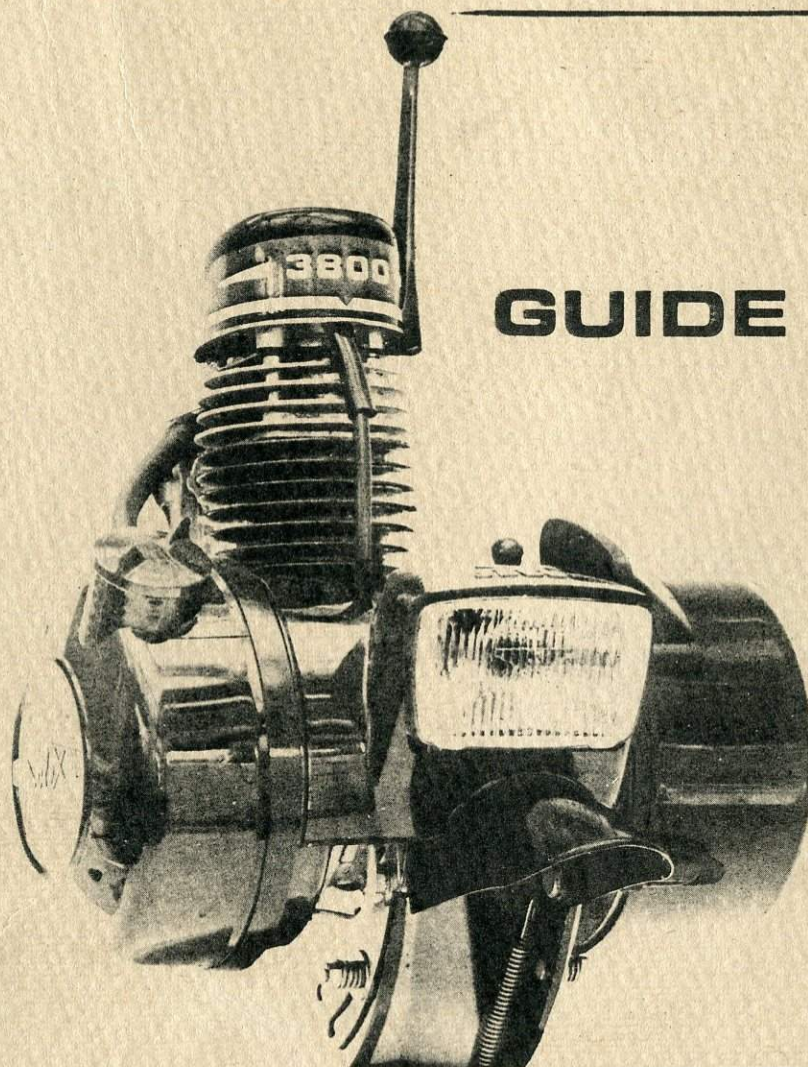


12 SEP 1979



VELOSOLEX

GUIDE TO ADJUSTING

AND

STRIPPING

THE ENGINE

MOTA-VATION

300 Old Kent Road,
London SE1 5UE



Motorcycle Sales
& Servicing and
Repairs

01-703 7881

GEOFF. HAYMAN

VELOSOLEX

S. I. N. F. A. C.

68, BOULEVARD DE VERDUN

92 - COURBEVOIE

TÉLÉPHONE (1) 333-37-15

Adr. Télégr. : VELOSOLEX-COURBEVOIE

To our mechanics friends

The VELOSOLEX guide is specifically published for you in order that you may take whatever efficient steps are required in the event of quick repairs or for the usual overhauls.

The first part of this guide (pages 1 to 6) is devoted to the problems involving quick repair while the second part (pages 7 to 15) deals with engine disassembly.

The ruggedness and quality of our manufacture, as well known as the simplicity of the SOLEX engine and its maintenance, would exclude any serious failing.

Whatever the type of your intervention, adjustment or repair, please do remember that the spirit of the pertinent method must remain the absolute rule in your endeavor. Consequently, study the points enumerated in this guide by successive steps and not simultaneously.

If anyone of these interventions is ineffectual, do not hesitate to call upon one of our numerous service stations where you will find in all the appropriate test benches, tooling, and a knowledgeable mechanics.

*The After-Sales Department
SINFAC - VELOSOLEX*

SOCIÉTÉ INDUSTRIELLE NOUVELLE DE FABRICATION POUR L'AUTOMOBILE ET LE CYCLE S.I.N.F.A.C.

C. C. POSTAUX PARIS N° 5652-33

RÉG. DU COM. SEINE 65 B 5231

I. N. S. E. E. N° 266 92 036 1012

GUIDE TO ADJUSTEMENTS



WHERE TO LOOK

- Find, among the 8 points enumerated in the "Incidents" section (pages 2 and 3), that which matches best the case of concern to you.
- Once your choice is determined, proceed with the various possible preliminary checks which may be at the origin of the failure. Then, carry through, systematically, all verifications by following the stops given in the column "Remedies" of the paragraphs on :

Supply	- Page 4
Ignition	-) Page 5
Lighting	-)
Maintenance	- Page 6

after you have picked the numbers of the paragraphs to consult for the chosen case, in the column "Incidents".

INCIDENTS

I

THE ENGINE WILL NOT START

Make certain:

1. That the fuel tank contains SOLEXINE.
2. That the lights are off.
3. That oil has not been poured directly into the fuel tank.
4. [That the air choke (6) is closed when the engine is cold.
That the air choke (6) is open when the engine is warm.

If these conditions are fulfilled and the engine still will not start, check in the following order:

1. FUEL SUPPLY

Disconnect the overflow pipe (9)
turn the engine on decompression.

If the fuel flows normally.

Check:

2 Ba] See "Fuel supply".

If the fuel does not flow.

Check:

2 A]
3 A] See "Fuel supply".
4 A]

1 B]
1 H] See "Maintenance".

If the fuel bubbles through.

Check:

1 A]
1 D] See "Fuel supply".
1 E]

2. IGNITION

To find out if the cause of the trouble is due to bad ignition setting or a faulty part, take the sparking plug out, keep it connected to the plug lead, hold it against the cylinder head and turn the engine.

If there is a regular spark between the electrodes.

Check:

1]
3] See "Ignition".

If the spark is intermittent or
If there is no spark.

Check:

2] See "Ignition".
1 H] See "Maintenance".

3. MAINTENANCE

Check:

1 A]
1 B] See "Maintenance".
1 H]

If following this, the engine will still not start, the VeloSolex must be ridden to a VeloSolex Service Station.

II

THE ENGINE IS DIFFICULT TO START

First of all make certain that the light switch is in the "off" position.
Then check the ignition.

See: **THE ENGINE WILL NOT START.**
"IGNITION" or "MAINTENANCE".

III

THE ENGINE STARTS AND THEN STOPS

Make certain that the riding technique was not incorrect on starting.

Namely: 1. Forgotten to open the air choke after travelling 200 metres (engine cold).

2. Air choke closed with the engine already warm.
If the technique has been correct.

Check:

2 Ba]
2 A] See "Fuel supply".
3 A]

4 A]
1] See "Ignition".
2]

IV

THE ENGINE RUNS WITH THE AIR CHOKE PARTLY CLOSED.

This irregularity may be due to:

1. the jet being too weak or partly blocked;
2. air being taken into the fuel suction circuit;
3. air being taken in at the inlet manifold or the crankcase.

Therefore, after disconnecting the overflow pipe.

If the fuel flows normally.

