



USER'S HANDBOOK

for Marks

20 (208 c.c.)

25 (256 c.c.)

40 (359 c.c.)

FOUR-STROKE ENGINES



*The Power and the Heart
of a fine machine*

THE VILLIERS ENGINEERING CO. LTD.
WOLVERHAMPTON . . ENGLAND

APRIL 1959

ONE SHILLING

V.L.C.544

Printed in England by Cradley Printing Co. Ltd., Cradley Heath, Staffs.
E. & O.M.

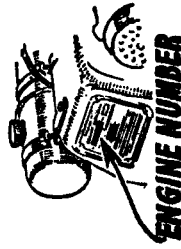
Introduction

THE engines dealt with in this book, like all Villiers products, are precision built; every part conforming rigidly to standards of the highest quality. Provided proper care and attention is given to the simple routine maintenance suggested in these pages, your engine, which is the heart of the machine in which it is installed, will give many years of efficient and trouble-free service. Keep this book handy for consultation when required.

Because of the fine limits to which this engine is made and assembled you are advised to entrust major overhauling to your nearest Official Service Depot† or to the Manufacturer of your machine, both of whom have the full facilities of Villiers Service Organisation at their disposal.

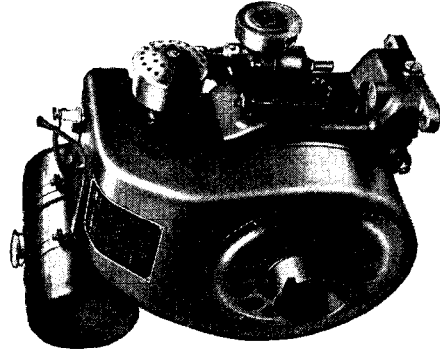
Important

The engine number stamped on the plate rivetted to the cowling should always be quoted when enquiries are made to either Official Service Depots or Villiers Service Department. The illustration below shows the location of the numbers.



†The name and address of your nearest Service Depot will be advised upon application to us.

THE VILLIERS ENGINEERING COMPANY LTD.
Marston Road • • • • • • • • • • • • • • • •
Wolverhampton;
TELEPHONS:—
22399 (20 lines).
TELEGRAMS:—VILLIERS
WOLVERHAMPTON

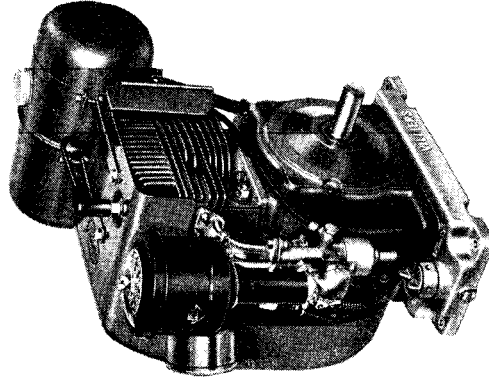


Villiers

**FOUR-STROKE
ENGINES**



**Mark 20 Mark 25
208 c.c. 256 c.c.**



**Mark 40
395 c.c.**



RUNNING INSTRUCTIONS

INSTALLATION

The engine must be securely fixed in place and be *reasonably level*, otherwise lubrication and operation of carburetter are liable to be adversely affected.

BEFORE STARTING (See also "Routine Attention")

With engine level fill sump with recommended grade of oil—up to underside of filler hole, which is level with shoulder of dipstick. The bottom end of dipstick indicates danger level and the sump should be replenished before oil drops to this level.

Engines with reduction gears must have oil introduced into gear casing up to level plug.

STARTING

When engine is cold:—Open petrol tap and close strangler (fitted to carburetter body, elbow, or air filter). Flood carburetter by depressing tickler cap, projecting from top of float chamber. Wind rope around starting pulley in a clockwise direction, the knotted end being placed in the notch provided in the pulley, the knob at the other end being held in the hand. Give a brisk pull to rotate the engine, pulling rope clear of starting pulley.

