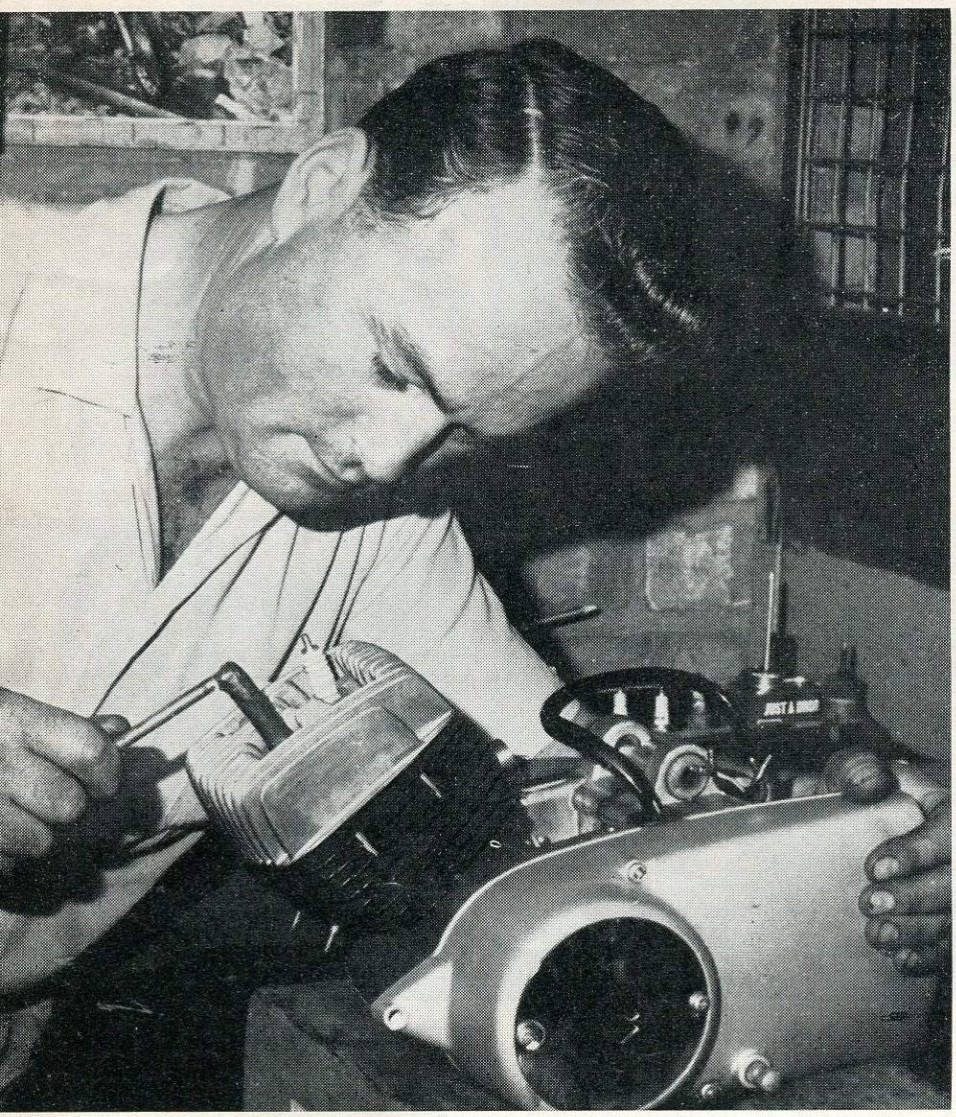


John Smethurst of Suzuki shows you how to strip the latest 50cc

SUZUKI M 30

Before stripping any engine the first thing to do is get it out of the frame and on to a bench, where it can be worked on a lot more easily. To get the 50 cc Suzy motor out of the frame it is a simple job of releasing the engine fixing bolts, silencer, carburettor and rear chain.

Once the engine is on the bench, clean any surface dirt off and the engine is ready to strip. First job is to remove the head and barrel which is a simple matter of releasing the four headnuts. Once off, decoke the head and the exhaust port of the barrel, also check barrel for any signs of wear.

Next the timing side of the crankcase is stripped down. Main points to watch here are that the final drive sprocket is checked for wear, and that the tab washer is replaced. Also see that a timing mark is put on the stator plate before it is removed. When locking the engine to undo the flywheel magneto, retaining bolt, the safest thing to put either side of the connecting rod to lock the piston is two strong strips of wood.

Before removing the stator unit also remember to release the wire from the neutral indicator switch. Once this is free the rest of the wiring harness should be unclipped to free the stator.

With the timing side stripped turn the engine over to the drive side and remove the cover. This exposes the clutch and kickstart spring assembly for removal. The spring is held down by a small circlip. Be careful when removing the circclip that it does not fly off and get lost. The kickstart spring engages in a hole in the shaft and is pre-tensioned so hold it firmly with a pair of pliers as you remove it.

Next thing to remove is the clutch. Firstly, the clutch pressure plate, which must be compressed to allow the clutch adjusting studs to be removed. The best way to do this if you have not got the special tool is to use a small G clamp.

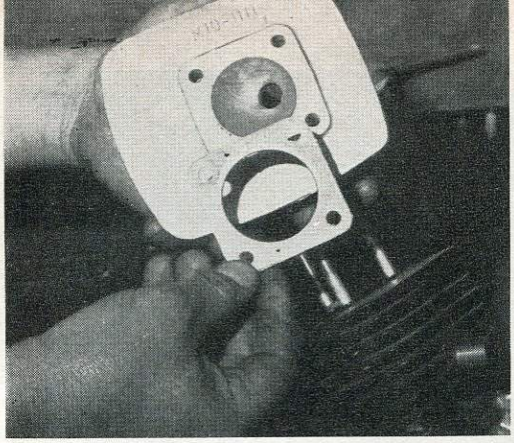
Once the pressure plate is removed the clutch retaining nut can be undone. To do this the clutch must be locked for which there is a special tool. This can be hired from your local Suzuki dealer. When the clutch is off, check the plates for signs of wear, and also check the teeth around the outside are not chipped or rounded.

Next remove the drive pinion, and, like the clutch, check teeth for wear. The drive pinion is a taper fit onto the crankshaft, so once the nut is off, gentle levering from underneath will be enough to free it.

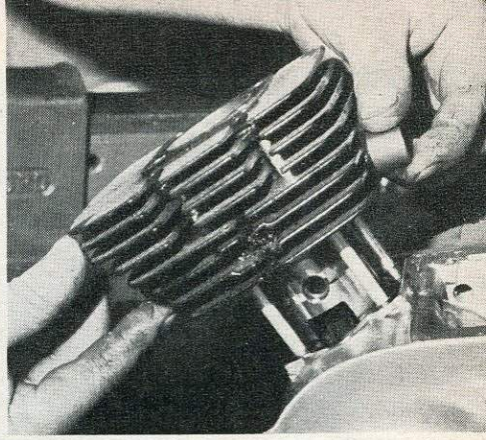
With all the parts removed from either side of the motor the crankcase halves themselves, can now be split. Before trying to force them apart first tap around the edges with a wooden mallet. This will free off the gasket cement between the two halves. With gentle pulling the drive side of the crankcase will then lift off. Gears are now free to be removed if necessary or the crank checked for wear.

Final point to remember is that the spacer between the crankcase halves is not left out on reassembly.

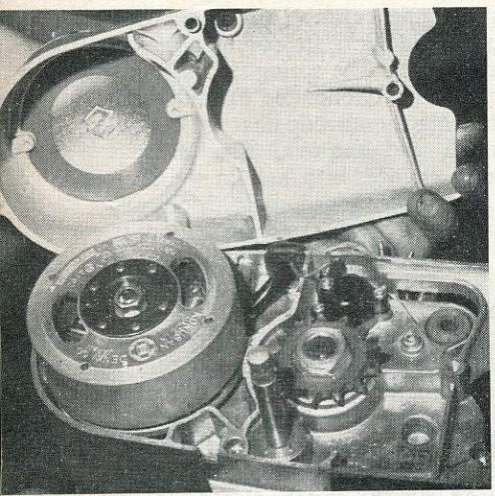
50cc, M.30 PICTURE STRIP GUIDE



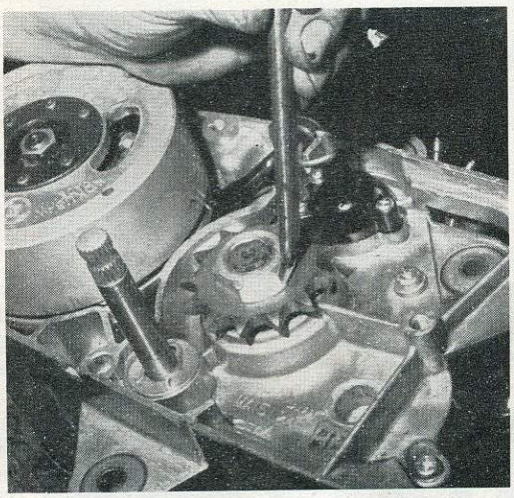
Start by removing the cylinder head and check the gasket which will probably need replacing. Clean any carbon out of head.



