# INSTRUCTIONS AND SPARE PARTS LIST

FOR THE

# TEAGLE

## 49 c.c. TWO-STROKE PETROL ENGINE


**W. T. TEAGLE (Machinery) LTD.**

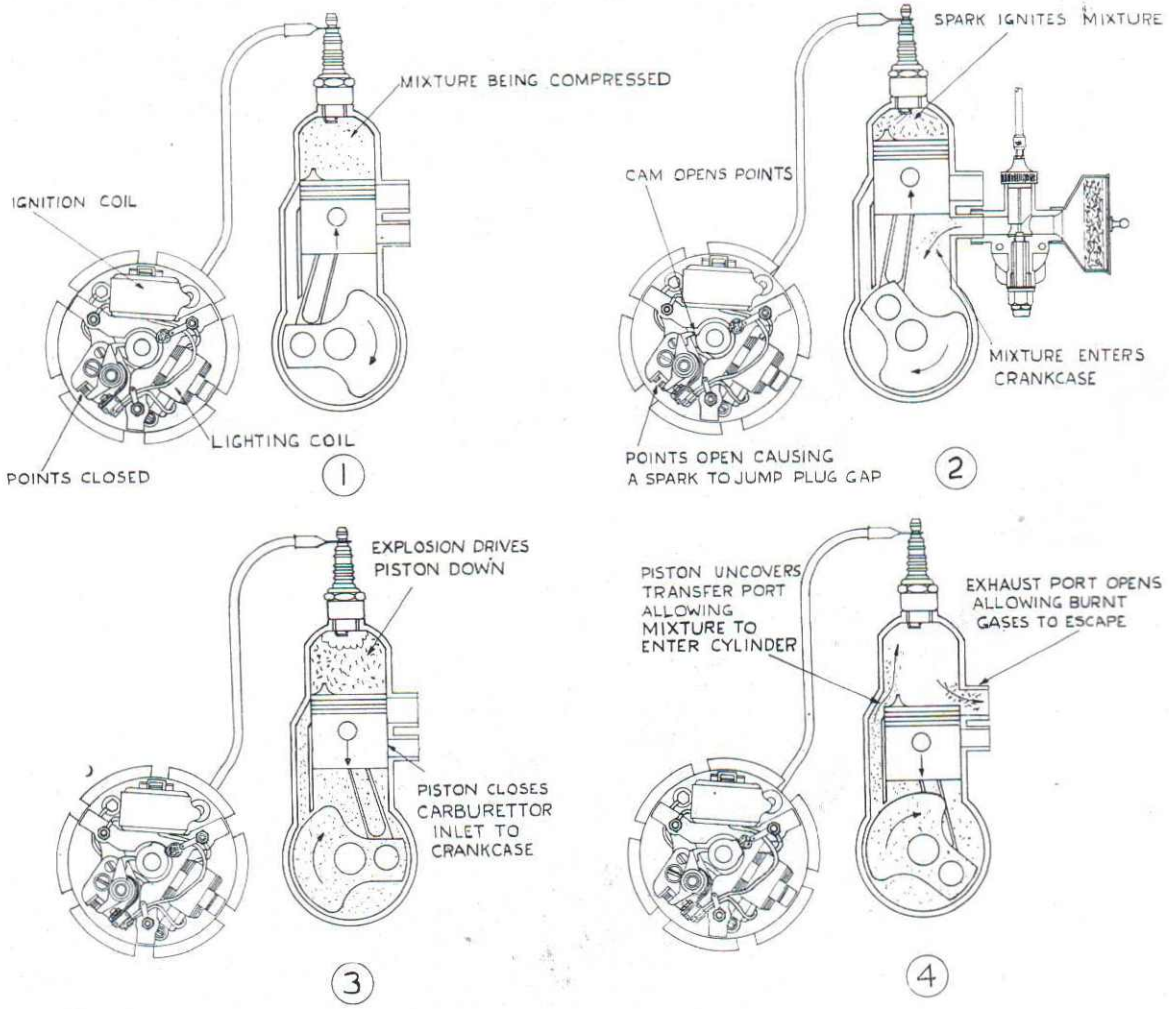
BLACKWATER · TRURO · CORNWALL

Grams—TEAGLE, TRURO Phone—THREEWATERS 242



*Issue B/E1*

# HOW THE TEAGLE 49 c.c. TWO STROKE ENGINE WORKS




*These diagrams are for descriptive purposes only.*

The above diagrams show the sequence of operations inside the engine. It will be seen that the mixture is exploded every revolution of the crankshaft, that is, every Two Strokes of the piston. As the crankcase is a reservoir for the mixture and is subjected to alternate suction and pressure by the movement of the piston, it will be obvious that any leaks will cause dilution of the mixture during the suction stroke owing to air being drawn in. Thus it is imperative for efficiency and economy that the crankcase oil seal is functioning perfectly. The gasket at the carburettor flange must also be airtight. The rush of mixture from the crankcase, via the transfer port into the cylinder, is deflected upwards by the shape of the piston crown and pushes the exhaust gases out of the exhaust port. The efficiency of the engine depends on the cylinder being properly filled with the mixture and any impediment in the exhaust system will prevent this. Thus the silencer should be removed at regular intervals and well cleaned of any carbon that may be building up in the port holes. The exhaust ports in the cylinder will also require attention periodically and should be scraped free of carbon deposits with a blunt pocket-knife. The piston must be at the bottom of its stroke, to prevent any damage to its skirt. Then, if the sparking-plug is removed, any loose particles of carbon that may be inside the cylinder may

be blown out. The silencer should then be assembled and plug replaced, when it should be found that the engine has regained its former power.

Occasionally it will be necessary to remove the carbon deposit on top of the piston. This will necessitate removing the air cowling before the cylinder head can be removed. Then the piston should be brought to the top of its stroke, when the carbon can be scraped off. Care should be taken not to scratch the soft aluminium piston crown, as it provides a key for further carbon to adhere. The cylinder head may also have a carbon deposit which should be removed. (Note re tightening cylinder head bolts—see page 7, under Gaskets).