After starting, open the strangler gradually as the engine warms up.
Note:—At extremely low temperatures it is essential that the lighter grade of oil recommended is used; this will enable the engine to rotate quickly enough to start, and also ensure proper circulation of the oil. It may also be helpful to inject petrol through the sparking plug hole before starting.

When engine is hot:—The same method is used for starting when the engine is still hot from a recent run, but it is not usually necessary to close the strangler. Do not flood the carburetter.

FAILURE TO START

If the engine will not start after a reasonable number of attempts, the cause of the trouble may be found by a systematic check-over as given under "Fault Finding Guide" on page 16. Read this section carefully before doing anything to the engine.

ENGINE DATA

Engine Type	MR. 20	MR. 25	MR. 40
BORE AND STROKE (m.m.)	63 × 66.7	70 × 66.7	77.8 × 82.5
CAPACITY (c.c.)	208	256	395
POWER OUTPUT	2.5 h.p. at 2,500 r.p.m.	3.0 h.p. at 2,500 r.p.m.	4.2 h.p. at 2,150 r.p.m.
POWER OUTPUT (H.S. engines)	2.7 h.p. at 3,000 r.p.m.	3.4 h.p. at 3,000 r.p.m.	4.6 h.p. at 2,600 r.p.m.
SPARK PLUG	CB.3	CB.3	HLN.18
IGNITION TIMING B.T.D.C.	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{4}$ "
SUMP CAPACITY	2 pints	2 pints	3 pints
FUEL TANK	1 gallon	1 gallon	1 gallon

Tappet clearance (all models) .006"/.010"

Contact breaker point gap (all models) .012"/.015"

All types are air-cooled by fan and cowling. Villiers magneto is standard. "V" type carburetters are fitted to standard models, Zenith to H.S. engines.

STOPPING

Closing the fuel tap will shut off the fuel supply, and the engine will stop as soon as the carburettor float chamber is empty. Pressing the metal strip, bolted on top of cylinder head casing of Marks 20 and 25 engines against the sparking plug terminal will immediately stop the engine by earthing the ignition current.

Marks 20 and 25 engines have an insulated cut-out terminal on rear of armature plate and machine manufacturers may provide a push button or switch with a connection to this terminal.

On Mark 40 engines the contact breaker cover has a knob protruding from it. Fully depressing the knob earths the L.T. current and so stops the engine.

RECOMMENDED GRADES OF OIL

Petrol Engines

Below 16° F. Wakefield Castrolite, (S.A.E.20).

16° F.—90° F. Wakefield Castrol XL (S.A.E.30).

Above 90° F. Wakefield Castrol XXL (S.A.E.40).

Petrol Vaporising Oil Engines

Below 16° F.—Wakefield Castrol XL (S.A.E.30).

Above 16° F.—Wakefield Castrol XXL (S.A.E.40).

Reduction Gear (where fitted)

All temperatures—Wakefield Castrol XL (S.A.E.30).
(Also see page 5 for further details regarding lubrication).

FUEL

The tank must be filled with good quality fuel. When the engine has been made to run on either petrol or vaporising oil, the two separate compartments of the fuel tank must be correctly filled with the appropriate fuel.

Note:—Do not mix oil and petrol. The lubrication system of these engines is separate from the fuel supply system.

PETROL VAPORISING OIL ENGINES

Engines specially adapted to start on petrol and then to run on vaporising oil are fitted with a fuel tank having two compartments, the smaller

being for petrol. A three-way cock is fitted and after engine has warmed up for about five minutes the cock should be turned over to vaporising oil supply. A few minutes before stopping engine turn cock to petrol supply so that the float chamber will contain petrol for re-starting; should this not be done the vaporising oil must be drained from the carburettor by means of the drain screw or tap at base of float chamber before attempting to start from cold.

ROUTINE ATTENTION

OIL LEVEL

The engine must be level when checking and topping up. After every eight running hours, the level of oil in the engine sump must be checked, and if necessary topped up with the recommended grade of oil. Do not remove filler plug whilst engine is running. Once a week remove oil level plug from reduction gear casing and if necessary top up with fresh oil.

CHANGING THE OIL

After every 100 hours operation, drain all the old oil from the sump by removing the small slotted plug fitted at the side. This is best done when the engine is warm, as the oil will then run out freely. Refill the sump with clean new oil of the correct grade.

Note:—If the above operation is not carried out at the proper intervals, the running of the engine may be affected, due to excessive wear and the formation of large deposits of carbon.

AIR FILTER

Regular attention to the air filter is required, especially when the engine is operating under dusty conditions. It is important to see that the filter does not become choked, or the engine will overheat and the fuel consumption become excessive. If the engine runs better without the filter, then the filter needs cleaning. Directions for this operation are given on page 15.

MAINTENANCE AND REPAIRS

PETROL FILTER

Occasional examination and cleaning of the filter gauzes is desirable. These are accessible by unscrewing the banjo bolt on the carburettor, and

the tap on the petrol tank. In the case of petrol/vaporising oil engines filters are also incorporated in the banjo fittings securing the two copper pipes to the petrol tank.

SPARKING PLUG

Clean the plug and re-set the points .020" gap after each 100 hours operation. Adjustment of the gap should be done by moving the points attached to the outer body of the plug. **NEVER BEND THE CENTRE PIN.** Keep the outside of the plug insulation free from water and dirt. Should any undue stiffness be experienced when screwing the plug in the cylinder head, do not use force but examine the threads for any particles of grit or carbon which may be present. These must be removed, otherwise the threads in the cylinder head may be damaged. It is a good plan to smear a little graphite grease on the plug threads before replacing.

CONTACT BREAKER

Occasionally check the points for cleanliness and to ensure that the gap when the points are fully open is between .012"—.015"; a feeler gauge and screwdriver are supplied to carry out these adjustments. Ensure that the rocker arm is free to operate on its pivot pin.

Adjustment—Marks 20 and 25

Remove the magneto dust cover and contact breaker box cover (if fitted). Turn flywheel clockwise until rocker arm pad "E" is on top of profile of cam, the latter being rivetted to the flywheel boss. Release screw "A" and position bracket "B" by turning eccentric screw "C" until the point gap is correct then retighten screw "A." Do not disturb nut "D."

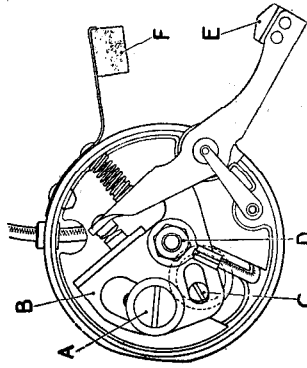


Fig. 1

The rocker pivot pin, needs occasional lubrication with very light oil to prevent wear which would eventually cause faulty ignition. The felt pad "F" should occasionally be soaked in high melting point grease so as to maintain a slight film of grease on the cam. Avoid over-oiling as excess may creep along rocker arm causing ignition trouble by fouling the points.

Adjustment—Mark 40

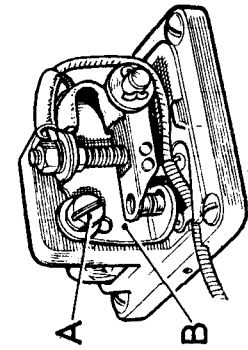


Fig. 2

The contact breaker assembly mounted on the crankcase is readily accessible by springing off the clip and removing the dust cover. Rotate the flywheel until the rocker arm is at its maximum travel, i.e. points fully open. Slacken off screw "A" and move the base plate "B" until the gap is .012"—.015"; tighten screw "A" and recheck the point gap.

IGNITION TIMING

The magneto is timed so that the contact breaker points commence to open when the Marks 20 and 25 piston is $\frac{1}{16}$ " and Mark 40 is $\frac{1}{4}$ " before top dead centre.

