

STAPLES

92

History of the MPJG, XPAG and XPEG Engine and Transmission Units in the
Cars and Y Type Saloon Cars, plus the Complementary Morris Production Vehicles.
(Roger Wilson : 84/00/02/04/05/06)

Introduction

The easiest way to start an article of this type is to go back in history to 1935 and examine the general state of the MG Car Company. At that time the financial standing of the company was at its lowest ebb, and this was due to two reasons.

One was the increasing cost of maintaining the works competition department, and this was overcome by curtailing all racing activities and disbanding the competition department.

The other reason was the enormous cost to the company of the mechanical components used in the various MG models. Although the original concept of the Midget series had been to use standard Morris components, this had only been applied with success to the M type. The OHC Morris Minor which provided most of the "M" type components was discontinued in 1932.

The continual modification to the Morris components needed to accommodate the increased performance of successive Midgets, and still maintain reliability, meant that the units fitted to the MG vehicles shared less and less with the original Morris components. Thus, from about 1932 to 1935, the production years of the OHC Midgets, the MG Car Company was producing virtually all its own mechanical components.

The short production runs of each model did nothing to help the situation, and thus the successor to the "M" type was designed to use as many standard components from production Morris vehicles as possible. This meant a return to the original concept whereby the high volume Morris vehicle would, in effect, subsidise the MG vehicle.

In 1935 Morris Motors updated their Series 2 Morris 10 by adapting the existing side valve engine to overhead valve operation. The new car was designated the Series 3 Morris 10, and the engine MPJM. The bore and stroke of this engine were 63.5mm and 102mm respectively. It had direct metal connecting rods and bearings and a non-counterbalanced crankshaft.

A new "T" type series of Midgets was designed as an enlarged PB, but modified to allow the use of the Series 3 Morris 10 to be used. Although due to the long stroke and five port cylinder head the engine was not really suited to sports car usage, a three branch exhaust system and twin carburettors raised the power output from 37 to 50 BHP. In this form when fitted to the new TA Midget, the engine was designated MPJG.

The Series 3 Morris 10 rear axle was also used, although the ratio was altered to 4.875 (8:39). The differential ratio in the Morris, which can be fitted, is 5.25 (8:42). Also the TB and TC differentials can be fitted, since all three axles were identical, and these had a ratio of 5.125 (8:41).

It is worth noting with these axles is that some of the side thrust on the pinion shaft is taken by a double bar contact bearing at the outer pinion end. These are obviously not up to the load imposed, and usually break up. This allows the pinion to float into the crown wheel with disastrous results. The bearings should be replaced.

Denne bog tilhører
MG Car Club Danish Centre

...og er købt for medlemmernes kontingent
Pas på den, som var det din egen --
og husk at aflevere den efter lån!

STAPLES