**Running-in a New Engine**

Your new engine should, preferably, be used carefully for the first few hours, to enable the piston to bed down to the cylinder. The cylinder wall has minute spots which stand up a fraction, and which are so small that they can only be measured in micro-inches, and these can only be worn smooth while the engine is actually running. The piston also distorts a certain amount, owing to the working temperature, and the high spots on it will also be removed during the running-in process. It is essential that the oil in the petrol is not forgotten at any time during the engine's life, as this is the only method of lubrication for the piston and engine bearings. All other things being equal, an engine which has been run in carefully will give much longer service before an overhaul is required, and will prove more economical in fuel consumption than one which has been driven harshly.

**The Carburettor**

The carburettor has the duty of supplying the petrol mixture in correct proportions for combustion. One part of petrol requires approximately fourteen parts of air by weight for correct combustion.

The motion of the piston creates a suction in the crankcase when, on its up-stroke, air is drawn in through the carburettor inlet at high velocity. This passes over the needle jet protruding in the air stream and causes a partial vacuum in the jet, as is caused in a chimney by the wind, or in a jet of insecticide spray when the bulb is squeezed. The vacuum causes the petrol in the needle jet, which is normally approximately $\frac{1}{8}$ in. below the top, to move up the jet to the top where it is picked up by the air stream and is carried into the crankcase ready for transferring to the cylinder. At the bottom of the jet tube is a small orifice, or jet, which meters the amount of petrol entering from the float chamber. This governs the proportion of petrol to air. Closing the throttle slide causes the air stream flow to be restricted and thus reduces the volume of mixture entering the engine. So the throttle slide governs the engine speed by opening and closing the air intake. The float chamber is connected to the petrol tank and contains a brass float which regulates the level of petrol in the jet tube by rising with the fuel and closing a valve when the level is correct.

The choke, which is fitted on the air filter, gives a rich mixture for starting a cold engine. The lever is moved so that the segmental openings are closed, thus cutting off the air supply to the carburettor. This induces a very high proportion of petrol to air to enter the engine, which facilitates starting. As soon as the engine warms up, the choke must be opened to allow the correct mixture proportions to prevail.

Very little maintenance is required by the carburettor. Periodically it should be cleaned of any sediment that may be in the float chamber and the jet should be blown through to make sure it is quite clear. Never use a pricker or probe of any form.

The mixture in the cylinder is ignited by an electric spark which occurs when the piston has nearly reached the top of its stroke. The reason for igniting the mixture early is that it gives time for the petrol to completely burn, and by the time the piston has reached the top of its stroke the full force of the explosion is available to drive it down. The electric current for the spark at the sparking-plug is provided by the magneto.

## HOW YOUR MAGNETO WORKS

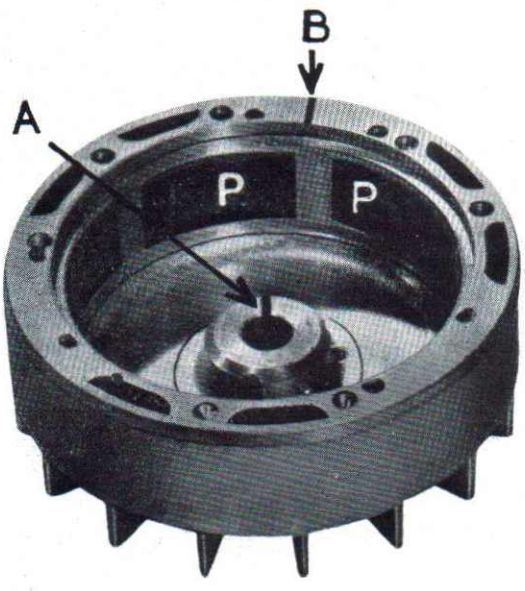
The Magneto used on the Teagle Minor Engine is of the Rotating Magnet—Stationary Coil type, the magnet being cast in the flywheel.

When a magnet is moved near a coil an electric current is introduced in the wire, and when an iron core is placed inside the coil the current is intensified. This current is Low Tension (L.T. or low voltage) and is produced in the primary winding of the coil, which consists of a few turns of thick wire.

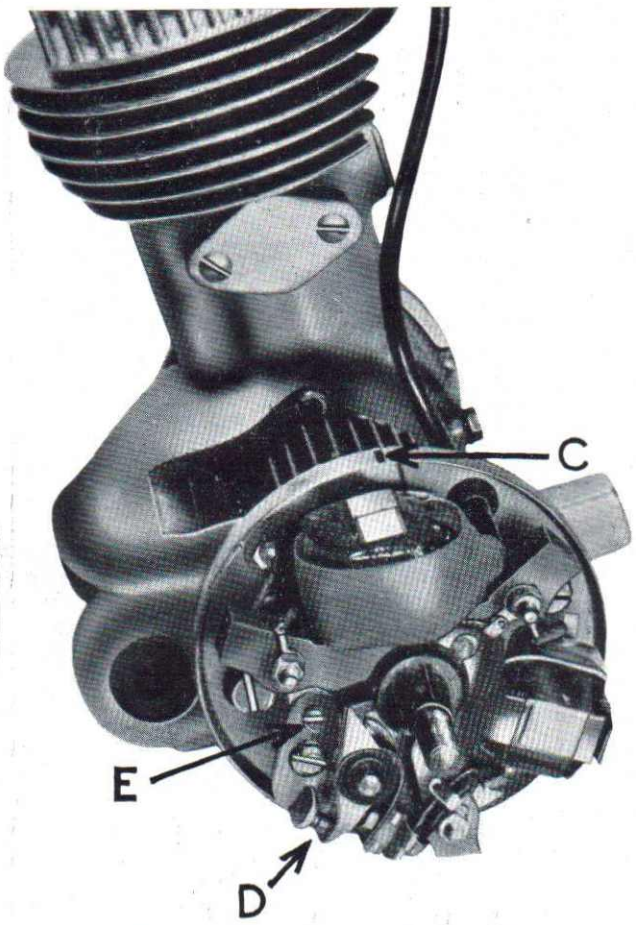
Around the outside of the primary winding many turns of fine wire are wound to form the secondary or High Tension winding (H.T. or high voltage), which may consist of as many as 12,000 turns of wire. One end of this winding is earthed and the other end is connected to the sparking-plug by means of the H.T. lead, completing the circuit through the engine.