Marks 20 and 25

The cam operating the contact breaker lever is rivetted to the flywheel which is driven by a taper on the crankshaft, and if alteration to magneto timing is necessary, the flywheel must be released, by unscrewing the centre nut with the box spanner provided in the tool kit. This nut which has a right-hand thread is imprisoned in the flywheel and it should be unscrewed until the flywheel is just free to revolve on the crankshaft. With the piston in its correct position, the flywheel should then be moved round until the points are just open, then tighten up the nut firmly and re-check the timing. Always set the contact breaker points to .012"/.015" gap before timing the magneto, because any alteration to the point gap alters the ignition timing. The nut must be tightly locked by hammering the tommy bar of the "hammer-tight" box spanner.

The taper must be cleaned and lightly oiled before assembly.

Smear a little oil occasionally on the cam profile and on the felt pad which bears on the cam.

Mark 40

The rocker arm is actuated by a tappet which bears on a third cam, machined on the camshaft, which is driven by the crankshaft gear wheel. The gears are marked as shown in Fig. 3 and these marks must be lined

up for correct timing. Fine adjustment is made by fitting shims between the contact breaker body and the crankcase, it is important therefore that these are replaced correctly. The sealing ring must also be in position to avoid oil leaking from crankcase.

Unlike the Marks 20 and 25 engines the magneto flywheel is located by a key in the tapered end of crankshaft, but the centre nut is similar and acts both for tightening flywheel on to shaft and for withdrawing it. Because of the key it is not necessary to disturb the flywheel when adjusting spark timing.

DECARBONISING

This will be necessary at intervals, varying according to the type of service the engine has to perform, but generally after every 200/300 hours operation. If the engine "knocks" at normal loads but not when the load is reduced, it is usually an indication that there is an excessive amount of carbon on the piston and the inside of the cylinder head.

VALVE GRINDING

While the engine is being decarbonised raise the valves and inspect the condition of the seats to see whether they require re-grinding. This is most easily done when the cylinder is taken off the crankcase. To do this, take off the silencer and detach one end of the link connecting the throttle lever to the governor lever. Remove carburettor intake pipe from cylinder then, when the fan casing is taken off, the four cylinder fixing nuts are readily accessible. If the valve chest cover is first removed it will be possible to see that the tappet caps remain in place when the cylinder is lifted away. When the valve springs are compressed, the split taper cotters which hold the bottom spring seat in place can be removed, thus allowing the valves to be taken out of the cylinder. All traces of grinding compound must be removed before re-assembly of the valves. A suitable grade of valve grinding compound is carborundum No. 360 Fine. Should it be necessary to recut the valve seating in the cylinder, the included angle is 89°. Inlet and exhaust valves are marked on their heads and they are not interchangeable.

VALVE CLEARANCE

When the valves are closed there must be a clearance between the end of the valve stem and the tappet cap. Shims, approximately .006" thick, are fitted between the tappet and the cap and may be added or removed to provide the necessary adjustment. The clearance should be between .006", and .010".

VALVE TIMING

Correct timing will only be obtained by assembling the camshaft and crankshaft gears so that the timing marks on each gear are together and in line (see Fig. 3).

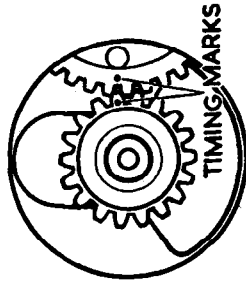


Fig. 3

PISTON RINGS

Three compression and one oil control ring are fitted to the piston on all these engines. The middle compression ring has a tapered face to facilitate initial running-in. When fitting new piston rings it is most important to check that the ring gap is correct. To do this, the ring must be placed so that it lies squarely in the cylinder bore at the part of the cylinder where the least wear has occurred, i.e. at the bottom.

The minimum gap for new rings having a square cut gap is:—Mark 20—.011" and Mark 25/40—.012". The corresponding figures for rings with the angle cut gap are: .007" and .008" respectively. If gap exceeds .030" in existing rings it is advisable to replace with new. Oversize rings are available in two sizes only, .015" O/S and .030" O/S.

The taper faced ring referred to above is marked with a "T" and this mark must be uppermost when the ring is fitted.

