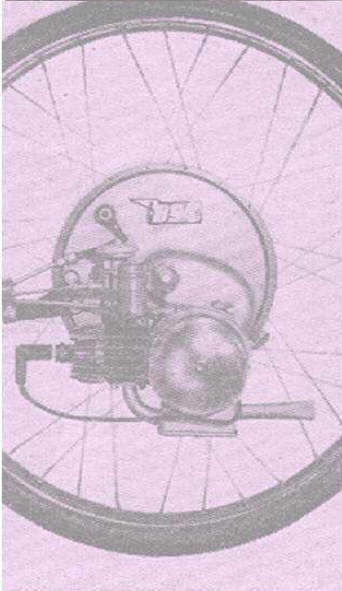
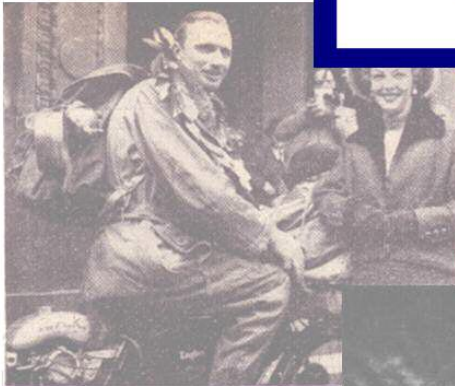
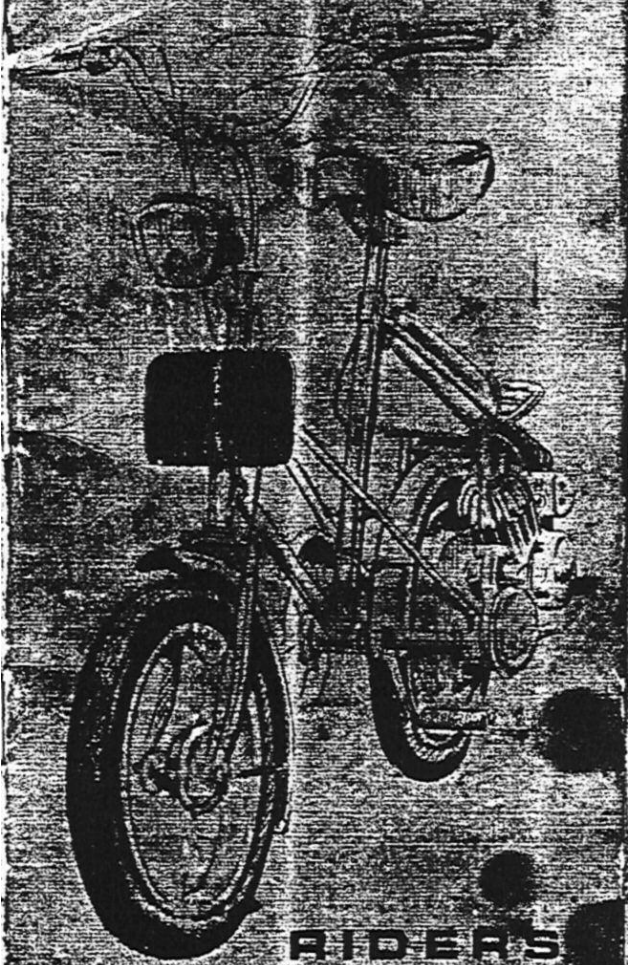


IceniCAM Information Service



Scamp



RIDERS
MANUAL

Scamp

**RIDERS
MANUAL**

A.N. CLARK (ENGINEERS) LTD.
BINSTEAD, ISLE OF WIGHT

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Foreword

The SCAMP machine which you have purchased is a true Moped and not a compromise Motor Cycle design as are most others. The cycle part of the machine has been designed along correct cycle lines which means that the SCAMP may be pedalled almost as easily as a normal cycle. Driving is no more difficult. It is in the bold positioning of the engine to the side of the rear wheel and the careful design of detail that the true secret of SCAMP lies.

Your SCAMP is the most easy-to-service Moped ever made. To make things even better, we have linked you to a nation-wide service organisation which we recommend you to use. First, however, we suggest you read this small booklet carefully.

Happy Riding.

Specification

DIMENSIONS

Wheelbase: 39½"

Saddle Height: Max. 35" Min. 31"

Handlebar Height: Max. 39½" Min. 36½"

Overall Length: 59"

Dry Kerb Weight: (Approx.) 67 lb.

ENGINE

Cubic Capacity: 49 cc.

