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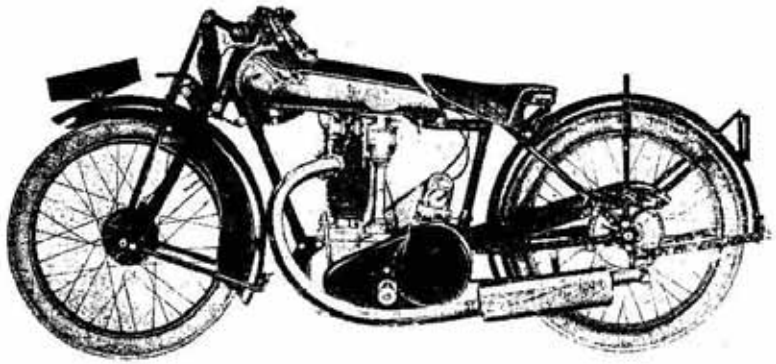
L/R 1/1926 1000.

Matchless
IN NAME & REPUTATION

INSTRUCTION BOOK
AND
SPARE PARTS LIST

MODEL L/R

DRIVING AND ADJUSTMENT INSTRUCTIONS



Matchless Model L/R

H. COLLIER & SONS, LIMITED,

Manufacturers,

Registered Offices :

44-45, PLUMSTEAD ROAD, PLUMSTEAD
LONDON, S.E., 18, ENGLAND

Nearest Station :
WOOLWICH ARSENAL, S.E.C.R.

Factories :
BURRAGE GROVE & MAXEY ROAD
PLUMSTEAD, S.E.
And BARTH'S WHARF, WOOLWICH.

Telegrams & Cables — "Matchless," Woolwich."

Telephone — Woolwich 1010 (4 lines).

Code — A.B.C. 5th Edition, Bentley's, & Private Code

All correspondence to—
Offices : 44-45 Plumstead Road, London, S.E. 18.

INTRODUCTION

Following our previous practice of endeavouring to obtain good service by making every purchaser thoroughly acquainted with the working of his mount, we issue herewith detailed description and adjustment advice on all important units, together with useful illustrations. A careful study of the contents will enable the possessor of a Model " L/R " to carry out any small adjustments that may be necessary from time to time, and so obtain the best service from his mount, which result is our earnest desire.

The Spares Section has been compiled to enable customers to correctly specify their requirements when renewals of any part are necessary (See Pages 17 and 18) for Instructions re Ordering Parts and particulars of Deposit Account System.

H. COLLIER & SONS, LIMITED.

General Description.

The Model L/R described below has been introduced to meet the requirements of the enthusiast, and represents the latest developments in Motor Cycle design, while retaining essential reliability. As will be seen from the sectional illustration overleaf, the engine is robust in construction, and its capability for extraordinary power output has not been obtained at the sacrifice of strength. Special alloy metals are used where an enormous factor of safety is desirable, an instance being the valves which are made from the very latest discovery in alloy steels, K.E. 965, a metal which possesses a tensile strength three times greater at working temperature than any valve steel used or known hitherto. The overhead rockers are mounted on roller bearings in an aluminium alloy case bolted over the cylinder head, which case contains also the overhead camshaft. The main oil supply is led into this case thereby ensuring ideal working conditions for the rapidly moving parts contained therein. An auxiliary oil supply intended only for high engine speeds is taken direct to the connecting rod big end bearing via ducts drilled through the flywheel and crankpin. This oil feed is by gravity and the supply is adjusted by means of a needle valve attached to a sight feed on the under side of tank. In ordinary circumstances this oil feed may be ignored, but for sustained high speed a steady drip via the aforementioned sight feed should be maintained. It is perhaps advisable to explain that at normal engine speeds the ordinary and standard motorcycle practice of oil mist lubrication of the big end bearing has been found perfectly satisfactory, but on account of centrifugal force this method fails upwards of 4,000 revolutions per minute and for this reason only the direct supply of oil to this bearing has been arranged. The camshaft is driven by means of a vertical shaft suitably encased behind the cylinder, the system of drive being bevel gears top and bottom. These bevel gears are adjustable as regards mesh. The engagement of the top pair may be seen and tested by removing the end plate of camshaft housing, while the bottom pair may be tested for back lash whenever the camshaft case is removed such as for decarbonizing. The externally threaded sleeves which screw into camshaft case and the casting bolted on to crankcase respectively, control the adjustment and when any alteration is made the lock nut must be carefully tightened to overcome any tendency to slacken in use. The arrangement described above can be readily understood by referring to the sectional illustration of engine (page 7).

The big end of connecting rod, flywheel axle bearings, and also various parts of timing gear are mounted upon roller bearings while the overhead camshaft and vertical bevel shaft run on ball bearings. The only plain bearing employed being that of the gudgeon pin. This ideal arrangement provides a remarkably free running engine, and revolutions upwards of 6,000 p.m. have been obtained during bench tests. The cylinder head, it will be observed, is of unique design, but here again latest port design has been incorporated with the object of obtaining maximum turbulence, and more important still the centre of the head

is perfectly finned, and free of any undesirable mass of metal. As will be found described later accessibility has been carefully thought out, and in spite of difficulties which will be obvious, the cylinder head may be removed in a few moments only, and without disturbing valve timing or adjustment in any way. The remainder of the Cycle has been designed in keeping with the power unit, and here again special alloys utilized where necessary. Unless specially ordered all machines are sent out with standard pistons. For racing a special high compression piston can be supplied. This, however, is not recommended for touring and when so used a 50-50 mixture of Benzole and Petrol is desirable to avoid unnecessary pinking. At all times high grade sparking plugs must be used and the type fitted as standard is recommended for all round purposes, K.L.G. type H.S. 1.

To turn now to the general handling of the L/R Model, it is perhaps advisable before describing the actual method of starting to explain the various controls and lever positions. Neutral or free engine position of the gear is at a point where the extension on gear quadrant engages slot in gear lever (about one-third) forward from rearmost position and at this position engine should always be started.

Ignition is advanced or retarded by means of a lever on the left side of handlebar; to advance spark this lever should be drawn inwards; for starting it should be about three-quarters avbanced.

The throttle and air levers for carburetter both open inwards, the top lever operating the air and the lower and longer one the throttle. For starting, throttle should be about one-sixth open, and air completely closed.

The petrol is turned on when the lever on the tap to which the petrol pipe is attached is parallel to the body of the tap. Assuming that the tank has been filled with petrol and oil of the brand recommended elsewhere, and that all levers and taps have been set as above, to start engine first flood the carburetter by depressing the button on the float chamber until the petrol overflows, then raise the valve by lifting the left side handlebar lever, and at the same time, with the right foot give the kickstarter pedal a sharp and vigorous push downwards, releasing the valve lifter lever when the starter crank is about half-way down. This operation should not require at the most more than three or four attempts.

When the engine is started close the throttle slightly to check the engine speed, and seated on the cycle, disengage clutch by drawing inward the lever which is situated on the left side of handlebar. Then shift gear lever backward into first gear position, after which gently engage the clutch by releasing slowly the lever which has already been drawn inward.

When fairly under way, smartly declutch and simultaneously shift gear lever forward into second gear position, which is in middle of quadrant at the same time releasing clutch lever gently but smartly as engine takes up the drive, after which repeat the operation to obtain top gear. In all changes of gear it is advisable to make certain that the gear lever is fairly in engagement with the notches in gear quadrant.

NOTE.—Any difficulty in starting will most probably be caused either by insufficient flooding too liberal throttle opening or ignition not sufficiently advanced.

DRIVING.

In general driving it is always advisable to advance the ignition as far as possible without causing knocking. When ascending a steep hill as the engine slows, care should be taken to retard the ignition just sufficiently to prevent knocking, and if a change of gear then be made the ignition should be again advanced, as the speed of the engine is increased by the use of the lower gear. For descending exceptionally steep and dangerous inclines the middle gear should be engaged enabling the frictional resistance of the engine to assist in retarding the descent. We do not, however, under any circumstances recommend using the bottom gear for this purpose owing to the strain imposed upon the rear driving chain. It is advisable to change down to second speed when rounding acute corners, as owing to the high compression ratio employed the engine is somewhat harsh at very low revolutions. In addition or as an alternative in such cases, the clutch should be slightly eased. Much unnecessary strain on the transmission may be easily avoided by such considerations.

"DON'TS" IN DRIVING.

DO NOT allow engine to labour on high gear on a steep gradient and remember that an easier, faster, and better ascent can be made on the next lower gear.

DO NOT make a practice of starting on second speed.

DO NOT under any circumstances, allow the chains to run very slack or very dry. Either will soon cause trouble, and adjustments are easy. Slack chains will inevitably cause harshness of transmission.

DO NOT force engine for the first 500 miles. Mention is made of this warning on account of the natural desire of a new owner to ascertain his mount's maximum capabilities. However, until all bearings are well run in, etc., it is advisable to refrain from speed bursts and the accompanying possibility of seized bearing, piston rings, etc. The first 500 miles of an engine's existence is far more important than the next 5,000.

DO NOT ignore these instructions or think them too elaborate. They have been compiled at a great amount of trouble, and are the outcome of practical experience extending over many thousand miles riding.

LUBRICATION

The mechanical oil pump is set at the Works to deliver a generous supply of oil and unless found to be troublesome this supply should not be reduced for the first 500 miles after which it may be possible to cut down the supply. The final adjustment must necessarily be left more or less to the rider's judgment. At all times when starting up from the cold a thin film of oily smoke should be apparent in the exhaust, and if at any time this should not be observed although the tell-tale indicates that oil is passing, the two screws holding down the top plate on oil pump should be loosened and the centre barrel (the part with handle extension) turned one division of the indicator in a left hand or contra clockwise direction.

The tell tale referred to above consists of a small plunger extension to the oil pump on the delivery side which must lift before oil can pass. Therefore, when oil is passing, this small plunger must necessarily be somewhat extended and at low speeds it will be seen to fluctuate with the action of the plunger of oil pump. It may be explained that at high engine speeds the deliveries of oil from pump are too rapid to allow of the tell-tale plunger returning to its normal position between each impulse and therefore it constantly remains in an extended position. The movement of this tell-tale must be noticed before and occasionally during each run as this is the only means by which driver can readily observe that the pump is functioning properly. At night time the position of the plunger can be felt quite easily, even though gloves are worn, and it must always be remembered that oil cannot pass into the engine until this tell-tale plunger is extended thereby uncovering the oil passage. The special gravity feed provided for direct big end lubrication described on page 3 need only be used for high speed. When it is desired to use this auxiliary supply it is only necessary to turn the tap lever until it lies parallel to the pipe in which position it is fully open and to afterwards adjust the needle valve to provide a fairly rapid drip. This drip may be observed through the sight tube and it is of course not necessary to vary the feed once it has been set. To turn off this auxiliary big end oil feed, it is only necessary to turn the tap to the off position.

The oil specially recommended for touring with perhaps occasional speed bursts of short duration is WAKEFIELD CASTROL X.L., while the brand advised for general speed work is WAKEFIELD R, which latter, may of course be used for all purposes if preferred.

Of equal importance to the engine is the lubrication of such parts as chains, fork spindles, hub bearings, etc., which should be dealt with systematically as follows :—

CHAINS.

It will probably be found that the front chain will receive sufficient lubrication from the engine air release pipe, but however, this should be inspected periodically and oil injected at rear of chain guard if necessary. The rear chain should be removed occasionally and well soaked in paraffin especially in bad weather, and after carefully wiping should then be soaked in molten tallow. A good soaking in engine oil will serve as a poorer substitute.

FORK SPINDLES.

Every 200 or 300 miles the fork spindle bearings should be flooded with a good quality grease preferably Foliac Graphite Grease. This flooding process is one of a few seconds only by means of the special grease gun provided which requires merely holding nozzle end against the rounded nipples on fork spindles and given a few sharp strokes.

GEAR BOX.

Every 500 miles the gear box filling plug should be removed and the gear box filled to overflowing when the machine is standing level with (preferably) Speedwell Crimsangere which is specially recommended. If this is temporarily unobtainable, Mobiloil C Gear oil may be used.

HUBS.

