

Matchless
IN NAME & REPUTATION

**INSTRUCTION BOOK
AND
SPARE PARTS LIST**

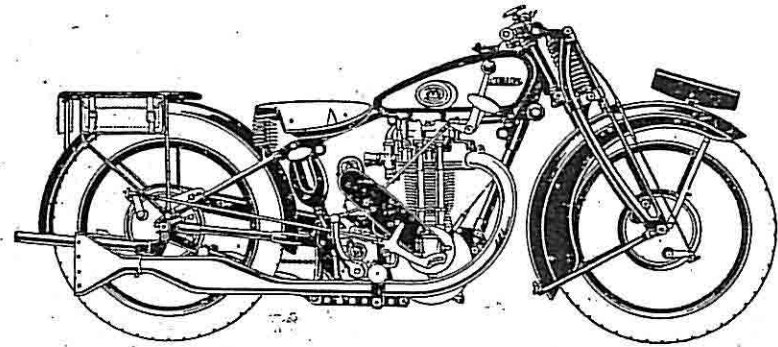
**MODEL
V/2**



DINGLE'S PRINTERS
100, N. W. CORNER
100, N. W. CORNER

1929/3/24

DRIVING AND ADJUSTMENT INSTRUCTIONS.



"MATCHLESS" MODEL "V/2"

H. COLLIER & SONS, LIMITED,
Manufacturers,

Registered Offices:

**44-45, Plumstead Rd., Plumstead,
London, S.E.18, England.**

Nearest Station:

WOOLWICH ARSENAL, S.R.

Factories:

BURRAGE GROVE & MAXEY ROAD,
PLUMSTEAD, S.E.

And MAST POND WHARF, WOOLWICH

Telegrams and Cables: "Matchless," Woolwich.

Telephone: Woolwich 1010 (4 lines).

Code { A.B.C. 5th and 6th Edition
Bentley's
and 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 V/2 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 16 and 17) for Instructions re ordering parts and particulars of Deposit Account System.

H. COLLIER & SONS, LIMITED.

General Description.

STARTING.

The new Model V/2 described herein has been introduced to meet the requirements of the keen competition rider or the high speed average enthusiast. The engine is particularly robust in construction and its capability for sustained extraordinary power output has not been obtained at the sacrifice of strength or reliability in the slightest degree, special alloy metals being used where a high factor of safety is required. The overhead rockers are mounted on roller bearings in an aluminium housing bolted over the cylinder head, Tecalemit grease nipples being provided to facilitate occasional lubrication. A special duplex delivery oil pump is fitted by means of which four-fifths of the oil supply is delivered to the connecting rod big end and the remainder to the rear of the cylinder wall. This distribution will be at once appreciated by the expert as ideal for all conditions. The tubular push rods are completely enclosed in oil-tight tubes but are arranged to permit of easy tappet adjustment. The cylinder head is perfectly finned and free from any undesirable mass of metal. It is secured to the cylinder by six evenly spaced bolts, ensuring a perfectly sound joint without resort to washers or packing of any description. With regard to the general handling of the Model V/2, 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 lever (about one-third forward from rearmost position in quadrant) is at a point where the small projection in gear quadrant engages with a slot in the gear lever. The engine must always be started with the gear lever in this neutral position. 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 advanced.

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. A small milled edge screw at the bottom of mixing chamber controls the air supply to pilot jet. This screw is accurately set at the works, but on account of variation in fuel or temperature, it may be found desirable to alter the adjustment occasionally. It should be explained, therefore, that by unscrewing, more air is admitted thereby weakening the mixture or vice versa, screwing in enriches the mixture by decreasing the air supply. This adjustment only affects carburation on very small throttle openings, and dead slow running. The taper needle attached to the throttle piston controls the petrol supply on large throttle openings. To

Starting—contd.

weaken the mixture this needle must be lowered or alternatively to enrich it is necessary to raise same. These remarks are intended only to roughly convey some idea of the carburetter working and owners are advised to refrain from making any adjustments without good cause.

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 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 when the starter crank is about half-way. 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 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, 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 thousands of miles riding.