CONNECTING ROD

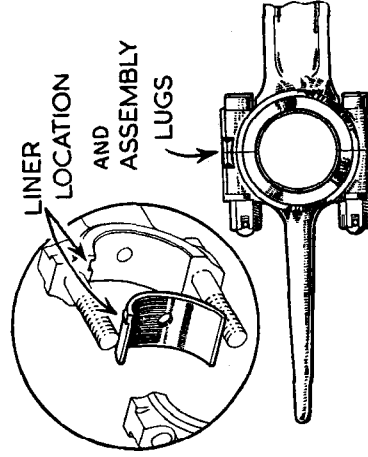


Fig. 4

Rods are fitted with detachable white metal linings and it is essential when replacing liners that the lugs are correctly mated with the slots in the rod. No filing or scraping should be done. The connecting rod and cap also have assembly lugs for correct mating and the rod should be replaced with these lugs facing the camshaft. Under-size liners (.020") are available.

GOVERNOR

This is carefully set before delivery to give the specified engine speed. An adjusting nut is fitted above the spring so that a different speed may be obtained when this is really necessary. **NO ADJUSTMENT** can be made by altering the position of the lever on the shaft. Hunting at light load may occur due to stiffness in the joints of the carburettor links; these should always be quite free, and adjustment of the pivot pins to ensure this can be made provided that the locknut is tightened up again. If hunting occurs when the joints are free the throttle adjusting screw should be screwed in so that the throttle just does not close without appreciably increasing the engine speed. Hunting may also be due to a weak carburettor setting.

To reset lever after removal

Fit governor lever loose on its shaft, connect up carburettor link at each end, turn shaft as far as possible in a **clockwise** direction then move lever to right until throttle is fully open and tighten clamp bolt securely.

CRANKSHAFT AND CAMSHAFT

Do not remove the crankshaft or camshaft unless it is absolutely necessary. Before the crankshaft can be taken out however, it is necessary to remove the oil sump or base, connecting rod cap, cowlings, flywheel, and bearing housing. The crankshaft must be turned into the position indicated in Fig. 3, otherwise the web and balance weight will foul the camshaft gear. The camshaft can only be moved by pressing its spindle from the outside of the crankcase towards the flywheel side of engine.

Reverse the above procedure when re-assembling, making sure that the two gears mesh correctly, indicated by dots imprinted on each wheel. The governor gear meshes with the camshaft gear in any position of the teeth.

The crankshaft end-float, which should be between .004" and .008", is regulated by shims behind the ball race in the bearing housing.

OIL LEAKS

The outside of the engine should be kept clean. If oil leaks develop, check the tightness of the valve cover plate and the cylinder nuts. Examine oil level—this should not be appreciably higher than the shoulder on the

dipstick. The breather valve can be removed and if necessary washed out in paraffin to ensure that the ball can operate freely. If after these precautions, oil still leaks from the crankshaft bearing or governor shaft, it would be advisable to examine the condition of the piston rings. These must be free in their grooves and the rubbing surfaces clean and bright. Remove carbon from the grooves and replace any damaged rings.

CARBURETTER (Type V)

The carburettor illustrated in Fig. 5 is fitted to standard petrol engines where a fixed governed speed is required. The pilot jet carburettor, part of which is shown in Fig. 6, is used where a low idling speed is required, and/or when the engine is designed to operate on vaporising oil. Carburettors are correctly set during bench testing of the engine, but it may be necessary to make very slight adjustments when the engine is used under actual working conditions. Details of the method of adjustment of the standard and pilot jet carburettors are given in the following paragraphs.

Adjustment (Standard Type)

If the original setting has been disturbed proceed as follows:—

Completely close the needle valve by turning clockwise as far as possible after the lock-nut has been slackened. Do not use force or the needle valve may be damaged.

Open the needle valve between two and two-and-a-half complete turns.

Final adjustment should be made with the engine on full load when the engine is warm by turning the needle valve to the position at which the engine operates most smoothly.

With the setting thus obtained, starting will be satisfactory.

Now, test with the engine off load and, with the damper spring out of operation, turn the throttle adjusting screw so that it just bears lightly

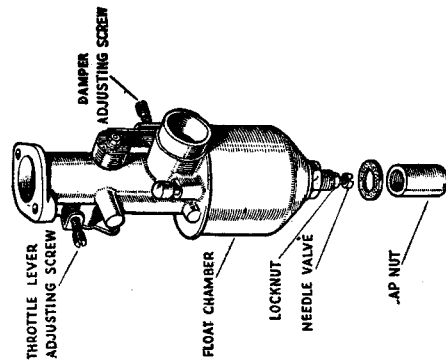


Fig. 5

on the buffer spring. In this condition the engine should run steadily, without "hunting." The locknut on the needle valve should now be tightened.

If, however, it is found that there is still a tendency to "hunt" a light pressure of the damper spring should be applied by means of the adjusting screw on the side of the carburettor body.

If, when starting from cold, the choke has to be kept closed for several minutes, before the engine runs smoothly, the carburettor setting is too weak, and the needle valve should be opened slightly more.

Adjustment (Pilot Jet Type)

Provision is made for adjusting both slow-running mixture and idling speed. The slow-running mixture strength is adjusted by means of the pilot adjuster screw (B). Screwing the adjuster in a clockwise direction will richen the mixture. To set the idling speed the adjusting screw (A) should be turned so that the end bears lightly on the carburettor body, thereby preventing complete closure of the throttle and ensuring steady running under no load conditions. The lock nuts (C) should be securely tightened after the required adjustments have been obtained. Use the damper spring only if absolutely necessary to prevent "hunting."

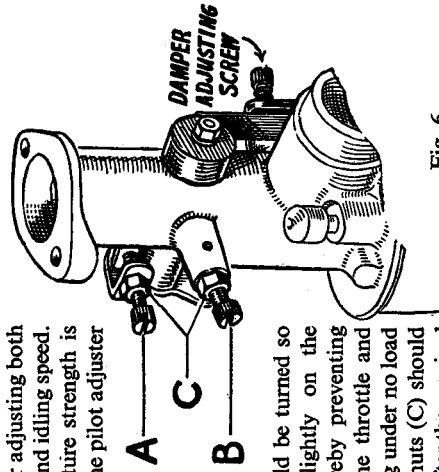


Fig. 6

The pilot jet carburettor is used mainly in conjunction with a slow-running control cable and lever, the engine speed being regulated by altering the tension on the governor spring. The adjuster attached to the slow-running cable is provided to permit the setting of the maximum speed position, and the throttle adjusting screw "A" for the setting of the idling speed. When setting the carburettor for idling speed it is essential that all tension is removed from the governor spring, otherwise a satisfactory tickover will not be obtained.

The pilot jet type of carburettor is also fitted to petrol/vaporising oil engines, but in this instance the throttle adjusting screw "A" is not fitted,

the standard adjusting screw and buffer spring taking its place. The pilot adjusting screw "B" should be set to give even off-load running when the engine has reached the full operating temperature, and has been switched over to vaporising oil. Adjustment of the throttle adjusting screw and damper spring adjusting screw is as for the standard type of carburettor.

TO CLEAN CARBURETTORS (Type V)

In order to carry out this work thoroughly, it is necessary to remove the carburettor from the engine.

Standard Type

The cap nut covering the needle valve should be unscrewed, followed by the hexagon nut which will then allow the float chamber to be removed. Any accumulated sediment should be cleaned away and the float examined to make sure it is in good condition. The float and float chamber, hexagon nut and cap nut can then be replaced making sure that the fibre washers are in their correct position.

Pilot Jet Type

Removal of the cap nut and fibre washer releases the float chamber. If it is necessary to remove the float, the main jet will have to be removed from the side of the centrepiece. After cleaning, reassemble in reverse order.

Notes on both types of carburettors

A filter is fitted over the banjo bolt which secures the end of the petrol pipe to the carburettor body. The bolt should be removed at intervals, and any sediment which accumulates around the filter washed off in petrol.