Check:

2 Ba]
2 Bc] See "Fuel supply".
2 Cb]

1 D]
1 E] See "Maintenance".
1 F]
1 G]

If the fuel bubbles through.

Check:

1 A]
1 D] See "Fuel supply".

INCIDENTS

V

THE ENGINE RUNS IN 4-STROKE CYCLE

Make certain that the air choke is completely open, and that the air filter on the carburettor is not partly blocked by impurities.

Then check:

- | | | |
|------|---|-----------------------------|
| 2 Bc | } | See " Fuel supply ". |
| 2 Ca | | |
| 1 C | | |
| 1 | } | See " Ignition ". |
| 3 | | |
| 3 | } | See " Maintenance ". |
| | | |

VI

THE ENGINE LACKS POWER

Make certain that the front tyre is inflated to the correct pressure and that the wheels turn freely.

If so, check the following:

- | | | |
|-----|---|-----------------------------|
| 1 | } | See " Ignition ". |
| 3 | | |
| 1 A | } | See " Maintenance ". |
| 1 B | | |
| 1 D | | |
| 1 E | | |
| 1 F | | |
| 1 H | | |
| 2 A | | |
| 2 B | | |
| 2 D | | |
| 3 | | |

VII

THE ENGINE IS NOISY

The noise may be due to a part that has come loose, an organ with play in it, or the engine may be carbonized.

Check:

- | | | |
|--|---|-----------------------------|
| 1. The tightness of all the engine assemblies. If the noise persists, check: | | |
| 2 A | } | See " Maintenance ". |
| 2 B | | |
| 2 C | | |
| 2 D | | |
| 2 E | | |
| 2 F | | |
| 3 | | |

VIII

THE LIGHTS DO NOT WORK

For lighting failures, refer directly to "IGNITION" where all the relative information is given.

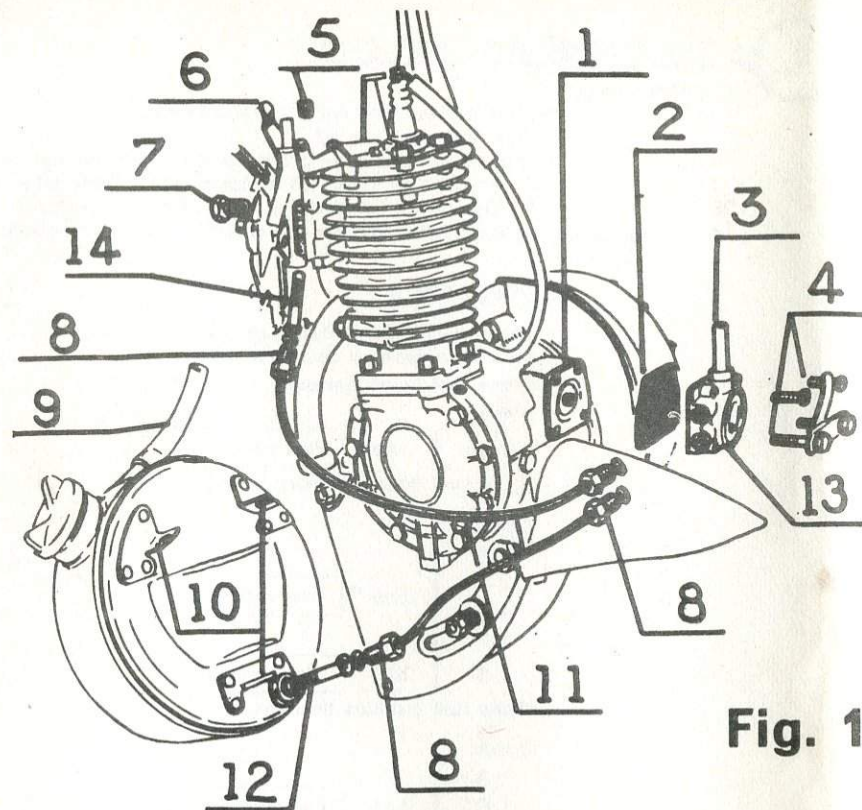


Fig. 1

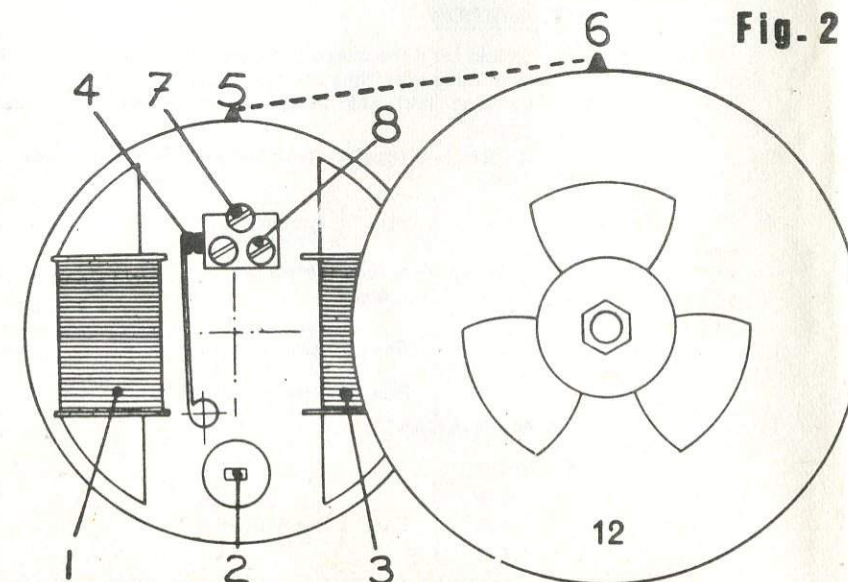


Fig. 2

FUEL SUPPLY

(Fig. 1)

CAUSES

REMEDIES

PUMP

- 1 A. Pump. (13)** → *Badly tightened.*
Engine will not start or runs with air choke partly closed.
- 1 B. Balls.** → *Gummed up.*
Engine will not start.
- 1 C. Membrane. (2)** → *Porous*
Runs in 4-stroke cycle.
- 1 D. Seating piece. (1)** → *Twisted or assembled the wrong way round.*
Engine runs with the air choke partly closed.
- 1 E. Fuel pipe union. (8)** → *Loose or flange crushed.*
Engine will not start, or starts then stops, or runs with air choke partly closed.

Check the tightness: 1. of pump fixing screws (4),
2. of pillar (3).

Change the pump (13).

Remove the 4 screws (4) fixing the pump body. Take the pump body a little way from the housing. Remove the membrane (2). Slide in a new membrane. Refit. Make certain that the seating piece (1) is not distorted, if it is, change it.

Remove the pump (13) and its membrane (2). Take out the seating piece (1). Fit a new seating piece, the concave face to the outside. Slot it over the housing centring lug. Open the lug out slightly. Re-assemble the pump.

Tighten without forcing too much, or change the pipe with the faulty union, after removing the fuel tank.

CARBURETTOR

- 2 A. Filter. (14)** → *Fouled up.*
Engine will not start, or starts with the air choke partly closed.
- 2 B. Fuel jet. (7)** → *a. Blocked.*
Engine will not start, or starts then stops.
b. Too large.
Engine runs in 4-stroke cycle.
c. Too small.
Runs with air choke partly closed.
- 2 C. Air jet. (5)** → *a. Blocked or too small.*
Engine runs in 4-stroke cycle.
b. Too large.
Engine runs with air choke partly closed.

On engines earlier than model 3.800: disconnect the fuel return pipe (8). Insert a wood screw Ø 3.5 mm into the carburettor housing to facilitate extraction of the filter. Change the filter. Re-assemble.

