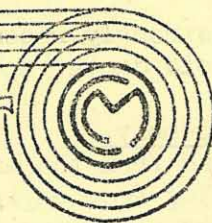


**Cyclemaster**  
LIMITED



HEAD OFFICE AND WORKS:

TUDOR WORKS  
BYFLEET, SURREY.

Telephones: Byfleet 3145/6/7

PRODUCTS CYCLEMASTER  
CYCLEMATE

Piatti

September, 1956.

SERVICE HINTS FOR THE PIATTI.

Servicing of the Piatti will present no difficulties to the service mechanic, as no major departures from standard workshop practice will be met. The following information, in conjunction with the Piatti Owner's Instruction Book, will assist towards a rapid and efficient repair. An illustrated Service Manual is now being prepared, and will be distributed to Piatti Dealers as soon as it is available.

Further information can be obtained by writing to the following address, QUOTING THE ENGINE AND FRAME NUMBERS :-

Service Manager,  
Cyclemaster Limited,  
Tudor Works,  
Byfleet,  
Surrey,

A. REMOVAL OF ENGINE-GEARBOX UNIT.

1. Close filler-cap air vent and turn off fuel tap.
2. With machine upright, unscrew carburettor throttle valve and control cable assembly, and disconnect fuel pipe. Drain gearbox and chain-case oil. Clean drain plugs and refit.
3. Remove two of the three air filter screws, slacken the third, and remove one filter mesh to give extra clearance when withdrawing carburettor.
4. Slacken clamp and remove carburettor.
5. Lay machine on its right side (using a piece of cloth or board to protect footboard enamel).
6. Disconnect rear brake-rod coupling and clutch control cable by removing split pins and clevis pins (carefully note position of rubber and metal washers on brake balance arm).
7. Slacken exhaust pipe clamp on silencer, remove exhaust pipe securing clip and withdraw exhaust pipe.
8. Remove split pin which retains gear change toggle, ease off toggle and remove clevis from cable nipple.
9. Slacken locknut, unscrew gear cable adjuster, and pull nipple through casting lug.
10. Disconnect low tension and ignition cut-out leads, leaving connectors on magneto leads, and remove the screw which retains the earthing terminal.
11. Remove two screws securing rear spring pivot pin to body, and push pivot pin out toward right side.
12. Remove engine main pivot bolts (a 7/16" whitworth socket or ring spanner is suitable). Extreme care must be taken to note the order in which the spacers are fitted, as incorrect re-assembly will affect the wheel alignment.
13. Remove engine unit from body.

B. MAGNETO.

1. To remove flywheel.

Remove flywheel retaining nut and washers, and pull off flywheel; using extractor. (The flywheel can only be removed after the engine unit has been removed from the body).

IMPORTANT. It is strongly recommended that the correct extractor is used in order to avoid damage to the crankshaft.

2. To remove stator assembly.

- a) Unscrew H.T. Lead from the magneto side of suppressor.
- b) Remove rubber plug from engine casting.
- c) Remove two screws retaining stator unit, and lift it off stator back-plate, gently feeding H.T., L.T., and ignition cut-out leads through aperture. (No attempt should be made to detach the back-plate from the engine casting without previously taking off the stator unit).

When refitting the magneto, the L.T. and ignition cut-out leads must be secured with the clip provided to avoid possible contact with the flywheel.

Further servicing instructions are contained in Service Sheet No. 1G.1467, a copy of which is attached.

C. ELECTRICAL SYSTEM.

A wiring diagram is attached.

D. SERVICING THE GEARBOX. (It is not necessary to remove engine from body).

Dismantling.

1. Lay the Piatti on its right side, and select top gear.
  2. Unscrew wheel nuts and remove wheel.
  3. Using a 27 m.m. spanner, unscrew "Nyloc" nut and slide drum off spindle shaft. Care must be taken to lift drum squarely to avoid damage to brake drum oil seal.
  4. Remove clevis and split pins, and disconnect brake cable.
  5. Unscrew five nuts (using a 10 m.m. set spanner), and remove spring washers. Gently ease off gearbox cover and brake plate assembly, again avoiding damage to the oil seal.
  6. Withdraw gearbox main shaft and thrust washer.
  7. Remove layshaft assembly (one piece) and 1st and 2nd gear pinions.
- NOTE. Top gear pinion cannot be removed without removing the engine complete and splitting the crankcase castings.

Re-assembling.

NOTE. It is important that all surfaces are clean before re-assembling, and care must be exercised to avoid damage to the oil seal.

8. Fit layshaft assembly, locating shaft in bearing. The large pinion must engage fully with the top gear pinion (24T).
  9. Fit main shaft complete with selector key.
  10. Fit 2nd gear pinion (29T) and 1st gear pinion (35T).
- NOTE. For correct pinion alignment, these are refitted with protecting flange toward rear wheel.
11. Replace gearbox cover gasket.
  12. Replace gearbox cover carefully, locating on retaining studs and dowel. Replace washers and nuts and tighten evenly.
  13. Connect rear brake cable and replace split pin.
  14. Clean brake drum and refit (once again avoiding damage to oil seal), and secure with "Nyloc" nut.
  15. Refit rear wheel.
  16. Check gear operation and adjust if necessary. (See Owner's Instruction Book, pages 5 and 6, and Fig. 5).

E. SERVICING THE CLUTCH AND PRIMARY TRANSMISSION.

Dismantling.

