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Porsche Classic

FAQ

Why do vehicles need engine oil?

Engine oil lubricates the moving parts in the engine, reducing mechanical friction. It also cools parts, such as bearings and pistons that get hot while driving. protects against corrosion and cleans the engine by absorbing abrasion particles, dirt and oil carbons, and also has a sealing effect on piston rings and radial shaft seals.

What are the most important properties of engine oil?

Viscosity is a key property of engine oils. It designates the fluidity or non-fluidity of liquids and is denoted by a number-letter combination – for example '20W-50'. As a rule of thumb, the colder the temperatures, the more viscous it becomes and the warmer, the thinner. In classic vehicles, especially those with air cooling, the engine oil must not become too thin at high temperatures. Otherwise it loses its lubricating properties – the lubricating film can tear. This is achieved by using several different base oils and appropriate additives (so-called viscosity index improvers). On the other hand, classic vehicles are generally no longer subjected to cold starts at extremely low temperatures. For this reason, Porsche purposefully developed engine oils that have a higher viscosity, in some cases deviating from the driver's manual, to reduce wear and make the engine acoustics more pleasant when the engine is warm.

Why do you have to change engine oil?

Like all consumables, engine oil wears out. On the one hand, it is subject to natural ageing and, on the other hand, it becomes soiled by combustion residues, such as soot, sulphur oxides and water, or by mechanical abrasion. In petrol engines that mostly drive short distances, there is also a risk of the engine oil becoming diluted by unburned petrol components.

Is too much oil bad for the engine?

Too much oil is bad for both the engine and the environment. If the oil level is too high, the engine oil can foam up, which means that it can only partially fulfil its purpose – namely to lubricate. At the same time, more oil mist is transported into the combustion chambers and only partially burned there. This reduces engine performance, deposits form in the combustion chamber, smoke develops – and in addition to increased oil consumption, unburned oil components get into the catalytic converter with the exhaust gas flow, impairing its effectiveness in the long term. A regular oil check helps to identify when and how much oil needs to be added. In engines with dry sump lubrication, the oil level must be checked while the engine is running and warm.

How often should the oil be changed?

The oil change intervals for each vehicle and engine type can be found in the respective driver's manual. Regardless of the distance driven, Porsche Classic recommends changing the engine oil once a year.

Short driving distances have a particularly negative impact on the oil: frequently starting a cold engine causes combustion residue, fuel contamination and condensation in the oil.

How long does oil keep?
For small containers, the minimum shelf life is five years. It should be stored dry and at temperatures between +5 and +30 degrees Celsius (out of direct sunlight). For example, in the basement, and if possible, not in the garage. Opened containers should not be stored for more than half a year. You can find your vehicle's oil change intervals in your maintenance booklet.

When is it advisable to use a synthetic engine oil?
The Porsche Classic 10W-50 and 5W-50 Motoroils are fully synthetic engine oils. Fully synthetic engine oil is made from synthetic base oils. With these, the unwanted components are not removed, but broken down into their individual parts in a chemical process and then combined exactly as desired. When tailored to more modern engines, fully synthetic engine oils offer many advantages: optimum wear protection, excellent cold start properties, reduced fuel consumption and a clean engine. They therefore provide the perfect basis for the development of select Classic Motoroils. The fully synthetic engine oil with a viscosity of 10W-50 is recommended for the four- and eight-cylinder transaxle vehicles from the Classic scope of support, and a 5W-50 engine oil is recommended for the 911 (type 996) and Boxster (type 986) models.

When is it advisable to use a mineral engine oil?
Mineral oil is manufactured by distilling natural crude oil. The unusable components of the crude oil are removed. Back then, engine oils were developed on the basis of mineral oil, but even today the properties of these oils meet the basic requirements of old engines. This is one of the reasons why this oil is used as the basis for the 20W-50 Classic engine oil and thus perfectly supplies all air-cooled models before 1977 with up to 2.7 litres displacement.

What else is in engine oil?
Additives are chemical substances that are mixed into the oil to enhance desirable properties or to suppress unwanted properties. They perform tasks such as corrosion protection, engine cleaning, oil ageing protection from temperature and chemical influences, emulsification of water that has entered the system, keeping soot particles in suspension, optimisation of the coefficient of friction or protection against wear on sliding and rolling contacts, avoidance of foam formation and improvement of the viscosity-temperature behaviour.

How do I prepare my classic Porsche engine for a break over winter?
You should definitely change the engine oil. This ensures that impurities, such as combustion residue and condensation are removed from the oil circuit. In conjunction with aggressive combustion residue, the oil filling mechanism can acidify, causing engine components to be attacked. It is therefore advisable to change the oil before a winter break. The engine should then be warmed up again before it is finally switched off. This keeps the engine well protected during its rest period.

Are the engine oils from Porsche Classic also suitable for winter use?

The Society of Automotive Engineers (SAE) defined viscosity classes. The reference number preceding the 'W' (20W = Winter) provides information about performance at low temperatures, while the reference number following the 'W' (50 in this case) is a measure of the flow performance at high temperatures (100°C). Basically, the smaller the number, the thinner the oil. For comparison: Water has a very low viscosity. At 20 degrees Celsius, its viscosity value is 1.
Porsche Classic Motoroils are multigrade oils. They are suitable for summer and winter use. If possible, you shouldn't subject a classic Porsche to cold starts at extremely low temperatures.

Which oil is the right one for my engine?
We recommend the 20W-50 engine oil for all 4 and 6-cylinder boxer engines up to 2.7 litres displacement and 10W-60 from 3.0 litres displacement. The decisive factors here are engine technology, manufacturing tolerances and materials in the 2.7 and 3.2 litre engines. We recommend 10W-50 engine oil for all four- and eight-cylinder transaxle vehicles that are covered by Porsche Classic. The 5W-50 engine oil is suitable for all models of the 911 (type 996) and Boxster (type 986), including all turbocharged engines. All engine oils are tried and tested by Porsche and 'engineered in Weissach'. The additive is therefore optimally tailored to the needs of the current normal use of the vehicle, the engine technology and the Porsche materials used.

What advantages does the 5W-50 offer the Porsche 911 (type 996) and Boxster (type 986)?
The engine oils available when the 996 and 986 models were launched were optimally developed by the engine and oil engineers for the engine technology of the time. Over the years, Porsche engines have constantly evolved, and at the same time the engine oils have also had to be adapted. As a result, the difference between the engine oil and the 996 and 986 engines has become greater over the years. The oil used back in 1996/1997 is no longer available on the market today. Our Porsche Classic Motoroil comes very close to the oils developed at the time and their engine technology. In addition, in connection with today's usual vehicle use, the higher mileage and the ageing sealing materials, our engine oils have been adapted and additives have been added accordingly.