LUBRICATION.

ENGINE.

At all times when starting from cold, a thin film of oily smoke should be observed in the exhaust, and should this not be seen, the oil supply should be slightly increased. The oil delivery is set while machines are undergoing road test upon the liberal side, and unless this somewhat excessive supply causes trouble such as oiled up sparking plug, etc., it should not be reduced until at least 500 miles have been covered, by which time most bearings will have settled down. The oil passing into engine interior can be at all times observed through the transparent window of oil pump, and the approximately correct setting (after the initial running in period referred to above) is 18 to 20 drips per minute at about 20 m.p.h. This setting can best be checked by running the engine light at about the same rate as given by a road speed of 20 m.p.h. and counting the drips for one whole minute. This method of checking will be found quite simple and any alteration found necessary may be made in a second, by screwing in or out as the case may be, the knurled edge adjusting screw fitted to the side of oil pump body. Screw in, i.e., turn clockwise, to reduce the supply and vice versa to increase. Other than above it is impossible to lay down any hard and fast rules for lubricating. It must always be remembered that when in doubt it is safer to err on the generous side. Use only Wakefield Castrol R or Castrol XL, the former for preference, particularly for sustained

Engine—contd.

high speeds. Refuse all others and accept only sealed tins. Above all avoid the just as good sort from bulk.

NOTE.—Wakefield Castrol R or Castrol XL specially recommended.

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 Tecalemit Grease or Wakefield Castrolase. 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) Wakefield Castrolase 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 small quantity of grease forced through them. (Wakefield Castrolase 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, unscrew the lower portion of the push rod covering tube by means of the hexagonal collar provided on same, and slide up to uncover the adjustable tappet head. Then hold tappet head (bottom large hexagon) with spanner provided, and slack off lock nut securing tappet head. Then screw head down or up, as required, until correct clearance is obtained, after which securely lock in position with lock nut.

NOTE.—Correct clearance between rocker end and exhaust valve stem when valve is down on its seating is .004 while that for the inlet is .002. To obtain the best results as regards silence of valve gear, these clearances should be accurately maintained, and a cheap set of engineers' feeler gauges will be found very useful for checking purposes.

TO REMOVE CYLINDER HEAD.

First remove both exhaust pipes and silencers. Then withdraw throttle and air valves from carburetter, and remove petrol pipe and sparking plug. Next remove the small tie tube attached to the top of the foremost bolt which secures the overhead rocker housing. Now unscrew the lower portions of both tappet rod tubes, and slide these lower portions up until the ends of tappet rods are exposed. Next unscrew the three bolts securing the overhead rocker housing, and remove entirely this housing complete with push rods and push rod tubes, etc. After removing the six cylinder head fixing bolts the head is free to 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 collar. It may be necessary to give the valve spring cap a sharp tap to release this taper collar. After removing all carbon deposit the face of each valve seating should be smeared with a good grinding paste (this may be obtained already mixed) and the valve revolved slightly backward and forward (never revolve completely) while light pressure is applied to the head. During this operation it is advisable to occasionally raise the valve off its seating and turn in the guide slightly, afterwards repeating the backward and forward movement. Generally one application only of grinding paste will be ample for the inlet, but two or three applications may be necessary to entirely restore the exhaust valve seating. After this grinding in has been satisfactorily accomplished, all traces of the grinding mixture should be carefully washed off with petrol, and both valve stems and guides cleaned thoroughly. Prior to refitting it is advisable to smear each valve stem with Graphite Grease.

NOTE.—When refixing the overhead rocker assembly and push rods, it will be found necessary first of all to see that both tappets are down, and secondly, advisable to draw the assembly down into position by means of the central fixing bolt, after which the two side bolts may be screwed home. All three bolts must of course, be in position in their respective holes before the assembly is fitted, as it is not possible on account of height to introduce same when the assembly is in position.

VALVE TIMING.