Every 500 miles (or more frequently in continuous bad weather) the lubricators in the centre of both front and rear hubs should have a few drops of oil forced through them. (Engine oil suitable).

In addition to the foregoing, all parts, such as brake and gear rod, joints, etc., should receive a few drops of oil occasionally, particularly in bad weather. Bicycle lubricating oil or engine oil.

ADJUSTMENTS

Tappet or Rocker Clearance. To adjust, slack off the lock nut on overhead rocker end, and screw in or out as required the hardened steel adjusting screw, after which securely lock in position with the nut provided.

NOTE.—The correct clearances for speed are .004 for the inlet and .010 for the exhaust. For ordinary touring the latter may be closed up to .006 but the larger clearance must be maintained for any extended speed bursts, to allow for the increased expansion or elongation of valve. This is most important, and a cheap set of engineers feeler gauges will be found useful for checking purposes.

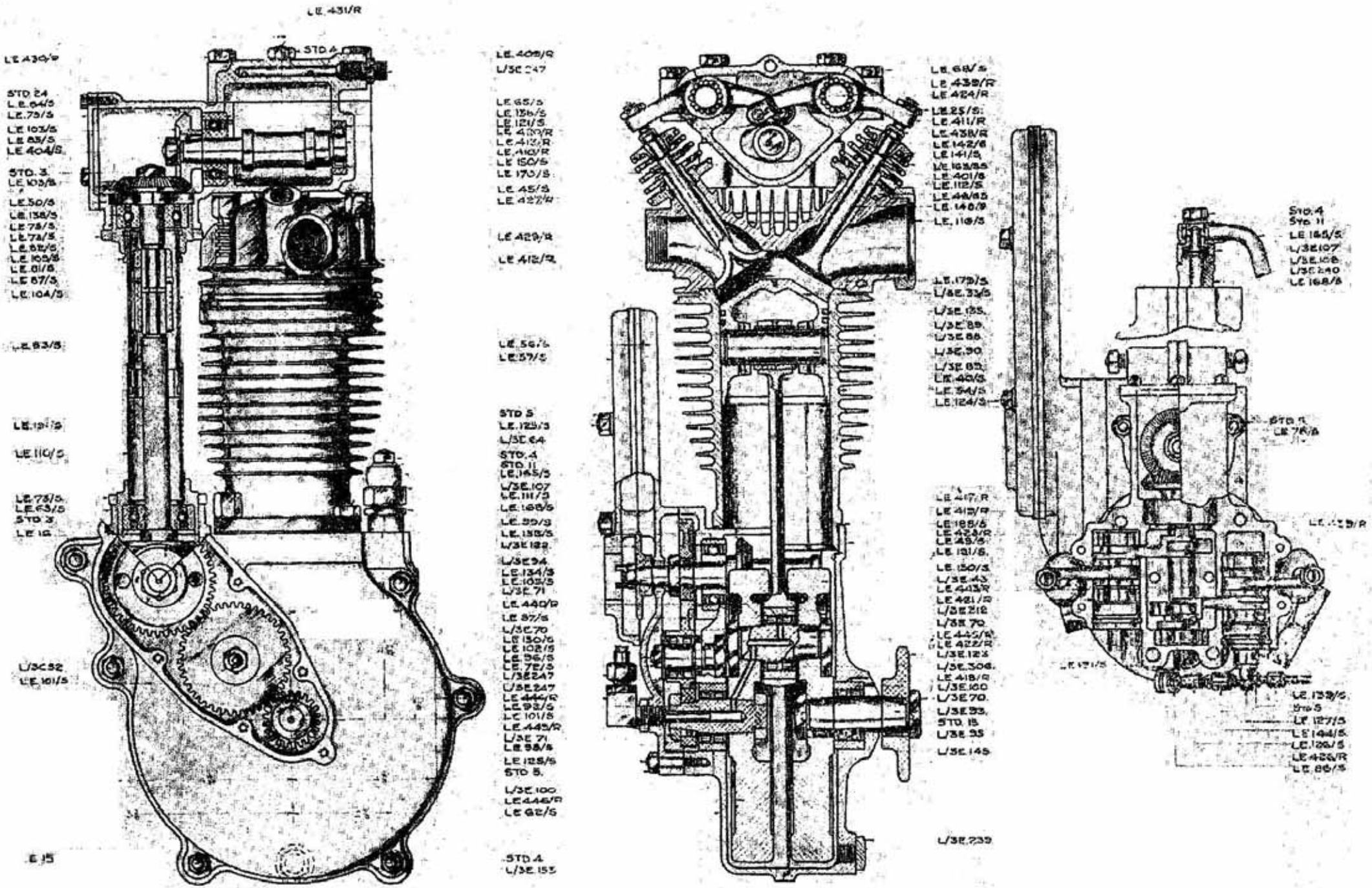
TO REMOVE CYLINDER HEAD

First unscrew exhaust pipe union nut and remove petrol pipe. Then withdraw throttle and air valves for carburretter and remove sparking plug. Then unscrew the top portion of the telescopic tube covering the vertical drive shaft of timing gear, and slide this top portion down into the larger bottom half.

NOTE.—The smallest of the three nuts at the top end of covering tube is the only one to be disturbed. The middle and medium size hexagonal nut controls the mesh adjustment of bevel gears, while the octagonal nut immediately underneath is the lock nut for securing this adjustable sleeve.

Next drive out gently the taper pin securing the sleeve connecting the bottom half of the vertical shaft to the top half, and slide the sleeve down until the top shaft end is uncovered. Then unscrew the four bolts securing the cam case to the cylinder head fixing bolts, when after detaching oil pipe and valve lifter cable the entire camshaft assembly may be taken away. Although the description of this operation is necessarily somewhat lengthy, it will be found quite simple, and it should be observed that the valve timing gears are not disturbed in any way. Upon removing the four cylinder head fixing bolts the head may be lifted clear.

To Grind in Valves. After cylinder head has been removed as described, to remove valve springs it will be found convenient to rest the head of valve on a small block (wood preferably) while the spring is being compressed to allow of the removal of the taper valve cap divided


LE.431/R
LE.430/R
STD.4
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LE.103/5
LE.85/5
LE.404/5
STD.3
LE.103/5
LE.50/5
LE.138/5
LE.78/5
LE.72/5
LE.82/5
LE.105/5
LE.81/5
LE.87/5
LE.104/5
LE.83/5
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LE.75/5
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STD.3
LE.16
L/3E.82
LE.101/5
E.15
LE.408/R
L/3E.247
LE.65/5
LE.136/5
LE.121/5
LE.409/R
LE.412/R
LE.410/R
LE.150/5
LE.170/5
LE.45/5
LE.422/R
LE.429/R
LE.412/R
LE.56/5
LE.57/5
STD.5
LE.125/5
L/3E.64
STD.4
STD.11
LE.165/5
L/3E.107
LE.111/5
LE.168/5
LE.99/5
LE.138/5
L/3E.122
L/3E.94
LE.134/5
LE.102/5
L/3E.71
LE.440/R
LE.87/5
L/3E.70
LE.150/5
LE.102/5
LE.96/5
LE.72/5
L/3E.247
L/3E.247
LE.446/R
LE.93/5
LE.101/5
LE.445/R
L/3E.71
LE.98/5
LE.125/5
STD.5.
L/3E.100
LE.446/R
LE.92/5
STD.4
L/3E.155
LE.68/5
LE.439/R
LE.424/R
LE.25/5
LE.411/R
LE.438/R
LE.142/5
LE.141/5
LE.163/55
LE.401/5
LE.112/5
LE.44/55
LE.140/5
LE.110/5
LE.179/5
L/3E.33/5
L/3E.135
L/3E.89
L/3E.88
L/3E.90
L/3E.85
LE.40/5
LE.54/5
LE.124/5
LE.417/R
LE.412/R
LE.185/5
LE.423/R
LE.45/5
LE.191/5
LE.150/5
L/3E.43
LE.443/R
LE.421/R
L/3E.218
L/3E.70
LE.443/R
LE.422/R
L/3E.123
L/3E.306
LE.418/R
L/3E.100
L/3E.70
L/3E.33
STD.15
L/3E.35
L/3E.145
L/3E.239
STD.4
STD.11
LE.165/5
L/3E.107
L/3E.108
L/3E.240
LE.168/5
STD.5
LE.78/5
LE.123/R
LE.121/5
LE.133/5
STD.5
LE.127/5
LE.144/5
LE.126/5
LE.423/R
LE.86/5

stroke. To obtain maximum power and speed this setting should be accurately obtained and preferably for ease any alteration made while cylinder head is removed when the exact position of piston may be checked instantly.

NOTE.—A greater amount of advance than described above is not recommended under any circumstances.

TO ADJUST MAGNETO CHAIN.

It will be observed that magneto chain adjustment is obtained by sliding the magneto platform back upon the engine cradle plates, by means of the adjuster situated on the down seat tube.

Correct chain adjustment is such that when the top of chain is lightly pressed up and down a whip of about ⅛ in. to ¼ in. is obtained.

To adjust chain, slack off the two nuts on gear box studs and screw the chain adjuster referred to above in a clockwise direction to tighten or in the opposite direction to slacken, after which securely tighten down gear box stud nuts.

TO DISMANTLE WHEEL BEARINGS

After wheels have been removed (see Removing Wheels) withdraw brake cover plate. Then unscrew adjusting cone and from the opposite side draw out spindle. Upon re-assembling each roller bearing cage should be packed with good quality medium transmission grease.

TO INSPECT GEAR BOX INTERIOR.

To remove gear box end plate for examination of gears, disconnect the clutch control wire by slackening off the adjustment, when the nipple can be slipped out of the small operating arm. After removing the seven nuts securing cover plate, gently draw off the latter.

NOTE.—While the end plate is being removed, a pan or some receptacle must be placed underneath to catch the oil, the bulk of which will run out. When re-assembling, the faces of the end plate and gear box must be thoroughly cleaned, and a new paper washer used if the old one has been damaged. Preferably coat with quick-drying gold size.

GEAR ROD ADJUSTMENT.

To adjust gear rod disconnect pin which passes through top yoke end of gear rod and slack off locking nut. Then screw yoke end up or down until correct adjustment is obtained after which replace yoke end pin and securely lock with locking nut.

When the gear is correctly adjusted the gear lever should move an equal amount either side of the neutral notch without engaging either the middle or low gear. This is important, and should be tested while moving rear wheel to and fro.

CLUTCH ADJUSTMENT.

In the event of clutch slip being experienced the adjustment of clutch operating cable should be suspected. When correctly adjusted it should be possible to move the clutch actuating worm (part to which

lower end of cable is attached) forward slightly with the fingers and if this free movement cannot be felt the cable stop should be adjusted accordingly. If necessary the bolt securing the clutch worm lever may be slackened and the worm portion revolved slightly backward to provide slacker cable adjustment or forward to tighten.

TO ADJUST FRONT CHAIN.

Slack off the two nuts securing gear box to aluminium bracket which rests on the engine cradle plates, also the bolts which pass through cradle plates immediately above gear box, and slide gear box in the required direction, by means of the adjuster which passes through the frame bracket at foot of saddle tube.

Correct adjustment of chain should allow a movement of ⅜ in. to ½ in. when chain is pressed up and down. Care must be taken after adjustment has been made to securely tighten the top gear box fixing nuts, and side bolts referred to above in the order mentioned.

WARNING.—The various nuts securing gear box must be carefully and thoroughly tightened after any adjustment has been made, otherwise the chain pull will show a tendency to tighten front chain and slacken rear.

TO ADJUST REAR CHAIN.

Put down rear stand, then slack off rear wheel spindle nuts and bolt which secures brake cover plate to special lug on frame tube. Then adjust chain as required, by means of the bolts which pass through each of the fork ends, after which securely tighten spindle nuts and bolt securing brake cover plate. Tension of chain should be tried in a number of places, and the correct adjustment (which should allow a whip of ⅜in. to ½in. when chain is pressed up and down), should be obtained for the tightest place.

NOTE.—Before tightening rear chain the adjustment of front chain should be inspected, and if attention to each is required the latter should be treated first.

