

STRIPPING THE ENGINE

In the first of our new series, John Wyatt — armed with tubs and plastic bags — shows us how to take the vee-twin CX500 engine apart.

THE CX500 was the first vee-twin motorcycle to be launched by the Honda factory. It was launched at the same time as the CBX1000 and was an instant sales success, although some felt it an unusual machine and never gave it much thought.

A few years ago, when one came into my possession, I was mightily impressed, as I suppose hundreds of despatch riders have been. Many motorcyclists wish Honda still made it.

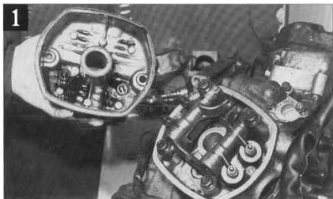
The first type was the CX500A. There was also a custom version called the CX500C. There were many other variations but effectively the stripdown covered here is applicable to all models.

- Before removing the engine from the frame clean the engine thoroughly. Remove the thermostat bracket from the top of the crankcases and the two bolts that hold the manifolds to the cylinder heads. Remove the transfer pipes, thermostat housing and air spoiler plate from the top of the engine. Note the 'O' rings. Finally, detach the chrome lower water pipes. These are held by clamps attached with Allen bolts.

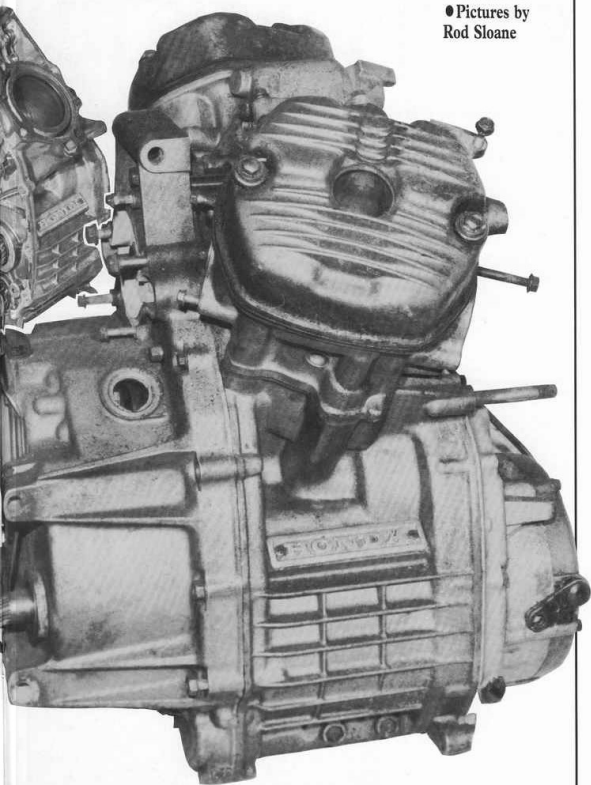
- Working on one cylinder at a time (in order to keep parts separate) and having some plastic bags or equivalent at the ready, undo the two chrome bolts on the rocker cover (10mm spanner) and withdraw the rocker cover, inspecting the rubber gaskets underneath (**pic one**).

- Remove the spark plug if this has not been done previously (**pic two**). Put a small container (a large margarine tub will do) under the drain plug (**pic three**) and drain the cylinder of any remaining coolant. Tipping the engine forward will help.

- Undo the nut (**pic four**) on the front of the engine (17mm spanner), remove the breather tower (or, if a very early machine, the similar plug behind



● Pictures by
Rod Sloane





the right hand barrel) and locate the timing marks. Rotate the engine until the TR mark lines up with the pointer and the right hand cylinder is at top dead centre.

- Now remove the two small bolts on the inside of the cylinder head followed by the four bolts that go through the rocker arm carrier. Do this evenly, in a diagonal pattern (pic five). Now remove the rocker carrier and put in a marked bag.

- Follow this by

withdrawing the two pushrods. Remember to mark them inlet and exhaust, left and right (pic six). The cylinder head can now be removed. Remove the small oil feed jet and put that in a bag as well.

- Rotate the crankshaft to the TL marks and do the same to the left hand cylinder head.

- The next move is to remove the clutch. For this you will need either Honda special tools or a little ingenuity. Remove the four

8mm headed bolts from the clutch cover (pic seven) and bag it.

- Evenly unscrew the four bolts holding the clutch springs and remove the clutch pressure plate, bearing and springs (pics eight and nine).

- Using the clutch lifter holder (part number 07923-4150000), easily available from Dave Silver Spares (tel: 0728 833020) and a 26mm socket, undo the central nut and lock washer (pics ten and 11).

- Remove the full set of



plates as a unit noting that a double thickness plate separates the plates nearly mid-way. For those who dropped the whole assembly on the floor, the re-assembly sequence is as follows:

- First to go in is a friction plate, then solid, friction, solid, friction, solid, friction and then the double thickness plate B followed by a friction, solid and a friction. Then the clutch centre.

- Remove the clutch outer, guide and trust washer. Stop now and bag all the pieces you have removed noting all the washers. If you are not stripping the whole engine, do not rotate the crankshaft at this point or gear assembly will be difficult.

- Now, after removing the oil pressure switch, remove the transmission cover screws using an 8mm socket and withdraw the transmission cover.

- Remove the 6mm bolts surrounding the oil pump drive sprocket (**pic 12**) and withdraw the complete assembly. Bag this now.

- Make sure all parts are now labelled and bagged while things are fresh in your mind. Go away and have a cup of tea!

- Turn the engine around on the bench and start on the rear cover. First remove the washer on the final shaft (**pic 13**). Remove the water pump cover, remove the cap nut, copper washer and impeller (not shown in the pictures).

- Next remove the starter motor by undoing two bolts on the rear cover and pulling the starter motor away. Remove the neutral switch and neutral cord guide (**pic 14**).

- Remove the CDI pulser cover (**pic 15**) (8mm spanner). Disconnect the pulser wires and remove the pulser stator. A good quality Phillips screwdriver is required here (**pics 16 and 17**). Then remove the rear cover bolts and separate it from the crankcases (**pic 18**).

Next month: we complete the stipdown. July issue on sale June 17th.