The correct setting for the closing and opening of valves is as follows: Inlet commences to open 25 degrees or $3/16$ ins. before top of exhaust scavenging stroke, and closes 50 degrees or $1/2$ ins. up the compression stroke. Exhaust valve commences to open 68 degrees or $29/32$ ins. from bottom of firing stroke and closes 21 degrees or $9/64$ ins. down induction stroke. To test these settings the rockers should be set at their correct respective clearances, which are .002 for the inlet and .004 for the exhaust. A cheap set of engineers' feeler gauges will be found very useful for checking rocker clearances, which should be carefully maintained if best results are required.

IGNITION SETTING.

With ignition fully advanced the contact points of magneto should break 40 degrees or approximately $1/2$ ins. before the top of compression 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 the adjustment of magneto chain is obtained by sliding the magneto platform along the engine cradle plates by means of the adjuster bolt passing through a small lug on the left side plate. To adjust chain, slack off the four gear box fixing stud nuts and screw the small adjuster nuts towards the end of the stud upon which they are mounted to tighten or vice versa to slacken, taking care to leave both tightly locked against the small lug referred to above when the correct adjustment has been obtained, after which, securely tighten down the four gear box stud nuts.

NOTE.—Correct chain adjustment is such that when the top of chain is lightly pressed up and down a whip of about $1/8$ ins. to $1/4$ ins. is obtained.

TO ADJUST FRONT CHAIN.

Adjustment of the front chain is arranged by sliding the gear box bodily forward or backward as the need may be upon the rear engine cradle plates under which it is mounted. A screwed draw bolt is provided forward of the gear box, operating through a bar fixed between the two cradle plates. To tighten the front chain firstly slack off the four gear box holding down nuts and also the bolt which passes through cradle plates immediately above gear box. Then slack off a few turns, the front nut on the draw bolt referred to (i.e., the nut farthest from gear box) and screw up the special double hexagon rear nut until the correct chain tension is obtained, when the front nut must be screwed up tightly against the cross bar and all other gear box fixing nuts thoroughly tightened down. It should be explained here, that two sizes of hexagon spaced alternatively are provided on the special nut referred to above, to facilitate adjustment, and it will be found that both sizes are arranged for on one of the standard spanners in tool kit.

NOTE.—Correct chain tension should allow a whip or movement of $1/8$ ins. to $1/4$ ins. as chain is pressed lightly up and down.

TO ADJUST REAR CHAIN.

Put down rear stand, then slack off rear wheel spindle nuts. Then adjust chain as required, by means of the bolts which pass through each of the fork ends, after which securely tighten spindle nuts. Tension of chain should be tried in a number of places, and

To Adjust Rear Chain—contd.

the correct adjustment (which should allow a whip of $\frac{3}{8}$ ins. to $\frac{1}{2}$ ins. 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 $\frac{3}{16}$ ins. less than right or brake side. 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 slackened off and the lower nut screwed down until all trace of slackness has disappeared when the top cap nut should be again tightened down.

IMPORTANT.—To guard against unconsciously over-tightening 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 ADJUST WHEEL BEARINGS.

To adjust either rear or front wheel bearings, slack off the left side spindle nut and with the spanner provided slack off the adjusting cone lock nut, after which 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.

NOTE.—A slight amount of shake is essential.

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 and backward 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 INSPECT GEAR BOX INTERIOR.

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

To Inspect Gear Box Interior—contd.

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 or seccotine before assembling.

PERIODICAL INSPECTION OF NUTS, ETC

Satisfactory service depends largely upon the necessary immediate attention to details. The old adage "A stitch in time saves nine" applies with particular force to motorcycle maintenance. Make a point of testing the security of all nuts occasionally with a spanner. There is possibly more dissatisfaction and damage caused through neglecting details than for any other reason. It must always be remembered that a motorcycle is a highly specialised piece of engineering, and that while it does not call for great engineering skill in driving, the exercise of a little mechanical sense and the occasional use of a spanner, cleaning cloth, etc., is very necessary if the maximum of service is to be obtained with the requisite degree of satisfaction. Therefore, do not wait until to-morrow, but adjust it now.

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.
- Oiled up sparking plug.

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 carburettor being disturbed).
- Paraffin in petrol or bad petrol.
- Valve seating burnt.
- Faulty or badly adjusted magneto contacts.
- Defective sparking plug cable.