IMPORTANT.—Adjustment to each side chain adjuster bolt should be equal, otherwise chain alignment with sprockets will not be correct. It must be noted that rear wheel is not intended to be dead central in the chain stays. Measuring from edge of rim to each side stay in turn should show a gap on left or chain side 5/32in. less than right or brake side.o This alignment must be carefully maintained.

TO ADJUST STEERING HEAD

The steering head should be occasionally tested for adjustment by exerting pressure upwards from the extreme tips of the handlebars. Should any shake be apparent the top cap nut on steering column should be slacked off and the lower nut screwed down until all trace of slackness has disappeared when the top cap nut should be again tightened down.

To Adjust Steering Head—*continued.*

IMPORTANT.—To guard against unconsciously overtightening the head bearings, the effect of which is extremely difficult steering, it is advisable to jack up the front of machine (a box of suitable height under crankcase will serve) in order that all shake may be taken up satisfactorily and the steering head left perfectly free.

TO REMOVE REAR WHEEL.

Put down rear stand. Then disconnect rear brake rod, and rear chain connecting link, after which release wheel axle nuts and remove the bolt securing brake cover plate. The wheel is then ready to be removed by drawing same backward until axle is free from fork ends.

TO REMOVE FRONT WHEEL.

Put down front stand. Then disconnect front brake rod at bottom end. Then slack off nuts and with a stout screwdriver or tyre lever gently spring each side of the fork out, at the same time pressing wheel down, when the wheel will drop out.

NOTE.—It is advisable to first put rear stand down as front stand is not wide enough to provide a safe balance.

TO ADJUST WHEEL BEARINGS.

To adjust either rear or front wheel bearings, slack off the left side spindle nut and with the thin cone spanner provided slack off the thin adjusting cone lock nut, after which with the same spanner turn the adjusting cone in the required direction, i.e., clockwise to tighten or vice versa after which lock the adjusting cone in position with the lock nut provided and lastly carefully re-tighten the axle nut.

PERIODICAL INSPECTION OF NUTS (IMPORTANT)

It is advisable to periodically run over all important nuts. Much valuable time may be saved by a few minutes so spent at various intervals. The most likely parts to be requiring attention are given below in your own interests.

Wheel axle nuts, all mudguard nuts, nuts securing brakecover plate, engine bolt nuts, and stand bolts and nuts.

CLEANING.

If the machine is used to any extent in bad weather, for mud removing a small hose is almost indispensable, but when using same care should be exercised not to direct water on to the engine and magneto or other such parts. If a hose is not available, soak dirt with paraffin before removing. Do not attempt to rub or brush mud off an enamel surface when dry, or the polish will soon be destroyed. For engine, magneto, etc., a good stiff paint brush and a pot of petrol is preferable.

STOPPAGES AND THE LIKELY CAUSES

ENGINE SUDDENLY STOPS. Probable cause :—
- Petrol low in tank.
- Dirt in petrol pipe.
- Choked jet.
- Water in float chamber.
- Choked petrol pipe or tap.
- Air lock in tank.

ENGINE RUNS BADLY. Probable cause :—
- Valve sticking.
- Weak valve spring.
- Plug points too close.
- Water on plug.
- Plug oily or sooted.
- Air leakage (due to carburetter being disturbed).
- Paraffin in petrol, or bad petrol.
- Valve seating burnt.
- Faulty magneto contacts.

ENGINE WILL NOT START. Probable cause :—
- Too liberal throttle opening.
- Valve stuck up.
- Water on plug.
- Choked jet.
- Valve or valves not seating properly.
- Oiled up sparking plug.

Legal Matter

To comply with the Law relating to motorcycles, the owner of a "Matchless" Model 'L/R' must :—

1. Hold a driver's licence, which can be obtained from the Chief Constable or Corporation of a County Borough, or from the County Council. The charge for this licence is 5/- yearly, and must be renewed annually from the date of issue. A motor-car driver's licence covers the driving of a motorcycle.
2. Apply to the Taxation Department of the Local Authority of the district in which the vehicle is to be ordinarily kept for Inland Revenue Licence and Registration Form RF 1/2 (Motorcycles only). The address of the above Taxation Department can be obtained by enquiry at a post office.
3. The form RF 1/2 when obtained must be filled in and returned, accompanied by a remittance of £3/0/0 if used solo and £4/0/0 if desired for use with sidecar, and in some districts evidence that the vehicle to be licenced is new and has not previously been registered may be demanded. Manufacturers' or Agents' invoice will serve.

4. See that his front plate is illuminated at night on both sides. See that his machine, if used with a sidecar is provided with a lamp on the extreme near side of same showing a light forward, (Compulsory in some countries only by bye-law), and is also provided with a lamp which shows a red light to the rear. The Law regarding this latter does not state any particular place in which the rear lamp must be fixed.
5. Never drive at a speed which is dangerous to the public.
6. Wherever necessary, give audible and sufficient warning by horn or other instrument of the approach of his motorcycle.

Guarantee Terms and Conditions

W give the following Guarantee with our motorcycles instead of the Guarantee implied by statute or otherwise as to the quality of fitness of such machines for the purpose of motorcycling, and such implied Guarantee being in all cases excluded. In the case of machines which have been used for " Hiring out " or racing purposes, or in respect of which our trade mark 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 be in force for six months only from date of purchase, and the damages for which we make ourselves responsible under this guarantee are limited to the replacement of any part which may have proved defective.

WE UNDERTAKE, subject to the conditions mentioned below, to make good at any time within six months any defects in these respects. As motorcycles are easily liable to derangements by neglect or misuse, this Guarantee does not apply to defects caused by wear and tear, misuse or neglect.

CONDITIONS.

Any motorcycle sent to us to be plated, enamelled or repaired will be repaired upon same conditions, i.e., we Guarantee that all precautions which are usual and reasonable, have been taken by us to secure excellence of material and workmanship, and this Guarantee is in lieu, and in exclusion of any common law or statute warranty, and the damages recoverable are limited to the cost of any further work which may be necessary to amend and make good the work found to be defective.

If a defective part should be found in our motorcycles 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 machine, the name of the Agent from whom he purchased, and the date of purchase.

Failing compliance with the above, no notice will be taken of anything which may arrive but such articles will lie here at the risk of the senders : and this Guarantee, or any implied Guarantee shall not be enforceable.

We guarantee only those machines which are bought either direct from us or from one of our duly authorised agents, and under no other conditions.

We do not Guarantee the specialities of other firms, such as tyres, saddles, chains, lamps, etc., or of any component part supplied to the order of the purchaser differing from our standard specification supplied with our motorcycles or otherwise.

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 have purchased from us ; nor are they authorised to give warranty or make any representation on our behalf other than those contained in the above Guarantee.

MACHINE NUMBERS.

The frame number will be found stamped on the right hand side of lug under saddle.

The engine number is stamped on the aluminium crankcase, transmission side, immediately beneath cylinder base.

H. COLLIER & SONS., LIMITED

INTRODUCTION.

We have pleasure in presenting this Spares List for the " Matchless " L/R Model.

Every part likely to be required can readily be found by reference to illustrations contained therein.

Every part has a distinctive number, and care should be taken to order correct part, calling same by the name specified, and giving the part number.

Read carefully rules on pages 17 and 18.

We are at all times willing to give estimates for parts or repairs, and also give to all customers the benefit of our advice regarding any query.

H. COLLIER & SONS, LIMITED

TERMS OF BUSINESS.

Our invariable rule in this department is net cash with order. Remittance to £1 in value may be sent by Postal Order, but over this amount it is advisable to remit by cheque. Cheques to be made payable to H. Collier & Sons, Ltd., and crossed. When making remittance by Telegraph Money Order, the name and address of sender should be included, as, unless this is done, the Post Office do not give this information in the telegram. We frequently receive Telegraph Money Orders without sender's name, with the result that we cannot trace by whom the amount is sent, and we have to wait until customer writes complaining about delay before the matter can receive any attention. If remittance is not sufficient to pay for postage or carriage, goods will be sent " carriage forward " (Goods train).

All repairs accounts are strictly cash before delivery.

The prices in this list are subject to alteration without notices.

DEPOSIT ACCOUNT.

We strongly advise all owners of " Matchless " motorcycles to take advantage of our " Deposit System." It often occurs that parts are required by return, but customers not having a current account, there is the inevitable delay of " pro forma " invoice being sent, and we have to wait receipt of his remittance before the goods can be despatched. This delay causes considerable inconvenience to the party concerned, and can be avoided by opening a Deposit Account.

A remittance of not less than £2 entitles a customer to this form of account, and when goods are ordered by 'phone, telegram or letter they will be despatched at the earliest possible moment by the quickest route. invoices will be sent for all goods supplied, and a statement will be rendered showing amount of deposit in hand when required. and customers will be notified immediately their deposit becomes exhausted, so that they may renew same. We are at all times prepared to return balance of deposit upon request.

Kindly note, when ordering, to mention " Deposit " or quote reference as shown on monthly statements.

REPAIRS.

In case of extensive structural repairs being required, we strongly advise all owners to send machines to our works for attention. It is obvious that manufacturers can do this kind of work better than any repairer.

OVERHAULING.

When sending us a complete motorcycle, engine, gear box or other part with the request that we overhaul same, we understand by the term " Overhaul " that it is to be entirely dismantled, thoroughly renovated, any worn part renewed and put in perfect working order. In case a customer desires only certain parts attended to, explicit instructions should be given us to that effect, otherwise cost may be far in excess of what is anticipated.

ESTIMATES.

It is becoming a general practice for customers when sending their engines or complete motorcycles to us for repairs, to request a detailed estimate for the necessary repairs before proceeding with the work.

We are always pleased to furnish these estimates, but it must be distinctly understood that only approximate quotations can be given, as, when re-erecting, it is often found that other repairs or new parts are necessary, which it was impossible to locate when dismantling.

In some instances, when an estimate has been submitted, several of the items quoted for are questioned as being unnecessary or not required. We may say that we only include in our quotation new parts and repairs that we consider essential to make the machine suitable and satisfactory for the road.

We much prefer not to undertake a repair (neither do we accept any responsibility) when the estimate for same has been curtailed by the owner, as the parts he may delete are probably the most important to obtain good results.

If an estimate is not accepted, i.e., the parts returned to the owner in their original condition, a nominal charge is made for taking down and re-assembling.

All repair accounts are strictly cash before delivery.

RULES TO BE OBSERVED.

1. Parts sent to us for repair, replacement, or as pattern must bear distinctly sender's full name and address. Instructions regarding same must be sent under separate cover, otherwise goods may lie at our works and not be unpacked until instructions regarding same are received.
2. All goods must be consigned to us carriage paid.
3. Do not enclose cash (whether in the form of coin or paper) with goods. Remittance should be sent by letter post for your own protection.
4. Customers having no account with us should not fail to remit at the time of order and also to include postage.
5. When customer has no account, a Telegraph Money Order will ensure immediate attention.
6. When making enquiries respecting any part on order or repair, it is advisable to quote date of order.
7. In case of doubt regarding correct names of parts required, it is advisable to send old part as pattern.

DAMAGE IN TRANSIT.

