oil tip

Regular checks of the oil level and regular oil changes are as decisive for a long motorcycle service life as warming-up the engine gently when starting from cold.

The oil change intervals specified by the manufacturer should always be observed using an oil with the prescribed viscosity and classification. The requirements for oil in motorcycle engines are stricter than in automotive engines – motorcycle engines are more powerful, often have a far higher rpm and the gearbox normally also runs in engine oil (wet sump lubrication). You should therefore always use a special motorcycle engine oil as this type of oil has special additives, high shear stability, is formulated for improved high-pressure performance and has the required thermal characteristics. The reverse is of course possible: you can use motorcycle engine oil in a car without problems, providing it is of the correct viscosity.
Synthetic engine oils are superior in terms of high temperature performance, cold starting protection, friction reduction and avoidance of mineral oil deposits. If an engine is subjected to extreme pressure (e.g. due to an extremely sporty riding approach, tuning measures, etc.), it may be advisable to use synthetic oil if the manufacturer prescribes a mineral-based oil for the model. If you are planning a changeover of this kind, you should discuss this with your authorised dealer – a number of engines are not compatible with synthetic oil and this can have adverse effects such as slipping of the clutch. Changeovers in engines with a higher operational performance should only be made once the engine has been cleaned and inspected. Synthetic oil is not recommended for motorcycles built before 1970. If an engine is not compatible with fully synthetic oil, it may be worth considering a changeover to semi-synthetic oil. Most clutches will operate with this type of oil without problems.

Classification of engine oil:
API – American engine oil classification (American Petrol Institute).
In use since approx. 1941. The „S“ classes refer to petrol engines. The second letter states the performance standard in each case. The standard S“F“ applied from 1980, S“G“ from 88, S“H“ from 93 and S“J“ from 96 onwards. Appendix „/ CF“ presents an oil test at modern test engines under heavy load. The API classes for two-stroke oils (letter „T“) are no longer used. Gear oils are specified according to grades G1-G3 or driveshaft oils are specified according to grades G4-G5.

ACEA - European Automobile Manufacturer‘s Association.
Valid since 1996. The grades A1-A3 specify oils for petrol engines, and B1-B4 specify oils for diesel passenger vehicles.

JASO - Japanese Automotive Standards Organisation.
Jaso T 903 is currently the most important classification in the world for four-stroke motorcycle engine oils. Taking the requirements of API (SE, SF, SG, SH, SJ) or the ACEA (A1, A2, A3) as the starting point, Jaso T 903 defines additional properties such as the perfect function of the oil with wet sump lubricated clutches and gearboxes. Depending on the friction behaviour in the clutch the oil is classified according to JASO MA or JASO MB. JASO MA and current JASO MA-2 specifies a higher coefficient of friction.

Viscosity (SAE, Society of Automotive Engineers).
Specifies the viscosity of the oil and the temperature range in which it can be used. The following applies for modern multigrade oils: The smaller the number with W („Winter“), the more flowable the oil is at low temperatures, the higher the following number (without W) is, the higher the load capacity of the lubricating film will be at high operating temperatures.