ENGINE WILL NOT START. Probable cause:—

- Too liberal throttle opening.
- Valve stuck up.
- Water on plug, or oiled up plug.
- Choked jet, or insufficient flooding.
- Valve or valves not seating properly.
- Defective sparking plug cable.
- Magneto contact breaker arm stuck.

LEGAL MATTERS.

NOTE.—In view of the growing public objection to noisy motorcycles, a word of warning on this subject may not be out of place here. Firstly, it has been noted and freely commented upon that much of the noise complained of is unnecessary, being due to injudicious driving as for instance, violently accelerating from a standstill, racing the engine when stationary, driving on full throttle when ascending hills in residential districts, etc. Any motorcycle, or for that matter, any motor vehicle driven in this manner creates abnormal noise, and in the interests of all, we earnestly implore every "Matchless" owner to studiously refrain from any of the practices enumerated.

To comply with the Law relating to motorcycles, the owner of a "Matchless" Model V/2 must:—

1. Hold a driver's license, which can be obtained from the Chief Constable or Corporation of a County Borough, or from the County Council. The charge for this license is 5/- yearly, and must be renewed annually from the date of issue. A Motorcar driver's license 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 License 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 if used solo and £4 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 Agent's Invoice will serve.
4. See that his front plate is illuminated at night on both sides. See that his machine if used with sidecar is provided with a lamp on the extreme near side of same showing a light forward compulsory in some counties only by (by-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.

For registration purposes, the following particulars will be required:

Weight of cycle unladen	260lbs.
Weight of sidecar (if requested)	100lbs.
If sidecar is detachable (if requested only)	Yes.
Description or type of motorcycle	"Matchless" Motorcycle.
Position of front number plate	On front mudguard, visible from either side.
Position of rear number plate	On back end of carrier behind saddle, and visible from the rear.

GUARANTEE.

We give the following guarantee with our motorcycles, motorcycle combinations and sidecars, which is given in place of any implied conditions, warranties or liabilities whatsoever, statutory or otherwise, all such implied conditions, warranties and liabilities being in all cases excluded. Any statement, description, condition, or representation contained in any Catalogue, advertisement, leaflet or other publication shall not be construed as enlarging, varying or overriding this guarantee. In the case of machines which have been used for "hiring out" purposes, or racing, or from which the trade mark name or manufacturing number has been removed, no guarantee of any kind is given or is to be implied.

WE GUARANTEE, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but this guarantee is to extend and be in force for six months only from date of purchase, and damages for which we make ourselves responsible under this guarantee are limited to the free supply of a new part in exchange for the part of the motorcycle, motorcycle combination, or sidecar which may have proved defective. We do not undertake to replace or refix, or bear the cost of replacing or refixing, such new part in the motorcycle, motorcycle combination or sidecar. We undertake, subject to the conditions mentioned below, to make good at any time within six months any defects in these respects. As motorcycles, motorcycle combinations, and sidecars are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse or neglect.

The term "misuse" shall include amongst others the following acts:—

1. The attaching of a sidecar to the motorcycle in such a manner as to cause damage or calculated to render the latter unsafe when ridden.
2. The use of a motorcycle or of a motorcycle and sidecar combined, when carrying more persons or a greater weight than for which the machine was designed by the manufacturers.
3. The attaching of a sidecar to a motorcycle by any form of attachment not provided or supplied by the manufacturers, or to a motorcycle which is not designed for such use.

Any motorcycle, motorcycle combination or sidecar sent to us to be plated, enamelled or repaired will be repaired upon the following conditions, i.e., we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, such guarantee to extend and be in force for three months only from the time such work shall have been executed or until

the expiration of the six months above referred to, and this guarantee is in lieu and in exclusion of any common law or statute warranty or condition 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.

CONDITIONS OF GUARANTEE.

If a defective part should be found in our motorcycles, motorcycle combinations or sidecars, or in any part supplied by way of exchange before referred to, it must be sent to us CARRIAGE PAID, and accompanied by an intimation from the owner that he desires to have it repaired or exchanged free of charge under our Guarantee, and he must also furnish us at the same time with the number of the machine, the date of the purchase, or the date which the alleged defective part was exchanged as the case may be.