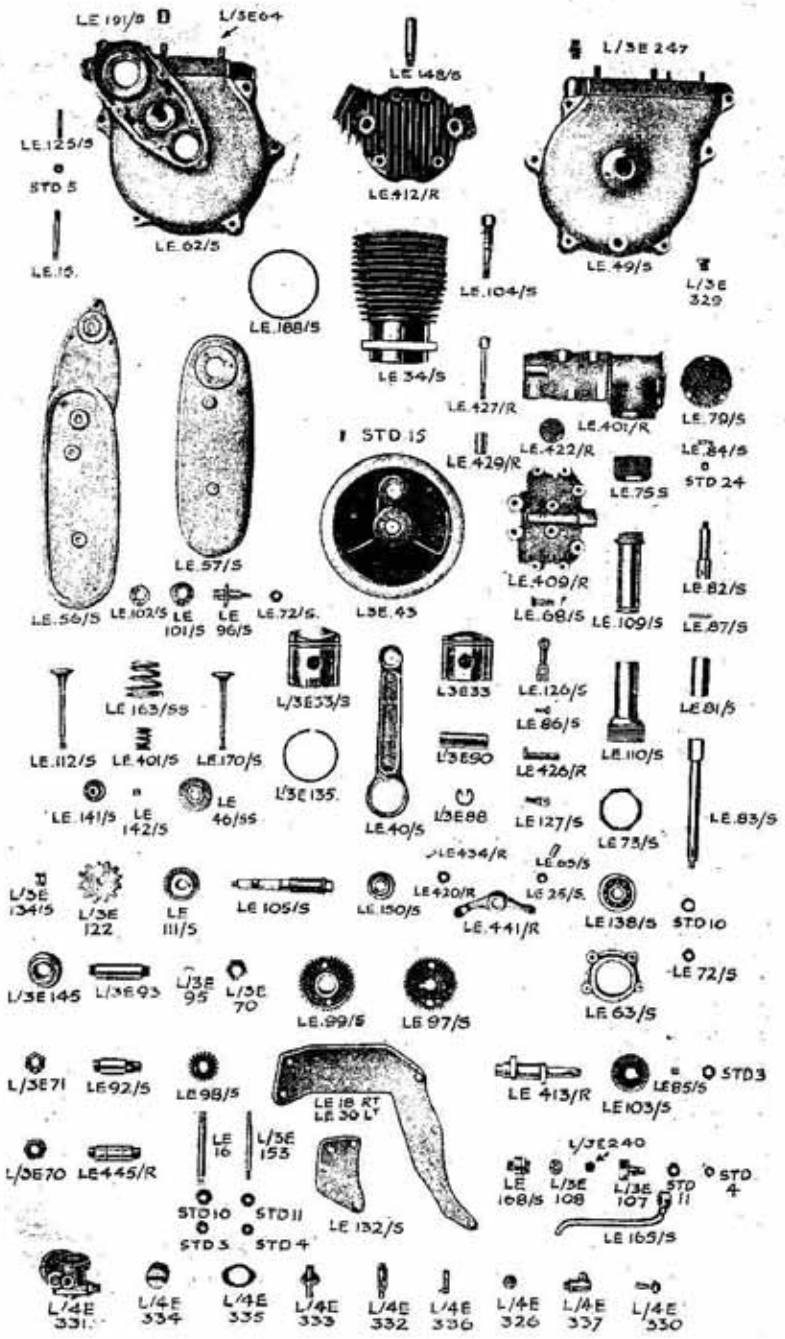
Our responsibility ceases when goods leave our Works, and claims must be made on carriers in the event of damage occurring in transit.

NOTE.—By railway Companies special regulations, unless damage in transit is reported within three days from receipt of goods, no claim can be entertained.

ENGINE PARTS

			£	s.	d.
		A.			
L/3 E.	93	Axle for flywheel (transmission side) ...		6	9
L.E.	92/S	Axle for flywheel (timing gear side) ...		5	6
L.E.	445/S	Axle for flywheel (crankpin)		6	0
L.E.	96/S	Axle for intermediate timing gear wheel ...		4	3
L.E.	102/S	Nut securing same			6
		See timing gear for other parts			
		B.			
L/3 E.	100	Bush (hardened steel for crankcase) timing side		4	6
L/3 E.	100	Bush (hardened steel for crankcase) transmission side		4	6
L/3 E.	89	Bush for gudgeon pin		3	3
L.E.	128/S	Bush for valve lifter		1	0
L.E.	169/S	Breather for crankcase (see release valve)			
L.E.	103/S	Bevel pinion for camshaft drive (taper hole)		9	0
L.E.	111/S	Bevel pinion for camshaft drive (parallel hole) See timing gear		9	0
L.E.	421/R	Hardened steel outer roller race or bush for			
L.E.	411/R	Overhead rockers		4	6
L.E.	138/S	Ball bearing complete for bevel shafts and camshaft (bevel end)		9	6
		C.			
L.E.	34/S	Cylinder (bare)	1	15	0
L/3 E.	64	Cylinder holding down stud (each) ...			6
L.E.	191/S	Cylinder holding down stud nuts (long) each			5
S.T.D.	3	Cylinder holding down stud nuts (short) each			3
L.E.	412/R	Cylinder head (bare)	2	2	0
L.E.	104/S	Cylinder head holding down bolts (long head)			9
L.E.	429/R	Cylinder head holding down bolts (short head)			7
L.E.	167/S	Crankcase with bush and studs (timing side) } Supplied Complete Crankcase with bush and studs (transmission) ... } Only	4	10	0
L/3 E.	239	Crankcase drain plug			4
L.E.	16	Crankcase bolt ⅜ diameter			7
S.T.D.	3	Nuts for above (each)			3
L.E.	15	Crankcase bolt 5/16in. diameter (long) ...			6
L/3 E.	153	Crankcase bolt 5/16in. diameter (short) ...			6
S.T.D.	4	Nuts for above (each)			2

ENGINE PARTS



C.—*continued.*

			£	s.	d.
		Crankcase timing gear cover (see timing gear)			
L.E.	125/S	Studs for fixing above			4
S.T.D.	5	Nuts only for studs (each)			2
L.E.	57/S	Crankcase magneto chain cover		10	0
L.E.	124/S	Studs for fixing above (each)			3
S.T.D.	5	Nuts for studs (each)			2
L.E.	40/S	Connecting rod only		9	6
L.E.	425/S	Connecting rod with big end assembly and small end bush	1	16	6
L.E.	458/R	Crankpin assembly only (pin, rollers and outer race)		16	6
L.E.	445/R	Crankpin only		6	0
L.E.	413/R	Camshaft (see Timing Gear)	1	0	0
L.E.	411/R	Cam lever (inlet) see Timing Gear ...		11	6
L.E.	411/R	Cam lever (exhaust) see Timing Gear ...		11	6
L.E.	65/S	Cam lever hardened screw		1	0
L.E.	25/S	Locking nut for above			3
L.E.	179/S	Cylinder head copper gasket		2	0
L.E.	429/R	Cylinder head fixing bolt flattened collar			6

D.

L/3 E.	239	Drain plug for crankcase			4

E.

		Engine bolts (see engine plates)			
		Exhaust valve (see valves)			
		Exhaust pipe (see silencer)			

F.

FLYWHEELS AND AXLES, ETC.

L.E.	446/R	Flywheel (timing side)	13	6	
L/3 E.	43	Flywheel (transmission side)	13	0	
L.E.	445/R	Flywheel crankpin	6	0	
L/3 E.	70	Fixing nuts for above (each)			6
S.T.D.	15	Lock screw			2
L/3 E.	92/S	Flywheel axle timing side	5	6	
L/3 E.	70	Nut for above inside			6
S.T.D.	15	Lock screw			2
L/3 E.	71	Nut securing small timing pinion			5
L.E.	93/S	Flywheel axle transmission side	6	9	
L/3 E.	70	Nuts for above (each)			6
S.T.D.	15	Lock screw			2
L/3 E.	95	Key for flywheel axle (each)			5

G.

L/3 E.	90	Gudgeon pin	3	9	
L/3 E.	88	Gudgeon pin securing spring ring ...			1

			£	s.	d.
L/3 E.	89	Gudgeon pin bush		3	3
L.E.	45/S	Guide for inlet valve		2	0
L.E.	148/S	Guide for exhaust valve		4	0

I.

		Inlet valve (see valves)			
L.E.	45/S	Inlet valve guide		2	0

M.

Magneto and parts (see page)

O.

L/3 E.	239	Oil drain plug for crankcase			4
L.E.	436/R	Oil delivery pipe (pump to camshaft case)		4	6
L.E.	434/R	Oil feed pipe (tank to pump)		5	3
L.E.	454/R	Oil feed pipe for big end lubrication ...		4	0
L.T.	51	Oil feed sight regulator for above (screws into tank)		5	0
L.E.	444/R	Oil elbow for big end oil pipe (screws into timing cover		2	0
L.E.	449/R	Lock nut for above			4
L/3 E.	247	Oil pipe union (screws into elbow) ...			3
L/3 E.	247	Oil pipe union for camshaft case			3
	5061/5475	Oil pump complete		19	0
	5475/1	Oil pump body only		3	0
	5475/5	Oil pump centre worm spindle		1	0
	5475/2	Oil pump regulating block (with hand extension)		1	6
	5475/3	Oil pump worm sleeve		1	6
	5475/9	Locking plate for above			6
	5/32 Whit.	Screws for plate (per dozen)			6
	5475/4	Oil pump plunger		1	6
	5475	Oil pump tell tale complete...		2	6
	5475/2 & 9	Oil pump tell tale plunger and cap only ...			9
L/3 E.	284	Oil pump union for oil pipe...			4
L/3 E.	324	Oil pump fixing screw (each)			2
L/3 E.	325	Nut for same			1
L/3 E.	290	Oil pipe nipple only (each)			3
L/3 E.	284	Oil pipe union nut only (each)			4
L.E.	134/S	Special nut for oil pump drive (see timing gear)			
L/3 E.	287	Oil pipe union and filter for tank		2	3

P.

L/3 E.	33	Piston only (standard type)		10	0
L/3 E.	33/S	Piston only (high compression type) ...		12	6
L/3 E.	288	Piston complete with gudgeon pin and rings, standard type		16	6

			£	s.	d.
L.E.	406/S	Piston high compression type		19	0
L/3 E.	135	Piston rings (each)		1	0
L.E.	98/S	Pinion (small timing) see timing gear ...		4	6
L.E.	96/S	Pin or axle for intermediate timing pinion (see timing gear)		4	3
		Petrol pipe (see carburetter)			
L.E.	423/R	Pin or axle for overhead rockers (see also timing gear)		3	0
L.E.	424/R	Pin or axle for roller end of rocker			8

R.

L.E.	169/S	Release valve complete with pipe ...		5	9
L.E.	165/S	Release valve pipe and top only		2	9
L.E.	168/S	Release valve screwed body		1	0
L/3 E.	107	Release valve screwed cap		1	4
S.T.D.	4	Nut for securing pipe			3
S.T.D.	11	Washer only			1
L/3 E.	240	Release valve diaphragm			2
L/3 E.	108	Release valve diaphragm seating			9
L/3 E.	145	Rollers and cage for flywheel axles ...		7	0
L/3 E.	100	Hardened outer race for same (either side)		4	0
L.E.	150/S	Rollers and cage for cross-shaft and intermediate pinion		5	0
L.E.	121/S	Hardened outer race for cross-shaft ...		4	6
L.E.	150/S	Rollers and cage for camshaft		5	0
L.E.	121/S	Hardened outer race for camshaft rollers		4	6
L.E.	411/R	Rocker or cam lever inlet		11	6
L.E.	411/R	Rocker or cam lever exhaust		11	6
L.E.	65/S	Hardened adjusting screw		1	0
L.E.	25/S	Locking nut for above			3
L.E.	439/R	Rollers for overhead rocker axle (per dozen)		2	0
L.E.	121/S	Hardened steel outer race for above ...		4	6
L.E.	423/R	Rocker axle only		3	0
L.E.	419/R	Felt oil retaining washer for rocker bearing			3
L.E.	417/R	Perforated cap washer for rocker bearing ...			3
L.E.	422/R	Solid end cap for rocker bearing			6
L.E.	420/R	Roller for rocker end			6
L.E.	424/R	Pin or axle for above			8

S.

