

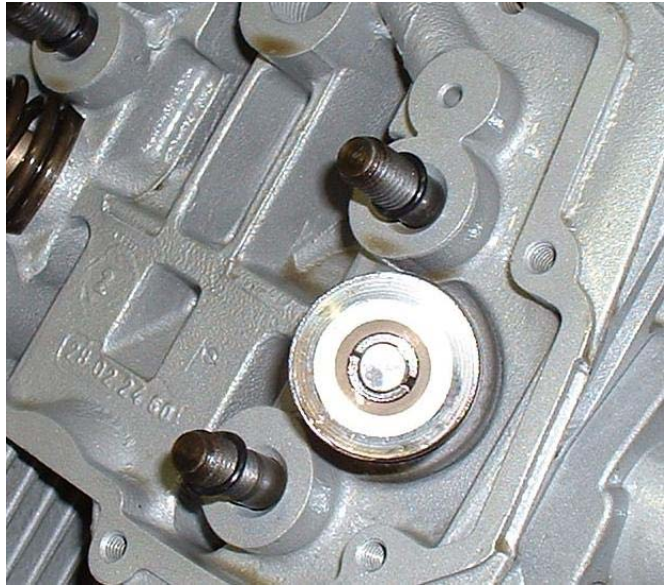
CHAPTER 10: HEADS, TAPPETS AND SUMP BACK ON

Posted on the Wildguzzi forum by Pete Roper: January 17, 2006:

Contents: Assembling the engine. Heads, tappets and sump back on.

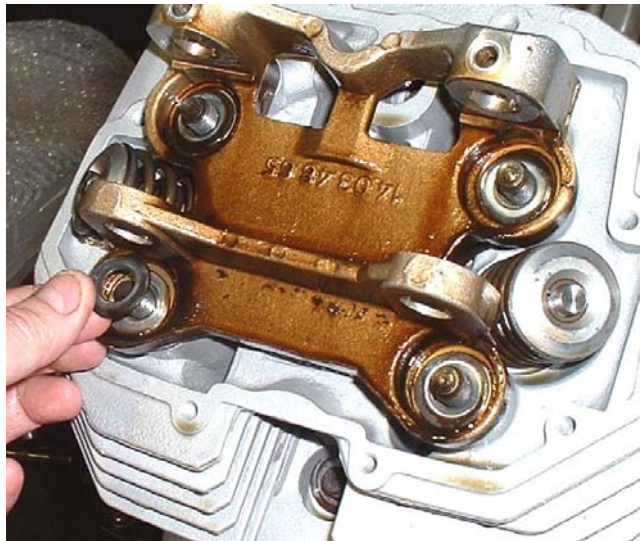
Pic 10-1:

Once the heads are in place put an O-ring on each of the long studs.



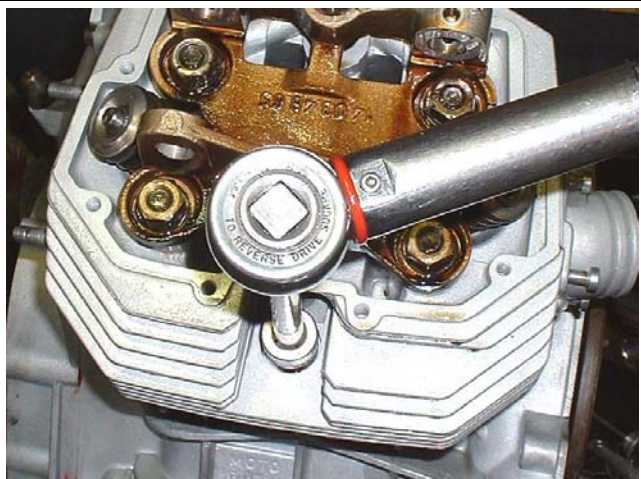
Pic 10-2:

Re-install the rocker carrier and put the five larger washers on the four long studs and the one by the spark plug before slipping the small washer (if it's there!) over the inner stud.



Pic 10-3:

Install the nuts, including the sleeve nut on the inner stud, and torque 'em down in a crosshatch pattern in 3 steps to a final torque of 32-34 ft/lbs. Don't forget to lube the threads before you torque 'em down.



