Parts highlights

Crankcase

The heart of every classic Porsche model is the engine. With its distinctive sound and characteristic power delivery, it ensures dynamic propulsion, which is the hallmark of the 911, for example. But even the best drive unit is not completely immune to the risk of engine damage, especially when using incorrect oils with a lack of effect. In such a case, if the crankcase is irreparably damaged, Porsche Classic can now offer replacements for various models from the 911 G, 964 and 993 series. These genuine parts have now been completed from existing blanks. They can be ordered from any Porsche Classic Partner or Porsche dealer - and are available in limited numbers.

Porsche Classic specialists have known for a long time that the unprocessed blanks were in stock, And, of course, there has long been a desire to use them to produce completely new crankcases for customers. Previously, in the event of a repair, vehicle owners had to rely solely on used parts from old engines, which might not necessarily have been in a technically sound condition.

Replacements previously only available on the used market

However, for a long time it was not possible to go from blank to ready-to-install genuine part, and this process brought with it some challenges. After all, the die-cast parts first had to be painstakingly processed and finished. The work documents required for this purpose were available in the historical archive, but some of them presented the project managers with significant chal-

lenges. The historical technical data relevant to production was no longer completely legible, so for quite some time it was simply not possible to process the blanks. However, the close technical relationship between classic series and racing engines at Porsche finally brought about the breakthrough for the completion of the crankcase.

The new edition of the Group C racing engine provided important data

The Porsche 962 dominated the sports car racing scene of the 1980s and celebrated numerous race victories and championships. At the same time, the Group C sports car, with approximately 150 vehicles built, saw huge sales success. However, since new engines were unavailable for a long time for the type-956/962 models

that are used in historic motorsport today, an ambitious project was launched some time ago. As part of the overall strategy for historic motorsport in Weissach, a requirement for a range of spare parts for the Group C vehicles was defined. The first sub-project was to relaunch the 962 engine. At the heart of this was the reproduction of the crankcase, which was used in its unprocessed form until the 997. As part of the development work, the unprocessed series blanks that were still available in the warehouse were measured and compared with the data for the crankcase of the 962. The results were impressive, because there were only a few differences between the two versions. As a result, extensive data could also be obtained and used for the reconstruction of the processing and assembly lists of the historical series parts as part of the racing project.



Processing of the poorly legible drawing data and comparison of the digital data of the motorsport engine.



Mechanical processing of the crankcase.



Cooperation between Porsche Classic and historic motorsport

These synergies between motorsport and Classic finally paved the way for Porsche Classic to complete the existing crankcase.

But before processing could begin, it was necessary to check which engine variants could be relaunched with the unprocessed parts available. For this purpose, bills of materials and technical information were reviewed in the historical archive, former and current employees were asked about technical details and, finally, 3D data was generated. In the end, a complete data set was available for processing on a CNC-controlled five-axis lathe.

A Swabian company located near Porsche AG was ultimately commissioned with the mechanical processing and completion

> Quality control using 3D measuring probes on the processed individual part.

of the crankcase. This supplier had already carried out these activities for the successful relaunch of the Group C racing engine and thus had the necessary experience.

Crankcase available for seven different vehicle derivatives

The inventory consisted of three housing types, but the combination of six different assembly kits means that a total of seven engine and vehicle derivatives can now be supplied with new parts. The oldest versions are the 911 G models from 1984 to 1989 with either a 3.2liter naturally aspirated engine or a 3.3-liter turbo engine, in which an identical crankcase is used. A genuine part is also available for the 964 with a 3.3-liter turbo engine. Porsche Classic now offers a new component for 964 and 993 series vehicles with a 3.6-liter turbo or naturally aspirated engine.

Available at every Porsche dealer worldwide

All crankcases have a blank number that shows the last construction stage from series production at the time. Instead of the engine number, the housings are marked with the respective part number. The engine type is only defined when completed using the respective mounting kit, so it cannot be attached to the crankcase at the factory.

Since the market launch by Porsche Classic, the new genuine parts have been available worldwide. In the event of engine damage, the Porsche Classic Partner or the Porsche dealer are the right points of contact, and can help beyond procuring spare parts. They have the expertise and the necessary special tools to disassemble the defective engine and rebuild it with the relevant components. This ensures the minimum disruption to driving pleasure — and that the value of the classic car is retained.





Final inspection on the 3D coordinate-measuring machine and comparison withthe processing data.

Crankcase, 3.2/3.3 L
Part no. 93010100322
911 G (1984 – 1989),
3.2-liter naturally aspirated engine types: 930.20, 930.21, 930.25, 930.26
Mounting kit, 3.2 L

Mounting kit, 3.2 L Part no. PCG10093020

Crankcase, 3.2/3.3 L
Part no. 93010100322
911 G Turbo (1984 – 1989),
3.3-liter turbo engine types:
930.66 and 930.68
Mounting kit, 3.3 L
Part no. PCG10093010

Crankcase, 3.3 L
Part no. 93010100321
964 (1991 – 1992),
3.3-liter turbo engine type:
M30.69

Mounting kit, 3.3 L
Part no. PCG10096430

Crankcase, 3.6 L
Part no. 99310100510
964 (1989 – 1994),
3.6-liter naturally aspirated engine types: M64.01, M64.02, M64.03
Mounting kit, 3.6 L

Crankcase, 3.6 L
Part no. 99310100510
964 (1993),
3.6-liter turbo engine type:
M64.50
Mounting kit, 3.6 L

Part no. **PCG10096410**

Part no. **PCG10096420**

Crankcase, 3.6 L
Part no. 99310100510
993 (1994 – 1998)
3.6-liter turbo engine type:
M64.60 and 3.6-liter naturally
aspirated engine types: M64.05,
M64.06, M64.07, M64.08,

M64.21, M64.22, M64.23, M64.24 **Mounting kit, 3.6 L** Part no. **PCG10099310**

Z bare engine 935/83 Group C Part no. 93510002120 962 Group C, 3.0-liter twin turbo engine, water-cooled

Z crankcase cpl. left/right Part no. 93510101920 962 Group C, 3.0-liter twin turbo engine, water-cooled

Front cross panel

When replacing body parts of classic Porsche models, authenticity, quality and fit are the top priorities. If original parts have to be replaced as part of a restoration or as a result of an accident, the appearance of the classic car should be retained in every detail. And only sheet metal parts that correspond exactly to the shape and quality of the original can be installed with less time-consuming and costly reworking. For these reasons, Porsche Classic has expanded its range of body parts for the early versions of the Porsche 911. The front cross panel of the first version of the 911 F (1965 - 1966) is now available together with the corresponding component for vehicles from model years 1967 to 1969. In addition to these new editions, Porsche Classic

There are significant differences between the cross panels from model years 1965 – 1966 (left) and 1970 – 1973 (right): The beading has gone and the recess for the windshield washer reservoir has been added.