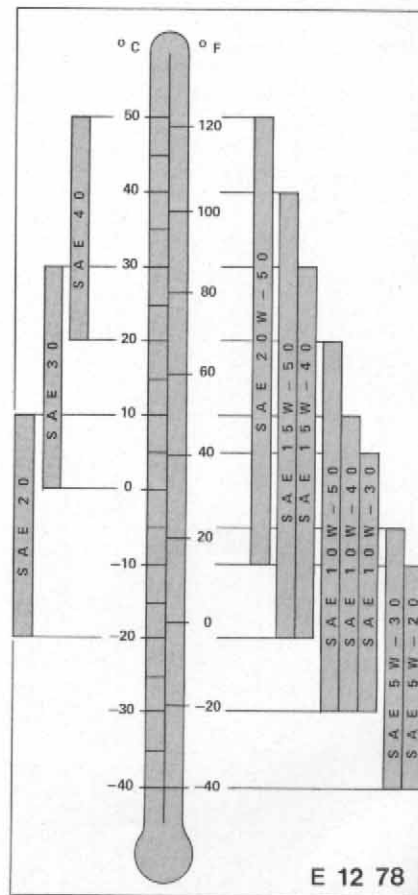
Unscrew drain plug (19 mm wrench) on the bottom right of the sump. Clean threads and tighten firmly after the old oil has drained fully.

**Total oil content** 3.75 litres or 4.0 US quarts/6.65 Imp. pints.

+0.25 litre or 0.44 Imp. pint/0.26 US quart when renewing filter.

**Oil level:** to upper mark on dipstick, not higher.

**Warning:** the oil dipstick must be fully inserted into the dipstick tube or a rough idle will result.



The transparent **reservoir for brake and clutch fluid** is in the engine compartment on the left hand side, and enables the level to be inspected at a glance.

Brake fluid is a hygroscopic fluid and can absorb moisture from the atmosphere over a period. To help ensure that the brakes remain absolutely safe we strongly recommend that the **brake fluid should be drained and renewed once a year.**

**Capacity:** fill to upper "MAX" mark on reservoir.

**Grades:** Use DOT 4 brake fluids only.

The **clutch requires no maintenance** and is automatically adjusted at the clutch slave cylinder.

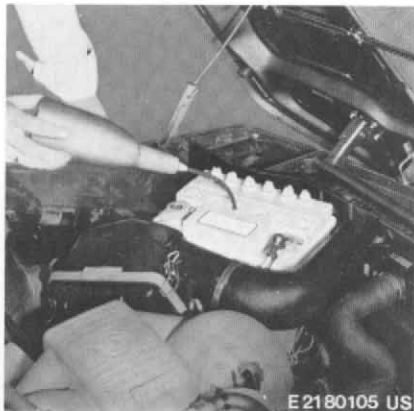
In the course of a BMW Programmtest every 30.000 miles or 48.000 km, wear of the clutch driving plate should be measured.



Every 7,500 miles or 12,000 km or at least once a month, the **battery acid level** should be checked. Remove the battery cover and unscrew the six plugs on top of the casing. The acid level should be approx. 0.2 inch or 5 mm above the surface of the plates in each cell, or up to the level mark visible in the plug orifice.

If the acid level is too low, top up with distilled water (not acid).

The top of the battery should be kept clean and dry.



E2180105 US

#### Important notes:

1. Acid or lead oxide from the battery terminals must never be allowed to contact the eyes, skin or clothing. Rinse off immediately with clean water, and consult a physician if necessary.
2. Never short-circuit the battery poles; this will cause severe overheating and could lead to the battery case bursting.
3. When the cell plugs have been removed, never bring an open flame near the battery or cause any sparks in the vicinity. This could lead to an explosion.
4. Never detach the battery leads when the engine is running, or else an overvoltage will occur and damage the car's electronic equipment beyond repair.
5. To recharge the battery without removing it from the car, the engine must be stopped and both battery leads disconnected.
6. Disconnect the negative lead from the battery before attempting any work on the car's electrical system, to avoid the risk of a short-circuit.
7. To remove the battery, first disconnect the negative lead, then the positive lead. Unscrew the battery retaining bar. When installing, first secure the battery with the retaining bar, then connect the positive lead and finally the negative lead.

Top up radiator to point "a" not higher than 3/4" or 2 cm below the base of the filter aperture. Replace cap and tighten.

Overfilling will dilute the additives in the coolant, which will escape through the overflow pipe and no longer possess the correct antifreeze and corrosion inhibitor concentration.

### Warning

The Emission Control system of your BMW is designed to remove pollutions of **unleaded fuel** only.

If leaded fuel is used – even only for a short period – the oxygen sensor and catalytic converter will be damaged and rendered inoperative.

To fulfill EPA Emission Standards the oxygen sensor and catalytic converter must be replaced after using fuel containing lead.

Never run engine with one or more ignition cables disconnected it will overheat and destroy the catalyst.

For a compression test the fuel injection system must be inoperative.