Pic 10-4:

Re install the blanking plug above the sleeve nut with a new O-ring. Don't over torque it or it will be a bummer to get off next time. Once again I recommend a smear of something like zinc-cote on the threads to help prevent seizure.



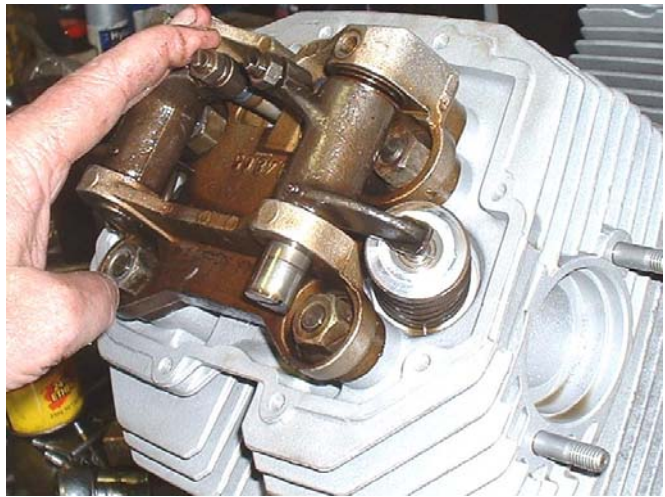
Pic 10-5:

Pop the pushrods back in. Note the assembly lube on the cup. There's some on the bottom too!



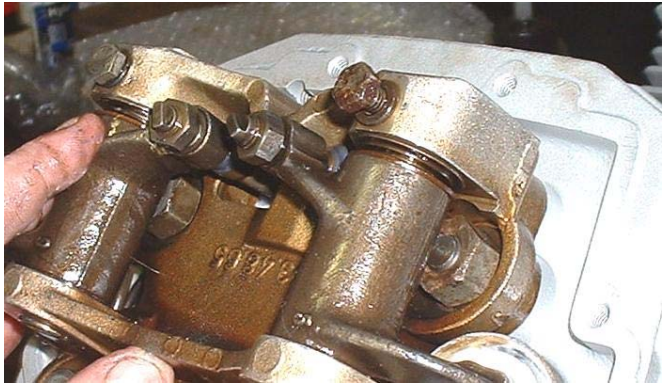
Pic 10-6:

Rockers can now be re-installed. Note that the adjusters are loose. If the heads have been trued up then if they aren't loosened off the tappets will be tight and you won't be able to get the spindles in! Make sure that the engine is at TDC on the compression stroke on the side you are working on too, this is easy enough to establish simply by rocking the flywheel/crank a bit. If the cylinder is on the correct stroke you'll feel no movement in the pushrods. if it's on the wrong stroke both pushrods will move up and down slightly as you turn the crank. Don't forget the order of the washers and spring. From the outside of the head they go brass washer, then rocker, then second brass washer, then spring and finally the steel washer goes between the spring and the inner/upper end of the rocker carrier.



Pic 10-7:

Using a screwdriver in the slots in the bottom of the spindles line up the holes in the spindle with the holes in the carrier and install the bolts with lock washers to retain them. It is VERY important that you don't use bolts longer than the originals. If you do they will block the oil passageways in the rocker spindle and the top end will squeak and wear out real quick!!!!



Pic 10-8:

Set the valve lash just as you would if the bike was having a regular service. I tend to set the gap a thou or two wider at first as the gaskets do crush down as they heat cycle in service. Once the engine has been started once and allowed to cool overnight I then re-torque the heads and revert to standard specs.



Pic 10-9:

If you haven't already? Re-install the oil pressure switch.