Bore: 38mm. Stroke: 44mm.

TYRES

2" x 12" heavy duty.

Pressures Front: 23 lb/sq. in.

Rear: 35 lb/sq. in.

FUEL TANK

Capacity: 4½ pints including reserve.

Fuel Mixture: 20 : 1 ordinary grade petrol/SAE 30 oil.

TRANSMISSION

Centrifugal clutch engaging at approx. 1500 rpm. Gear transmission engine/wheel ratio 10•64 : 1

IGNITION

Plug Gap: •016" gap.

Timing: Fixed

LIGHTS

Front: 6 volt 15 watt.

Rear: 6 volt 3 watt.

SERIAL NO. POSITIONING

Machine No. on frame beneath saddle.

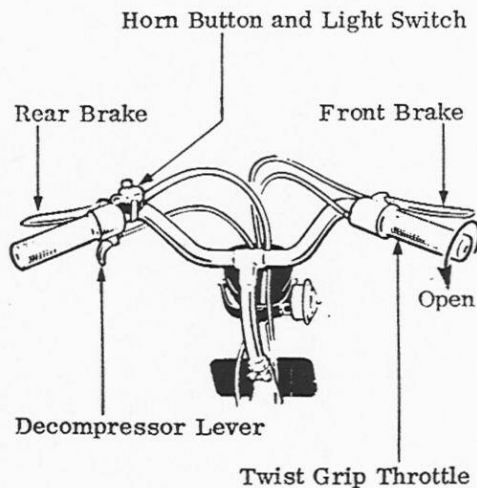
Engine No. on mounting flange.



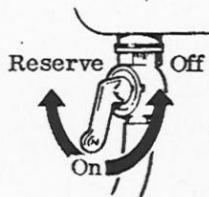
section
one

YOUR FIRST RIDE

HANDLEBAR CONTROLS



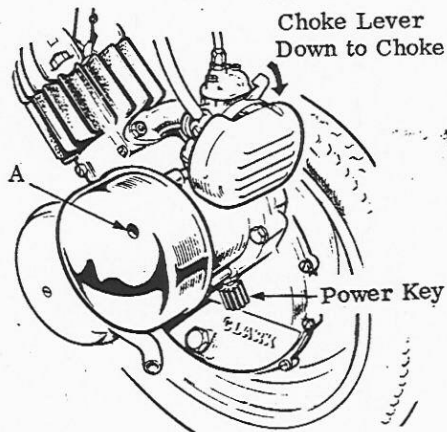
FUEL MIXTURE



Use 20:1 two stroke mixture which is available from most filling stations or mix your own using 20 parts ordinary grade petrol to one part of any good proprietary brand of SAE 30 Motor Oil. Mix well in a separate container before putting into tank, NEVER TRY TO RUN ENGINE ON PLAIN PETROL. Tank holds $4\frac{1}{2}$ pts. The picture shows the fuel tap positions for ON, OFF and RESERVE.

Starting

Turn fuel tap to ON. For the first ride of the day push choke lever down until it locks. NEVER use choke when engine is hot. Set twist grip throttle $\frac{1}{4}$ open. With left hand lift the decompressor lever. Pedal machine and release decompressor at a brisk walking pace. Engine will now start. When the throttle is opened the engine speed will increase. This will engage the automatic clutch. A turn or two more of the pedals will help the machine under way. The choke lever will release when the throttle is fully opened. DO NOT FORGET to do this as soon as the engine is warm.



If you wish to pedal Scamp insert the saddle clamp lever into hole 'A' in Magneto Cover, (see fig.), to stop engine turning. Push the Power Key (see fig.) inwards and turn clockwise one full turn. This disconnects engine drive. To reconnect repeat procedure turning Power Key anti-clockwise.

Stopping

Close throttle and gently apply both brakes. The clutch will automatically disengage before the machine stops. To stop the engine at the end of a run pull the decompressor lever on left handlebar. After the engine has stopped turn off fuel tap. If engine is to be left for any length of time without use drain carburettor by leaving the engine running with the fuel tap turned off. The engine will stop when the carburettor is empty.

Running in

During running - in a special effort should be made to avoid working the engine too hard. This is best achieved by avoiding the use of full throttle, keeping speed down to about 20 m.p.h. and assisting with the pedals on long hills.