Failing compliance with the above, such articles will lie here AT THE RISK OF THE OWNER, and this guarantee and any implied guarantee, warranty or condition shall not be enforceable.

We do not guarantee specialities such as tyres, saddles, chains, lamps, etc., or any component parts supplied to the order of the purchaser differing from standard specifications supplied with our motorcycles, motorcycle combinations, sidecars or otherwise.

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" Model V/2.

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 16 and 17.

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 notice.

IMPORTANT NOTE RE C.O.D.—Owing to the labour involved and to the fact that the minimum C.O.D. fee is 10d., goods to the value of 5/- and over only can be sent on the above system.

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 unduly 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 quotations new parts and repairs that we consider essential to make the machine suitable and satisfactory for the road.

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 senders' 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. Any such damage should be immediately reported.

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.

A

			£	s.	d.
M.E.	8	Axle for flywheel (transmission side) ...	6	9	
V.E.	26	Axle for flywheel (timing gear side) ...	6	6	
V/2E.	218	Axle for flywheel (crankpin) ...	8	6	
L/3E.	231	Axle for cam levers ...	2	0	
L/3E.	231	Axle for valve lifter cam block ...	2	0	

B

M.E.	9	Bush (hardened steel for crankcase) transmission side ...	5	7	
V.E.	27	Bush for flywheel axle (timing gear side) ...	3	6	
L/3E.	89	Bush for gudgeon pin ...	3	6	
L/3E.	233	Bush for camshaft (cover side) ...	2	0	
L/3E.	234	Bush for camshaft (crankcase side) ...	1	9	
L/3E.	213	Bush (screwed) for valve lifter rod ...	1	0	
		Breather for crankcase (see release valve)			

C

V.E.1.		Cylinder (bare) ...	1	15	3
V/2E.	126	Cylinder fixing stud (each) ...			5
V/2E.	197	Cylinder stud nut (each) ...			5
V/2E.	202	Cylinder head (2 Port) bare ...	2	7	6
V.E.	88	Cylinder head fixing bolt (short head) ...			10
M.E.	88	Cylinder head fixing bolt (medium head) ...			9
M.E.	87	Cylinder head fixing bolt long head with extension ...	1	2	
V.E.	106	Crankcase complete with bushes and studs (supplied complete only) ...	4	10	0
L/3E.	239	Crankcase oil drain plug ...			4
M.E.	255	Crankcase bolt $\frac{3}{8}$ in. diam. (short) ...			6
M.E.	54	Crankcase bolt $\frac{3}{8}$ in. diam. (long) ...			8
S.T.D.	3	Nuts for above (each) ...			3
S.T.D.	10	Washer for nut ...			1
H.E.	18	Crankcase bolt $\frac{5}{16}$ in. diam. ...			6
S.T.D.	4	Nut for above (each) ...			2
V/2F.R.	9	Crankcase bolt $\frac{3}{8}$ in. diam. for footrest rail support ...			8
H/2F.B.	33	Distance tube for above, right side ...			4
V/2F.R.	33	Distance tube for above, left side ...			3
S.T.D.	1	Nut for $\frac{3}{8}$ in. diam. bolt (each) ...			5

C.—contd.

			£	s.	d.
L/3E.	203	Crankcase cover for timing gear (see timing gear)			
L.E.	40/S	Connecting rod only ...	9	6	
L.E.	464/R/A	Connecting rod with big end assembly and small end bush ...	1	12	3
V/2E.	218A	Crankpin assembly only (crankpin, rollers) ...	14	6	
V/2E.	228	Crankpin washers (each) ...			9
V/2E.	306	Crankpin needle rollers (per set) ...	4	0	
V/2E.	218	Crankpin only ...	8	6	
V.E.	33	Camshaft (standard) ...	1	2	0
V/2E.	33/R	Camshaft (special racing) ...	1	10	0
V.E.	10	Cam lever inlet (complete) ...	7	6	
V.E.	10	Cam lever exhaust (complete) ...	7	6	
L.E.	420/R	Cam lever roller only ...			6
L.E.	424/R	Cam lever roller pin or axle ...			8
V/2F.	110	Cylinder head stay (to frame lug) ...	1	0	
S.T.D.	4	Nut securing above to rocker housing bolt			2
L.E.	448/R	Cylinder or crankcase oil elbow ...	2	0	
L.E.	449/R	Locking nut for above ...			4