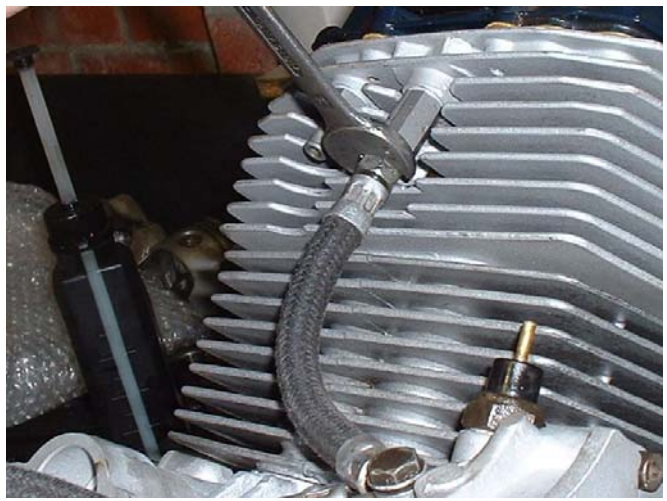
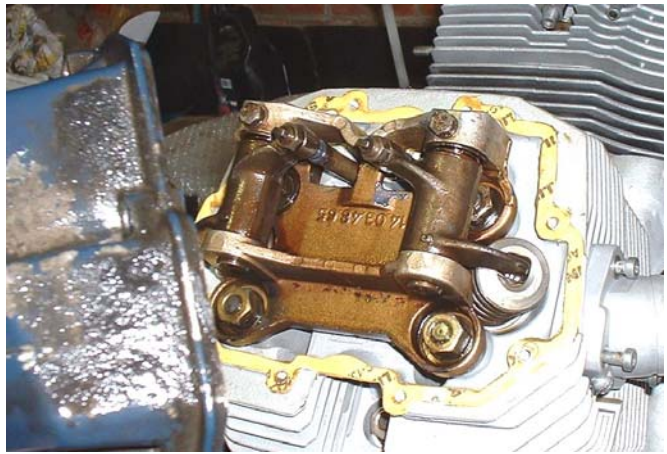


Pic 10-10A

Pic 10-10B:

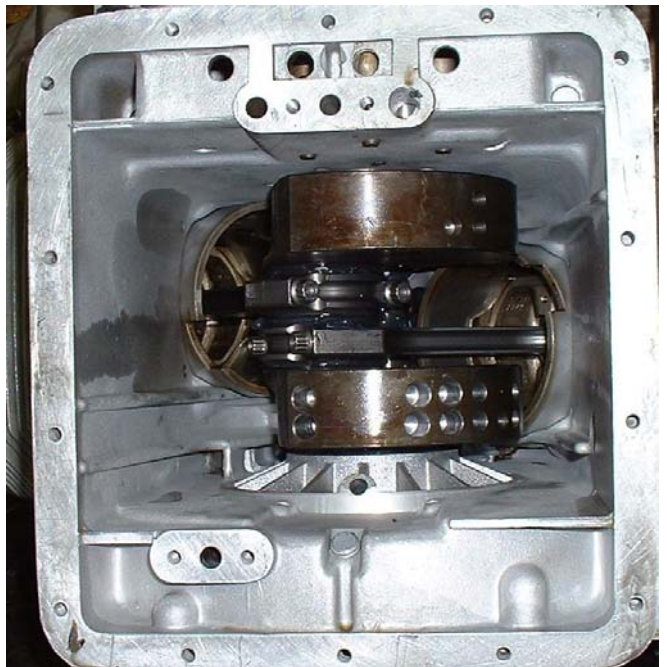
Pop on a new rocker cover gasket, install the cover and button it up!

Repeat the procedure with the other cylinder/head after you've made sure the piston on that side is at TDC compression! Then you can re-install the rocker oil feed pipes.



Pic 10-11:

Chuck the donk back on its bell housing studs and have a look up inside to make sure that there isn't any dirt, bits of rag, bats, false teeth etc. inside. If there are then remove them!



Pic 10-12:

Install the pressure relief valve, strainer and a new oil filter into the sump. Make particularly sure the pressure relief valve is tight eh? A small dab of red loctite on the threads of the OPR valve housing doesn't go astray but only the thinnest smear, not great gobs of it!!!!



Pic 10-13:

Grease two sump gaskets, (If your model has a spacer) and assemble the spacer onto the sump with a gasket betwixt sump and spacer and one on top of the spacer. Install two of the long bolts through the assembly to keep it all lined up and offer the sump and spacer up to the block. Loosely install all the bolts and then tighten them down in a crosshatch pattern, finishing off with the four clamp bolts for the oil galleries.

And that my friends, is the engine itself back together!