This care should extend over the first 250 miles. The reward will be a machine with more power and a longer working life.

section two



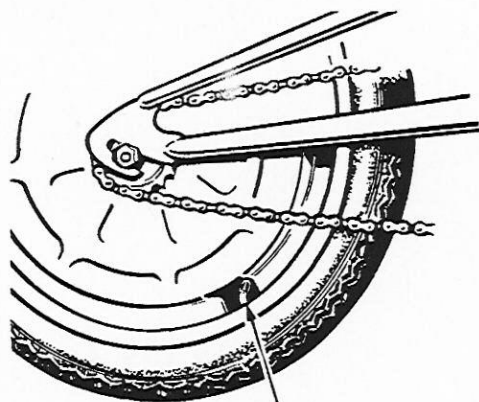
GENERAL MAINTENANCE

A Tyres

Your tyres are your only contact with the road. You should examine them carefully at frequent intervals for signs of wear, damage due to sharp objects encountered on the road, and the lodging of sharp stones in the tyre treads. Remove any stones using a blunt screwdriver. It is important to maintain correct tyre pressures—front = 23 psi; rear = 35 psi. Always see that the valve cap is replaced after inflation.

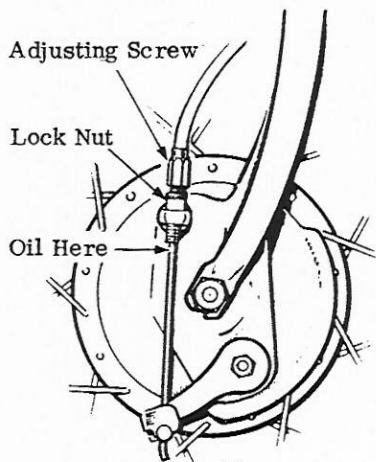
If an inner tube has to be removed for repair, ensure that it is replaced with the valve pointing towards the offside of the machine.

Note how valve protrudes on pedal chain side of machine.

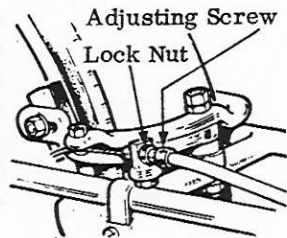


Rear wheel valve

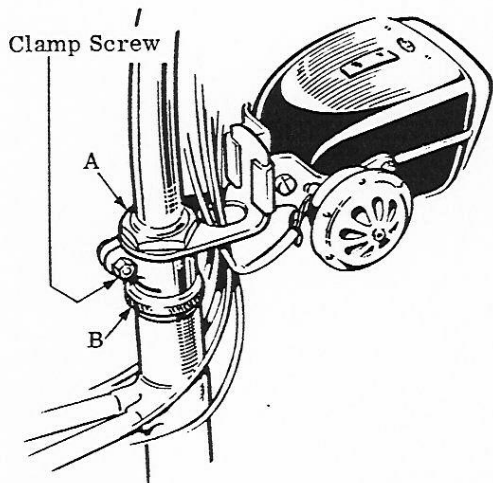
B Brake Adjustments . . .



The front brake is adjusted by a screw-adjuster. To take up the brake loosen the knurled lock nut and turn the adjuster in an anti-clockwise direction. Relock the adjuster. The rear brake is a caliper rim type also fitted with a screwed adjuster. Keep all brake cables lightly oiled. Lubricate pivot points of front and rear brake arms sparingly. Do not allow oil to come into contact with the brake blocks or drum of the front brake.



C Steering Head

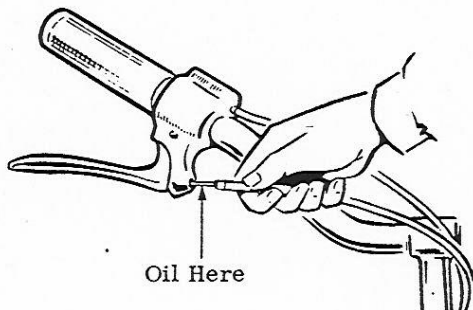


Adjust for height by slackening off the clamp screw. The handlebars can now be pushed down or pulled up to suit. Re-tighten the clamp screw having checked alignment of handlebars with front wheel.

To take up slack in the steering head, slacken clamp screw, slacken large nut 'A' on handlebar stem, and make adjustment to knurled hand nut 'B' under clamp. Always make sure all these parts are properly tightened before attempting to ride.

