

# **BSA A10 Rebuild Check List.**

## **Basic Repairs.**

- Crankshaft check
  - Sludge trap clean out – (or Greybeard will be onto you!)
  - Big End diameters and out of round (ovality) in 10 thou increments. If re-grinding, make sure sides are radiused against flywheels.
- Timing Side bush if worn –
  - machine crank only to clean up any damage
  - remove T's bush and check ovality of crankcase hole – machine for round. Get new undersized T/S bush, install and get it line-bored. Clearance from crank 1.5 thou aim.
  - After T/S bush is fitted, check leakage between bush and crankcase by immersing crankcase-half under water and put compressed air into bush oilways. Stick a rubber tube through the bush to seal air in.
- Drive side roller bearing – NF206 or NJ206 – either good. Ask for C3 bearing clearance.
- Crankshaft end float – aim for 1.5 thou end float. Assemble dry without shims against the flywheel. Measure end float (likely 15-20 thou). Shim to get aim endfloat.
- Breather cork fitted to apply firm pressure on the breather cam (in T/S case)
- Check wear in all bushes.
- Cork spacer beneath the dynamo large drive sprocket – controls camshaft endfloat.
- Rebore pistons & rings if needed.
- Carburettor overhaul or replace.
- Magneto overhaul – a few specialists available.
- If gearbox shifts OK, leave it alone.
- Chaincase – a nightmare if the sprockets don't line up – plenty on the Forum.
  - Rear mount inside frame, clearance about 1.5mm. Use washers and bolt.
  - 225mls of 20-30 grade oil with no friction modifiers, or overflow tube under chaincase.

## **Recommended modifications.**

- Oil – Fit an oil filter on the oil return line if you want to use a modern multigrade oil with added zinc to reduce wear on rubbing surfaces (cams & followers). Plenty on the Forum. If you don't fit an oil filter, use a 30-grade monograde oil.
- Oil Pressure gauge is great – need to tap into the T/S bush – plenty on the Forum.
- Upgrade to 12 volt gives you a large selection of bulbs. Options for the dynamo drive chain/belt. Belt allows a speed increase of 10% needed if you want to use the 6V dynamo without modifications. A 12 V upgrade means you can stick with the usual chain speed. I have no problem with the chain.
- Consider LED lamps to reduce dynamo load.
  - Indicators are essential today for safety.
  - Good range of LEDs for head and taillights.
- Modern fuel taps – the old cork taps are not good.

## **Luxury items.**

- Electric start luxury from Stephen McFarlane– depends on your age, weight and height. (I am an old short-arse and have difficulty kickstarting) Handy for old age or knee replacements. Total cost about £1500. This will require 12 volts and a larger battery, mods to the battery carrier.