

FITTING INSTRUCTIONS FOR PM20/24EV EVOLUTION POWER PIPE STAGE 1.



Thank you for purchasing a hand crafted pm's evolution performance pipes the end product of many years dyno research and development. Please read these instructions carefully before fitting. Please note the PM20/24EV is supplied as standard in oil finish and must be de greased and **coated with a suitable heat resistant paint or lacquer before fitting.**

A. Fit muffler to chamber using gasket 3x6 washers+3x m6 nylocks provided (sometimes muffler is factory fitted)

1. Remove old exhaust as required.

2. Loosely fit new hanging bracket finger tight on to engine casing using original bolts adjust bracket in the middle of the slots at this stage.

3. Clean/ de- grease the exhaust, slip joint and exhaust port on the cylinder fit down pipe to exhaust port a small amount silicone sealant (e.g. Rhoadaseal hi temp sealer) to both sides of the joints, use original nuts or clamp provided loosely at this stage. (For 210 Malossi kits please use optional stainless steel clamp to avoid crushing alloy exhaust spigot part no GN1221

4. After cleaning and de-greasing the slip joint locate main chamber onto connector slip joint down pipe, again silicone sealant should be used here.

5. Fit 2x expansion springs supplied and connect onto the spring retainers wiggle system to allow for correct seating /alignment.

6. Fit rubber gasket in between main bracket and chamber mount fit 2x m8x25 socket head bolts 4x washers and 2x m8 nylocks supplied through main chamber bracket and into hanging bracket loosely tightened at this stage.

7. Adjust system so that there is adequate clearance around the bodywork and rear tyre approx distance should be minimum 10mm (depending on size of tyre). Now fully secure all nuts and bolts in an even manner starting from the mounting bracket to chamber then the main crankcase bolt ending with exhaust port fixings avoid over compressing the rubber gasket on main mounting.

**** Important** make sure that the chamber sits in an unstressed position as you finally adjust and secure all fasteners failure to adhere to this will result in breakage's.**

Use of spare wheel

Important fit a 25mm spacer between lower inner chassis mounting and spare wheel to avoid spare wheel contacting the exhaust during suspension travel if wishing to fit spare wheel cover use a m8 extended nut (same as fitted to cylinder head cowling mount).

N.b. re-check all fasteners after 50 miles or so.

Setting suggestions using stock cylinder and carb. Later P200E machines 98/99 onwards

Spark plug NGKB85EGV set to 19"thou

(use stock **main jet** 116) or max 118 and with drilling a 4.5 mm hole in the underside of the air filter directly above and in line with the main jet holder (**see fig 1**) can in most cases show a considerable improvement in performance do this mod if engine runs rich with poor top end performance (e.g. plug colour usually very dark brown or black)

Air screw located at the back of air box /carb fully in then back out 2.5 turns (anti clockwise)



Late P200E 98/99 ONWARDS

Fig 1. Drill hole 4.5mm to underside of air filter above main jet holder.

PM muffler re-packing kit all parts required to service and re-pack muffler unit

Lubrication. We endorse and recommend the use of **Castrol tts** fully synthetic 2t oil

Setting up

The above details are typical to most Vespa models 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 engines performance, 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 color of the spark plug center electrode for signs of correct jetting e.g. black too rich white too weak oatmeal/light brown is the ideal. Always use shell optimax fuel or super unleaded 97/98 octane.

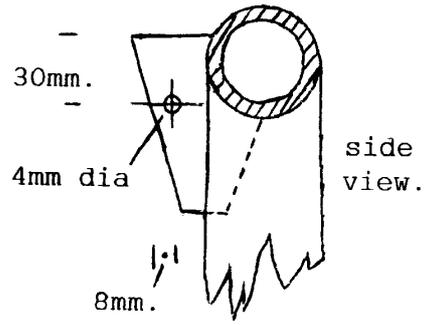
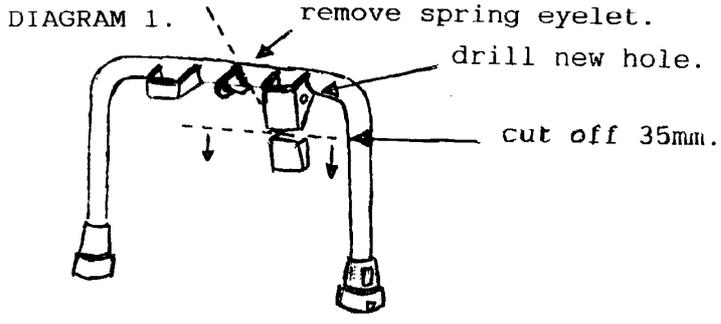
Disclaimer

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 accepts no responsibility for any damage or injury caused by the fitting of a pm tuning exhaust system. For the correct torque settings, please consult a workshop manual. If you feel that you are insufficiently equipped to carry out the exhaust fitting safely and correctly, we recommend you consult your nearest dealer. See web site for further tuning options www.pmtuning.co.uk or send us an e-mail requesting our tuning guide.

PM 20+24 "EVOLUTION" TYPE.

FOLLOW INSTRUCTIONS 1 . 7.
DUE TO INCREASE GROUND CLEARANCE ON THE EVOLUTION CHAMBERS IT HAS
BECOME NECESSARY TO MODIFY THE CENTER STAND SLIGHTLY. (PM 20+24) ONLY.

10. DEPENDING ON THE TYPE OF CENTER STAND FITTED IT WILL BE
NECESSARY TO CUT THE SPRING EYELET OFF AND REPOSITION BOTH ENDS
OF THE SPRING OVER TO THE LEFT AS PER DIAGRAM 1.



11. THE ABOVE MODIFICATIONS ARE BEST CARRIED OUT WITH THE STAND
OFF THE FRAME.

PM 20 SETTING SUGGESTIONS USING
STANDARD BARREL AND CARB. UP TO 96-

MAIN JET (118 STANDARD) OR MAX 120. AIR SCREW FULLY CLOCKWISE
THEN ANTICLOCKWISE 2½ TURNS.
SPARK PLUG NGK B8EV SET TO 19" THOU.

PM24 SETTING SUGGESTIONS USING
STANDARD BARREL + CARB.

MAIN JET (96 STANDARD) OR MAX. 98 AIR SCREW FULLY CLOCKWISE
THEN ANTICLOCKWISE 2½ TURNS SPARK PLUG NGK B7HV SET TO 19" THOU.

LIMITED SIX MONTHS WARRANTY

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During the six month warranty period, P.M.TUNING R.P. will repair or replace, at its option, any defective products or parts at no additional charge, provided that the product is returned to P.M.TUNING R.P. The purchaser is responsible for insuring any product so returned and assumes the risk of loss during shipping. All replaced parts and products become the property of P.M.TUNING R.P.
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