On engine later than model 3.800: take out the air filter. The fuel filter sticks out of the carburettor below the air filter- take it out and replace it.

Disassemble. Clean with compressed air. Re-assemble. Do not tighten too much. Never push wire or a needle through the calibrated orifice.

Disassemble. Replace with a jet one or two numbers smaller. Re-assemble. Do not tighten too much. Normal fuel jet 28 c.c. Only use jets of "SOLEX" origin.

Disassemble. Replace with a jet one or two numbers larger. Re-assemble. Do not tighten too much.

Remove the air jet body. Unblock or change the jet. Re-assemble.

Remove the air jet body. Take out the jet. Replace it with a smaller jet. Re-assemble.

FUEL TANK

- 3 A. Filter. (12)** → *Fouled up.*
Engine will not start, or starts then stops.

Remove the fuel tank. Unscrew the suction pipe. Take out the filter. Clean. Refit. Do not tighten too much.

FUEL PIPES

- 4 A. Suction Return (11)** → *Blocked.*
Engine will not start, or starts then stops.

Remove the fuel tank. Take off the fuel pipes. Unblock with compressed air. Refit. Do not tighten the unions too much. Check the position of the return pipe so that it does not touch the crankcase.

IGNITION

(Fig. 2)

CAUSES

REMEDIES

1. SPARKING PLUG → Plug.

Fouled up. Too wide or too close.
Engine will not start or starts with difficulty or runs in 4-stroke cycle.

Remove the air filter body. Take out the sparking plug. Brush the electrodes. Clean well. Adjust the sparking plug gap to 5/10 mm. (Do not force the earth electrode so as not to break it off.)
Attention! If it is to be replaced, only use the type of plug recommended by the factory.
(Marchal V 36)

2. PLUG LEAD → Insulator.

Lead cut or insulator faulty.
Engine will not start or runs in fits and starts.

Remove the engine cover, unscrew the plug lead retaining plate, disconnect the plug lead from the flywheel, and replace with a new lead. **Only use suppressor leads** recommended by VeloSolex service stations.

3. FLYWHEEL → Moment of sparking MAGNETO

Out of adjustment.
Engine will not start, or starts with difficulty, or lacks power, or runs in 4-stroke cycle.

Remove the magneto cover. Turn the rotor (12) and bring the 2 "contact-breaker" marks (6-5) together. Loosen the 2 screws (8) fixing the contact support by a quarter of a revolution. Insert a piece of cigarette paper between the support and the lever. Turn the eccentric screw (7) thus moving the support (4), and adjust the contact points gap so that the paper which you are pulling lightly begins to slide freely. The retighten the 2 screws (8). Be careful not to leave a scrap of paper between the contact points.

Ignition failures can also be due to the coil (3), the condenser (ç), the contact-breaker. To check or change one of these parts, ride the VeloSolex to a **VeloSolex Service Station**.

LIGHTS

BULBS → Filament.

Broken or earthed.

Remove either the headlamp insert or the rear lamp shell, in order to replace the faulty bulb. The bulb specifications are:

6 V — 1 A for the headlamp, yellow bulb,
14 V — A for the red light, white bulb.

LIGHTING WIRING

Broken or frayed.

Replace the faulty wire.

EARTH CIRCUIT

Check the condition of the conductors, insulation of the terminals, insulation of the headlamp and rear lamp contacts.

LIGHT SWITCH

Dirty

Clean the contact boss on the switch lever and the contact stud on the lighting terminal.

* FOR MAJOR REPAIRS, CONTACT VELOSOLEX SERVICE STATIONS

MAINTENANCE

CAUSES

REMEDIES

LEAKS

- 1 A. Decompression valve. (11498)** → Leaks.
Engine lacks power and there is no compression.
- 1 B. Cylinder head gasket. (10522)** → Torn.
Engine will not start and leaks oil.
- 1 D. Manifold gasket. (408)** → Broken.
Oil leaks. Engine runs with air choke partly closed and lacks power.
- 1 E. Cylinder base gasket. (142)** → Frayed.
Oil leaks. Engine runs with air choke partly closed and lacks power.
- 1 F. Crankcase end cover gasket. (10199)** → Broken.
Oil leaks. Engine runs with air choke partly closed and lacks power.
- 1 G. Inlet/exhaust manifold. (11143)** → Lock-nut loose.
Runs with air choke closed.

- 1 H. Clutch mechanism. (11853)** → Worn or greasy.
Engine will not start or starts with difficulty or lacks power.

- 2 A. Cylinder. (10839)** → Worn.
Engine noisy and lacks power.
- 2 B. Piston rings (11333)** → Worn.
Engine lacks compression, power and is noisy.
- 2 C. Piston gudgeon pin.** → Worn.
Engine is noisy.

- 2 D. Piston.** → Worn.
Engine lacks power and is noisy.

- 2 E. Connecting rod big end bearing. (11474)** → Play.
Engine is noisy.

- 2 F. Bearing.** → Worn.
Engine is noisy.

- 2 G. Clutch. (11853)** → Worn mechanism or drum.

- 3.** [Cylinder head. (11373)
Piston. ()
Cylinder. (10839)
Exhaust pipe. (11006)
Inlet/exhaust manifold. (11143)]
[Engine runs in 4-stroke cycle and pinks. Lacks power.]

- Check:
1. the valve setting (see page 15 »Decarbonization’’).
 2. sealing of valve.

Remove the cylinder heat (11373). Change the gasket (10522). True the support face of the cylinder head. Re-assemble.

Take off the exhaust pipe (11006). Remove the inlet/exhaust manifold (11143) and the carburettor (11651). Change the gasket (408). Re-assemble.

Remove the fuel tank (11648), the exhaust pipe (11006). Take out the cylinder (10839) with the cylinder head (11373), the inlet/exhaust manifold (11143), the carburettor (11651). Change the gasket (142). **Re-assemble.**

Remove the fuel tank (11648), the cylinder (10839), the crankcase end cover (10119). Fit 1 paper gasket (10199) smeared with grease. Cut at the intersection of the crankcase and cylinder support faces.

Check the tightness of the manifold nut (10551), and also the condition of the manifold olive 10547).

Engine engaged on the wheel, magneto housing removed, push the VeloSolex without decompressing. If the rotor does not turn, the clutch is slipping.
Get the work carried out by a VeloSolex Service Station.

Strip the cylinder (10839) completely and replace.

Remove the cylinder (10839). Change the piston rings (11333). Re-assemble.

Change the connecting rod and piston assembly (10840) or get a VeloSolex Station to do the work.

Change the connecting rod and piston assembly (10840) or get a VeloSolex Service Station to do the work.

Remove the fuel tank (11648), the cylinder (10839), the crankcase end cover (10119). Separate the connecting rod and piston assembly (10840). Change the big end bearing (11474). Re-assemble.

Get the work done by a VeloSolex Service Station.

Get the work done by a VeloSolex Service Station.

Light carbon deposit on the exhaust port:

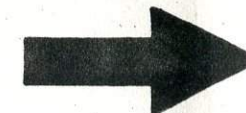
Remove the cylinder head (11373) after taking out the air filter body, the disengagement lever and the fixing studs. Take the piston to bottom dead centre. Scrape the carbon from the exhaust part. Clean. Refit.

Complete decarbonization of engine (see page 15).