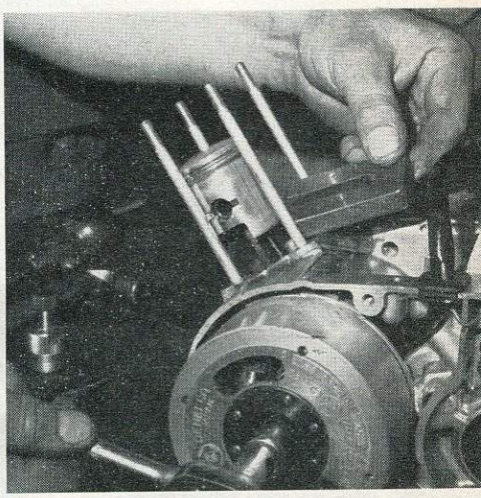
Next, gently ease off the cylinder barrel and check the bore for score marks. If worn the barrel should be rebored.



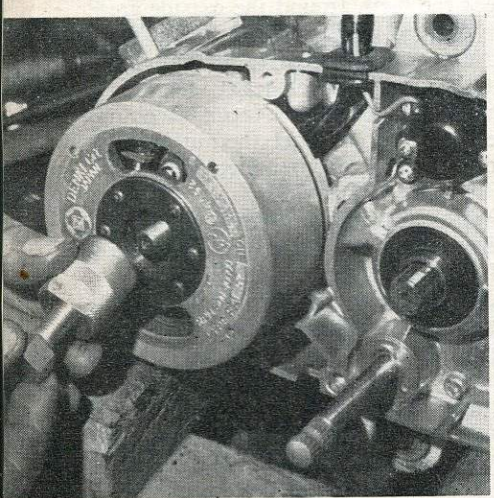
With the head and barrel removed turn to the timing side of the engine and remove gearchange lever and timing cover



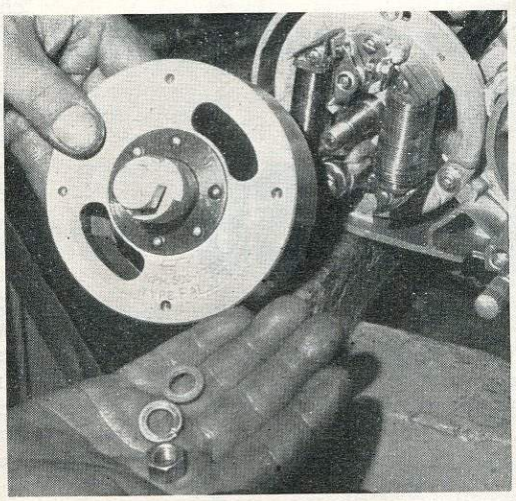
Next flatten down the final drive sprocket tab washer and remove the sprocket. Replace tab washer when reassembling.



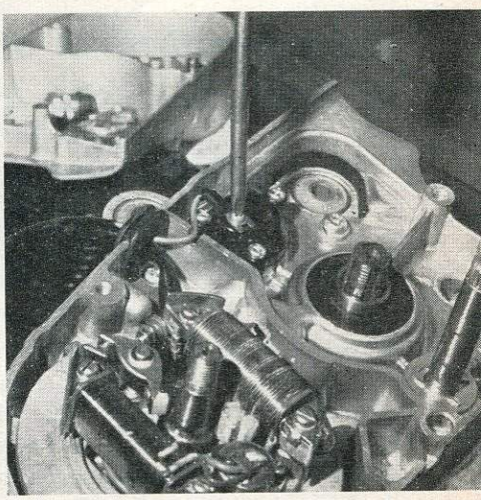
To undo the flywheel mag nut, the engine must first be locked. This is done by inserting wood or the like beneath piston.



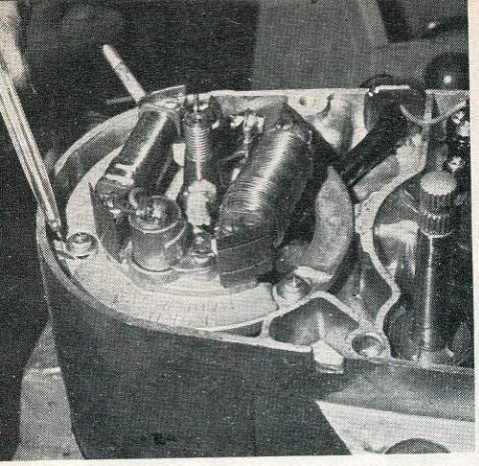
Once the nut is removed a special extractor is needed to pull the flywheel off the keyed shaft. Check for signs of wear.