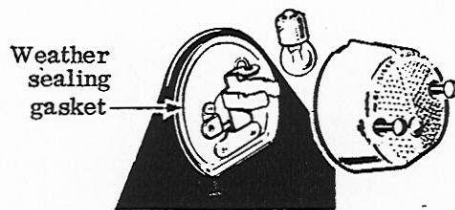
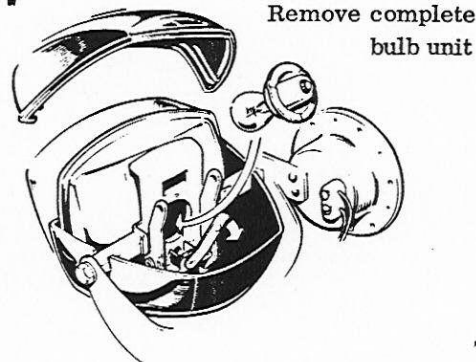
D Control Cables

There are four control cables, two to each side of the handlebars. All the cables should be oiled regularly. The inner cable of the throttle control may be exposed for oiling by pulling back the outer sheath. Oil the cable nipples which rest in the handlebar control levers to help them to swivel freely. If necessary adjust the straps which secure the cables to the frame to obtain smooth cable runs.



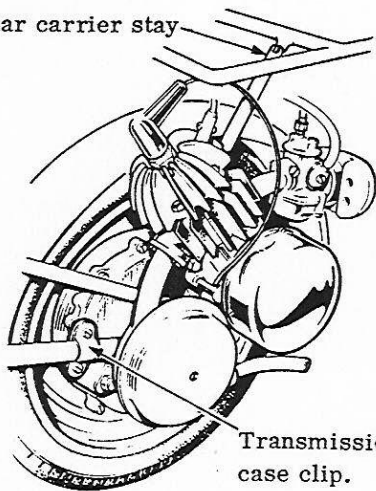
E Lighting

To change the headlamp bulb, remove the screw in the top of the lamp casing and take off the top of the case. Swing the central spring contact behind the lamp bulb to one side and take out the complete bulb from inside. Use special replacement bulb Part No. B 4624. It is not necessary to take off the lamp glass. When replacing the rear bulb, see that the weather sealing gasket is properly positioned before refixing the reflector. Rear bulb is part No. B 4625.