NOISE

CARBONIZATION

GUIDE TO DISASSEMBLY



TOOLING

In addition to conventional tooling, open-end wrench; box-end spanners of 7, 9, 12, 13, 14 mm, screwdrivers, etc. some interventions on the engine require the possession of special tools shown on pages 8 to 14. Reference numbers, designation, and their use are indicated in the section on "Special Tooling".

SEQUENCE OF OPERATIONS

In order to proceed with a complete engine disassembly, all that is required is to follow in the order given the various operations described on pages 8 to 14.

However, if you wish to replace a specific component, you should have to select, in the repertory given below, the sequence of operational phases leading to the wished for result.

No.	REFERENCE	OPERATIONS	No.	REFERENCE	OPERATIONS	No.	REFERENCE	OPERATIONS
—	Piston gudgeon pin.....	3-4-5-6-8-9-10	10840	Piston.....	3-4-5-6-8-9-10	11657	Pump.....	3-15
11474	Big end bearing.....	3-4-5-6-8-9-10	13853	Clutch mechanism.....	3-11-12-13	11648	Fuel tank.....	3-6
—	Connecting rod.....	3-4-5-6-8-9-10				11466	Flywheel magneto rotor....	3-11
11117	Ignition coil.....	3-11				—	Crankcase bearing.....	16
11118	Lighting coil.....	3-11	11031	Air filter.....	4	778	Flywheel bearing.....	3-11-12
779	Sparking plug.....	4	12456	Roller.....	3-11-12-13-14	11333	Piston rings.....	3-4-5-6-8
11656	Headlamp shell.....	3	11309	Clutch pad.....	3-11-12-13	10454	Pump seating piece.....	3-15
11111	Flywheel cover.....	3	10199	Crankcase end cover gasket	3-6-8-9	11006	Exhaust pipe.....	1
11651	Carburettor.....	1-4-7	10522	Cylinder head gasket.....	4-5	11498	Decompression valve.....	4-5
13035	Crankcase.....	1-2-3-4-5-6-8-9-10-11-12-13-14-15-17	142	Cylinder base gasket.....	3-6-8	11094	Stator plate.....	3-11-12
			408	Manifold gasket.....	1-4-7	—	Suspension.....	1-2-6-11-12-13
11191	Condenser.....	3-11	11501	Disengagement lever.....	4-5			14-17
10119	Crankcase end cover.....	3-6-8-9	281	Fuel pump membrane.....	3-15	11652	Fuel return pipe.....	3-6
11373	Cylinder head.....	4-5	—	Piston.....	3-4-5-6-8-9-10	11143	Inlet/exhaust manifold.....	1-4-7
10839	Cylinder.....	3-4-5-6-8	11120	Contact breaker.....	3-11	—	Crankshaft.....	16

SPECIAL TOOLING

9200 000

MILLING CUTTER FOR
VALVE SEAT

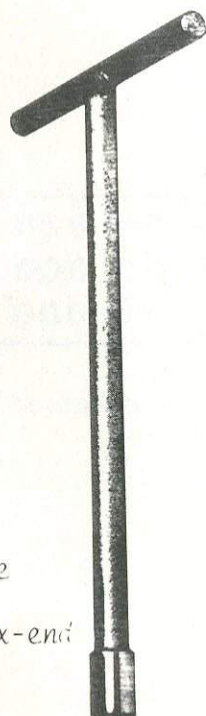
*To scrape off the carbon
deposit on the valve seat
(see operation n° 5)*



109 00 000

T-SPANNER, OF 9 mm

*Enables to reach easily the
9mm bolting that is rather
difficult to reach with box-end
spanner or fork wrench.*



GUIDE TO DISASSEMBLY

For reassembly, please follow the reverse order of disassembly

1

REMOVE THE MUFFLER

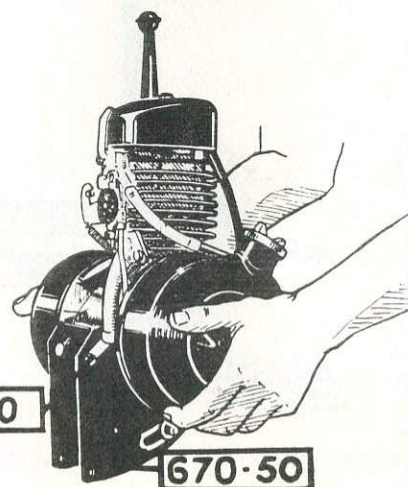
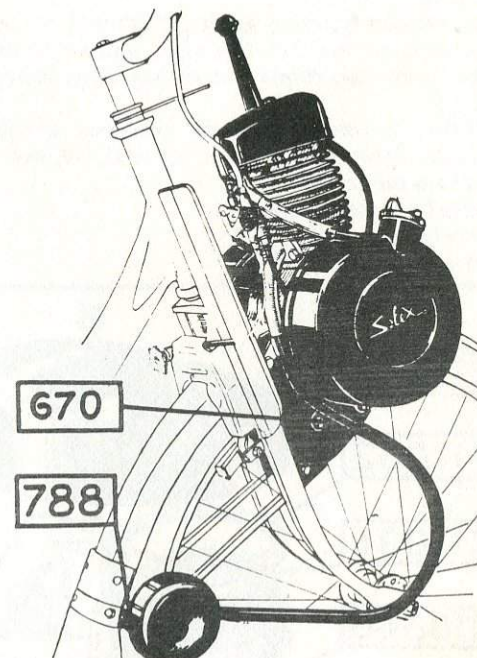
Untighten the nut N° 788 fastening the piping onto the mud-guard. Unscrew and remove the bolt N° 670 fastening the muffler on the suspension flange.

Disengage the piping lower tong from the mud-guard.

Tilt and swing the piping, pulling it downwards in order to disengage it from the swivel.

Every 6,000 km, change the muffler element at the time of carbon deposit removal.

Upon mounting a new muffler, verify to see if a droplet of paint does not obstruct the gas exhaust aperture.



2

ENGINE REMOVAL

Unhook the decompressor drive rod, disconnect the rear spotlight wire, untighten the cable locking screw 00343 on the valve lever, remove the thrust sheath on the carburator. Unscrew the two screws N° 670 fastening at the lower area, remove them.

Untighten the two nuts, N° 50, at the upper fastening. Lift the engine to disengage it from the locking buttons. For reassembly, carry out the adjustment of the gas control (see page 15).

3

REMOVAL OF THE WHEEL COVER AND OF THE BEAM COVER :

To remove the wheel cover, disengage it from the two rubber rings, N° 10761.

This operation enables to disengage also the beam cover after having disconnected, if need be, the rear light wire.

Upon reassembly, carry out an adjustment of the beam by pushing on the two strips (L) located at the base of the beam glass shield (the engine being lowered on the tyre).

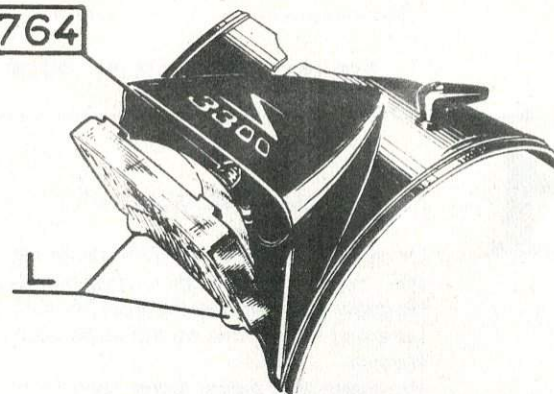
In order to undertake an exchange of the FT lightbulb, depress the strips (L) and tilt the whole optical system forward.