Both ends of the primary winding are earthed, one directly and the other via the condenser and contact breaker. The Tungsten points on the contact breaker are opened and closed by a cam on the crankshaft.

When the flywheel is turned an electric current is produced in the primary winding and flows while the points on the contact breaker are closed. When the points open or break, this flow of current is interrupted, the condenser acts like a buffer and forces the current to rush back




**D—Contact breaker points.**




**E—Eccentric head adjusting screw for D.**

into the primary winding, causing a more sudden breaking of electrical contact and creating higher voltages. Owing to the two windings of the coil being close, but insulated from each other, the breaking or making of an electric current in the one winding induces a current to flow in the other and the voltage of this current is directly proportional to the ratio of the number of turns in each coil and causes the current to jump the points of the plug.

If excessive sparking or pitting appears on the contact breaker points, this indicates a defective condenser.

It is imperative that to obtain the best results the points should break when the L.T. current produced is at is greatest value. To obtain these conditions proceed as follows:—

The two magnetic poles of the magnet which are used for ignition are marked on the photograph PP. They can easily be found, as they always bear the same relation to the Keyway A. Mark on the flywheel the trailing edge of the first pole as shown at B. It must be remembered that when the flywheel is assembled it will be placed the opposite way around to that which is shown in the photograph.

Next, mark the trailing edge of the Ignition Coil Core on the rim of the stator plate as at C. Now assemble the flywheel on to the crankshaft and move around until the points marked B and C coincide. Move the flywheel in a clockwise direction 1/16 in. Take off the flywheel without moving the crankshaft. Set points about to open (which are closed, but if the crankshaft rotates any further the cam will cause the points to break). When spinning the flywheel by hand the spark should jump a $\frac{1}{4}$ in. gap. If the marks on the flywheel and stator plate coincide a good spark will be produced, but it wil be lost at speed, that is why the flywheel should be 1/16 in. in advance.

It will be noted from the above method of setting the points that the feeler gauge is not required—the points may be anywhere between .012 ins. and .022 ins. If closer than this it may be a deterrent, owing to indefinite breaking, and if they open greatly in excess of .022 ins. bounce may set in.

The plate opposite shows lighting coil and lighting magnets; no notice should be taken of these when setting contact breaker points.

The Ignition Coil Core on Stator Plate must not foul the flywheel. If this happens, no spark will occur.

## ENGINE LUBRICATION

Any nationally-advertised and well-known make of lubricating oil of suitable grade for Two-stroke Engines can be used. The following is our recommendation for Castrol lubricating oil. In temperate climates: CASTROLITE SAE 20 in SUMMER and SAE 10 GRADE in WINTER, when near freezing. In extremely hot climates: CASTROL XL 30 should be used. OIL should be mixed with PETROL—$\frac{1}{4}$ pint Oil to $\frac{1}{2}$ gallon Petrol (1 — 16 ratio). If oil is too thick or of incorrect ratio it will not be drawn through Carburettor Jet, and this will make starting difficult and be detrimental to the engine.

It is our experience that the use of graphited oils or upper cylinder lubricants will not improve the efficiency or life of the engine. Never on any account should upper cylinder lubricant be used alone, that is, without the correct proportion of engine oil.

Constant viscosity oils must never be used, as they become volatile at higher operating temperatures and may leave the working parts dry (not lubricated), thereby causing engine failure.

Grease outrigger bearing once every two months.

## FAULT FINDING AND CURE

CHECK THAT PETROL IS IN TANK AND TURNED ON BEFORE SEARCHING FOR A FUEL STOPPAGE. ALSO CHECK PETROL FEED PIPE. We believe that we have taken more precautions than usual to keep fuel clean from tank to engine, but minute hair-like particles are very difficult to filter, as they pass through lengthways, eventually blocking the Jet in the Carburettor.

FIRST, CHECK FOR STOPPAGE AT CARBURETTOR — remove Dome Nut at bottom of Jet Chamber. If petrol flows, the jet may be choked. Take great care when removing jet. Blow it clear from the opposite direction to petrol flow. (Hold jet up to the light and look through aperture).

IF PETROL DOES NOT FLOW WHEN DOME NUT IS REMOVED, check entry of petrol to Carburettor Float Chamber, also petrol flow through FILTER.

THE FUEL SYSTEM is designed so that AIR LOCKS will not take place—these may occur should the SYSTEM be tampered with or otherwise altered.

A DEFECTIVE PLUG will cause motor to spit back through Carburettor and refuse to start.

IF IGNITION FAULT IS SUSPECTED, check circuit as far away from MAGNETO as possible. Commence at the PLUG. GAP should be .022 ins., wider gap makes starting more difficult. Narrow gaps cause intermittent firing at higher engine speeds. **A Plug may be tested** for sparking by removing it from Cylinder Head and holding the body of plug against Engine Cylinder Block and then turning the engine at medium speed with cord; a spark $\frac{1}{4}$ in. long should be produced.

Cracks in Plug Cover or in Ignition Lead are a possible source of ignition failure. Check that lead has not become chafed, thus causing shorting to occur. A broken wire inside the lead may give trouble.

When engine is started, preferably it should not be stopped again for two or three minutes, that is, until the engine has warmed; the reason being that **during wet weather** metal absorbs a considerable amount of moisture and when the engine has started this moisture will travel towards the heat of combustion; consequently, if the engine stops when half warm the plug may become watered and difficult to restart, but if the engine is allowed to warm through completely this excess moisture will be thrown out by the exhaust.

A FAULT FINDING CHART is given on page 8, and we wish to emphasise that if you are in difficulty the correct thing to do is to take off the engine and post it back to the manufacturers, who are able to rectify any fault, including a major engine overhaul, in a few minutes. If possible, engine should be sent as illustrated on the cover of this booklet—i.e., without silencer, cowling, flanges, carburettor and mounting, but with sparking-plug and rubber inserts. This will ensure much speedier servicing.

