

MORGO

IMPORTANT!

To assist the rings to bed in, use straight oil with *no* anti wear additive what so ever for 2000 miles!

Mk III

750 BIG BORE KIT

&

PISTON RING

FITTING

INSTRUCTIONS

1. Check to see if your old cylinder threads are CYCLE or U.N.F. Both types are available, CYCLE are supplied as standard, U.N.F. to order.
2. Check the crankcases are both level to each other where the cylinder base fits, free from all old gaskets, joining compound, and most of all burrs etc. For a final check to see if the cases are flat take out the two tubular dowels from the crankcase top, place the new Morgo without pistons over the studs, if it rocks there is a high spot. This should be removed before the cylinder is fitted. Do not forget to refit the dowel tubes or misalignment will result.
3. It is important that the original Triumph screws, that hold the two small lugs in the crankcase mouth are fitted, if screws with large heads are fitted they will protrude and damage the bottom of the cylinder when it is pushed down into the crankcase.
4. Make sure that the con-rods are not bent by passing a rod through one into the other, it should pass through with out any use of force. The rod to use should be .6875" dia (11/16") Stubbs silver steel will do the job well.
5. The 9 stud cylinder head must be flat, if not, have the head machined etc. before you refit it to your new Morgo cylinder. If the head is not flat it will leak between the cylinders causing oil to creep out along the top fin of

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the cylinder. This is not to be confused with oil escaping from push rod tubes or rocker boxes.

6. Check ring gaps in cylinder bores .009" (0.23mm) minimum for road use and .015" (0.38mm) minimum for racing. The twin rail oil rings must be left at standard clearance.

Chrome ring first groove.

TP iron ring, marked 'TOP' second groove.

Steel rail oil ring third groove.

7. **WARNING.** Check that cylinder base nuts are still tight after approx 300 miles.

8. Torque wrench settings for cylinder head are :-
3/8" bolt 18 Ft/Lbs. 5/16" bolt 15 Ft/Lbs.

9. Carburettor setting, first run the machine with manufacturers standard set up. If it is found that the mixture is weak fit a jet one size larger. Retry the machine on the road again. Over jetting will cause premature ring wear due to ring wash.

10. We also recommend you fit a new 'Morgo High Performance Oil Pump or Super Rotary Oil Pump' to improve oil flow required to cover the increase in power.

11. Running in should take 1000 miles at 3500 R.P.M. maximum.

IMPORTANT RING GAPS

Check ring gap in cylinder bore 1.5" up from the bottom, in line with cylinder base mounting flange. When checking ring gap ring must be square to cylinder bore, otherwise false reading will be given on inserting feeler gauge in gap. If the ring is out of square with bore it is possible for gap to be 50% different than feeler gauge indication. Care must be taken to maintain squareness of open ends of ring gap ie. 90 Deg to each other. Remove material from one side only. Match side being adjusted to original true end of ring. No attempt must be made to re-gap apex type oil rings. One piece oil rings follow procedure as above with the exception in some cases it may be necessary to adjust both ends of ring to avoid breaking into centre slot in ring body.

Minimum gap for road use .009"

Minimum gap for racing .015"



If chrome ring is supplied fit to top groove (This ring is none directional).

Taper ring marked 'TOP' in second groove with word 'TOP' at the top.

Oil ring in third groove.

If two taper rings are supplied fit to top and second groove with word 'TOP' at the top in both cases.

NOTE: Top marked on ring is direction of ring not indicating ring to be in top groove.

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Oilfeed Hole Blocking Instructions:

As Morgo cylinders do not utilize pressure oilfeed to the exhaust tappets fitted as original to certain Triumph unit 650 and 750 twins, the oil hole in the cylinder gasket surface of the crankcase must be blanked off on these engines to avoid oil leakage.

In these engines, there is a hollow dowel in the front RH of the crankcase mouth on the cylinder gasket surface that must be pulled out with a Vice-Grips and discarded. The oil hole it was fitted around can be easily blanked off by dropping a 1/4" ball bearing into it and pouring Epoxy on top of it, but a less permanent method is to tap the already perfectly sized oilhole with a 1/4x20 UNC tap and to fit a "setscrew" of that size into the hole with a bit of sealant. These setscrews (with no head on them) are easily available at any hardware store or Home Depot and are broached to accept an allen key.

The point of eliminating the oilfeed to the tappets is to increase the flow to the rod bearings, but cam life is dependent on running the nitrided cams as fitted to 1969 and later Triumph twins, or a good quality aftermarket cam such as Megacycle. As always, correct, clean, oil is important.

Though removal of this oilfeed has created no problems, and indeed Triumph themselves reverted to the original (non oil feed to tappets) system on later T14O models, if you prefer to retain this feature, Aercos bigbore kits are also imported and distributed by British Cycle Supply Company.

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