Lightbulbs characteristics are :

For the front : 6 V, 1 A

For the rear : 14 V, AR

764



4

REMOVAL OF AIR FILTER BODY

Unscrew the screw N° 11413. Remove the washer N° 10612, then the air filter body assembly. In order to reach the air filter : remove the cap N° 11410 while holding the assembly with one hand and by tapping slightly with a mallet over the strip (L) ; with a screwdriver, remove the bell N° 11032 then take out the filter N° 11031.

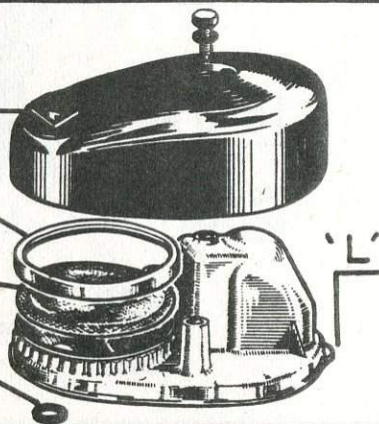
Upon reassembly of this unit, do not omit to reset in the gasket N° 10546.

11410

11032

11031

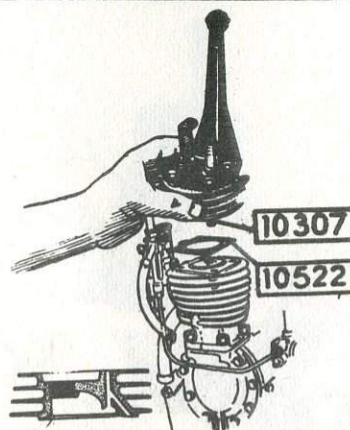
10546



5

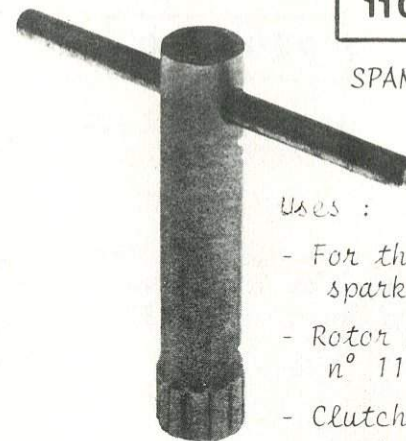
REMOVAL OF THE CYLINDER HEAD AND THE LIFT LEVER

Once you have disconnected the wire lead to the sparking plug N° 11660, unscrew without removing them the 4 screws N° 10307 fastening the cylinder head and remove the whole cylinder head assembly with the lift lever as well as the decompressor system. For each cylinder head disassembly, replace the gasket N° 10522. For any descaling, scrape inside the cylinder head, insert a bit of 3.5 mm ϕ in the decompression chamber oblique canal. With a tool 00092 carry out the milling cutting of the valve seat. Change the spring and the valve ; a slight grinding of the seat is necessary to ensure tightness as this is of primordial importance insofar as concerns the operation and power of the engine. Valve grinding- Set a few drops of oil on the valve seat, and nothing else ; plate a new valve into its shell and with a screwdriver, give it a back-and-forth motion rotationally for a few seconds while pushing lightly.



110 00 000

SPANNER OF 21 mm



Uses :

- For the dismounting of sparking plugs.
- Rotor nut (see operation n° 11)
- Clutching nuts (see operations n° 13 and 14)

313 00 000

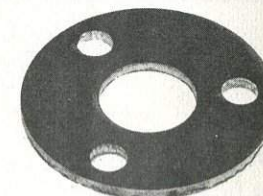
331 00 000

670 00 000

ROTOR EXTRACTOR



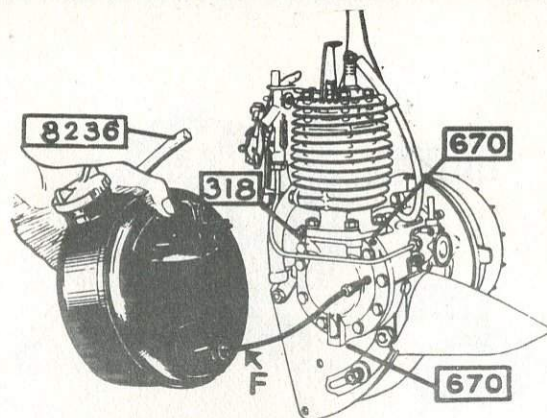
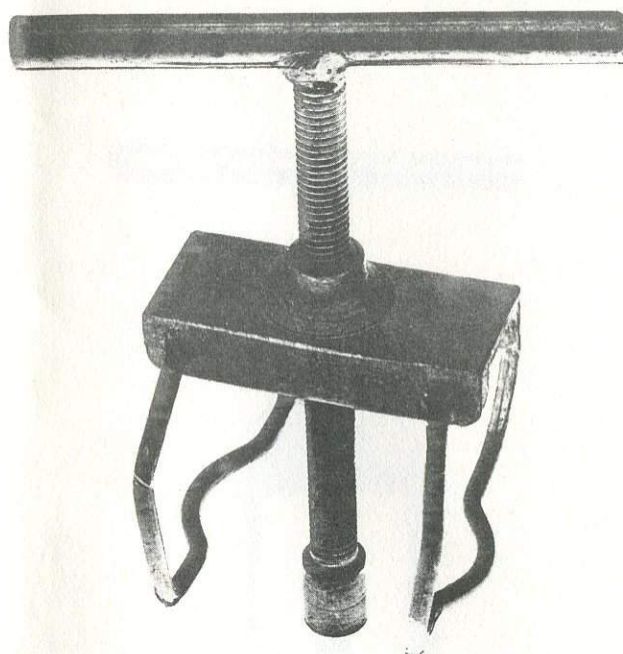
See operation n° 11 for use.



195 00 000

STATOR EXTRACTOR

See operation n° 12 for use.



TANK REMOVAL :

Disconnect the petrol feedback piping N° 8236, unscrew the piping coupler for petrol inlet onto the pump, untighten the screw N° 318 for rearward fastening of the tank, then completely remove the front fastening screws and the lower screws N° 670. Remove the tank. Upon reassembly, verify the presence and condition of cleanliness of the filter (F) in the housing of the intake piping coupler. Do not overly clamp these adaptors.

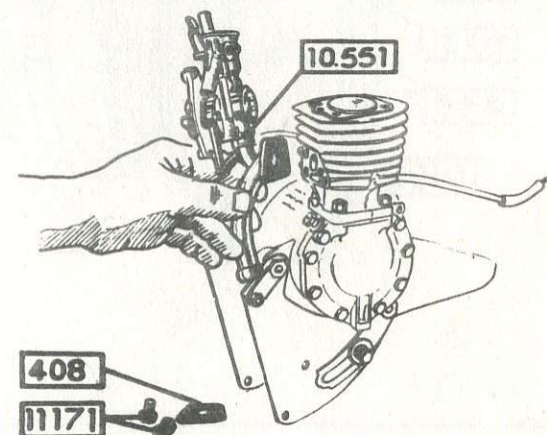
7

CARBURETOR AND MANIFOLD : REMOVAL OF THE ASSEMBLY

Unblock the cable clamping screw N° 343 and disengage the sheath and the idler cable.

Unscrew the delivery piping coupler as well as the 2 fastening screws for the manifold, N° 11171. Pull out the carburetor-manifold assembly. To uncouple them, unscrew the coupler N° 10551.

