KEEPING THE PARILLA ENGINE IN SHAPE

Decarbonizing and Fettling an Unusual Italian Moped Power Unit

ALTHOUGH its near-horizontal cylinder gives the engine of the Parilla two-stroke moped an unconventional appearance, it is in actual fact a quite straightforward two-stroke of conventional "flat-top" design. That being so, it follows that there is very little "specialist knowledge" required for such routine jobs as decarbonizing. Even so, it is essential that the task is tackled in the proper manner — methodically, not haphazardly.

First comes the question—"When does the engine need this attention?" That will depend upon the manner in which the engine is used and the mileage covered. As a general rule, the first "de-coke" should be undertaken at around the 900-1,000-mile mark. This can be simply a "top overhaul." At 2,000-mile intervals the job should be extended to cover work on the barrel and rings as well. If you are the kind of owner who habitually over-lubricates—using a 16 to 1 petroil mixture instead of the recommended 20 to 1, for instance—you will need to decarbonize earlier.

Let's take, first of all, the case of the 1,000-mile "top overhaul." This is such a simple task that it could well be done in a single lunch-hour, if needs be, since all that it entails is removal of the silencing system and the cylinder head. First move is to undo the four 10 mm. nuts which secure the head and, after detaching the plug lead, to lift the head off its studs, placing it on some clean newspaper while you turn your attention to the exhaust system. This is secured to the machine by a screwed ring on the cylinder's exhaust stub and by a 10 mm. through-bolt at the rear of the gearbox. For the removal of the screwed ring you will need a C-spanner. Undo the ring and draw it clear of the stub. Then remove the through-bolt, and the exhaust pipe and silencer can be lifted from the machine.

Silencer Dismantle

Separate the pipe from the silencer by undoing the 10 mm. bolt securing the silencer clamp, and then undo the 10 mm. nut which secures the silencer end-cap. A hearty pull on this cap will draw the baffles from the silencer, and all is now ready for the actual job of decarbonizing

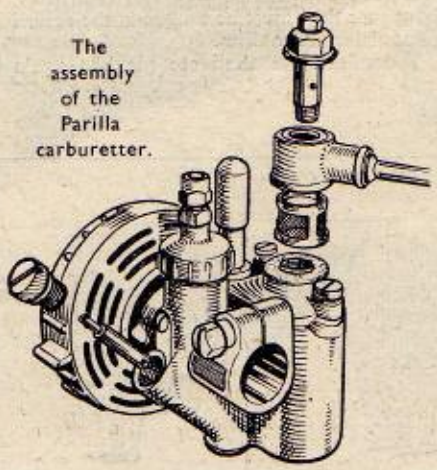
You will have handy, of course, a blunt scraper and some fine emery cloth, together with some clean petrol for washing purposes. Rotate the pedals to bring the piston to the top of the barrel, and then scrape the piston crown clear of carbon, finishing off, gently, with the emery cloth. Now wash the piston crown with petrol until it is quite clean. Rotate the pedals until the piston is at the bottom of its stroke. This will bare the exhaust port, and you can easily chip away all carbon which has formed there, finally washing through the barrel with petrol.

This done, it is the turn of the cylinder head. Remove the sparking plug, and scrape the head clean, paying special attention to the area around the sparking plug hole. Again, finish off with emery cloth—being careful not to damage the head/barrel joint—and wash with petrol.

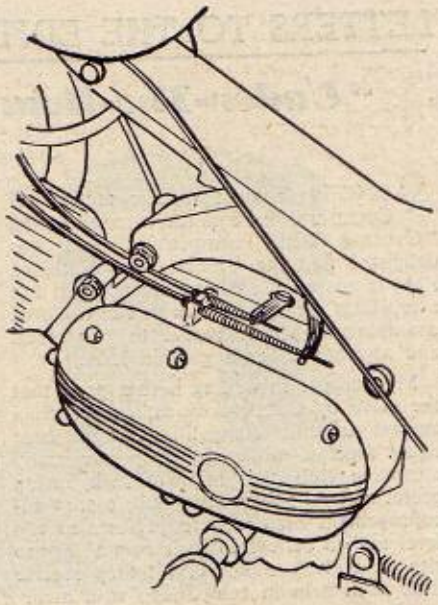
Cleaning the Exhaust

You will probably find that the exhaust pipe is no more than sooty. A stiff wire brush on a long, flexible handle is the tool for cleaning this off—but the silencer baffles may be more heavily carboned. Make sure that none of the internal holes

The break-down of the Magneto.



The assembly of the Parilla carburetter.



The Parilla clutch controls.

are choked. If they are, poke them clear again and finish off work with a wire brush.

