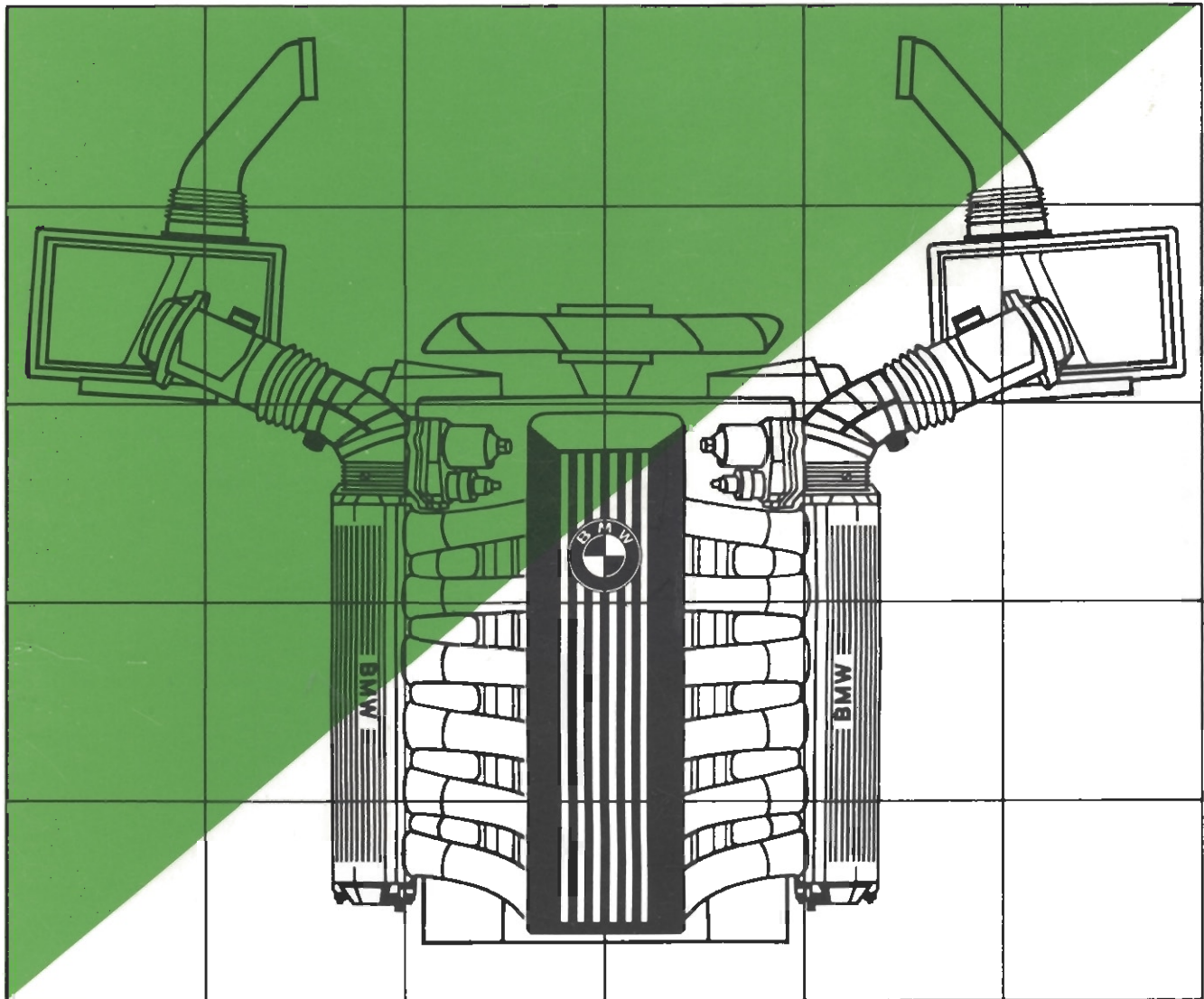
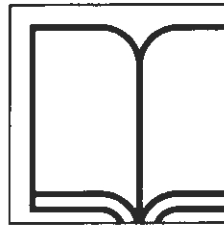


# BMW V-12 Light Alloy Engine M 70

# Training Course Material



CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: [www.heydownloads.com](http://www.heydownloads.com) by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

Annealed cast iron main bearing caps are mounted on the crankcase with 4 bolts. Two bolts each are perpendicular to the cylinder dividing plane and parallel to the cylinder axis. In this manner forces of gas and gravity are transmitted into the crankcase on a wide basis.