Upon reassembly, once you have the presence and good condition of the nylon seal N° 10547 in the carburetor, and of filter N° 13039, slide on the carburetor over the intake manifold and carry out coupler tightening, N° 10551 only when the whole air filter assembly is in place, and while checking the proper fit of the carburetor over the air filter. Refit on the cable and sheathes and undertake the adjustment of the gas control. For the descaling of the manifold, change the seal N° 408.

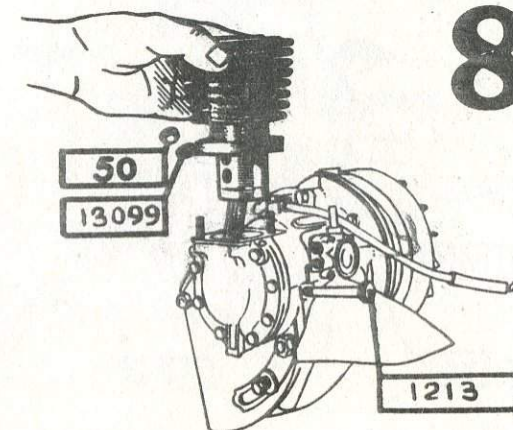


REMOVAL OF THE CYLINDER

Unscrew the 4 nuts N° 50, remove them as well as the Grower washers N° 13099.

After fitting the lock pin N° 1213 in the space instead of the pulg screw N° 670 so as to immobilize the connecting rod at the high dead point, remove the cylinder and remove the seal N° 142.

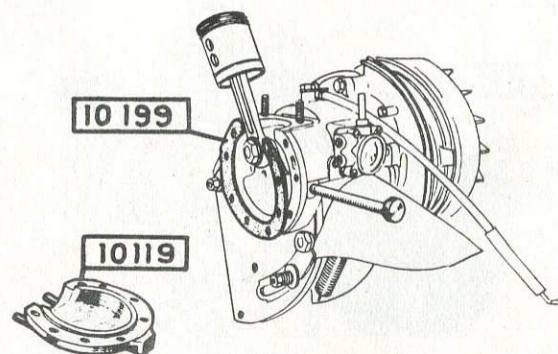
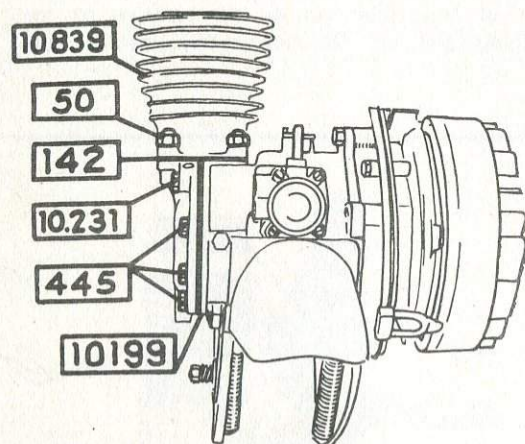
During a descaling, scrape the exhaust port and the two transfer ports, pass a bit of 5 mm into the decompressor vertical canal.



9

REMOVAL OF HOUSING COVER

Unscrew the eight fastening screws for the housing cover and remove the cover as well as its gasket. Upon reassembly, place a new gasket No 10199, previously well coated with grease or oil, then the 2 long

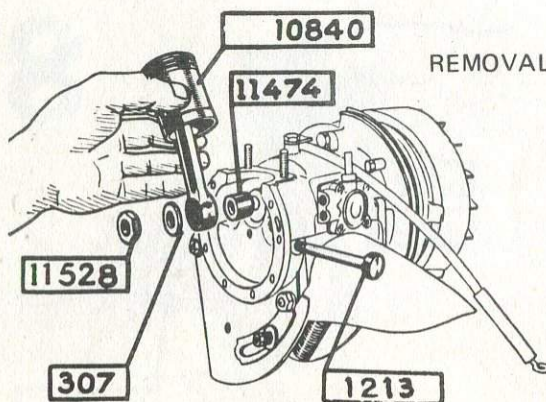


upper fastening screws, No 10231, with their washer No 413 without tightening them, cut the gasket as per the cylinder shoe outline, screw the six screws No 445 without tightening them, and do not forget to fit in the seal washers No 413.

Fit the cylinder gasket, No 142. Set in the rings so that the cuts do not overlap nor find themselves within the sake alignment as ports, then engage the cylinder on the piston. Fit in the four Grower washers as well as nuts No 50, tighten these then the two screws No 19231, then untighten by a sixth of a turn the two nuts on the housing cover side.

Lock in the housing cover fastening screws starting with the bottom and going toward the top.

Tighten well the two nuts No 50 located on the housing cover side.



REMOVAL OF THE CONNECTING ROD ASSEMBLY :

10

With the rod No 1213, lock in the crankshaft.

Unscrew nut No 11528.

Remove the washer, No 307, the connecting rod No 10840 and the ring No 11474.

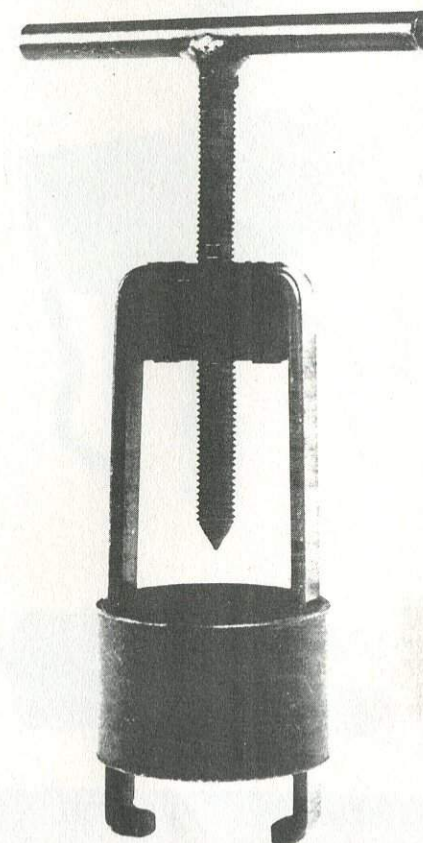
Index mark the direction of the connecting rod toward its eventual reassembly.

Upon reassembly, the ring No 11474 shall be set on the crankpin, chamfered side, toward the inside.

883 00 000

STATOR ROLLER EXTRACTOR

For use, see operation n° 12.



942 00 000



IGNITION CHECKLIGHT

Enables a more accurate adjustment than with the system described on page n° 5, paragraph 3.

NOTE : The casing must be hooked on to the engine, the claw connected to the strip without touching the rotor. The light shall go on when the contacts start to separate.

11

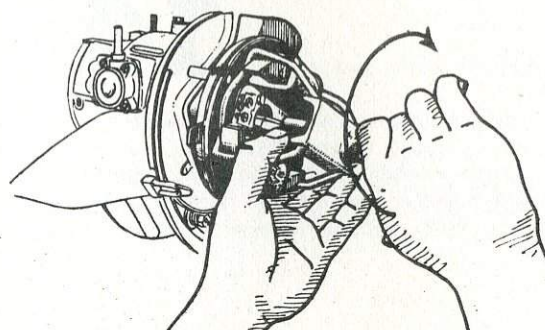
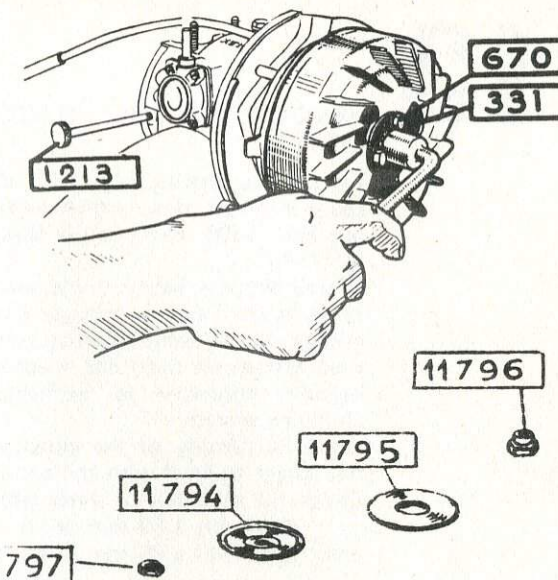
REMOVAL OF THE ROTOR

With the rod N° 1213, lock in the crankshaft. Unscrew nut N° 11797 fastening the plate and the rubber gasket so as to reach nut N° 11796 which is holding the rotor in place.