L.E.	158/S	Sparking plug K.L.G. with washer ...		6	0
L.E.	246	Sparking plug C. & A washer only... ...			2
L.E.	163/SS	Spring for valves inlet or exhaust (outer)		1	0
L.E.	401/S	Spring for valves (inner anti-periodicity)			6
L.E.	144/S	Spring (helical) for exhaust lift cable ...			7
L/3 E.	123	Sprocket for transmission		6	6
L.E.	70	Nut for fixing same			6
S.T.D.	15	Lock screw			2

			£	s.	d.
L/3 E.	95	Key for sprocket			5
L.E.	124/S	Stud for timing gear cover (long) ...			4
L.E.	125/S	Stud for timing gear cover (short) (each)			3
L.E.	125/S	Stud for magneto chain case			4
S.T.D.	5	Nuts for above			2
L.E.	96/S	Stud or axle for timing gear intermediate pinion		4	3
L.E.	102/S	Nut for same (inside crankcase)			6
L.E.	72/S	Nut for outside end			2
L.E.	101/S	Large steel washer for outside end... ...			3
L.E.	431/R	Stud 5/16 for camshaft case cover ...			4
S.T.D.	4	Nut for above			2
L/3 E.	122	Sprocket for magneto chain (engine end)		2	6
L.M.D.	11	Sprocket for magneto (see also magneto)		3	0
L.E.	140/S	Silencer		10	0
L.F.	32	Silencer support strap bolt			3
S.T.D.	4	Nut for above			2
L.E.	182/S	Silencer exhaust pipe	1	0	0
L.E.	116/S	Silencer exhaust pipe union nut		3	0
L.E.	105/S	Shaft (horizontal bevel) see also timing gear		9	0
L.E.	83/S	Shaft (vertical bevel) long bottom portion		12	0
L.E.	82/S	Shaft (vertical bevel) short top portion ...		9	0
L.E.	81/S	Sleeve connecting top and bottom portions		6	6
L.E.	87/S	Taper pin securing sleeve			2
L.E.	110/S	Shaft covering tube (bottom portion) ...		6	3
L.E.	109/S	Shaft covering tube (top portion) ...		3	6
L.E.	75/S	Sleeve (screwed) for vertical shaft top bearing		5	0
L.E.	73/S	Locking nut for above		3	2
L.E.	63/S	Housing or sleeve for bottom vertical shaft bearing		4	6
L.E.	78/S	Stud securing above to crankcase (each)			3
S.T.D.	5	Nut for stud (each)			2

T.

			£	s.	d.
L.E.	56/S	Timing gear cover		12	6
L.E.	125/S	Stud for fixing above (short)			3
L.E.	124/S	Stud for fixing above (long)			4
S.T.D.	5	Nuts for fixing (each)			2
L.E.	57/S	Magneto chain case front		10	0
L.E.	125/S	Stud for fixing			3
S.T.D.	5	Nut for above (each)			2
L/3 E.	98	Timing gear small pinion		4	6
L/3 E.	71	Nut for fixing same			5
L/3 E.	97/S	Timing gear intermediate pinion		8	6
L/3 E.	96/S	Stud for mounting above		4	3
L.E.	150/S	Roller cage and rollers		5	0
L.E.	101/S	Large steel washer for above			4

			£	s.	d.
L.E.	72/S	Outside nut for stud			2
L.E.	102/S	Inside nut for same			6
L.E.	99/S	Timing gear pinion for horizontal bevel shaft		8	0
L/3 E.	71	Nut for same			5
S.T.D.	15	Locking screw for nut			2
L.E.	111/S	Timing gear bevel pinion (parallel bore) ...		9	0
L.E.	103/S	Timing gear bevel pinion (taper bore) ...		9	0
L.E.	85/S	Keys for above (each)			4
S.T.D.	3	Nuts for fixing (each)			3
L.E.	404/S	Washer for nut (each)			1
L.E.	105/S	Timing gear camshaft	1	0	0
L.E.	150/S	Rollers and cage for same		6	6
L.E.	121/S	Hardened steel race for rollers		3	9
L.E.	138/S	Ball bearing for camshaft		9	6
L.E.	410/R	Timing gear camshaft case with bush and bolts, also with cap forming top half of rocker bearings supplied complete only	2	5	0
L.E.	79/S	End cap for above...		1	9
L.E.	84/S	Stud for end cap (each)			3
S.T.D.	24	Nuts for above (each)			2
L.E.	68/S	Bolts for top cap or cover			3
L.E.	124/S	Bolts securing camshaft housing (each) long			6
L.E.	125/S	Bolts securing camshaft housing (each) short			3
L.E.	411/R	Timing gear cam lever or rocker (inlet) ...		11	6
L.E.	411/R	Timing gear cam lever or rocker (exhaust)		11	6
L.E.	65/S	Hardened adjusting screws for above (each)		1	0
L.E.	25/S	Locking nut for screw (each)			3
L.E.	431/R	Stud 5/16 for camshaft housing top cap ...			4
S.T.D.	4	Nut for stud			2
L.E.	105/S	Timing gear horizontal shaft		13	6
L.E.	138/S	Ball bearing for above		9	6
L.E.	150/S	Roller cage and rollers for above ...		6	6
L.E.	121/S	Hardened steel outer race for roller cage ...		3	9
L.E.	83/S	Timing gear vertical shaft (long bottom portion)	1	12	0
L.E.	82/S	Timing gear vertical shaft (short top portion)		9	0
L.E.	81/S	Connecting sleeve for above		6	6
L.E.	87/S	Taper pin for sleeve			2
L.E.	138/S	Ball bearing for vertical shaft		9	6

U.

			£	s.	d.
L.E.	116/S	Union nut for exhaust pipe		3	0
L/3 E.	284	Union nut for oil pipe			4
L/3 E.	247	Union for oil pipe (screws into camshaft case)			3
L.E.	448/R	Oil elbow for timing cover		2	0
L/3 E.	290	Nipples for oil pipes (each)			3

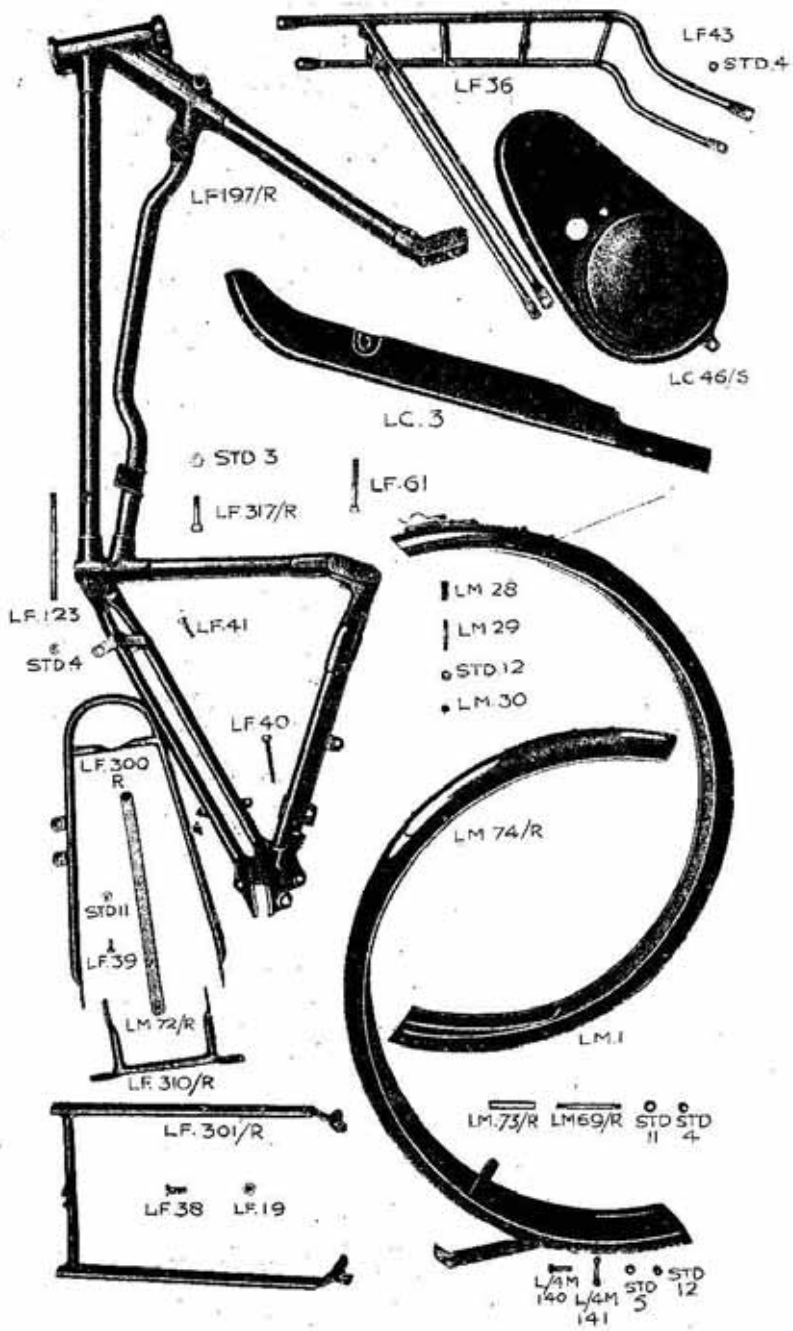
V.

			£	s.	d
L.E.	170/S	Valve (only) inlet		12	6
L.E.	112/S	Valve (only) exhaust		12	6
L.E.	438/R	Hardened steel cap for valve end each) ...			6
L.E.	163/SS	Valve spring outer		1	0
L.E.	401/S	Valve spring inner			6
L.E.	141/S	Valve spring cap (top)			8
L.E.	142/S	Valve split taper collar (two pieces) ...			9
L.E.	148/S	Valve guide inlet or exhaust		4	0
L.E.	426/R	Valve lifter shaft		3	6
L.E.	126/S	Valve lifter lever for above		1	6
L.E.	86/S	Pinch bolt for lever			3
L.E.	407/S	Valve lifter cable (inner and outer) ...		2	10
L.E.	186	Valve lifter cable (outer)		2	1
L.E.	184/S	Valve lifter cable nipple handlebar end ...			3
L.E.	180/S	Valve lifter cable nipple engine end ...			3
L.E.	139/S	Valve lifter cable adjusting stop			7
S.T.D.	5	Lock nut for above			2
L.E.	144/S	Valve lifter involute spring			7
		Valve lifter lever (see handlebar)			
L.E.	131/S	Valve lifter shaft retaining spring			1
L.E.	185/S	Valve lifter cable (inner only)			9
L.E.	46/SS	Valve spring cap (bottom)			5

FRAME AND FORK PARTS.

			£	s.	d
L.F.	277/R	Complete frame	5	7	6
L.F.F.	157/R	Steering head race for frame		2	5
L.F.	42	Seat lug bolt			8
S.T.D.	4	Nuts for above (each)			2
S.T.D.	11	Washer for nut (each)			1
L.F.	40	Rear chain adjuster bolt			9
L.F.F.	126/R	Front forks complete with stand and mud-guard	5	12	0
L.F.F.	122/R	Front forks complete less stand and mud-guard	4	5	0
L.F.F.	169/R	Front fork girder only (left side)		16	0
L.F.F.	168/R	Front fork girder only (right side)		17	6
L.F.F.	70/R	Fork handlebar clip		8	0
L/4 F.F.	64	Pinch bolt for above...			6
S.T.D.	3	Nut for bolt			3
L/4 F.F.	52	Ball race for handlebar clip...		2	5
L/4 F.F.	42	Steering head nut plain			8
L/4 F.F.	46	Steering head cap nut		1	6
L.F.F.	115/R	Steering friction damper long bolt ...		2	6
L.F.F.	101/R	Steering friction damper fly nut		1	9
L.F.F.	116/R	Steering friction damper base socket ...		5	9
L.F.F.	104/R	Steering friction damper long bolt spring			3
L.F.F.	117/R	Locating pin for long bolt			1