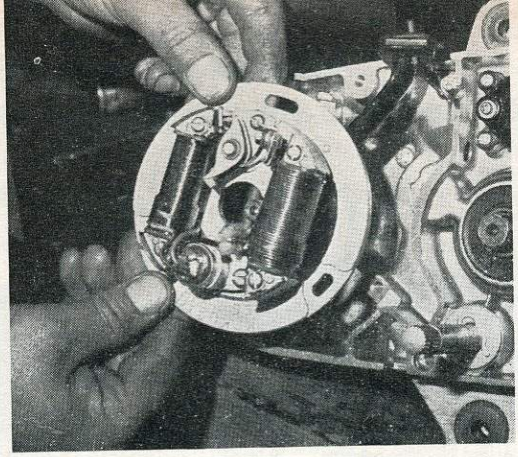
Note the order of the retaining nut and washers. There are two washers, firstly a plain washer followed by a sprung type.



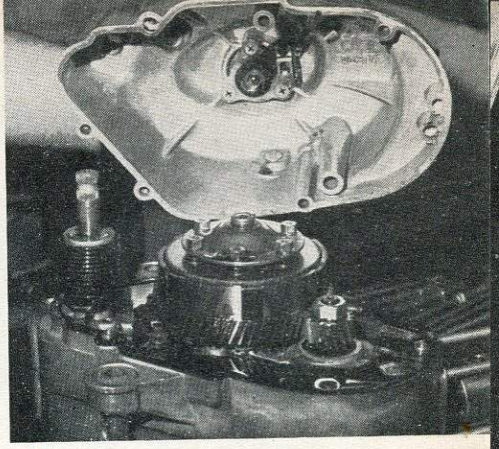
Before the stator plate can be removed the wire for the neutral indicator light must be unscrewed from the switch unit.



Before removing the stator plate mark the edge of the plate with the crankcase to save retiming the engine on reassembly.

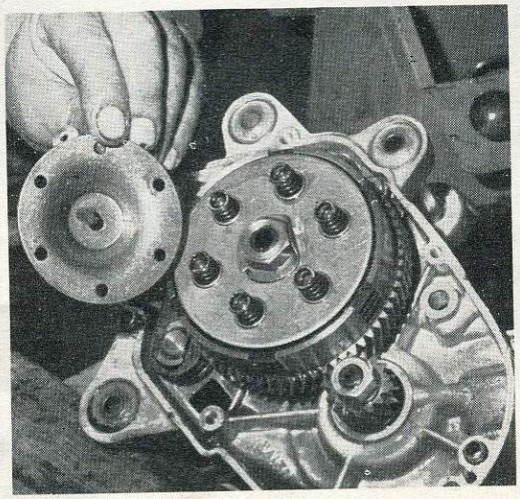


Remove the three fixing screws and take off the plate complete. Check the contact breaker points for any signs of wear.

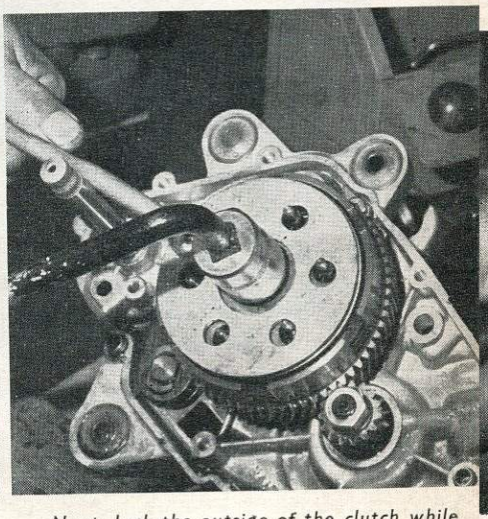


Next turn the engine over to the clutch side and remove the kickstart lever and the clutch cover to expose the clutch.

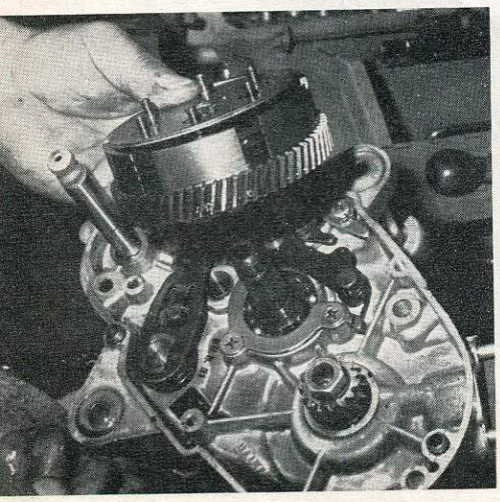
Kickstart spring retainer is held in position with a circlip. Remove this, then the retainer and spring from shaft.



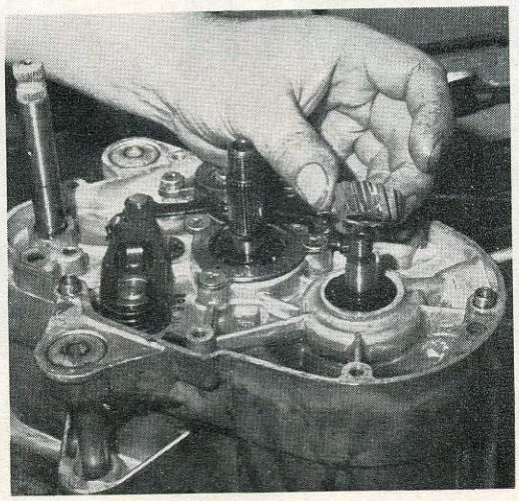
Remove the clutch pressure plate by unscrewing the six clutch studs. Ease pressure off plate first with a G clamp.



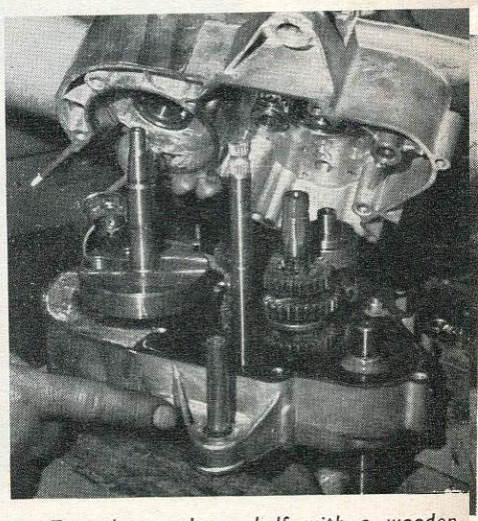
Next, lock the outside of the clutch while the clutch centre retaining nut is undone. Tab washer on this nut is also replaced.



Once the centre nut is off, the clutch can be removed complete. Check clutch plates are not worn and teeth are all OK.



Nut holding the drive pinion on, can now be removed. Pinion is on tapered shaft and should be eased off with wedge.



Tap the crankcase half with a wooden mallet to free the gasket sealer and split case. Put back spacer on reassembly.

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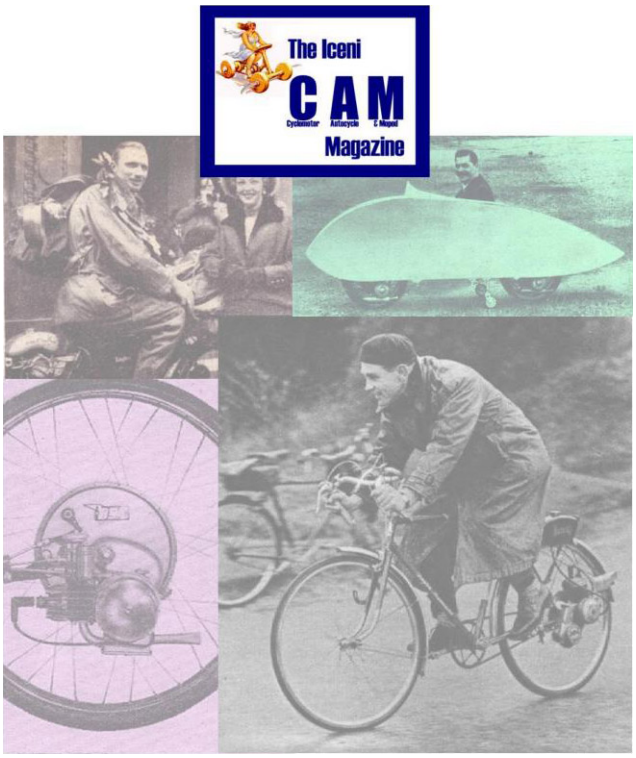

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