# **Chapter 1 – Preparing for engine removal**



1-1: (Courtesy Porsche AG)

#### Organising and preparation

Preparation is key, as the saying goes. Because you're unlikely to have a setup like the Porsche one shown here, the prospect of removing the engine and all of the other associated tasks can be daunting. However, it's important to remember that Porsche designed the car to allow both the engine and gearbox to be removed with relative ease. It's also useful to know that many of the tasks are common to other cars.

In my experience, being able to benefit from the knowledge of a previous generation that didn't have the internet makes a huge difference. From a young age, I've picked up knowledge from my dad who had two Porsche 356s in the early 1970s. The ability to think outside the box is a more sharply honed skill as a result.

In hindsight, the biggest benefit of trying to complete these tasks is the familiarity it grants with all the various facets of the design of this car.

The projects you are about to embark upon are something to savour. You'll really become

familiar with the clever design of the Porsche 911, and will refresh what is most probably one of the finest sports cars ever produced.

Inevitably, you'll encounter scenarios that may require particular tools or approaches that you couldn't predict at the outset. My basic set of tools is not particularly fancy, but there are some items I now have purely as a result of working on old Porsches.

My basic toolkit contains a selection of spanners, sockets, swivel-foot sockets, socket wrenches of differing sizes, and Allen-headed attachments. I have listed here a few items to start with, as this is essentially the approach I used, before acquiring other items that later proved to be essential.

#### General

- \* A clear workspace area/table/bench
- \* A notebook
- \* Freezer bags. I use the types that have a useful label already on the front
- \* Disposable gloves
- \* Eye protection
- \* Dust mask

#### **Precision and coercion**

- \* A set of different screwdriver heads and Allen-headed attachments
- \* Various spanners
- \* Pliers, including vice-grips
- \* Various sockets, including swivel-foot sockets and deep sockets
- \* Socket wrenches of different sizes
- \* Torque wrench with crowfoot attachments
- \* Feeler gauges, including dedicated gauges for tappet adjustment
- \* Internal hex keys for gearbox drain and fill plugs

## Watch out for the mess

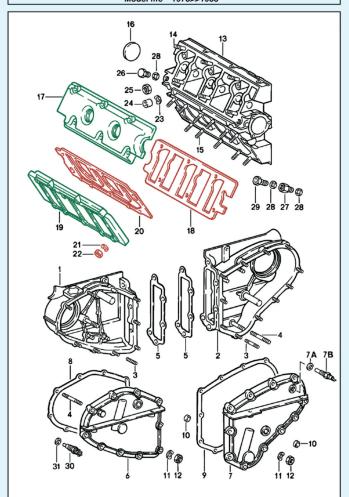
- \* Oil drip trays
- \* Degreaser and carb cleaner
- \* WD40
- \* Hand cleaner

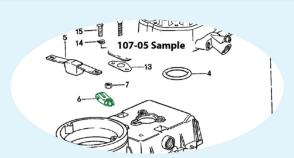
### Where is the support when you need it?

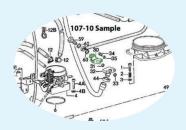
- \* Floor jacks x 2 (ideally)
- \* Jack stands x 4 (ideally)
- \* Moveable lights, including small torches/lamps
- \* Engine stand
- \* Engine stand adaptor for the 911 SC engine

PORSCHE Illustration: 103-05 PORSCHE

Model life 1978>>1983







PORSCHE Illustration: 106-00 PORSCHE

Model life 1978>>1983