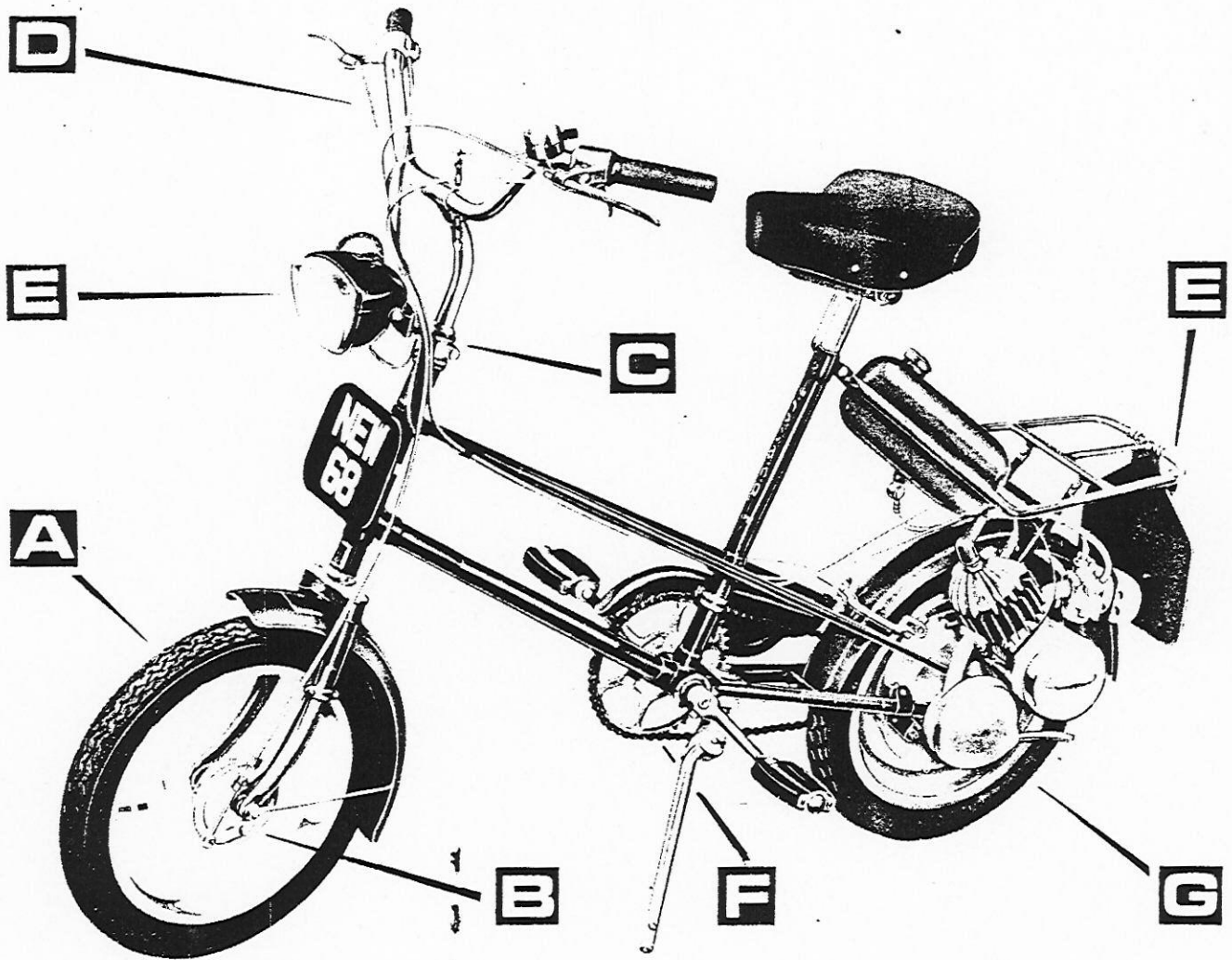
F Pedal Chain

Rear carrier stay



Transmission case clip.

To adjust the chain tension, first slacken the transmission case clip on the engine side of the lower frame tube. Now loosen wheel hub nuts and position wheel so that the chain has a small amount of slack in it. Chain must never be fully tight. Make sure wheel is central in frame, and retighten hub nuts. Reposition transmission case clip and tighten, ensuring that the engine cylinder fins are clear of rear carrier stay.



Principal Maintenance Points

GENERAL MAINTENANCE CHART

TYRES	WEEKLY	Check for correct pressures, re-inflate if necessary. Remove stones and inspect for damage.	A
BRAKES	WEEKLY	Check for easy movement of levers and cables. Oil with thin oil. Adjust if brake efficiency is falling off.	B
STEERING HEAD	MONTHLY	Check for play, adjust if necessary.	C
CONTROL CABLES	WEEKLY	Check for chafing of outer cables. Oil with thin oil.	D
LIGHTING	WEEKLY	Check all wiring for condition. Look for poor connections, the source of most troubles.	E
PEDAL CHAIN	MONTHLY	Check and adjust if necessary. Oil lightly with thin oil.	F
ENGINE TRANSMISSION UNIT	MONTHLY	Clean exterior. Check silencer fasteners for tightness, check condition of H. T. lead. Clean fuel filter. Check spark plug.	G

Component

Period

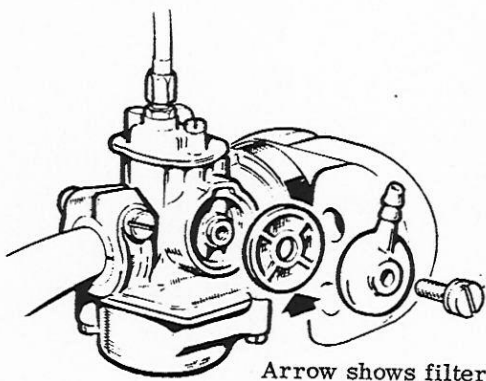
Attention



Engine Transmission Unit Maintenance

The CLARK Power Unit fitted to the SCAMP is an extremely simple and reliable two-stroke engine. So long as it receives basic attention in the way of maintenance, it will continue to give excellent service.

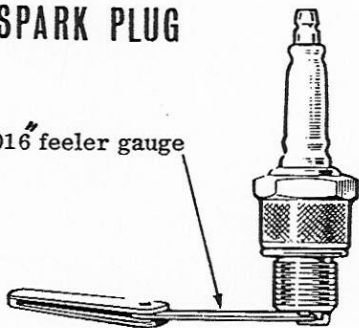
① FUEL FILTER



The fuel filter should be removed and cleaned monthly. Its job is to remove dirt from the fuel and it may therefore become clogged with foreign matter, restricting the flow. Undo the central screw, take off the feed pipe union and remove the filter. Do not damage the fine mesh screen. Wash in clean petrol and replace.

