

Setup Guide

- Always use Shell Optimax or Super Unleaded 97 / 98 octane fuels.

Lubrication

We do recommend disconnection of the oil injector in favor of pre mix lubrication. Using the following oils and ratio/s:

- Castrol
- R2 fully synthetic -option1
- TTS fully synthetic -option2
- 30ml of oil to every 1 litres of fuel.
- If however you wish to use your existing oil injector please follow these instructions carefully
- Drain oil tank completely and fill with any one of the above 2 oils with the following changes to the injector pump.
- Remove rubber inspection plug from crankcase cover. (See PIC 1)
- Clean alignment marks. (See PIC 2)
- Adjust outer cable (See PIC3) until alignment marks are plus 3mm advanced (See PIC 2). Relock locking nut. (See PIC 3)



Spark Plug

- NGK B85EGV
- Spark plug electrode gap: 0.5mm (20 thou)
- TQ settings: 18-21 lbs ft.

Running In

We suggest no more than ¼ throttle for the first 50 miles. No more than ½ throttle up to 100 miles. No more than ¾ throttle up to 200 miles and short bursts of full throttle upto 250 miles. You should feel the kit starting to loosen up at around 250miles.

Jetting with stock air box Dellorto PHBL25mm PM Tuning Stage2 Carb kit.

- Main jet 88-90 (start with largest and down jet to suit)
- Atomiser AQ266
- D24 needle clip position 2 from top
- Slide 40
- Pilot jet 50-55
- Air screw 1 to 1.5 out from fully in
- Float seat 200 with PM manifold PMM001 (side entry)
- Float height 24mm +/-0.5

Jetting PM Tuning sports foam filter Dellorto PHBL25mm PM Tuning Stage2 Carb kit.

- Main jet 102-105-108 (start with largest and down jet to suit)
- Atomiser AQ268
- D24 needle clip position 2 from top
- Slide 40
- Pilot jet 50-55-60
- Air screw 1 to 1.5 out from fully in
- Float seat 200 with PM manifold PMM001 (side entry) Float height 24mm +/-0.5
- Float seat 250 with PM manifold PMM002 (Inclined) Float height 23mm +/- 0.5

DISCLAIMER

While every effort has been made to ensure that these instructions are accurate and concise, they are only intended as a guide for general fitting. Your machine may differ slightly from the one described. PM Tuning accept no responsibility for any damage or injury caused by the fitting of a PM Tuning Cylinder Kit. For any additional information please contact our technical support line. If you feel that you are insufficiently equipped to carry out the cylinder kit fitting safely and correctly, we recommend you consult your nearest dealer. If your engine does not respond to the above base line settings, it may be necessary to re-jet and/or adjust. In any case you will need to check the colour of the spark plug centre electrode for signs of correct jetting, E.g. black = too rich, white = too weak, oatmeal / lightbrown = ideal. By performing a plug chop or dyno testing with an experienced dyno operator.

Pro-Street Cylinder Kit Fitting Instructions

PMCK0007 - PMCK0008 - PMCK0009

Thank you for purchasing a PM Pro-Street Cylinder Kit.

These kits are the end products of many years of dyno research and development. They represent the best all round performance/torque outputs and will last for many years if fitted and maintained correctly. The original concept of the PM Pro-Street Kit was to offer the best currently available performance as a bolt on kit using the latest high quality materials and technologies to give a genuine 25 HP (rear wheel) along with good long term reliability for fast every day road going use. One of the key features of the kit is having generous amounts of alloy material in the right areas for owners/ tuners wishing to push the HP limit upwards, without suffering the usual problem of breaking through into water galleries and fresh air when porting to the extreme. This Cylinder Kit is optimised to suit modified machines listed as part of our tuning program, see <https://www.pmtuning.co.uk/index2.htm> for further details.

Before Fitting: These instructions deal with the fitting of a PM Cylinder Kit, for removal of existing parts please consult your Haynes or factory workshop manual. As with all good workshop practice please ensure good cleanliness of the engine and work area before proceeding. Important: Please wash all new parts prior to fitting with a good water soluble de-greaser such as Jizer or Gunk and blow-dry with compressed air.

These details are typical for the applications listed and have been tried and tested to the best of our ability. However we cannot be held responsible or control the many factors that affect an engine's performance. Note: It is the fitter's responsibility to ensure that the crankshaft, bearings, seals etc. and general condition of the engine is up to a sufficient standard in order to take the increase in performance that this kit offers. Use after-market racing products at your own risk. PM Tuning are always happy to offer help and advice as necessary, but cannot be held responsible for damage caused by mistakes made, or for the misuse of their high performance products.