Reassembly can now commence. First, replace the head and tighten it down, giving each nut in turn finger-tightness, and then screwing them down bit by bit, working from one nut to the one diametrically opposite, until all are tight. Clean the plug and gap it (.018-.022 in.) before replacing it and re-connecting the lead. Then assemble the silencer and fix it to the exhaust pipe, subsequently offering the complete unit up to the machine. Fix the through-bolt first, and place its nut on loosely. Now screw on the ring and tighten it thoroughly, finally locking up the through-bolt.

Complete Decarbonizing

For a complete decarbonizing the routine is similar, but instead of leaving the barrel in place when the head and exhaust have been stripped it is carefully lifted off. Before doing this, however, you must loosen the two socket screws on the left of the crankcase mouth. These "pinch" the barrel spigot and make its mounting more secure.

With the barrel off, spring the circlips out of the gudgeon pin housings in the piston and, using rag wrung out in hot water to expand the alloy, drive out the gudgeon pin and remove the piston. Make a careful note of its correct fitting first, by scribing an arrow on the crown to show which side should be uppermost. Next take off each ring and clean out the ring grooves. Scrape the inside of the rings, too, and decarbonize the piston crown. You can then fix it back on the con-rod and clean the barrel ports. There are no reassembly snags, but don't forget to tighten the two socket screws once the head and barrel have been locked down by tightening the cylinder head nuts.

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COMPLETING THE PARILLA

Rounding off the maintenance work on an unusual Italian moped

COMPENSATION for cable stretch in the gear-control mechanism of the Parilla moped is allowed for in a rather unconventional way. Most mopeds have a screw-type adjuster let into the outer casing of the control cable, but in this case all play is taken up on the inner casing which, on the gearbox lever, is retained by a solderless nipple. This means that by loosening the screw which clamps the cable into the nipple, it is possible to increase or decrease the amount of free play in the controls, and if the gear shows signs of slipping, or engagement is difficult, there is a set routine for readjustment.

First, put the gearbox selector-lever—the shorter one of the two atop the gearbox—into its second-gear position. This is when the lever is pointing straight across the unit at right-angles to the centre-line. Now slacken the cable locking screw in the solderless nipple, and set the twist-grip control in second gear—twisted forward. All that remains to be done, now, is to pull on the end of the inner cable until it is taut, when the locking screw can be re-tightened. The resulting gear adjustment should be perfect, but it is as well to check that each gear engages properly, and that neutral can easily be selected. If not, readjust, allowing a fraction of an inch of play in the control, until all three control positions can be selected.

A similar provision is made for adjustment of the clutch, which should be reset whenever play at the handlebar lever is more or less than a quarter of an inch. In addition, there is a screw-type adjuster on the clutch rod itself, and this can be reached by unscrewing the small alloy plug set into the left side of the gearcase. The screw is locked by a nut, which must be loosened before the screwdriver is inserted in the slot. Turn the screwdriver to the right to decrease clutch play, to the left to increase it. When the correct setting has been found, retighten the lock nut to hold your adjustment.

Oil Level

The level of the oil in the gearbox needs to be checked every 1,000 miles, by examining the dip-stick carried on the filler plug, which must, of course, be unscrewed. If the level is incorrect, top up with fresh oil. Every 2,000 miles it is advisable to change the oil completely. This job should be carried out with the engine warm. Open the filler cap, and remove the drain plug at the bottom of the unit to permit all the dirty oil to escape. Then temporarily replace the drain plug and pour in some flushing oil. Run the machine for a mile or so, and then drain the gearbox again. Replace the plug, pour in fresh oil and tighten down both drain plug and filler plug.

The carburetter is of Dell'Orto manufacture and is equipped with two filters. The air filter, in the bell-mouth, is retained by a large central screw. When this is undone the filter can be removed and dismantled. The element itself is of wire mesh. Wash it in petrol, and steep it for ten minutes in thin oil. Let it drain before refitting. A wire mesh fuel filter is contained in the banjo union atop the float chamber. It is reached by undoing the hexagonal bolt which secures the banjo, and should be washed out at the same time as the air filter. Both jobs need to be done once in 200 miles. The manufacturers also advise removal of the float chamber top (held by two slotted screws) and cleaning of the chamber. If jet-blocking is suspected the slotted and knurled brass screw on the side of the mixing chamber should be unscrewed, and the jet—which lies beneath it—lifted out. Blow through the jet, switch on the petrol, and spurt fuel through the carburetter by depressing the plunger on the instrument two or three times. Then reassemble.

Contact Breaker

For adjusting the contact-breaker points, removal of the right-hand engine case is required. This is held by socket screws. When you have bared the magneto, turn the flywheel until the ignition points are fully open, and check the gap with a feeler gauge. It should be between .012 and .014-in. If it is not, adjust them by loosening the screw which clamps the fixed point plate to the baseplate, and move the plate about its eccentric until the gap is correct. Tighten up the clamping screw again, and re-check the gap when you have done so. This is a job which needs to be done every 400 miles. At the same time, you can clean the points by inserting between them a piece of clean paper, and tightening them on to it by rotating the flywheel. When the points are just lightly gripping the paper, draw it clear. It will show traces of dirt. Repeat the performance until the paper is clean when released.