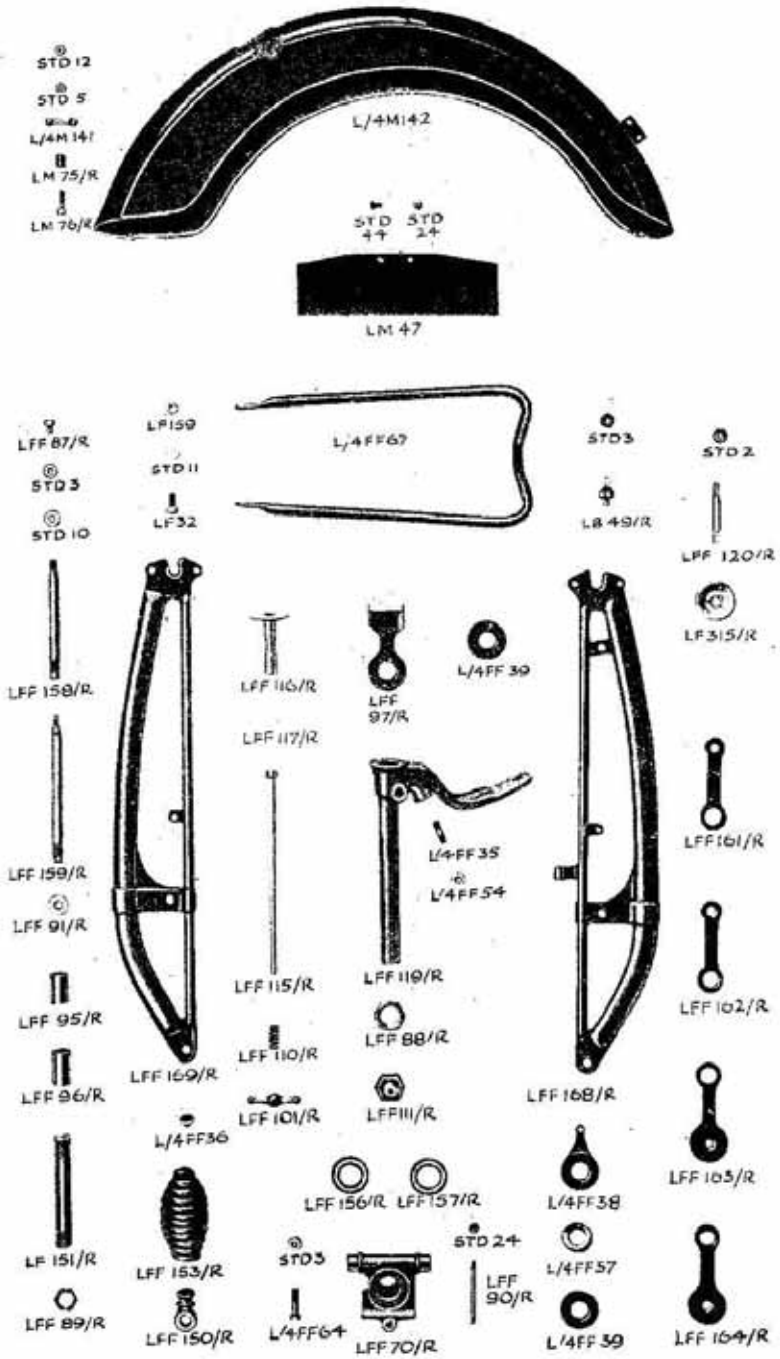
FRAME PARTS, Etc.



			£	s.	d.
L.F.F.	97/R	Steering damper base bracket		1	0
L.F.F.	120/R	Bolt securing above to head lug ...			4
S.T.D.	2	Nut for above (each)			2
L.F.	315/R	Large dished washers for above			9
L/4 F.F.	39	Steering damper leather friction washer (each)			1
L.F.F.	162/R	Left side bottom front fork link		1	4
L.F.F.	161/R	Right side bottom front fork link ...		1	3
L.F.F.	164/R	Left side top front fork link		1	8
L.F.F.	163/R	Right side top front fork link		1	3
L.F.F	159/R	Front fork spindle (long)		1	0
L.F.F.	158/R	Front fork spindle (short)		1	1
L.F.F.	91/R	Left side lock nut for spindle			5
S.T.D.	3	Right side nut for spindle			3
L.F.F.	121/R	Front fork spindle grease nipple			5
L.F.F.	151/R	Front fork spindle sleeve (top)		2	4
L.F.F.	154/R	Front fork spindle sleeve (bottom)... ...		2	6
L.F.F.	91/R	Front fork spindle sleeve nuts (each) ...			4
S.T.D.	14	Split pin securing lock nuts (per dozen)			6
L.F.F.	96/R	Distance collar for top spindle sleeve (long)			4
L.F.F.	95/R	Distance collar for top spindle sleeve (short)			4
L.F.F.	170/R	Fork crown and stem		13	6
L.F.F.	156/R	Fork crown ball race		3	2
L.F.F.	157/R	Fork ball race (for frame and handlebar lug)		2	5
L/4 F.F.	59	Set of steering head balls		1	3
L/4 F.F.	39	Friction damper leather ring			1
L/4 F.F.	38	Friction damper side plate (each) ...			6
L/4 F.F.	35	Friction damper side plate long bolt ...			3
S.T.D.	24	Friction damper bolts nuts (each)			2
L/4 F.F.	37	Friction damper spring washer			3
L.F.F.	153/R	Front fork spring		2	6
L.F.F.	150/R	Top anchor lug for spring (fits over spindle sleeve)		1	7
L/4 F.F.	54	Bottom fixing nut for spring			3
L/4 F.F.	36	Taper collar for nut for spring			4

ENGINE PLATES AND BOLTS.

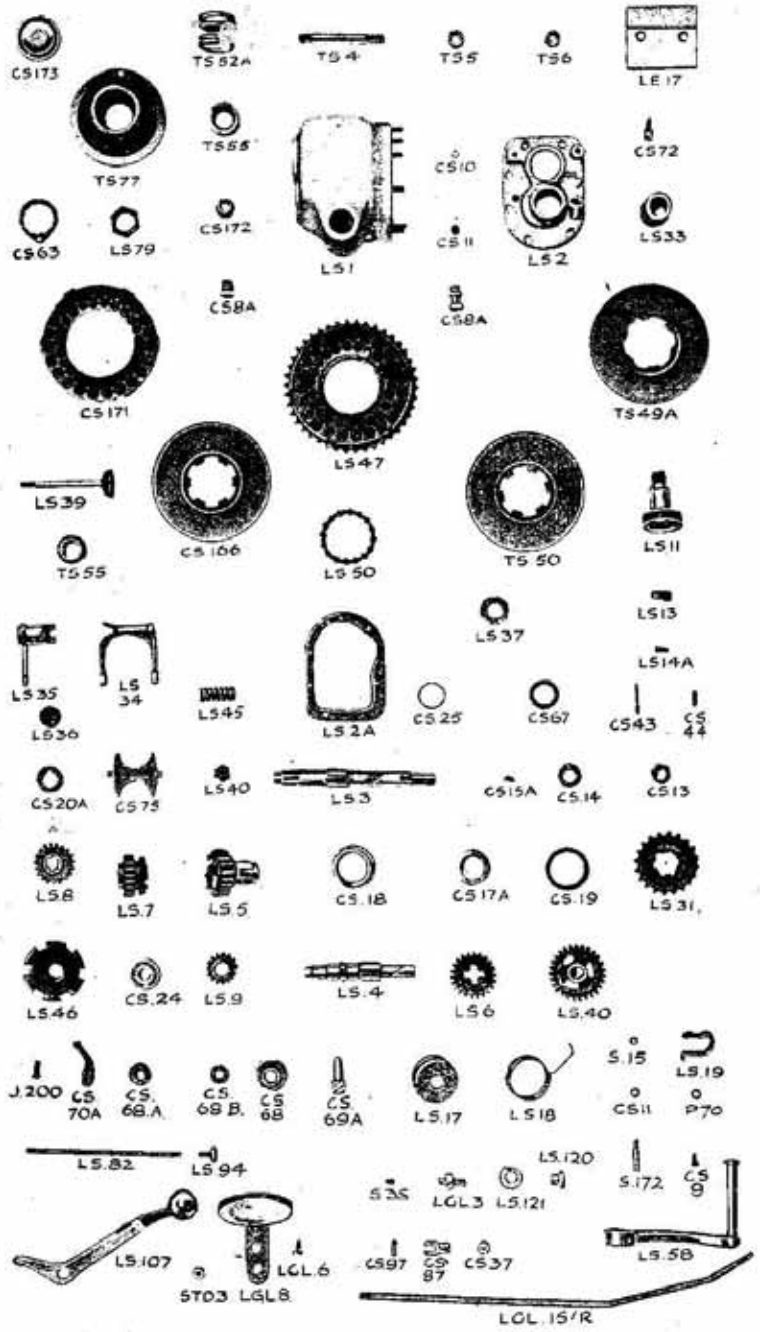
L.E.	18/36	Rear engine plates (left or right)	5	6	
L.E.	130	Front engine plates (left or right) ...		10	
L.E.	16	Engine plate bolt ⅜ diameter (short) ...			7
S.T.D.	3	Nuts for same (each)			3
L/3 C	52	Engine plate bolt ⅜ diameter (long) ...			6
L/3 C.	59	Tubular distance piece for chain guard ...			5
S.T.D.	3	Nuts for above (each)			3
L.E.	15	Engine plate bolt 5/16 diameter			5
S.T.D.	4	Nuts for above			2
L.F.	61	Clamping bolt for rear engine plates (over gear box)			5



GEAR BOX (Special close ratio type)

			£	s.	d.
L.S.	1	Gear box shell only	2	0	0
L.S.	2	Gear box end plate		16	0
L.S.	3	Gear box main driving shaft		13	0
L.S.	4	Layshaft only		13	6
L.S.	5	Main shaft high speed or sleeve pinion (less loose ball cones)		16	0
C.S.	17A	Ball cones for above (each)...		2	6
C.S.	6	Middle gear sliding pinion for mainshaft ...		8	6
C.S.	7	Middle gear sliding pinion for layshaft ...		10	0
C.S.	8	Layshaft pinion		5	0
C.S.	9	Mainshaft pinion		4	0
C.S.	10	Low gear and kickstarter pinion		10	0
C.S.	11	Kickstarter shaft or axle } supplied only Layshaft bush ... } assembled		12	6
L.S.	13	Kickstarter pawl		1	3
L.S.	14A	Kickstarter pawl pin			3
L.S.	17	Kickstarter crank return spring cover ...		1	0
L.S.	18	Kickstarter crank return spring		1	0
L.S.	19	Kickstarter crank stop spring			7
L.S.	20A	Kickstarter crank relief cam			3
L.S.	31	Sprocket for rear chain		7	6
L.S.	71	Sprocket fixing nut			9
C.S.	63	Chain sprocket locking plate			5
S.	35	Screw for same			1
C.S.	43	K.S. Pawl spring			1
C.S.	44	K.S. Pawl spring plunger			3
L.S.	32	Ball bearing cup			3
L.S.	33	Kickstarter axle bush		1	6
L.S.	34	Striking gear fork		6	6
L.S.	35A	Striking gear lever		6	6
L.S.	36	Oil retainer cap			3
L.S.	37	Rocking shaft lever bush		2	0
L.S.	38	Rocking shaft end bush or cap		1	6
L.S.	39	Rocking shaft		1	4
L.S.	40	Rocking shaft nut			6
L.S.	45	Compensator spring for rocking shaft ...			5
L.S.	75	Striking fork plate or slipper		2	6
L.F.	17	Gear box top guide plate		6	9
S.	172	Kickstarter crank cotter pin			2
S.	15	Nut for same			2
P.	70	Washer			1
L.S.	2A	Gear box end plate paper washer			1
L.S.	58	Kickstarter crank		12	6
C.S.	24	Ball bearing for layshaft or main shaft ...		8	9
C.S.	8A	Gear box filling or drain plug			9
C.S.	67	Packing or adjusting washers (each) ...			1
T.S.	6	Gear box fixing stud nut (each) ...			3
T.S.	5	Spring washer for same (each)			2

GEAR BOX PARTS



Gear Box—*continued.*

			£	s.	d.
T.S.	4	Gear box stud (each)			5
C.S.	10	Gear Box end plate nuts (each)			2
C.S.	9	Gear box end plate studs (each)			3
C.S.	143	Bolt for securing kickstarter crank spring			3
L/3 E.	265	Gear box adjuster (for front chain) ...		1	4
L/3 E.	271	Special long bolt for same			7
C.S.	20A	Main axle thrust washer		1	6

CLUTCH PARTS.