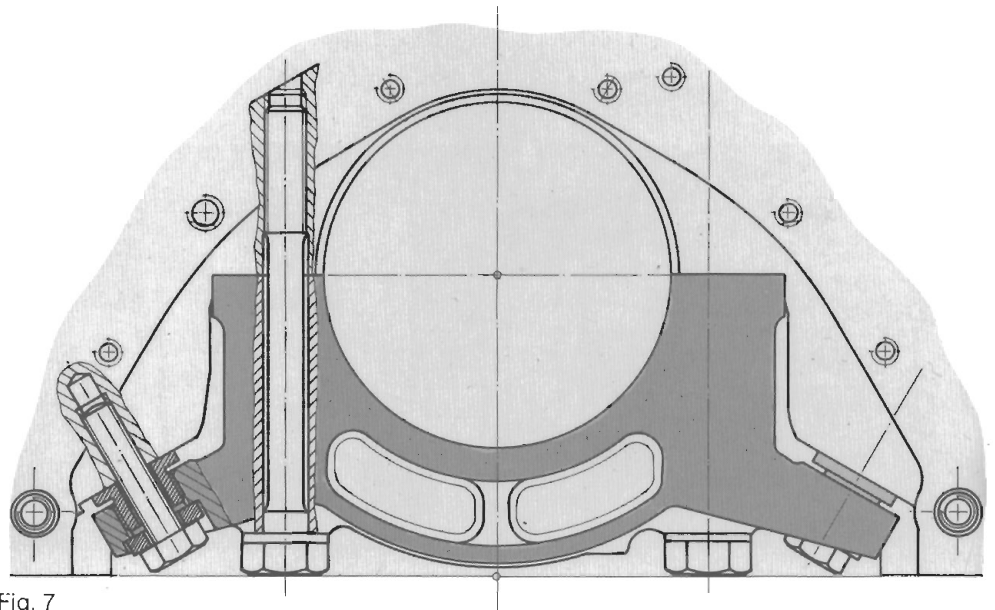


Fig. 7  
Bearing Cap Installation on V-12 Engine

There is a large and flexionally strong basis for bolting on the transmission by way of the

- rear oil pan end and
- flange for bolting on the starter

The bolting flange is cast on the crankcase on both sides. The method of starter installation can be selected to conform with the country version of the car.

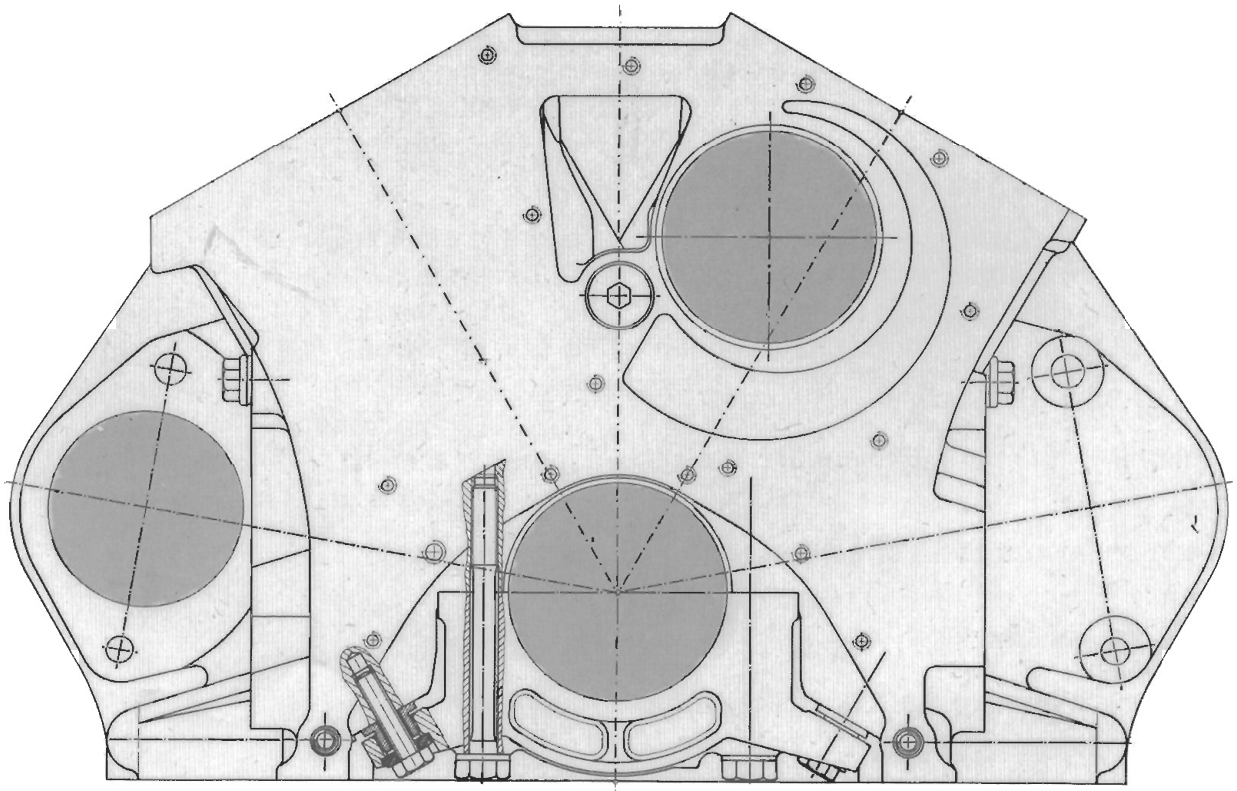


Fig. 8  
View of Power Output End of V-12 Engine



## Oil Filter

The **oil filter** is mounted away from the engine, in other words on the vehicle. It is easily accessible from above for servicing. Thermostatic oil cooler control is located in the bottom part of the housing. A valve opens as from a temperature of 95° C: there is flow in the cooler and oil is switched in.