Every 1,000 miles, it is advisable to run a drop or two of thin oil on to the felt pad which lubricates the contact-breaker cam. This is located in a square housing, just below the condenser.

On the cycle side there is very little to be done. A constant watch should be kept upon the chain tension—there should never be more than ½-in. play in the bottom run—and it is as well to test each brake once a week, taking up any excess play on the cable adjuster provided in each outer casing. Once every 500 miles, also, the front and rear suspension pivots should be greased by two or three shots from a grease gun, while the chain should be removed for cleaning and soaking in grease at least once every year, especially if the machine is used in all weathers.

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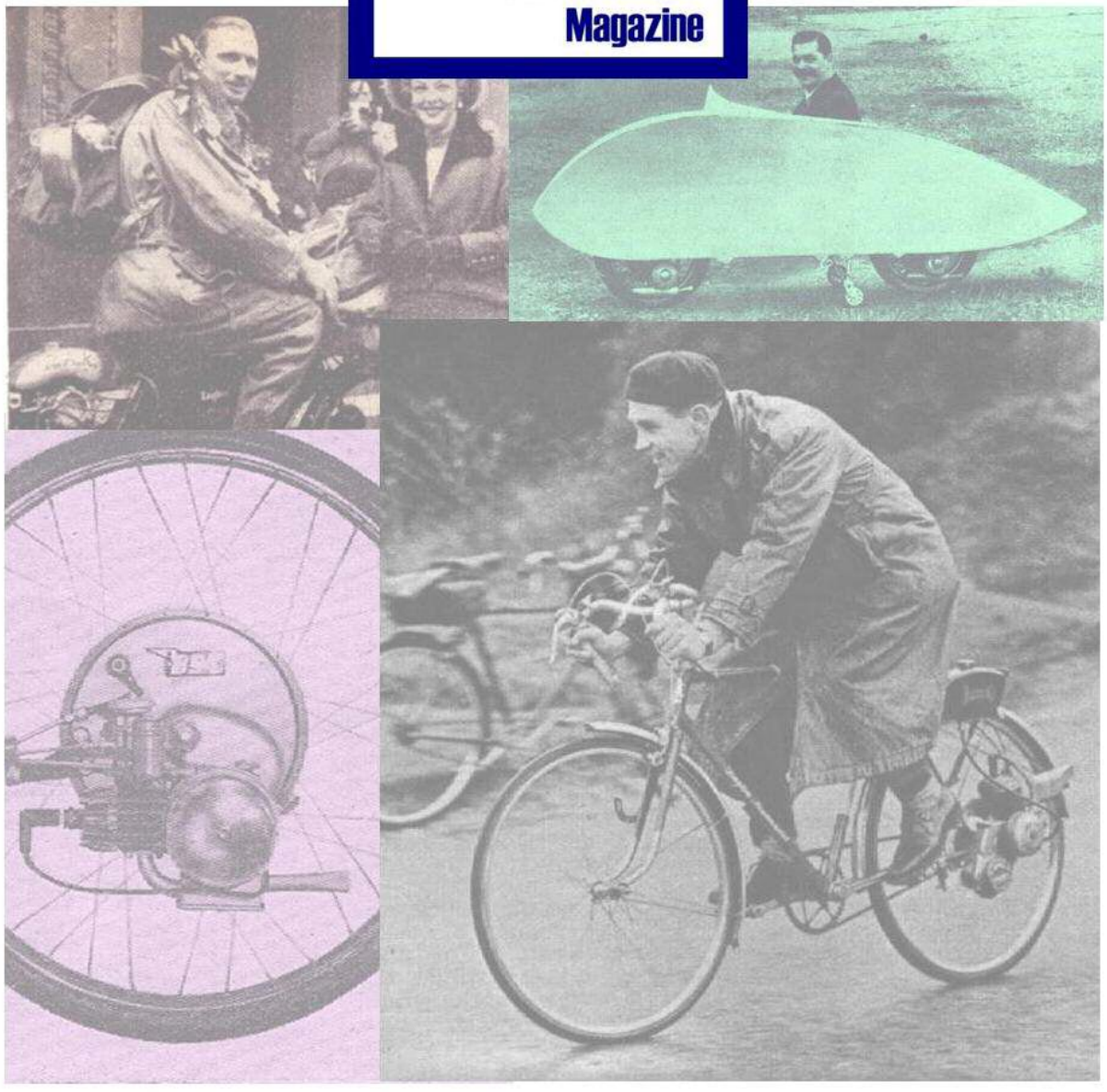

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