L.S.	50B	¼ rollers (each)			2
L.S.	50	Roller cage		2	0
L.S.	46	Clutch centre		13	6
L.S.	47	Clutch sprocket	1	6	0
T.S.	49A	Clutch outer plate		2	6
T.S.	50	Clutch back plate		2	6
C.S.	166	Clutch centre plate		2	6
C.S.	171	Clutch friction plate with insetts		5	0
T.S.	77	Clutch spring cup		3	0
T.S.	52A	Clutch spring		1	8
C.S.	173	Clutch end cap		1	6
L.S.	82A	Clutch rod			10
L.S.	94	Clutch thrust pin			10
C.S.	172	Clutch spring nut			9
T.S.	55	Clutch spring collar (fits over above) ...			6
C.S.	13	Axle nut (fixing clutch hub)			5
C.S.	14	Axle nut lock washer			1
C.S.	15A	Axle key for clutch hub			3
C.S.	68	Clutch worm nut		5	0
C.S.	69A	Clutch worm		1	9
C.S.	70A	Clutch worm lever		2	6
J.	200	Clutch worm lever pinch bolt			1
C.S.	72	Clutch cable adjuster support stud ...		1	0
C.S.	106	Clutch cable stop with nut			9
L.E.	52	Clutch cable (inner and outer) with nipples		5	6
L.E.	53	Clutch cable (outer)		3	6
L.E.	54	Clutch cable (inner)		1	6
L.E.	55	Clutch cable spring			3
C.S.	100B	Clutch handlebar lever (see handlebars)		12	0
C.S.	100	Lever portion only		4	0
C.S.	104	Lever fulcrum bolt and nut			3
C.S. X 90		Lever clip screw (each)			1
		Clutch Inserts (large or small) per doz.		1	0

GEAR CHANGE PARTS.

L.G.L.	10	Gear lever complete with gate		17	6
L.G.L.	8	Gate with tank plate only		7	6
L.G.L.	6	Gate fixing bolt			3
L.G.L.	3	Fulcrum stud for gear lever		1	0
L.S.	120	Cap nut for same			5

Gear Change Parts—*continued.*

			£	s.	d.
L.S.	121	Spring washer			4
L.S.	107	Gear lever with ball		5	0
L.G.L.	12/S	Gear rod complete		5	0
C.S.	87	Gear rod yoke end (each)			10
C.S.	37	Lock nut for same			2
C.S.	89	Yoke end pin			2
C.S.	108	Split pin for same (per dozen) ...			6

LUGGAGE CARRIER AND TOOL BOX

L/4 F.F.	228	Luggage carrier complete		16	0
L.F.	43	Bolt for fixing same (top)			4
S.T.D.	4	Nut for above			2
S.T.D.	11	Washer for above			1
L.F.	167	Bolt for fixing carrier to rear mudguard			3
S.T.D.	5	Nut for above			2
L.F.	39	Bolt for fixing carrier (bottom end) each ...			2
L.F.	151	Tool box for luggage carrier		15	0
L.F.	167	Bolts for fixing same (each)			3
S.T.D.	5	Nut for above (each)			2
L.F.	166	Rear number plate (see also mudguards) acetylene lamp type		1	1

SPECIAL PARTS TAKING THE PLACE OF CARRIER WHEN HAND HOLD IS FITTED IN LIEU.

L.F.	300/R	Hand hold arch piece		7	6
L.F.	39	Bolt securing arch piece bottom end ...			2
L.F.	167	Bolt securing arch piece to mudguard ...			3
S.T.D.	5	Nut for same			2
L.F.	151	Tool box only		15	0
L.F.	167	Bolts securing tool box (each)			3
S.T.D.	5	Nut for above			2
		For other special parts see mudguard section			

MUDGUARDS.

L/4 M.	142	Front mudguard only		15	6
L.M.	70/R	Front mudguard side fixing bolts (each) ...			3
S.T.D.	5	Nut for mudguard side fixing bolts (each)			2
L/4 M.	140	Front stand fixing stud			3
L.M.	75/R	Collar for front mudguard side bolt ...			3
S.T.D.	5	Lock nuts for stud (each)			2
L/4 M.	141	Wing nut for front stand fixing		1	0
L.M.	1	Rear mudguard (carrier type)		12	9
L.F.	39	Rear mudguard fixing bolt (chain stay bridge)			5
L.F.	41	Rear mudguard fixing bolt (top stay bridge)			6
S.T.D.	4	Nut for fixing bolt			2
L.F.	167	Bolt fixing mudguard to luggage carrier			3
S.T.D.	5	Nut for above			2
L.F.	167	Bolt securing mudguard to tool box ...			3
S.T.D.	5	Nut for same			2

Mudguards—*continued.*

			£	s.	d.
L.M.	29	Rear stand clip screwed stud			4
S.T.D.	5	Locking nuts for above (each)			2
L.M.	141	Wing nut for rear stand		1	0
L.M.	74/R	Rear mudguard (non carrier type) ...		13	6
L.M.	72/R	Left side rear mudguard stay			9
L.M.	72/R	Right side rear mudguard stay			9
L.M.	69/R	Support rod for rear number plate bracket			5
S.T.D.	4	Nuts for above (each			2
S.T.D.	11	Washer for nut (each)			1
L.M.	73/R	Distance tube for rod			6
L.F.	167	Top mudguard stay bolt			3
S.T.D.	5	Nut for same			2

TANK AND FITTINGS.

			£	s.	d.
L.T.	68/R	Tank less all fittings	4	17	6
L.T.	71/R	Tank hinged filler cap (oil or petrol) ...		3	6
L.T.	49	Fulcrum screw for cap			2
L.T.	31	Petrol tap and filter		4	2
L.T.	33	Filter only for petrol tap			6
L.T.	32	Petrol drain tap		1	9
L.E.	437/R	Petrol pipe (see also carburetter)		4	0
L.T.	16/R	Petrol tank fixing bolt (rear). L.T. 55 front			6
L.T.	53	Petrol tank fixing bolt rubber pad ...			5
L.T.	56	Petrol tank fixing bolt rubber pad washer			2
L.T.	17/R	Capped nut for rear fixing bolt			6
L/3 E	287	Oil pipe union and filter		2	3
L.T.	51	Oil sight feed regulator (for big end lubrication)		5	0
L.T.	50	Regulator needle and gland nut only ...		2	0
L.T.	34	Knee grips (per pair) complete		5	0
L.T.	35	Fixing bolt only			3
L.T.	36	Fixing plate only			6
L.T.	61	Petrol tank U pipe		2	4
L.T.	48	Screwed nipples for above (screw into tank bottom)			3
L.T.	59	Union nut for U pipe			4
		Nipple for U pipe			3

STANDS.

			£	s.	d.
L.F.F.	67	Front stand only		5	0
L.F.	32	Front stand fixing bolt			3
S.T.D.	5	Front stand fixing bolt lock nut			2
L.F.	31	Rear stand only		10	9
L.F.	38	Rear stand fixing bolt			3
L.F.	19	Rear stand fixing bolt lock nut			4
L.M.	29	Stand clip screwed stud			3
S.T.D.	5	Locking nut for screwed stud			2
L.M.	141	Stand clip fly nut		1	0

REAR WHEEL AND BRAKE PARTS.

			£	s.	d.
L/4 F	265	Rear wheel complete with Dunlop Cord Tyre.	6	12	0
L/4 F.	278	Rear wheel complete less tyre	3	18	6
L/4 F.	258	Rear wheel bare (less all fittings including hub interior)	2	17	6
L/4 C.	100	Rear wheel chain sprocket		8	0
L.C.	6	Fixing bolts for above (each)			2
S.T.D.	4	Lock nut for above (each)			2
L/4 B.	104	Rear wheel brake drum		10	9
L/4 B.	105	Fixing bolts (each)			5
L/4 B.	106	Nut for above			3
L/4 B.	107	Rear brake cover plate assembled with bands, etc.	1	5	3
L/4 B.	87	Cover plate only		9	0
L/4 B.	84	Brake shoes per pair with linings (less spring)		11	8
L/4 B.	108	Brake shoe linings only with rivets (pair)		3	8
L/4 B.	71	Brake shoe internal spring (each)			7
L/4 B.	109	Brake shoe fulcrum stud			9
S.T.D.	3	Nut for same			4
L/4 B.	83	Brake shoe expander		3	0
L/4 B.	82	Brake shoe expander lever		1	6
L/4 B.	90	Nut for above			5
L/4 B.	91	Spring washer			3
L.B.	44/R	Rear brake rod		2	5
S.T.D.	4	Nuts for same (each)			2
L/4 B.	92	Brake rod toggle or crosshead			8
S.T.D.	14	Split pin for fixing toggle (per doz.) ...			6
S.T.D.	11	Washer			1
L.B.	36/R	Yoke end for front end of brake rod ...			9
L.B.	2/R	Yoke end bolt			3
S.T.D.	5	Lock nut for above			2
L.B.	45/R	Rear brake pedal		4	9
L.B.	46/R	Rear brake pedal pull off spring			4
L.B.	30/R	Rear brake pedal fulcrum stud		1	6
L.B.	5	Long bolt fixing above			6
S.T.D.	3	Nut for bolt			3
S.T.D.	10	Washer for same			1
L.B.	6	Distance tube for above (between plates)			4
L/4 B.	86	Rear wheel spindle		2	4
L/4 B.	76	Spindle nuts (each)			7
L/4 B.	75	Spindle washer (plain)			3
L/4 B.	89	Spindle washer (domed)			4
L/4 B.	73	Taper cone (fixed)			
L/4 B.	72	Taper cone (adjusting)	Supplied		
L/4 B.	114	Rollers and cage	complete	6	0
L/4 B.	113	Hardened steel outer roller race	only		
L.B.	40/S	Shouldered bolt for anchoring brake cover plate			6

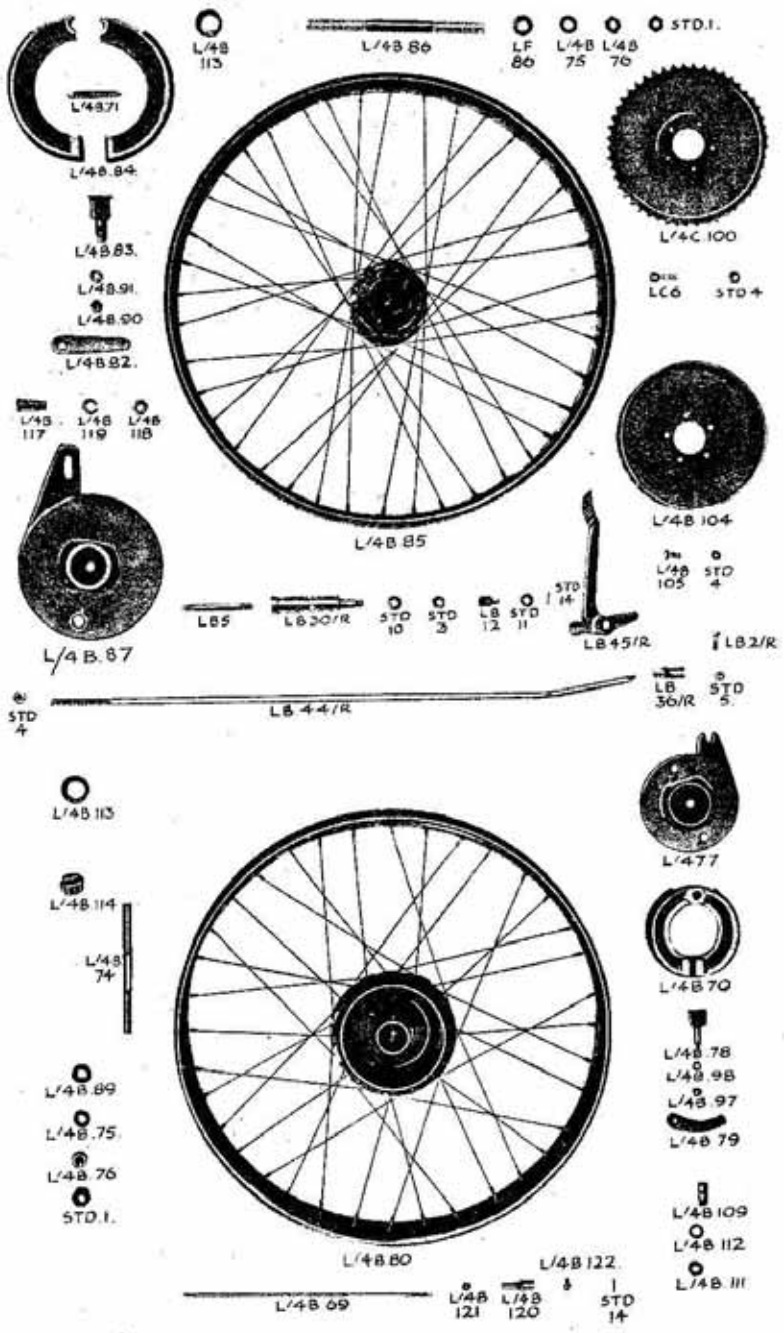
Rear Wheel and Brake Parts—*continued.*

			£	s.	d.
S.T.D	3	Nut for same			3
L/4 B.	81	Rear hub lubricator			4
L/4 F.	285	Rear wheel tyre complete (Dunlop Cord 650 × 65)	2	13	6
L/4 F.	283	Cover only (Dunlop Cord 650 × 65) ...	2	5	0
L/4 F.	284	Tube only		8	6
L/4 F.	253	Rear wheel spokes (each)			1
L.F.	64	Rear wheel spoke nipples (each)			2

FRONT WHEEL AND BRAKE PARTS.

L/4 F.	266	Front wheel complete with Dunlop Cord Tyre	5	9	6
L/4 F.	267	Front wheel complete less tyre	2	16	0
L/4 F.	257	Front wheel only (less all fittings including hub interior	2	1	0
L/4 F.	77	Front brake cover plate complete with shoes, etc.		18	0
L.B.	110	Front brake cover plate only		8	0
L.B.	70	Front brake shoes with linings (per pair) less spring		7	9
L.B.	108	Brake shoe linings only with rivets (per pair)		2	5
L.B.	109	Fulcrum stud for shoes			9
L.B.	111	Nut for same			5
L.B.	112	Washer			3
L/4 B.	71	Front brake shoe internal spring (each) ...		1	6
L/4 B.	78	Front brake shoe expander		2	5
L/4 B.	79	Front brake shoe expander lever ...		1	3
L/4 B.	97	Nut securing above			4
L/4 B.	98	Washer for nut			3
L/4 B.	74	Front wheel spindle		2	3
L/4 B.	76	Spindle nuts (each)			7
L/4 B.	89	Spindle washer (domed)			4
L/4 B.	75	Spindle washer (plain)			3
L/4 B.	73	Taper cone (fixed)			
L/4 B.	72	Taper cone (adjusting) — Supplied complete only			
L/4 B.	113	Hardened steel roller bearing outer race — Supplied complete only		6	0
L/4 B.	114	Rollers and cage			
L/4 B.	81	Hub lubricator			5
L.B.	49/R	Special bolt for anchoring front brake cover plate			6
S.T.D.	3	Nut securing above bolt			3
S.T.D.	10	Washer for nut			1
L/4 B.	69	Front brake rod only			9
L/4 B.	115	Bottom end toggle for rod complete with eye bolt and pin		1	3
L/4 B.	116	Eye bolt only with nut and washer ...			6
L/4 B.	94	Nut for above only			3

WHEELS AND PARTS



Front Wheel and Brake Parts—*continued.*

			£	s.	d.
L/4 B.	95	Washer only			1
L/4 B.	92	Fulcrum pin only for toggle with split pin			4
L.B.	32	Front brake cable (inner and outer assembled with spring box, etc.)		4	2
L.B.	23	Front brake cable (inner only with nipples)			9
L.B.	24	Front brake cable (outer with thimbles)		1	7
L.B.	25	Front brake cable spring box		1	0
L.B.	26	Front brake cable spring box spring ...			3
L.B.	27	Front brake cable adjuster stop and lock nut			7
		Front brake handlebar lever complete (see handlebar)			
L/4 F.	285	Front wheel tyre complete (650 × 65) Dunlop Cord	2	13	6
L/4 F.	283	Cover only (650 × 65) Dunlop Cord ...	2	5	0
L/4 F.	284	Tube only		8	6
L/4 F.	251	Front wheel spoke (left side)			1
L/4 F.	252	Front wheel spoke right or brake side ...			1
L/4 F.	64	Front wheel spoke nipples (each)			2

CHAIN GUARDS AND CHAINS.

L.C.	33	Rear chain guard		7	6
L.F.	37	Bolt fixing same (rear end)			3
S.T.D.	4	Nut for above			2
L.F.	61	Bolt for front end (engine bolt)			5
L.C.	46/S	Front chain guard		16	6
L/3 C.	52	Long bolt securing centre (see also engine bolts			6
L/3 C.	53	Distance piece for rear end fixing stud ...			5
S.T.D.	4	Nut for rear end fixing stud			2
S.T.D.	11	Washer			1
L.C.	13	Rear driving chain	1	0	0
L.C.	47/S	Front driving chain		11	0
L.C.	19	Detachable connecting link only			5
L.C.	21	Cranked chain link			7
L/4 M.D.	45	Magneto chain (endless)		2	6
L.C.	25	Chain rivet extractor (for drive chains only)		5	0
L/3 C.	59	Distance tube engine plate to chain case ...			5
S.T.D.	3	Nuts for bolt (each)			3

FOOTREST AND PARTS

L.F.R.	32/R	Footrest rod only		1	6
S.T.D.	3	End nuts for rod only (each)			2
L.F.R.	11	End spigot washer (each)			3
L.F.R.	64	Left or right side spacer tube			7
L.F.R.	63	Centre spacer tube			5
L.F.R.	54	Footrest pad and holder assembled ...		2	2
L.F.R.	51	Footrest pad only			10
L.F.R.	53	Footrest pad flanges only (each)			3
L.F.R.	52	Footrest pad centre tube			5

HANDLEBAR, ETC.

			£	s.	d.
L.F.F.	124/R	Handlebar bare	1	2	0
L/4 F.F.	58	Handlebar with grips	1	5	6
L.F.F.	127/R	Inverted lever left or right complete ...		7	6
L.F.F.	128/R	Lever portion of above only		3	9
L.F.F.	129/R	Body portion only		3	3
L.F.F.	130/R	Fulcrum screw for lever			4
L.F.F.	131/R	Nut for ditto			2
S.T.D.	44	Screw securing body portion to handlebar			2
L/4 F.F.	64	Handlebar clip bolt...			6
S.T.D.	3	Nut for ditto			3

SADDLE AND PARTS

L.F.	313/R	Saddle only (special type Terry)	2	11	6
	317/R	Bolt securing front end to frame tube ...			6
S.T.D.	3	Nut for bolt			3
L.F.	310/R	Tubular bracket supporting rear end ...		6	0
L.F.	43	Bolt fixing support bracket to frame ...			4
S.T.D.	3	Nut for above bolt			3
S.T.D.	4	Nut securing saddle to tubular bracket ...			2
S.T.D.	11	Washer for above nut			1

MAGNETO AND PARTS.

L.M.D.	12	Complete magneto	3	15	0
L.M.D.	58	Contact breaker only complete	1	2	6
L.M.D.	59	Contact screws only (pair)		12	6
L.M.D.	23	High tension pick up new type		2	6
L.M.D.	60	Carbon brush only			6
L.M.D.	61	Spring for same			
L.E.	159	Sparking plug cable with terminal end ...		1	0
L.M.D.	11	Magneto chain sprocket		3	0
L.M.D.	62	Bolt for same			2
L.E.	122	Sprocket for magneto drive (engine end)...		2	6
L.E.	134	Special nut for fixing same			11
L.E.	129/S	Magneto platform or base		7	6
L.M.D.	33	Bolt for fixing magneto to same			2
S.T.D.	5	Nut for above			2
L.M.D.	9	Magneto chain adjuster stud			5
L.M.D.	8	Special double headed nut for same ...			9
L.M.D.	25	Magneto advance and retard cable (inner)			9
L.M.D.	26	Magneto advance and retard cable (outer)		2	0
L.M.D.	27	Handlebar lever for above complete ...		6	9

MECHANICAL OIL PUMP AND PARTS.

5061/5475		Oil pump complete with tell-tale ...		19	0
5475		Tell tale only complete		2	6
L/3 E.	330	Tell tale plunger and cap			9
5475/1		Aluminium pump body		3	0
L/3 E.	326	Screwed plug with fibre washer (fits inside of above)			8

Mechanical Oil Pump and Parts—*continued.*

			£	s.	d.
5475/5		Steel worm shaft		1	0
5475/3		Bronze worm sleeve		1	6
5475/2		Regulating block (with handle extension)		1	6
5475/9		Index plate for above			6
L/3 E.	324	Screws securing plate (per dozen) ...			6
5475/4		Steel pump plunger		1	6
L/3 E.	337	Screwed oil pipe connection with washer ...			4
L.E.	434/R	Oil pipe tank to pump		5	3
L.E.	436/R	Oil pipe pump to camshaft housing ...		4	6
L.E.	454/R	Oil pipe (sight feed regulator to timing cover		4	0
L/3 E.	247	Camshaft housing pipe screwed connection			3
L/3 E.	248	Oil pipe union nut only			4
L/3 E.	290	Oil pipe nipple only			3

CARBURETTER B. & B.

			£	s.	d.
L.E.	402/S	Complete Carburetter (special type B. & B.	2	10	0
L/3 E.	338	Float chamber body only		8	6
L/3 E.	339	Float chamber cap and tickler		7	8
L/3 E.	340	Float chamber, needle valve			10
L/3 E.	341	Float		2	6
L/3 E.	342	Main jet complete		1	9
L/3 E.	343	Fibre washer for same			1
L/3 E.	344	Pilot jet			9
L/3 E.	345	Pilot jet air screw and spring			7
L/3 E.	346	Jet taper needle		1	9
L/4 E.	347	Needle holder and screw			7
L/3 E.	348	Spraying chamber		8	6
L/3 E.	349	Spraying chamber cap with bushes ...		1	8
L/3 E.	350	Spraying chamber cap lock ring		1	3
L/3 E.	351	Clip and bolt for inlet port		1	8
L/3 E.	352	Bolt only			3
L/3 E.	353	Throttle valve } per		6	9
L/3 E.	354	Air valve } pair			
L/3 E.	355	Valve springs (pair)		1	2
L.E.	59	Control levers complete		7	0
L.E.	356	Air lever only		2	11
L.E.	357	Throttle lever only		2	11
L.E.	358	Control cables (inner and outer) complete...		5	9

EQUIPMENT.

			£	s.	d.
L.E.Q.	56	Acetylene lamp set complete	2	2	6
L.E.Q.	57	Rubber tubing, per yard		1	6
L.E.Q.	58	Head lamp only (with special fitting) ...	1	11	0
L.E.Q.	59	Tail lamp only		3	6
L.E.Q.	60	Head lamp burner		2	1
L.E.Q.	61	Tail lamp burner			6
L.E.Q.	62	Generator		11	6

Equipment—*continued*

			£	s.	d.
L.E.Q.	64	Cowey Speedometer gear box		15	0
L.E.Q.	65	Cowey speedometer complete (special 100 m.p.h. type) Model S.	4	5	0
L.E.Q.	35	Cowey speedometer driving wheel ...		3	0
L.E.Q.	36	Cowey speedometer driving wheel screw and clamps		2	0
L.E.Q.	37	Cowey speedometer driving wheel complete		5	0
L.E.Q.	38	Cowey speedometer flexible drive complete		12	6
L.E.Q.	39	Cowey speedometer sheath and coil (per ft.)		1	6
L.E.Q.	40	Cowey speedometer cable (per ft.)		1	4

TOOLS.

			£	s.	d.
L/3 T.K.	16	Oil injector		1	0
L/3 T.K.	15	Six inch combination pliers		1	6
L/3 T.K.	13	Six inch wire screwdriver			9
L/3 T.K.	10	Double end forged spanner $\frac{1}{4} \times 5/16$ ins.		1	3
L/3 T.K.	11	Double end forged spanner $\frac{3}{8} \times \frac{1}{2}$ ...		1	6
L/3 T.K.	9	Tappet adjusting spanner			9
L/3 T.K.	19/S	Thin cone adjusting spanner			6
L.T.K.	12	Six inch adjustable spanner		6	0
L.T.K.	18	Large open end spanner for timing gear bevel shaft housing lock nut		2	0
L.T.K.	20	Tecalemit Grease Gun		3	0
L.T.K.	14	Tyre lever			3
L.T.K.	21	Tyre pump		3	9
L.T.K.	5	Magneto spanner			4
L.T.K.	17	Tool roll only		4	0
L.T.K.	7	Tool roll complete with all tools (less pump)	1	2	6
L.F.	151	Tool box only (see also luggage carrier) ...		15	0