D

L/3E.	239	Drain plug for crankcase ...			4
-------	-----	------------------------------	--	--	---

E

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

F

V/2E.	125	Flywheel (timing side) standard ...	17	9	
V/2E.	225	Flywheel (timing side) special racing ...	1	2	6
V/2E.	119	Flywheel (transmission side) standard ...	17	9	
V/2E.	219	Flywheel (transmission side) special racing ...	1	2	6
V/2E.	218	Flywheel crankpin ...	8	6	
L/3E.	70	Fixing nuts (each) ...			6
S.T.D.	15	Lock screw ...			2
V.E.	26	Flywheel axle (timing side) ...	5	6	
L/3E.	70	Nut for above (inside) ...			6
S.T.D.	15	Lock screw for nut ...			2
L/3E.	71	Nut securing small timing pinion ...			5
M.E.	8	Flywheel axle (transmission side) ...	6	9	
M.E.	120	Nuts for above (each) ...			5
S.T.D.	15	Lock screw ...			2
L/3E.	95	Key for flywheel axle (each) ...			5

G

			£	s.	d.
M/3E.	308	Gudgeon pin (standard)	4	0	
V/2E.	214	Gudgeon pin (special racing)	6	6	
L/3E.	88	Gudgeon pin securing spring rings (each)		1	
L/3E.	89	Gudgeon pin bush	3	3	
L.E.	148/S	Guide for inlet valve (standard)	4	0	
L.E.	471/R	Guide for inlet valve (special racing)	4	0	
L.E.	148/S	Guide for exhaust valve	4	0	
M.E.	72	Guide for tappet (inlet or exhaust)	4	9	
L/3E.	213	Guide (screwed) for valve lifter rod	1	0	

I

Inlet valve (see valves)
Inlet valve guide (see valves)

M

Magneto and parts (see page 42)

O

L/3E.	239	Oil drain plug for crankcase	4		
V.E.	111	Oil delivery pipe (pump to cylinder wall)	3	6	
V.E.	103	Oil delivery pipe (pump to crankcase)	2	6	
V.E.	101	Oil supply pipe (tank to pump)	4	6	
L.E.	448/R	Oil pipe elbow for cylinder or crankcase	2	0	
L.E.	449/R	Locking nut for above		4	
L/3E.	287	Oil pipe connection and filter for tank	2	3	
V.E.	99	Oil pump complete	17	6	
P/OP.	1S	Oil pump body only	6	0	
P/OP.	2	Oil pump cap (with cam projection)	1	0	
P/OP.	3S	Oil pump plunger	3	0	
P/OP.	4	Oil pump regulator spindle	1	6	
P/OP.	5	Oil pump driving worm	1	6	
P/OP.	6	Oil pump screwed bush for above		9	
P/OP.	7	Oil pump fibre washer for regulator	1		
P/OP.	8	Oil pump steel washer for regulator	1		
P/OP.	9	Oil pump spring washer for regulator	1		
P/OP.	11	Oil pump glass window		2	
P/OP.	10	Oil pump cap or cover for above	1	0	
P/OP.	29S	Oil pump screwed union for cylinder oil pipe	5		
L/3E.	284	Oil pipe nut for above	4		
L/3E.	290	Oil pipe nipple for above	3		
P/OP.	14	Oil pipe gland nut	3		
P/OP.	17	Oil pump screwed cap	6		
P/OP.	23	Fibre washer for above	1		
P/OP.	19	Screw securing cam cap (each)	1		
P/OP.	20	Washer for cam cap	1		

O.—contd.