Screw at the extremity of the crankshaft the flat base note N° 313, fit on the washer N° 331 and fasten it by means of the three screws N° 670.

In order to untighten or to disassemble the rotor, untighten then ut N° 313. If such unlocking is difficult, double the plate N° 331 and fasten them with three screws N° 445. Recover the nut N° 313, the washer N° 331 and the three screws N° 670 because the assembly of the rotor is carried out with nut N° 11796.

Correctly engage the rotor key into the groove on the crankshaft. Replace the rubber and the sealing washer.



REMOVAL OF THE STATOR

Unscrew the connecting terminal of the sparking plug wire, N° 11660 on the stator ; after having disengaged the wire by lifting the strip N° 11131. Unscrew the fastening screw N° 10307 located on the outside over the top of the casing and the two screws N° 12104 inside the stator.

Screw on the extremity of the unit N° 195 on the crankshaft, fit in the unit ears under the coil winding contacts.

Unscrew the locking rod N° 1213 and screw the manoeuvring screw to disengage the stator.

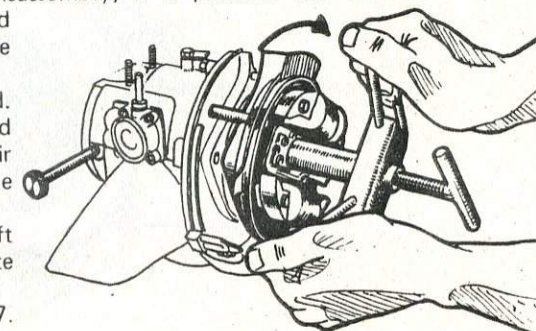
Upon stator disassembly, it is possible that the roller N° 778 remains engaged

on the crankshaft . In this case, it shall become necessary to remove it by means of the unit N° 883.

Upon reassembly, lock in the crankshaft with the locking rod. Position the stator provided with its roller over the crankshaft and engage the three screws for fastening (the 2 inner screws with their fan washers held tight). Engage the short tube provided with the wheel-puller N° 195 over the crankshaft.

Screw the manoeuvring screw over the extremity of the crankshaft and turn the unit ears toward a clockwise direction up to complete engagement of the stator.

Lock in the two screws N° 12104 and the screw N° 10307.



12

13

REMOVAL OF THE CLUTCH SYSTEM

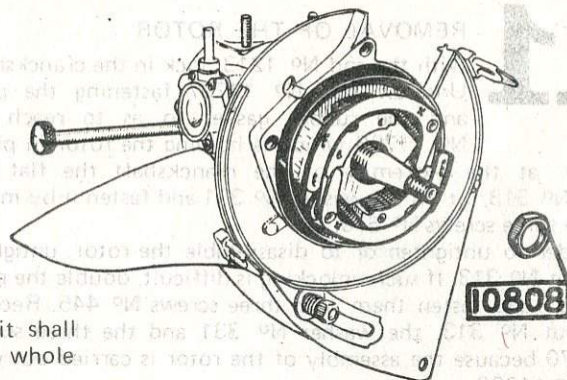
Fit on the locking rod. With the spanner of 21 mm, untighten the nut N° 10808. Remove the clutch N° 11853.

If you witness heavy lining wear, there is the need to change such linings. In the event whereby these have cemented onto the mechanism, it shall become necessary to exchange the whole clutching system.

Upon reassembly of the clutching system, do not forget to fit it with the corsos to the outside.

Check the thickness of shoes which must be :

4 mm for a 83 mm drum
and 5 mm for a 85 mm drum



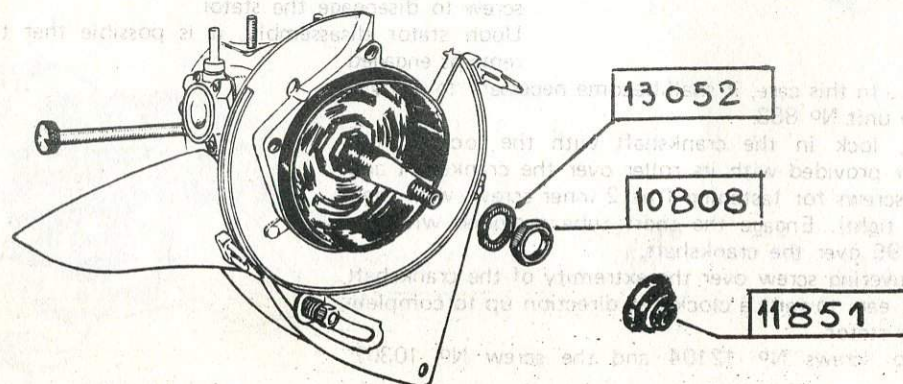
10808

REMOVAL OF THE DRUM WHEEL

Remove the sealing cap N° 11851 while being careful not to deteriorate the spring gasket located inside and which is not seen during disassembly.

With a spanner of 31 mm, untighten the second nut N° 10808 which is barely locked on and remove the brackingwasher N° 13502. Remove the drum wheel which can be done manually without tools.

Upon reassembly, once the drum is fitted over the crankshaft, push it slowly while turning the drum slightly so as to engage the bronze ring on the wheel side within the housing spring gasket, and without damaging this gasket. Tightening of nut N° 10808 for drum fastening must be achieved with a tubular spanner, without its spindle so as to limit tightening torque.



13502

10808

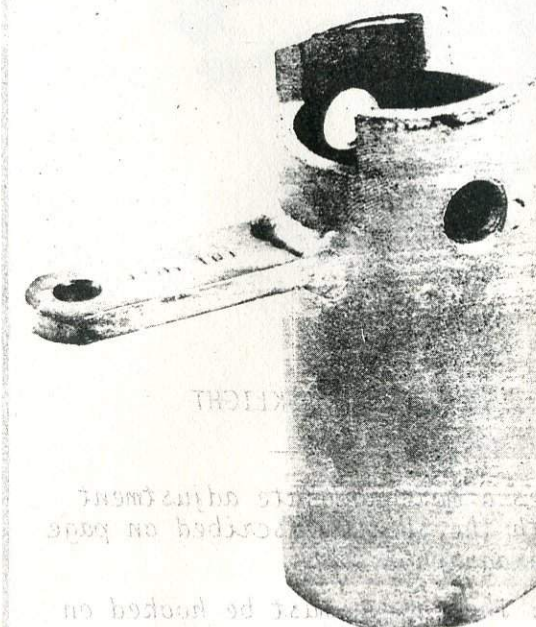
11851

14

957 00 000

CLUTCH CENTERING SPANNER

During reassembly, enables to center the clutch at the moment of tightening.