② SPARK PLUG

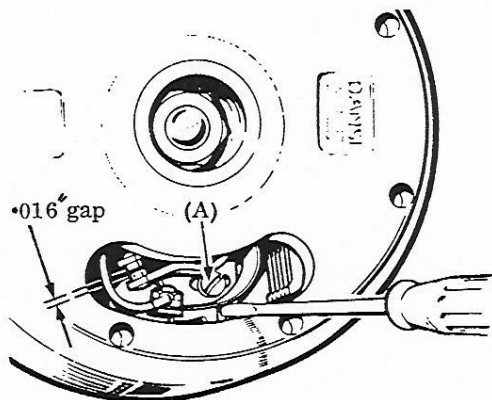
•016" feeler gauge



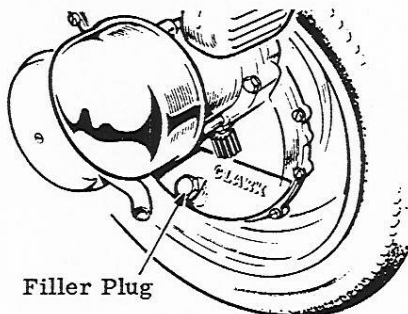
The type of spark plug fitted to your engine has been carefully selected for its purpose. Replace with the same type. The gap should be •016" of an inch. After every 500 miles or so, remove the plug and clean it, resetting the gap before putting it back. It is always a good idea to keep a spare plug handy. See that the plastic cap attaching the ignition lead is clean and undamaged as this can lead to irregular running.

3 IGNITION POINTS

Turn flywheel until points are fully open. Check gap with .016" feeler gauge. If necessary adjust as follows. Slacken screw (A) securing fixed contact plate. Insert screwdriver into slot on plate. Twist to adjust gap. Tighten screw (A) and recheck gap.



4 TRANSMISSION CASE



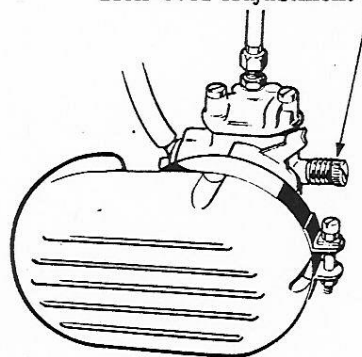
Filler Plug

The transmission case must be filled with oil to the level of the filler plug. This should be checked weekly and topped up as necessary with SAE 140 motor oil. See section 3 for complete oil change instructions and page 21 for oil recommendations.

5 TICK-OVER ADJUSTMENT

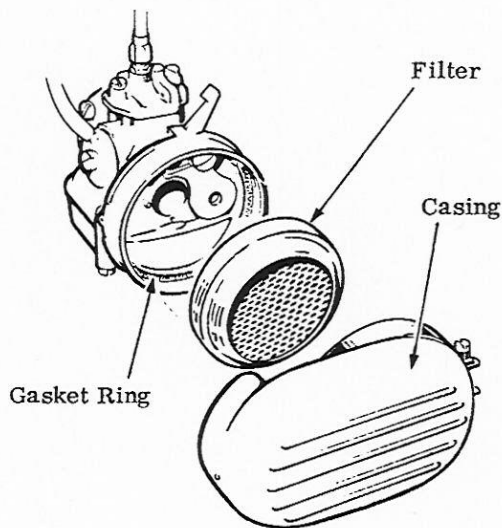
If the centrifugal clutch tends to engage on tickover the engine is running too fast. If the pedal clutch is engaging as indicated by a ratcheting noise the tick-over is too slow. To adjust the slow running of the engine, close the throttle and turn the spring-locked screw on the side of the carburettor nearest the wheel. To slow down the engine the screw should be screwed out a little; to increase the speed it should be screwed inwards.

Tick-over Adjustment Screw.



6 AIR FILTER

To clean, slacken off the clamp which holds the air cleaner casing in position, remove air cleaner casing, take out filter and wash in clean petrol. Then immerse in clean oil for a minute or two, remove and stand to drain. On re-assembly see that the split gasket sealing ring is correctly positioned inside the carburettor.



General Mechanical Care

FASTENERS

Nuts, bolts, screws, rivets, straps and clips may all be termed "fasteners". Their common purpose is to attach the various parts of a machine to each other. Under the effects of vibration settling down and age most fasteners tend to loosen, especially in their early life. Make a point of regularly checking with a screwdriver or spanner the tightness of all screws and nuts. The reward will be a rattle free machine and an extended life for all fixed parts.