1. First: Select base gasket 0.5mm. Apply Rhodorseal to all 3 crankcase joints as shown.



2. Fit new small end bearing -Apply a couple of drops of oil onto it.



3. Insert piston ring into bore evenly and check ring gap tolerance. Min. 0.25mm. Max wear limit. 0.80mm



4. Important: Fit piston rings to piston, with the marked 'T' facing upwards.



5. Locate 1 end into groove first, then gently pull apart and locate into groove as shown. Avoid scratching or overstretching. Repeat for top ring



6. Insert 1st circlip using needle nose pliers. Ideally install circlips with openings at 6 or 12 o'clock. Avoid scratching or distorting.



7. Apply oil to gudgeon bosses and gudgeon pin.



8. Carefully place piston onto con-rod and insert pin through small end bearing. Note: Port cutout facing upwards.



9. Insert 2nd / final circlip before sliding cylinder onto piston.



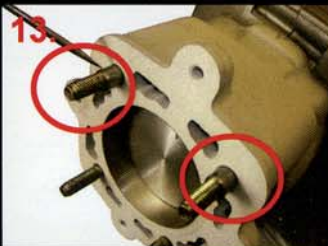
10. Apply small amount of lubrication to the bore and spread evenly.



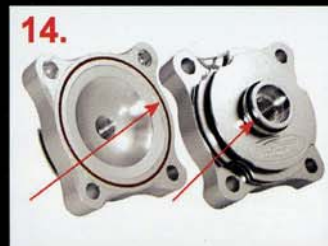
11. Slide cylinder onto studs ensuring that the ring pegs are centrally located to the piston ring ends.



12. Ease piston/rings into grooves using fingers only, at this point lubricate rings and piston as shown.



13. Fit x2 10mm locator dowels as shown.



14. Fit O rings into grooves as shown.



15. Now apply a small amount of Rhodorseal to sealing area evenly, and allow to set for 15mins.



16. Slide head onto studs. Fit x4 8mm flange nuts then proceed to tighten diagonally in order shown.



17. Torque head up in 3 stages to avoid distortion. Stage1: 6 ft lbs, Stage2: 12 ft lbs and Stage3: 18 ft lbs.



18. Take some 1mm solder approx. 160mm long, fold in half and twist. Then bend at 90 degrees.



19. Insert the solder wire through the spark plug hole at 90 degrees to the exhaust port. Ensuring its pushed firmly against cylinder wall.



20. Rotate crankshaft by hand until solder wire is compressed between the piston and cylinder head squish band. Remove and check.



21. Tolerance: Min. 0.90 / Max. 1.10. The ideal being 1mm. Use optional base gaskets supplied to adjust as required.



22. Install CNC or original skullcap as applicable. Using a new skullcap gasket. Smear a small amount of oil on the plug O ring before fitting.



23. Exhaust Stub Big Bore Fitting Kit. Apply Loctite to exhaust stub bolts. M8 x 30mm, Use M8 heavy duty spring washers.



24. Optional big bore stub kit. I.D Size 34.5mm, you will need to bore your existing manifold to this size if using a PM55/59 exhaust.



25. Fitted big bore stub kit PM10131. TQ settings 18 lbs ft.



26. It is not necessary to match exhaust port to stub. For best results oval to round works best.



27. See details below on bleeding the cooling system.

Bleeding the cooling system

To avoid air cavitation in the cooling system and the possibility of over heating, please follow these details carefully. Use anti-freeze / summer coolant @ a 50/50 mix.

Connect clear piece of 3mm hose to bleed nipple, open bleed nipple about 1 full turn using a 8mm spanner, purge air/coolant for at least 5 to 10 minutes into a container (see image 27), whilst occasionally leaning the machine from left to right to allow air to escape from any trapped cavity s. Squeeze and tap rubber coolant hoses to assist this process whilst keeping the header tank topped up. Continue this process until no further air bubbles appear. Lock down the bleed nipple, clean off any spilt coolant; check all hose connections, cylinder seals for leaks and check header tank levels. Start machine and allow the engine to get to normal running temperature with the header tank cap off. Switch off check level again. Fit cap and re-run for 10 minutes then check for leaks again, and then you re done.