The bottom section also houses a check valve. It serves to maintain an initial pressure when the engine is stopped so that oil pressure can be built up faster.

## Servicing



The oil pressure is 4 bar.

Oil volume for replacement of oil and filter is 7.5 litres.

Initial Filling:

1 litre for oil cooler

1 litre for oil filter

6.5 litres for engine



Fig. 33  
Oil Filter Housing

## Manifolds

The V-12 engine has four manifold parts. Three cylinders are connected on each manifold.  
The eight exhaust pipes are mounted on the exhaust with four spring-loaded, ball-shaped flanges.  
This guarantees perfect sealing throughout the service life.

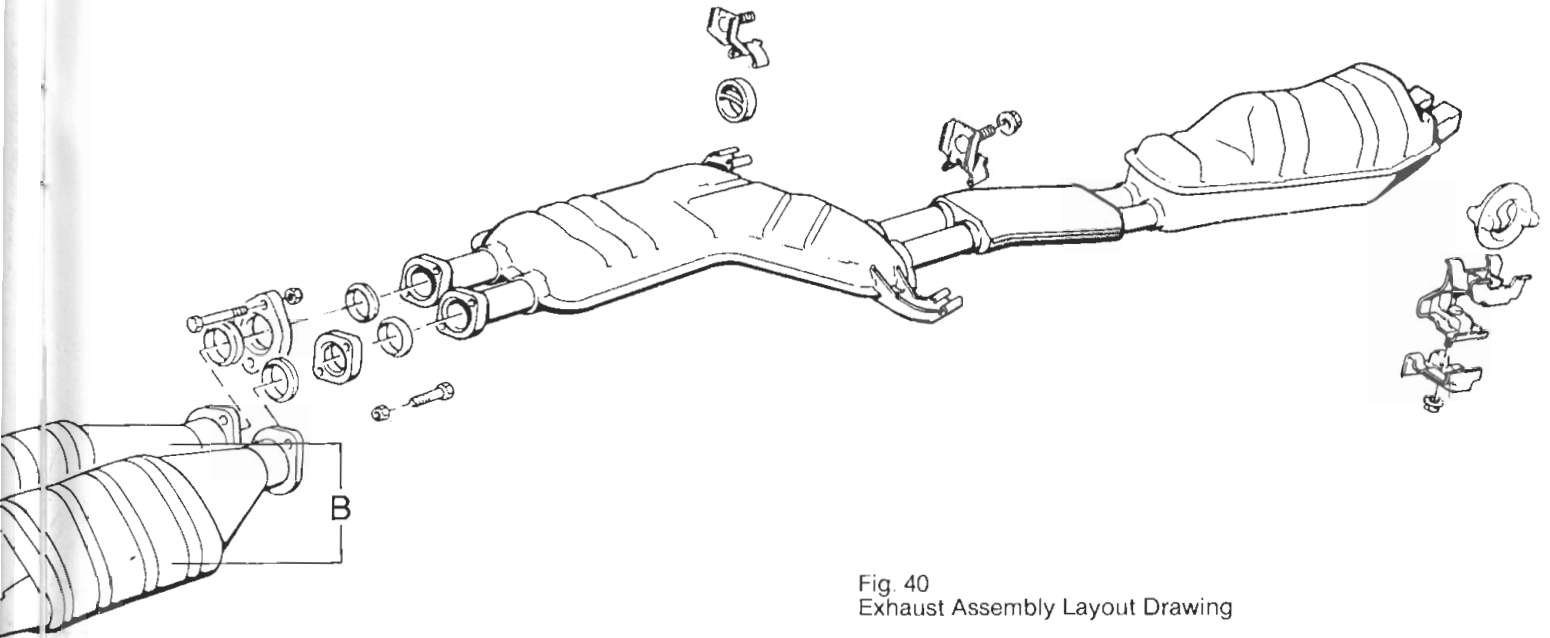


Fig. 40  
Exhaust Assembly Layout Drawing

A Oxygen sensors  
B Catalytic converters

## Catalytic Converters and Oxygen Sensors

Catalytic converters have even higher performance due to a new coating of the monoliths.  
It was possible to drop the starting temperature by about 70° C, so that it is now approx. 280° C.

New catalytic converters are adapted to the displacement, power output and air flow rate. All in all they are larger in cross section size. This keeps the exhaust backpressure low. Inside and outside noise level behaviour are improved, since the catalytic converters also serve as primary mufflers.

Catalytic converters are full load proof.

Oxygen sensors are mounted on the inlet of each of both catalytic converters.

### Note:

Cars with catalytic converters can be operated on either unleaded regular grade or unleaded premium grade gasoline.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: [www.heydownloads.com](http://www.heydownloads.com) by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL