



SPARES for ROYAL ENFIELD & AMAL

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EFI Performance Camshaft Kit 90350

The following is the approximate timing for the above camshafts set with 1mm clearance:

(These figures are for information only as the EFI engines run hydraulic lifters so these figures cannot be checked in the conventional way).

Inlet opens 30° BTDC

Inlet closes 70° ABDC

Inlet valve lift 11.3mm

Exhaust opens 70° BBDC

Exhaust closes 35° ATDC

Exhaust valve lift 10.2mm

The kit contains:

- 90069 Pair of Performance Camshafts
- 90075 Inlet Pushrod
- 90076 Exhaust Pushrod (longest)

These instructions are a sequence of activities required to fit the kit. It is recommended that these cams should be fitted with our improved valve and spring kit (part 90273 for 500 EFI models and part 90274 for the 535 Continental GT) to help eliminate valve bounce.

A Workshop Manual is also required for detailed instructions on how to remove and refit the associated engine parts.

1. Disconnect the battery and ensure the disconnected wires and battery terminals are isolated.
2. Remove the Fuel Pump and Fuel Sender wiring from the petrol tank. Remove the petrol pipe.
3. Remove the Petrol Tank.
4. Remove the rocker covers,
5. Remove the Rocker Assemblies.
6. Remove the Pushrods.
7. On the Timing Cover, disconnect the Alternator and Crank Position Sensor wiring and disconnect the Breather.
8. Remove the Timing Cover, this may require loosening the Footrest, Exhaust System and Rear Brake Lever.

Note: Important, refer to the Workshop Manual to ensure the "O" ring between the oil pump and filter housing is undamaged and in the correct position.

Note: On the Continental GT only, it is very difficult to disconnect the Alternator and Crank Position wiring so it may be necessary to leave these connected. Ensure the removed timing cover is kept in a position that does not stretch the attached wiring.

9. Remove the Alternator, special tool ST25128 is required.
10. Remove the Cam Steady Plate, take a note of the position and number of cam shims to ensure the same combination of shims is assembled when fitting the new cams.
11. Remove the oil pumps plastic gear.
12. Remove the cams.
13. Fit the new cams, the timing marks are shown in the Workshop Manual and **very importantly** adjust the backlash between the gears to ensure that there are no tight spots in any position with minimum of backlash
14. Reassemble with the new pushrods following the reverse of the above sequence. It is important with the pushrod positioned on top of the lifter with no cam lift, the rocker and rocker housings are then placed on the head with the fixing screws loosely attached with no pressure. At this stage it would be expected for there to be between 1mm and 2.5mm gap between the base of the rocker housing and cylinder head. (If the valves are being held open beyond this, there is too much preload which can be solved with a slightly shorter pushrod). When you then tighten the 4 fixings this gap will close up. Due to the oil in the lifter, it is very likely that when tightening the rocker housing the valve will open. You must allow 10 or 15 minutes for the lifter to "bleed" before turning over the engine. This should then allow the valves to close.