LUBRICATION

The engine is lubricated by the oil in the petrol fuel mixture (see Section 1). The gear transmission is lubricated by filling the case to the level of the filling plug with any good proprietary SAE 140 Motor Oil. The cables, pedals, chain, bottom bracket, handlebar controls, freewheel and brake pivots should all be oiled with any good SAE 10 Motor Oil. Do not overoil. Only a little is required at each place. A machine which receives regular attention from an oilcan repays its owner by retaining its new condition and performance.

Recommended Brands of Lubricants:

Mobil, Esso, B. P. Duckhams,
Shell, Castrol, Regent.

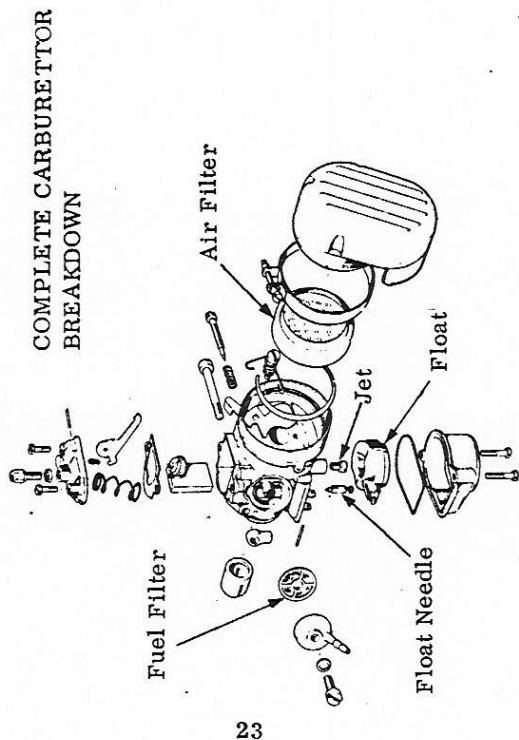
section three

SHORT OVERHAUL

As distinct from maintenance and repair, the purpose of the overhaul is to rectify the effects of prolonged usage. The need for overhaul may be apparent by the gradual diminishing of power, an occasional difficulty in starting or irregular running. Such defects call for decarbonisation of the engine, cleaning of the points, carburettor and so on. Because the SCAMP is so simple, the necessary work is quickly and easily done. The overhaul will be needed approximately every six months. The fuel filter should be cleaned monthly.

Cleaning Carburettor

The carburettor is a simple unit and the illustration below shows all parts. Thoroughly wash all pieces in clean petrol. Check that the float is not perforated and is quite free on its hinge. Blow through all openings to ensure that there is no blockage. Reassemble carefully and check that the automatic choke cut - out is working when the throttle is fully opened before putting back the air filter.



Decarbonising

CYLINDER

Remove sparking plug and undo the screw holding the end of the decompressor cable. It is not necessary to remove the decompressor. Using a box spanner remove the four nuts and lift off the cylinder head, holding the cylinder barrel firmly down. Carbon in the combustion space and on top of the piston should be removed with any hard smooth instrument taking care to avoid scratching either component. Push the piston to the bottom of its stroke with the silencer removed and scrape all carbon out of the cylinder exhaust port.

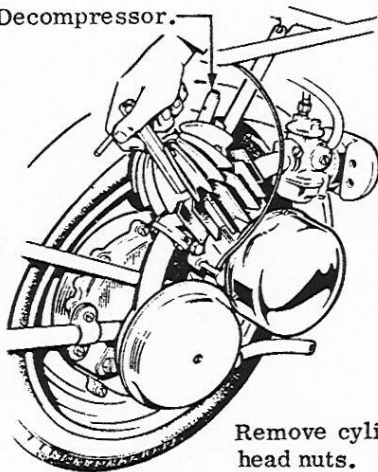
SILENCER

To dismantle the silencer remove the central screw. Separate the two halves taking care not to tear the sealing gasket. Do not lose the central distance piece. Excessive carbon build-up in the silencer can be removed by scraping. Clean all parts well before re-assembly.

REASSEMBLY

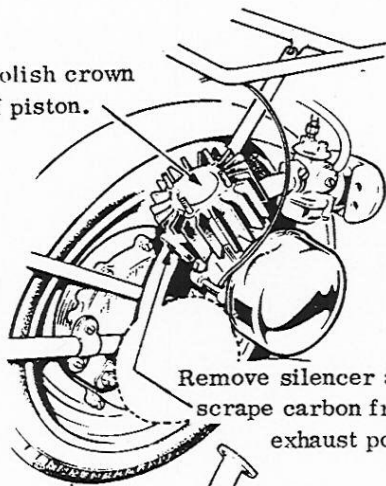
On reassembly of the engine note that although there is a paper gasket between barrel and crankcase, there is no gasket between the head and the barrel. Tighten down the head nuts evenly.