## NOTES ON THE OVERHAUL AND MAINTENANCE OF ENGINE

The majority of troubles (including wear) connected with these engines are directly attributable to dirt and dust. It cannot be too strongly emphasised that any dismantling of the engine must be made under conditions of extreme cleanliness. See that the workbench is clean and that the engine is thoroughly cleaned before commencing work on it.

**Firstly.** Remove all exterior parts (Cowling, Carburettor, Flanges, Cylinder Head and Crankcase cover).

**Secondly.** Withdraw Gudgeon Pin retaining Circlips and drive out pin with $\frac{1}{4}$ in. rod, being careful not to injure sides of inlet ports. The Piston and Con Rod can now be dismantled.

**Thirdly.** Both nuts on Crankshaft have LEFT-HAND THREADS, and after taking off outside nut (5/16 ins. L.H. BSF) the Flywheel can be taken off by holding the Flywheel tightly in one hand and giving the end of the Crankshaft a sharp tap with, preferably, a copper drift. Care should be taken not to damage threads. (A Flywheel puller is preferable, if available). Next, remove Stator Plate and Cam on Crankshaft, being careful to remove both Woodruff Keys.

**Fourthly.** Referring to plate on page 9, the main bearing (PE 41) is used for longitudinal location of the Crankshaft. The fit used is not interference. The Crankshaft is held in position through tightening nut (9/16 ins. L.H. BSF) (PE 38). The Outrigger Bearing (PE 40) is a force fit on Crankshaft.

To dismantle Crankshaft assembly, slack back nut (PE 38). To undo this nut keep crankshaft from turning by placing a piece of hardwood (hammer shaft) or soft metal between crankweb (not crankpin) and base of cylinder barrel (not liner).

Now, the crankshaft can be driven out, preferably using a copper drift.

## THE FOLLOWING REMARKS APPLY TO ENGINE WEAR

**Cylinder Head.** Check Plug Threads: if they are stripped or torn, replace casting.

**Cylinder Liner.** When cold the liner does not form a true circle, but when engine is hot, owing to the differential expansion of the aluminium casting and liner, the liner takes a true form. The mean variance between hot and cold is .002 ins. and this is a requirement for efficient running.

If a ridge has formed near the top of the piston stroke and the wear under this ridge is .012 ins. or more, inclusive of both sides, the liner should be renewed. The liner can be extracted by first heating the Cylinder Barrel.

**Piston.** Major point for inspection here is the condition of the piston rings and ring grooves. Clearance of ring in groove when clean should not exceed .003 ins. and thickness of ring should not be less than .018 ins. Ring gap should be .055 ins. (this allows for locating pin) and should be tested where the cylinder is not worn (i.e., above the piston stroke) or the ring will seize and break when moved up and down the liner, as the liner wears less at the bottom; that is, away from the heat and chemicals of combustion. Any pistons which show signs of scoring or undue Gudgeon Pin bore wear should be discarded. These faults are very rare.

**Connecting Rod.** When a two-stroke engine is running under load, the connecting rod is stressed under compression only and larger tolerances for wear are permissible than with four-stroke engines. On dismantling, if a roller should drop from needle cage no attempt should be made to replace it, but a new bearing obtained, preferably a replacement Connecting Rod complete.

**Crankshaft.** Should be replaced if the ovality of the crankpin exceeds .002 ins.

**Gaskets.** No Gasket should be used for Cylinder Head, but great care is needed to pull the head down evenly all round when tightening. Do not overtighten to strip threads or break studs. Gaskets are used on inlet ports; on the induction side a thick asbestos gasket is used to insulate the heat of engine from tube or carburettor. A thin elastic band is used to seal the crankcase cover. This is very effective, as any oil or petrol present will tend to swell the elastic band and ensure a perfect seal.

No Jointing Compound of any kind should be used on the TEAGLE engine. It is of NO HELP and only makes the engine dirty and difficult to clean.

**Oil Seals.** PE 150 must be maintained in good order. The effectiveness of this seal is of utmost importance. If any air enters the crankcase through this seal it will upset the functioning of the carburettor, especially when starting. If air enters crankcase through this seal dust will also enter, causing premature wear. These oil seals should only be obtained from the Engine manufacturers, as any oil seal not made for this application will only give trouble. A new oil seal should be used every time the engine is dismantled. If the pulley sleeve, on which PE 150 is used, shows any sign of wear whatever, it should be renewed.