1213 00 000

CRANKSHAFT LOCKING ROD

For its use, see the operations n° 8-10-12-13-14.

1218 00 000

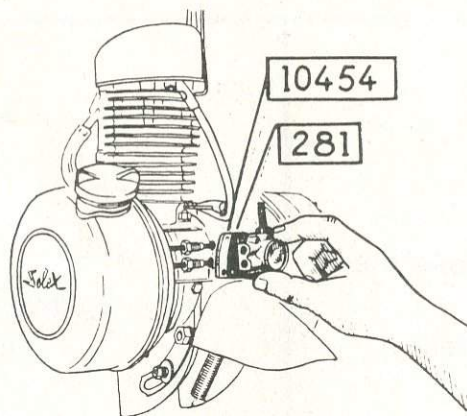
COMBINED SPANNER OF 9mm

Eye side :

To tighten the housing cover screw and the rear screw for the tank.

Fork side :

To effect coupling on petrol pump or on carburettor.



REMOVAL OF THE PUMP

To disassemble the pump, unscrew the 4 screws N° 11081, and if need be the two piping adaptors, then slide the pump body out toward the right. Remove the diaphragm N° 281, then unhook the diaphragm seat, N° 10454.

Upon reassembly, make sure that the diaphragm is not pierced, that the balls are not locked in and that the diaphragm seat has not buckled.

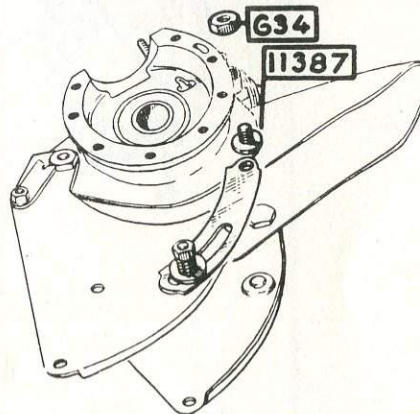
The diaphragm seat must be fitted in with the flat facing against the housing and inserted over the housing center dowel pin which must be slightly spread out.

16

HOUSING OR CRANKSHAFT ROLLER

The deterioration of roller N° 777 is generally responsible for that of its housing or for the wheel sealing ring housing deterioration ; for this reason, a complete change of the N° 13035 housing is mandatory.

REMOVAL OF THE SUSPENSION OR OF THE HOUSING



With a pair of pliers, unhook the two suspension springs N° 11005.

Then remove the shield plate N° 11129, then unscrew the 2 nuts N° 634 fastening the housing front ; remove them as well as the two bolts N° 10727 and the bracings N° 11387 and so doing you shall have disengaged the engine mud-guard N° 11388 and the two slides N° 11128.

Unscrew one of the nuts N° 312 after having disengaged it from its nut lock.

Remove the engine bracket that fits there and remove the engine axle N° 319 through the other side, and this shall free the other engine bracket as well as washers N° 310 and 311 and the silent-blocks N° 320.

In order to free the slide pieces, unscrew the screws N° 10231 and the nuts N° 11183.

Upon reassembly, do not forget to lock in the nuts by caulking the extremities of the screws N° 10727 and 10231.

ATTENTION : Never use grease or oil to lubricate the slide pieces which must be exclusively cleaned with SOLEXINE.

17

DESCALING (DECARBONIZING)

After a certain mileage, carbon deposits obstruct the various engine lines and are detrimental to proper engine operation.

To eliminate these deposits, first proceed with the disassembly of :

1^o) Cylinder head N° 11373, after having removed the air filter body and the lift lever.

2^o) Carburetor N° 11651 and manifold N° 11143.

Scrape the carbon deposits off the cylinder head and from the top of the piston.

Properly clean the exhaust port as well as the piping and make sure that a carbon deposit plug does not obstruct at any point.

Pass through a 5 mm bit into the decompressor vertical canal into the cylinder head oblique canal. Clean the seat and change the valve as well as the spring, if necessary. The adjustment of valve opening is obtained by fully tightening the nut N° 11499 and then by untightening it by one half turn.

The exhaust silencers are not dismantable.

Upon mounting a new muffler, insert a 6 mm bit into the gas outlet piping as a droplet of paint could possibly have obstructed it.

Upon reassembly.

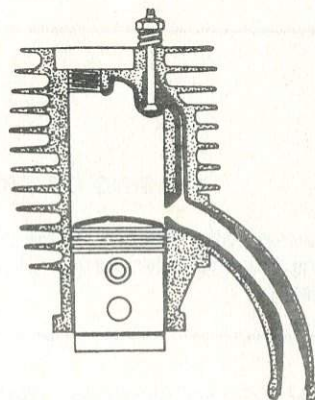
Use new gaskets.

Check the burn-out point of the magnetic wheel. See "Ignition-3"

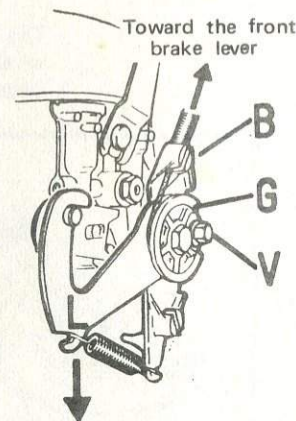
Adjust the sparking plug electrodes to 5/10 th.

Clean the air filter with a double-acting admixture.

Carry out the adjustment of the gas throttle control.



SYNCHRONIZED THROTTLE ADJUSTMENT



After having set the handbar to its normal height (hanger height of 28 to 30 mm).

Carry out the adjustment of the FT brake by means of the notched hand lever. Make sure that the turning handle is on the "FULL THROTTLE" position.

Engage the idling sheath into the top sheath block stop notch (B) of the carburetor.

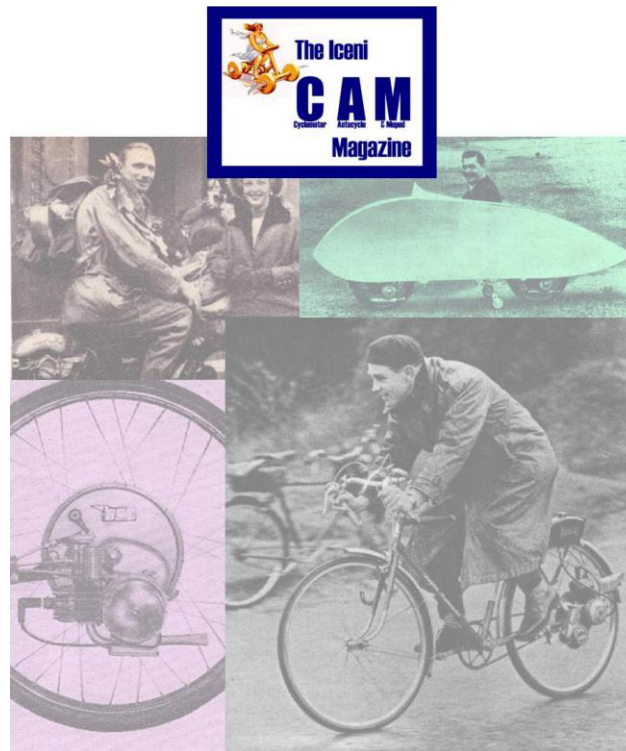
Then give a complete turn to the cable on the plastic roller (C) and under the locking washer. Tighten the idler cable.

Hold the lever (L) in its low position and tighten the cable clamp screw (V).

Ref. 1362 AN

Edition DECEMBRE 1973

IceniCAM On-Line Library



www.icenicam.org.uk