1. Complete paragraphs 1-13 of Section "A", and paragraph 1 of Section "B".

Separating the castings.

2. Unscrew suspension unit pivot bolt, press out and remove suspension unit.

2. Unscrew casting bolts, using 10 m.m. socket spanner, and gently ease off right-hand engine casting assembly, complete with kick-start and stator plate assemblies.
4. Slacken jockey sprocket barrel nut.
5. Remove chain connector and chain. (Some models are fitted with endless chains and it is necessary to remove driving sprocket and kick-start ratchet, retained with circlip).
6. Gently release clutch spring tension and remove six screws retaining clutch plate, remove cover and corked clutch plate.
7. Ease tab-washer clear of clutch retaining nut and slacken nut.  
Do Not Remove. Compress clutch spring as follows :-
  - a) Fit clutch service tool over crankshaft and seat firmly on clutch pressure plate.
  - b) Locate the four screws and tighten evenly.
  - c) Remove clutch locknut and tab-washer.
  - d) Release clutch spring tension by gradually unscrewing the four screws of the service tool. This must be carried out by crossing diagonally, and each screw must be slackened one turn at a time, finally removing the service tool.
8. Withdraw clutch plate and housing assembly.
9. Removal of the 34T driving sprocket and kick-start ratchet assembly is straightforward; it is only necessary to remove the circlip and gently ease the assembly off the driving gear splines.

#### Re-Assembly.

Re-assembly of the primary transmission and clutch is straightforward, if the following points are observed :-

10. The clutch plate must be in line on both the crankshaft splines and the clutch housing, before attempting to compress the spring.
11. Clutch locknut must be securely tightened and tab-washer fully tapped home.
12. Using two only clutch cover screws, less spring washers, tighten fully, bringing clutch housing to correct position.
13. Fit remaining four screws and spring washers, and replace spring washers on screws first fitted.
14. Primary chain must be adjusted after right-hand engine casting assembly is refitted.

#### F. CARBURETTOR.

All adjustments and servicing details are contained in the attached leaflet No. 537.

#### G. EXHAUST SYSTEM.

1. The engine does not normally require decarbonising before approximately 2,500 miles, but loss of power can occasionally be attributed to the exhaust tailpipe having become partially blocked with carbon. When cleaning it, it is suggested that the flattened end of the exhaust pipe is opened slightly, using the blade of a screwdriver.
2. When refitting the exhaust pipe, care must be taken to avoid damage to the asbestos tubular packing. This should be entered approximately half-way in the silencer, and, with the exhaust pipe inserted in the opposite end, gently eased home.

NOTE. It is essential that the asbestos packing is not damaged when the exhaust pipe is refitted, as particles of this packing can partially block the exhaust pipe, causing loss of power.

#### H. CHANGING CHAIN-CASE AND GEARBOX OIL.

When carrying out this operation, it is important to keep the machine on the stand, as with the machine on its side, there is a tendency for oil to run into the rear brake drum.

## I. STEERING BEARING RACE ADJUSTMENT.

The adjustment of the head races, although not critical, must be carefully carried out. Over-tight races can cause erratic steering and instability.

1. To remove the steering shield, take out eight P.K. Phillips screws and one domed-head screw.
2. Slacken head race locking tab (if fitted) and slide it clear of locknut.
3. Adjust bearings so that play is only just perceptible. This must be checked with front wheel lifted clear of ground or with the machine on its side.
4. Lock the race and check adjustment. Refit locking tab.
5. Refit steering shield. The moulding should fit snugly, and should, if necessary, be resecured with adhesive.

## J. CENTRE STAND.

1. Earlier models were fitted with the stand control cable on the same side as the return spring, with the result that there is no compensation for wear. It will be necessary when excessive wear takes place at the points of attachment to lay the machine on its side, remove the stand retaining clips and re-shape, to reduce the clearance.
2. On later models, where the cable attachment is on the opposite side to the spring, the stand control cable must be adjusted to allow approximately  $\frac{1}{8}$ " between the rubber feet and the underside of the footboard. To adjust, lay the machine on its side :-
  - a) Slacken the cable clamp on the stand.
  - b) Pull the bowden inner wire through the clamp to give the above clearance.
  - c) Tighten the clamp and check operation of stand. Lubricate if necessary.

## K. FUEL TANK MOUNTING.

The order of the tank mounting bolt assembly, reading downward, is :- Bolt, plain washer, rubber washer, body bracket, rubber washer, tank bracket, plain washer, nut, locknut.

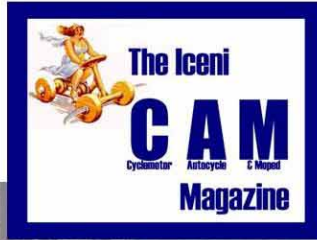
NOTE. The tank securing nut must not be over-tightened, but the locknut must be securely tightened to it.  
(The fuel tank can only be removed with the engine unit out of the body)

## L. REMOVAL OF DUAL-SEAT.

1. Slacken seat pillar clamp.
2. Gently ease seat upwards until seat pillar is clear of support.
3. Disconnect parking battery snap connections, (NOTE. Green is live, and translucent is earth) leaving rubber connectors on seat leads to avoid possible short-circuiting of the battery.

When refitting the dual-seat, care must be taken to avoid chafing or trapping the parking battery leads between the seat pillar and fuel tank. Surplus leads should be pulled gently into the battery compartment, through the hinged flap at the rear of the dual-seat.

# IceniCAM Information Service



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