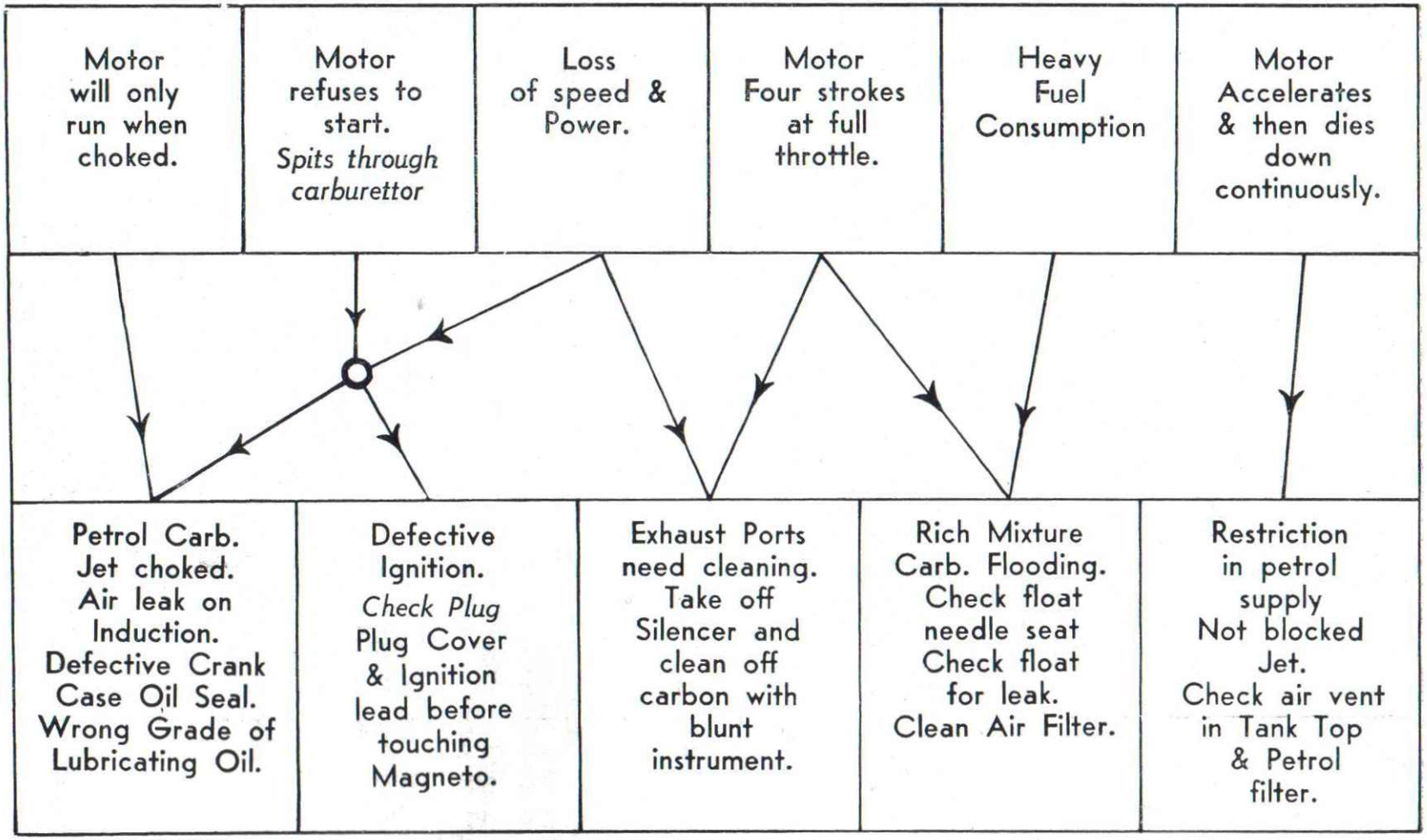
The oil seals PE 112 and PE 145 do not have to withstand the same operating conditions as above, and do not need to be renewed unless any signs of deterioration are apparent. Oil seal PE 145 should always be assembled in reverse, to release any excess grease instead of allowing it to enter the magneto.

---

*Although the above information given is for use when necessary, it is recommended that the engine should not be touched when power output is ample, as very often these engines will run for twelve months without even removing the plug.*

*Teagle Minor Engines will give good service if parts are assembled with wear exceeding the tolerances given above. To obtain best results and longest service between overhauls, we recommend that parts should not be replaced unless they are within the limits given.*

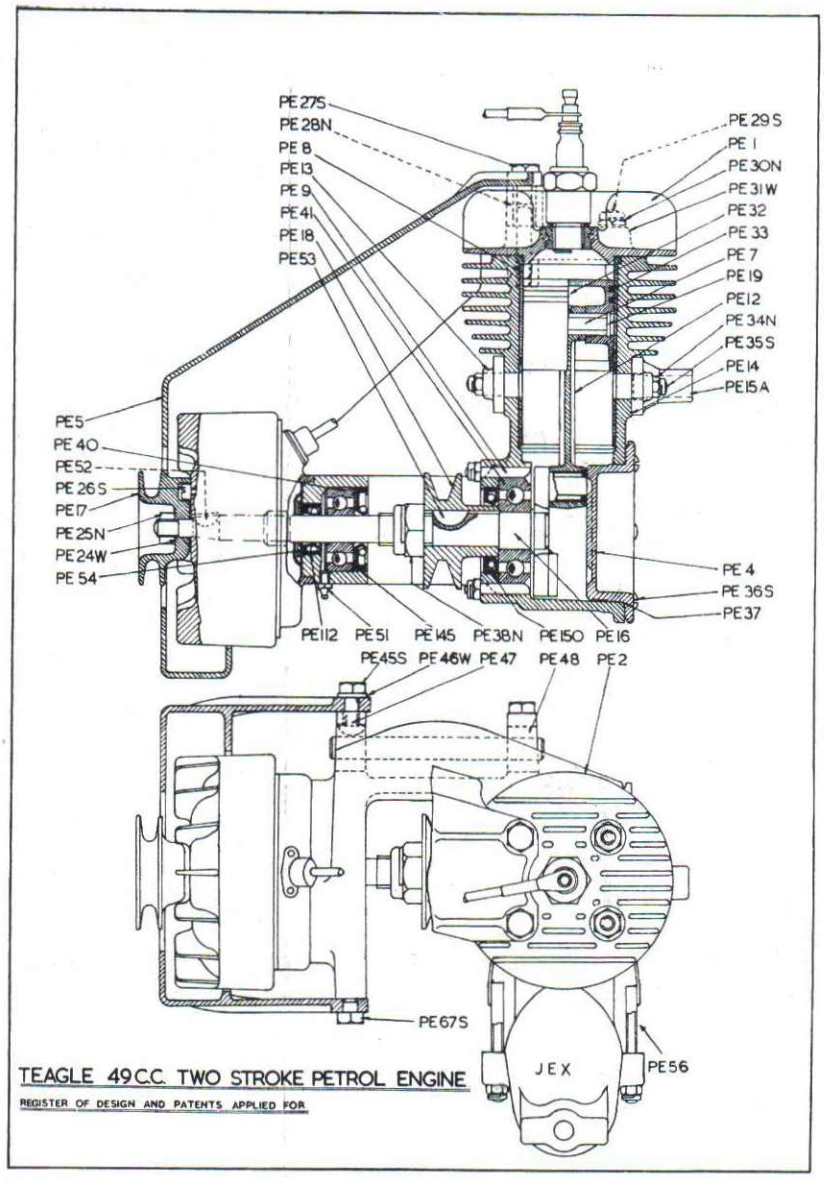
# VISUAL CHECK FOR FAULT FINDING




**Defective Choking especially apparent during very cold weather.**

**Please Note.—If any trouble should arise which cannot be immediately rectified, post engine back to manufacturers; preferably stripped as per illustration on cover. Majority of engines sent back for overhaul are returned same day as received.**

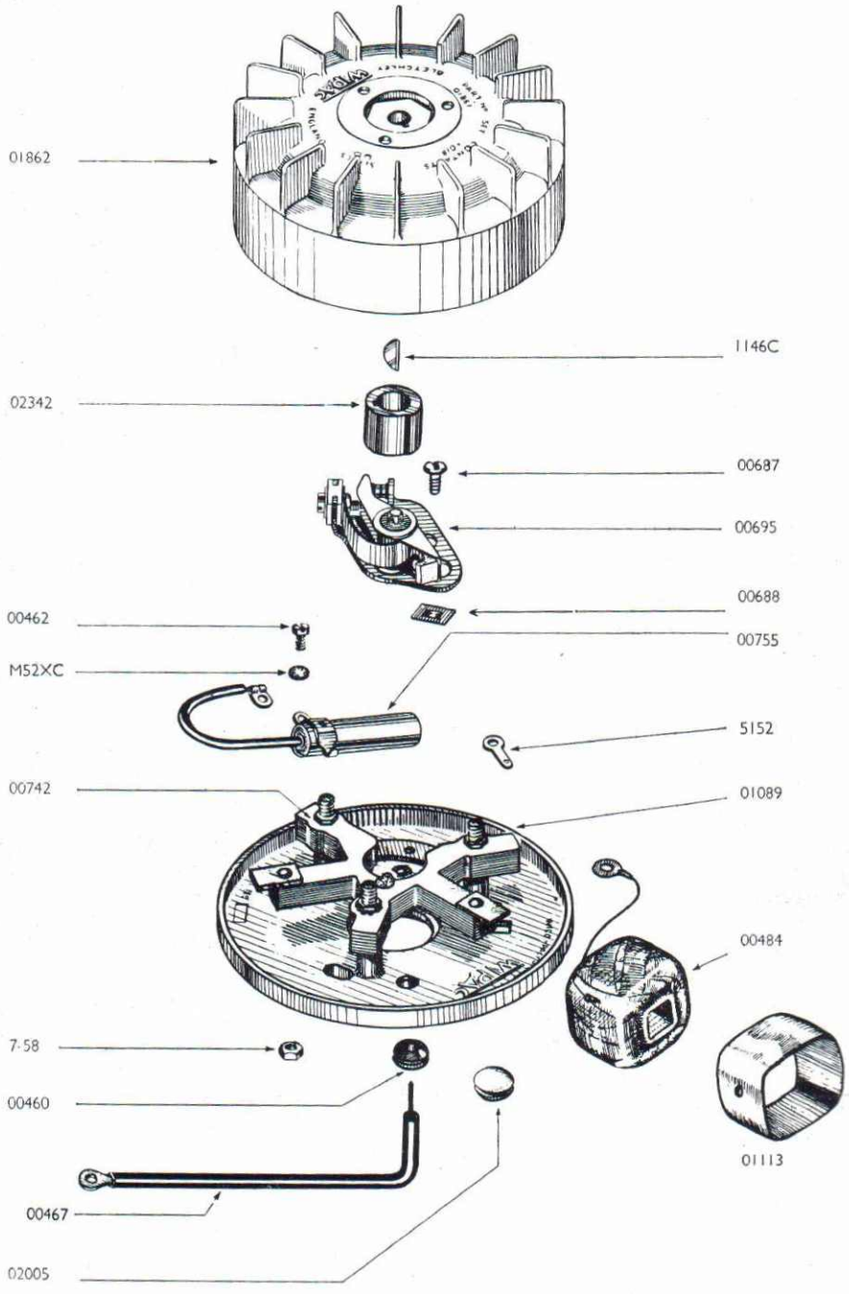
# ENGINE PARTS LIST




| | | |
|---|---|---|
| PE 1 | Cylinder Head | ... 10/– |
| PE 2 | Crankcase | ... 40/– |
| PE 4 | End Cover | ... 5/– |
| PE 5 | Cowling | ... 15/– |
| PE 6S | Drain Plug ⅜" x 2 BA | 4d. |
| PE 6W | Fibre Washer for above | 3d. |
| PE 7 | Gudgeon Pin | |
| PE 8 | Liner (Cylinder) | ... 25/– |
| PE 9 | Bearing Gib Bolts (2 off) | 6d. ea. |
| PE 12 | Connecting Rod with Bearing | ... 12/6 |
| PE 13 | Inlet Cover Plate | ... 1/6 |
| PE 13A | Gasket for above | ... 3d. |
| PE 14 | Inlet Plate Gasket (Thick) | ... 1/– |
| PE 15A | Carburettor Flange | ... 4/– |
| PE 16 | Crankshaft | ... 15/– |
| PE 17 | Starting Pulley | ... 3/– |
| PE 18 | Drive Pulley | ... 12/– |
| PE 19 | Circlip | ... 3d. |
| PE 21 | Clip Assembly for Ignition Lead | 1/– |
| PE 24W | Magneto Spring Washer | 2d. |
| PE 25N | Magneto Nut (L.H.) | 6d. |
| PE 26S | Drive Screw | ... 4d. |
| PE 27S | Cowling Fixing Set Screws (Top (2 off) | 4d. ea. |
| PE 28N | Pillar Nuts (2 off) | 8d. ea. |
| PE 29S | Cylinder Head Studs (4 off) | 6d. ea. |
| PE 30N | Cylinder Head Nuts (2 off) | 5d. ea. |
| PE 31W | Cylinder Head Spring Washer (4 off) | 2d. ea. |
| PE 32 | Piston, including PE 7, two PE 33, two PE 19 | 30/– |
| PE 33 | Piston Rings (2 off) | 2/6 ea |
| PE 34N | Carburettor Flange Nut | 3d. ea. |
| PE 35S | Carburettor Flange Stud | 4d. |
| PE 36S | End Cover Screw (6 off) | 2d. |
| PE 37 | Rubber Gasket | ... 2d. |
| PE 38N | Lock Nut (L.H.) | ... 1/6 |
| PE 40 | Outrigger Bearing | ... 12/– |
| PE 41 | Main Bearing | ... 13/– |
| PE 45S | Cowling Set Screw | ... 4d. |
| PE 46W | Spring Washers (4 off) | 2d. ea. |
| PE 47 | Insert Nut | ... 6d. |
| PE 48 | Rubber Brush (2 off) | 4d. |
| PE 51 | Grease Nipple | ... 6d. |
| PE 52 | Magneto Woodruff Key (Small) (2 off) | 3d. ea. |
| PE 53 | Pulley Woodruff Key (Large) | 4d. |
| PE 54 | Washer | ... 3d. |
| PE 67S | Cowling Fixing Set Screw | 6d. |
| PE 112 | Magneto Oil Seal | ... 5/– |
| PE 145 | Oil Seal | ... 5/– |
| PE 150 | Crankshaft Oil Seal | ... 6/– |
| JEX | Exhaust Silencer | ... 10/– |
| PE 56 | Exhaust Strap | ... 2/– |
| PE 73 | Sparking Plug (14 mm., ⅝ in. reach) | |
| PE 75 | Plug Cover | ... 3/6 |

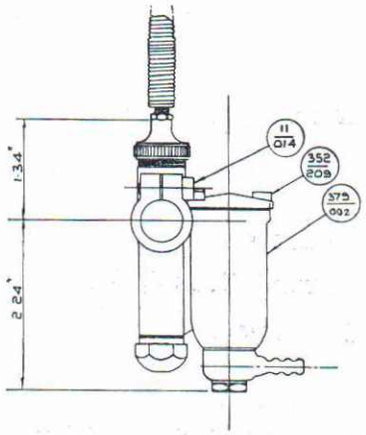
*Attention is drawn to our postal engine replacement scheme which operates on the following charges:— Minimum charge 10/-, Maximum charge £4, except where a new crankcase casting PE 2 is required, when this charge will be £6. These prices do not include magneto and carburettor servicing.*

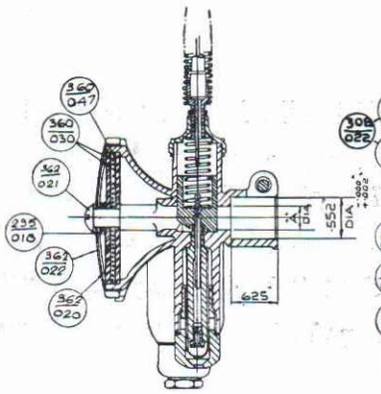
| Part No. | Parts in Exploded View | Part No. |
|---|---|---|

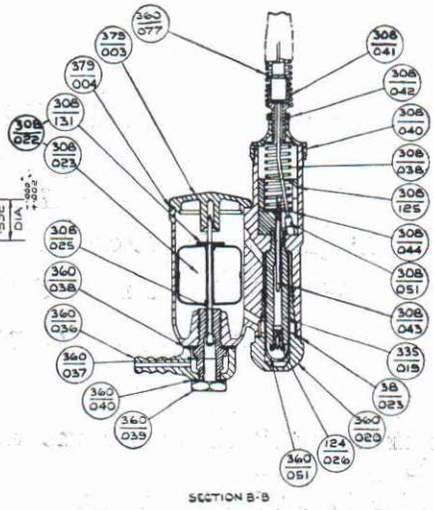



# CARBURETTOR SPARES LIST

| Component | Quantity Reqd. | Part No. |
|---|---|---|
| Carburettor Body | 1 | 379/002 |
| Cable Spring Sheath | 1 | 360/077 |
| Cable Adjuster | 1 | 308/041 |
| Cable Adjuster Locknut | 1 | 308/042 |
| Mixing Chamber Top | 1 | 308/040 |
| Throttle Valve Spring | 1 | 308/038 |
| Throttle Valve | 1 | 308/125 |
| Spring Clip for Jet Needle | 1 | 308/044 |
| Cable Nipple | 1 | 308/051 |
| Jet Needle | 1 | 308/043 |
| Jet Plug | 1 | 360/020 |
| Jet Plug Washer | 1 | 38/023 |
| Main Jet | 1 | 124/026 |
| Needle Jet | 1 | 335/019 |
| Petrol Filter | 1 | 360/051 |
| Float Chamber Cover | 1 | 379/003 |
| Float Chamber Cover Washer | 1 | 379/004 |
| Float Chamber Cover Screws | 2 | 352/209 |
| Float Complete comprising: | | |
| Float Bow Spring ) (1) 308/131 ) | 1 | 308/022 |
| Float Halves ) (2) 308/023 ) | | |
| Float Needle | 1 | 308/025 |
| Float Needle Seating | 1 | 360/037 |
| Float Needle Seating Washer | 1 | 360/038 |
| Banjo | 1 | 360/036 |
| Banjo Bolt | 1 | 360/039 |
| Banjo Bolt Washer | 1 | 360/040 |
| Clip Screw | 1 | 11/014 |
| Air Filter Plates | 2 | 360/030 |
| Filter Centre Pin | 1 | 362/021 |
| Thackeray Washer | 1 | 295/018 |
| Filter Cover | 1 | 362/022 |
| Shutter and Knob Complete, comprising: | | |
| Knob ) (1) 310/027 ) | 1 | 362/023 |
| Shutter ) (1) 362/020 ) | | |