A fuel needle is fitted in the carburettor body, above the float, held in position by a forked brass lever. Any dirt on the needle seating may cause the carburettor to flood, but generally this can be washed out by permitting petrol to flush through it freely, when the tickler is operated.

If this does not cure the flooding, a light tap on the square end of the needle should produce a satisfactory seating. Take care, however, that the lever is not bent during this process, as this will affect the petrol level. The forked brass lever should have $\frac{1}{16}$ " free movement on its retaining pin, and when the float is pushed up against the lever with the fuel needle in

position, the distance between the top of the float and the underside of the carburettor body should be $\frac{3}{32}$ ".

AFTER REFITTING CARBURETTER TO ENGINE MAKE SURE THAT THE GOVERNOR LINKAGE IS SET CORRECTLY.

(See page 10)

ZENITH CARBURETTER (Type 24T-2) Fig. 7

It should be remembered that considerable care is taken to ensure that carburettor settings are accurate before engines leave the Works, and normally further adjustments are unnecessary.

The carburettor main jet can be altered by means of the tapered adjuster (1) screwing in a clockwise direction will weaken the mixture strength and vice-versa. The adjuster should only be moved $\frac{1}{8}$ of a turn at a time until the required setting is obtained, which is when the engine runs smoothly, develops maximum power (maximum speed), and has a clean exhaust. Excessive black smoke from the exhaust system indicates too rich a mixture.

When the main jet has been set for full load running, the load should be taken off the engine so that the slow-running mixture strength can be

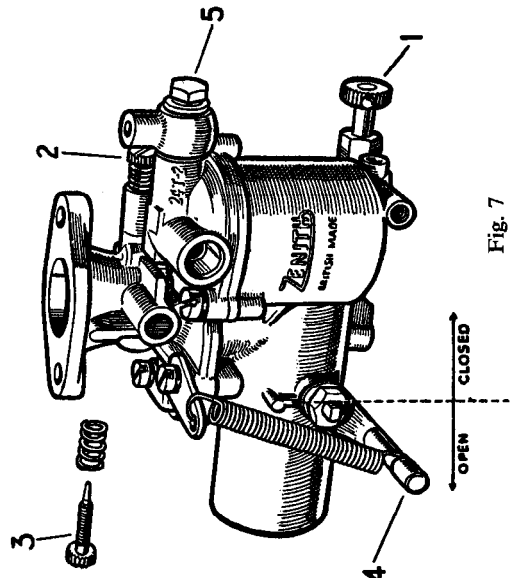


Fig. 7

set. The strength of the mixture can be varied by means of the air regulating screw (2)—turning clockwise will richen the mixture.

Adjustments for idling speed can be made by means of the throttle stop screw (3), which controls the throttle opening. Screwing in a clockwise direction will increase the idling speed of the engine.

When starting from cold the strangler flap (4) should be in the closed position so as to provide a sufficiently rich mixture, but after engine is warm the strangler should be fully opened.

If for any reason it is necessary to dismantle the carburettor it is advisable to blow out the main castings with compressed air, if such is available. All parts of the carburettor should be carefully cleaned before re-assembly, and it is important to see that the gasket is replaced between the carburettor bowl and barrel.

Periodically, the filter gauze fitted around the filter plug (5) should be removed and washed in petrol.

AFTER REFITTING CARBURETTER TO ENGINE MAKE SURE THAT THE GOVERNOR LINKAGE IS SET CORRECTLY.

(See page 10)

AIR FILTERS

The oil wetted air filter should be removed from the carburettor, washed in petrol or paraffin and re-oiled with engine oil. Allow oil to drain before replacing filter.

The oil bath air filter, fitted as an alternative, should be serviced at regular intervals to ensure that oil is maintained at the correct level and that an excess of sludge does not accumulate in the base of the filter cup. The filter element should be washed out in petrol or paraffin and allowed to drain. It will be re-oiled automatically when the engine is started.