Decompressor.



Remove cylinder head nuts.

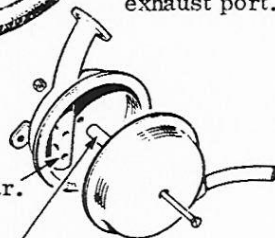
Polish crown of piston.



Remove silencer and scrape carbon from exhaust port.

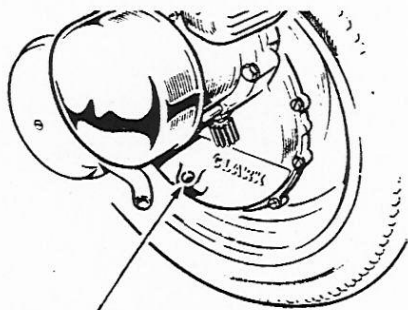
Keep holes clear.

Distance piece.

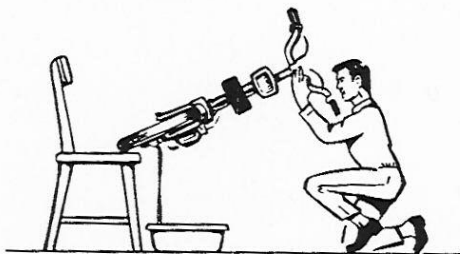


Transmission Oil Change

The oil filler is situated in the lower portion of the transmission case on the engine side of the wheel. Remove the filler plug and tip the machine to allow the old oil to drain out. Refill using a good SAE140 motor oil. Fill right up to the top of the hole - this is the correct level and equals about a quarter pint.



Remove the filler plug



Tip the machine to allow the old oil to drain out.

Fault Finding

SYMPTOM	POSSIBLE CAUSE AND REMEDY
FAILURE TO START	<ol style="list-style-type: none"> 1 Fuel tap turned off - turn on. 2 No fuel left in tank - refill. 3 Fuel level low - switch to reserve. 4 Plug lead detached - replace. 5 Plug oiled or whiskered - remove and clean.
ENGINE RUNS BUT STOPS WHEN THROTTLE IS OPENED	<ol style="list-style-type: none"> 1 Fuel filter clogged - remove and clean. 2 Plug whiskered - remove, clean and reset gap to .016". 3 Carburettor dirty - remove dismantle and clean all parts.
ENGINE BACKFIRES THROUGH CARBURETTOR INLET	<ol style="list-style-type: none"> 1 Weak mixture caused by blocked filter or dirty carburettor - remove and clean. 2 Incorrect timing of spark - check the contact breaker gap and correct if necessary.
ENGINE RUNS RICH WITH SMOKY EXHAUST	<ol style="list-style-type: none"> 1 Choke lever stuck down and not releasing with the throttle twist grip - adjust throttle cable length with carburettor screw cable adjuster. 2 Air inlet filter blocked - remove and clean. 3 Carburettor flooding - remove float chamber clean out and check the float needle for wear.
ENGINE RUNS NORMALLY BUT LACKS POWER	Exhaust port and / or silencer blocked with carbon - carry out short overhaul scraping clean exhaust port and silencer.
CLUTCH DRAGS WHEN MACHINE IS STATIONARY AND THROTTLE CLOSED	Engine tickover is set too fast - reduce engine speed by unscrewing the slow running adjuster on the carburettor.
PEDAL CLUTCH RATCHETS WHEN THROTTLE IS CLOSED AND MACHINE STATIONARY	Engine tickover is set too slow - increase engine speed by screwing in the slow running adjuster on the carburettor.

Some Do's and Don'ts

Do

Ride carefully at all times and take a pride in your riding technique.

Keep your tyres inflated to the correct pressures.

Keep the frame and engine clean in a weekly 5 minute routine

Check the adjustment of the brakes regularly.

In any correspondence quote the Engine No., Machine No. and date and place of purchase.

Don't

Forget to ask your dealer if you are in doubt about the correct functioning of your machine.

Hesitate to assist the engine with the pedals on long hills.

Use any fuel mixture other than the 20 : 1 petrol / oil.

Use a doubtful brand of lubricant just because it is cheap.

Forget to turn off fuel tap at the end of the run.