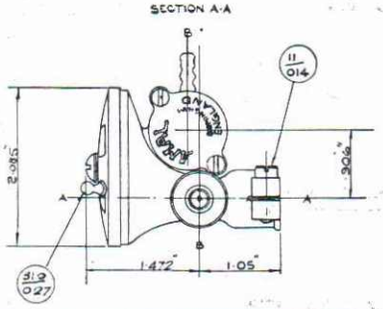






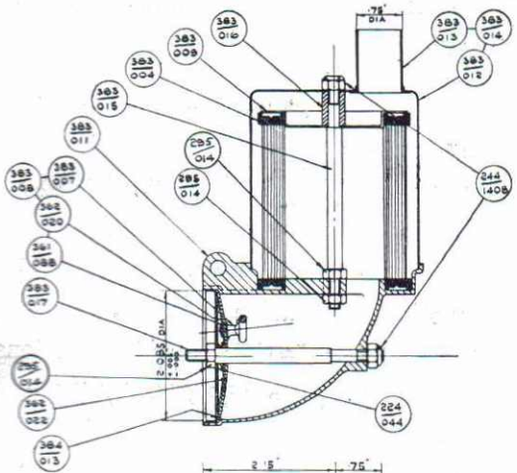
## AMAL CARBURETTOR

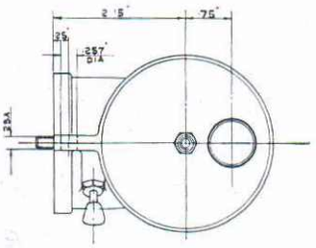
**Type 379/50/10 mm.**



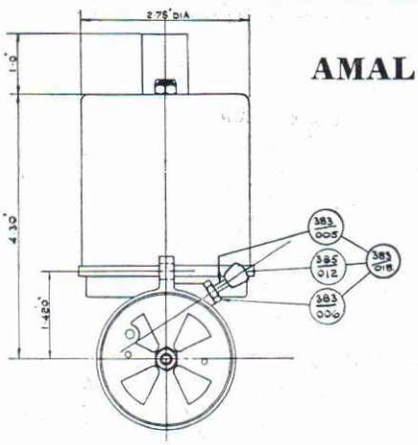
**Throttle Control Lever assembly, order 355/4; and Throttle Control Cable, order CFF and length.**

---





*The above Air Filter is only fitted on machines that work in dusty conditions.*



## AMAL AIR CLEANER

**Type 383/3.**

| Component | Quantity Reqd. | Part No. |
|---|---|---|
| Filter Body ... ... ... ... | 1 | 383/011 |
| Filter Element (paper) ... ... | 1 | 383/004 |
| Filter Cowl & Tube complete, comprising: Filter Cowl (1) 383/012; Filter Cowl Tube (1) 383/013 ... ... ... | 1 | 383/014 |
| Cowl Centre Stud ... ... ... | 1 | 383/015 |
| Filter End Cap ... ... ... | 1 | 383/009 |
| Distance Piece ... ... ... | 1 | 383/016 |
| Cowl Stud Bottom Locknuts ... ... | 3 | 295/014 |
| Body Centre Stud ... ... ... | 1 | 383/017 |
| Shutter, Knob & Washer compete, comprising: Shutter (1) 362/020; Knob (1) 383/007; Washer (1) 361/088 ... ... | 1 | 383/008 |
| Cover ... ... ... ... | 1 | 362/022 |
| Spring Washer ... ... ... | 1 | 224/044 |
| 2BA Locknut (Nyloc) ... ... ... | 2 | 244/1408 |
| Seal Washer ... ... ... ... | 1 | 384/013 |
| Rod, Guide & Knob complete, comprising: Knob (1) 385/012; Rod (1) 383/005; Guide (1) 383/006 ... ... ... | 1 | 383/018 |

# TEAGLE MINOR ENGINE DATA

**Built under British Patents Nos. 714619 and 730537 and Registered Design No. 867520**

Single Cylinder 49 c.c. Two Stroke. Bore 40 mm., Stroke 40 mm.

Normal Engine revolutions 3 to 4,000 r.p.m. Maximum revolutions 9,600.

Maximum Torque developed 22 ozs. at 1 ft. radius at 4,000 r.p.m.

### Piston

Cast from "41" Alloy for use at high temperatures.

Deflector type with two rings.

Ring Gap .055 ins.

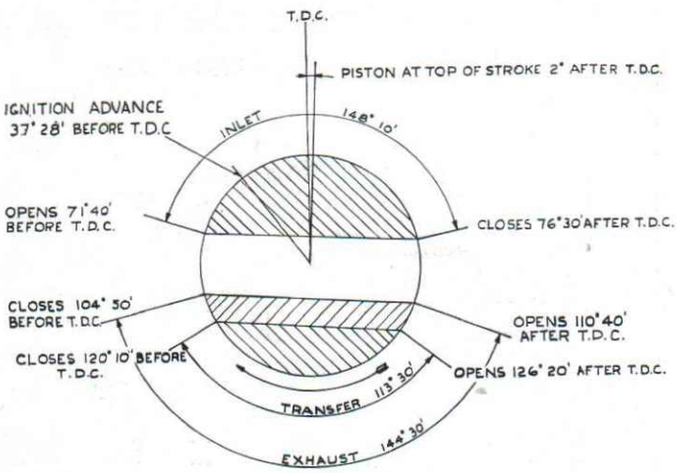
### Connecting Rod

Drop Forged from RR56 Aluminium Alloy.

Small End Bronze Bush.

Big End Needle Roller Bearing.

Lubricated by oil mist conducted by scavenge through hole drilled in crankpin.




**Engine timing Diagram.**

### Lubrication

Internal parts by Petrol Oil Mist. One gallon Petrol to ½ pint Oil=16—1.

Outrigger Bearing. Three shots light grease every two months.

### Cylinder Liner

Centrifugally cast to Air Ministry specification, 4K6.

Replaceable when excessive wear has taken place.

### Sparking-plug

14 mm. ⅜ reach. Gap .022 ins.

Lodge—CAN. Plug Cover, Lodge R9(

### Ignition

Flywheel, clockwise rotation.

Point setting–See Magneto instructions.

Ignition Advance, 37° 28′=7/32 ins. B.T.D.C.

### Approximate Petrol Consumption

¾ gallon per 8 hours.


# W. T. TEAGLE (Machinery) LIMITED

**BLACKWATER · TRURO · CORNWALL**

**Grams—TEAGLE, TRURO** **Phone—THREEWATERS 242**


Netherton & Worth Ltd., The County Printers, Truro