The frequency of filter cleaning will depend upon the conditions under which engine is running. The oil wetted air filter should be re-oiled before use if the engine has been standing for some time. If the engine runs rich, the filter probably requires cleaning.

* Insist on
GENUINE *Villiers* SPARES

FAULT FINDING GUIDE

Engine will not start

1. Ensure that there is petrol in tank.
2. If petrol is present, filters may be choked.
3. Fuel needle sticking; remove float chamber to gain access.
4. Main jet may be choked—clean by blowing out, but do not use wire as this may enlarge jet.
5. When the engine is warm the mixture can easily be made too rich by incorrect use of strangler causing difficult starting. Float may be punctured or air cleaner choked.
6. Check sparking plug. With lead attached hold plug on top of engine to see if spark is visible when engine is rotated. Clean and adjust point gap to .020".
7. If no spark can be obtained hold lead about $\frac{1}{8}$ " from cowlings. Insulation of lead may be faulty or contact breaker points dirty. Clean contact points and adjust .012"/.015"—renew if badly pitted. Condenser or ignition coil or their connections may be faulty.

Lack of power

1. Faulty or unsuitable sparking plug.
2. Loss of compression due to:—
 - (i) Leak through cylinder head joint. Tighten bolts or nuts.
 - (ii) Valves not seating due to insufficient tappet clearance.
 - (iii) Valve sticking in guide. Remove valve and clean off gum or carbon from stem.
 - (iv) Valve not seating correctly. Remove valve and clean off carbon. Lap seating with grinding compound.
 - (v) Leakage past piston. Piston rings broken or sticking. Remove piston and replace rings or clean ring grooves. Renew or rebore cylinder if worn.
3. Excessive carbon deposit. Remove cylinder head and scrape off carbon from head and piston. Silencer should also be cleaned.
4. Valve timing incorrect. Check, particularly after overhaul.
5. Ignition timing incorrect. Contact breaker points must commence opening $\frac{1}{8}$ " before T.D.C.—Marks 20 and 25
 $\frac{1}{4}$ " before T.D.C.—Mark 40.

GUARANTEE

WE give the following guarantee with VILLIERS Engines and Accessories in place of any implied guarantee by statute or otherwise all such guarantees being in all cases excluded. No statement or representation contained in this catalogue shall be construed as enlarging or varying this guarantee. In the case of engines and accessories which have been used for "firing out" purposes, or from which our trade mark, name, or manufacturing number has been removed, no guarantee of any kind is given or is to be implied.

We guarantee subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but this guarantee is to extend and to be in force for six months only from the date the engines or accessories are despatched by us and the damages for which we make ourselves responsible under this guarantee are limited to the replacement of a part manufactured by us which may have proved defective. We cannot accept responsibility for the replacement of any proprietary articles or parts not manufactured by us, unless the makers of these parts agree to replacement.

We do not undertake to refit or bear the cost of replacement or refitting such new part. We guarantee, subject to the conditions mentioned below, to make good at any time within six months any defects in these respects. As VILLIERS Engines and accessories are liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse and neglect.

CONDITIONS OF GUARANTEE

If a defective part should be found in our engines or accessories, it must be sent to us carriage paid and accompanied by an intimation from the sender that he desires to have it repaired free of charge, under our guarantee, and he must also furnish us at the same time with the number of the engine, and full particulars of purchase. Failing compliance with the above, no notice will be taken of anything that may arrive, but such articles will lie here at the risk of the sender, and this guarantee or any implied guarantee shall not be enforceable.

THE TERM "AGENT" is used in a complimentary sense only and those firms whom we style our agents are not authorised to advertise, incur any debts, or transact any business whatsoever on our account other than the sale of goods which they may purchase from us, nor are they authorised to give any warranty or make any representations on our behalf or sell subject to or with any conditions other than those contained in the above guarantee.

The guarantee becomes void if any parts not made or supplied by THE VILLIERS ENGINEERING COMPANY, LTD., are fitted to a VILLIERS engine. To safeguard his own interests, the owner should always insist upon genuine VILLIERS parts.