			£	s.	d.
L.E.	479R	Oil pump driving worm block			8
P/OP.	22	Oil pump spring			3
P/OP.	24	Ratchet pin for regulator			1
P/OP.	25	Ratchet spring for regulator			1
P/OP.	26	Screw for window cap			1
V.E.	99A	Oil pump fixing screw			1
R.E.	121	Locking washer for above			1
R.E.	131	Oil pump paper joint washer			1

P

V.E.	12	Piston only (standard type)	11	6	
V.E.	112	Piston only (special high compression type)	1	0	0
V.E.	12A	Piston complete with gudgeon pin and rings (standard type)	18	0	
V.E.	112A	Piston complete with gudgeon pin and rings (high compression type)	1	9	6
M/3E.	311	Piston rings (each) standard	1	0	
V/2E.	311	Piston rings (each) racing	1	6	
L/3E.	230	Pinion (small timing)	4	6	
		Petrol pipe (see Carburetter)			
L/3E.	231	Pin or axle for cam levers	2	6	
L/3E.	231	Pin or axle for valve lifter cam block	2	0	
L.E.	424/R	Pin or axle for cam lever roller			8

R

M.E.	265	Release valve complete with pipe	6	0	
M.E.	75	Release valve pipe and top only	3	7	
L/3E.	228	Release valve screwed body		10	
L/3E.	107	Release valve screwed cap for above	1	4	
S.T.D.	4	Nut securing pipe and top		2	
S.T.D.	10	Washer for nut		1	
L/3E.	240	Release valve diaphragm		2	
L/3E.	108	Release valve diaphragm seating		9	
M.E.	47	Rollers and cage for flywheel axle	8	6	
M.E.	9	Outer hardened steel race for above	5	7	
V/2E.	306	Needle rollers for big end (per set of 35)	4	0	
V/2E.	218	Roller spacing washers, hardened steel (each)			9
L.E.	439/R	Rollers for overhead rockers (per doz.)	2	0	
V.E.	3	Roller race for above (hardened steel)	2	6	
L/3E.	312	Roller race for big end (hardened steel)	4	6	
V.E.	10	Rocker or cam lever inlet	7	6	
V.E.	10	Rocker or cam lever exhaust	7	6	
V/2E.	259	Rocker overhead (inlet)	11	6	
V/2E.	260	Rocker overhead (exhaust)	11	6	
V/2E.	258	Rocker overhead aluminium housing (supplied complete only)	1	0	0

T.—contd.

			£	s.	d.
L/3E.	223	Tappet head lock nut			4
L/3E.	222	Tappet body only inlet or exhaust ...	2	0	
V.E.	14a	Tappet rod complete with spring and collars	4	3	
V.F.	79	Tappet rod hardened end (each) ...	1	0	
V.L.	70	Tappet rod spring		4	
V.E.	71	Bottom washer for above		3	
V.E.	72	Top washer for tappet rod spring ...		3	
V.E.	14	Tubular tappet rod bare	1	4	
M.E.	68	Tappet covering tube bottom portion ...	3	0	
M.E.	67	Tappet covering tube top portion ...	2	10	
M.E.	200	Fibre washer for bottom portion ...		2	
L/3E.	256	Timing gear cover with bush	8	3	
L/3E.	233	Timing gear cover bush only	2	0	
V.E.	33	Timing gear camshaft (standard) ...	1	2	0
V/2E.	33/R	Timing gear camshaft (special racing)	1	10	0
L/3E.	230	Timing gear small pinion	4	6	
L/3E.	71	Nut for fixing above		5	
L/3E.	269	Nut for camshaft (securing magneto sprocket)		11	
V.E.	10	Timing gear cam lever complete ...	7	6	
L.E.	420/R	Timing gear cam-lever roller		6	
L.E.	424/R	Timing gear cam lever roller pin ...		8	
L/3E.	249	Timing gear cam lever spacer		7	
L/3E.	231	Timing gear cam lever axle	2	0	
L/3E.	231	Timing gear axle for valve lifter cam block	2	0	
L/3E.	237	Timing gear cover screw		3	

U

		Union nut for oil pipes (see Section O.)		4	
L.E.	448/R	Elbow for oil pipe (screws into cylinder or crankcase)		2	0
L/3E.	287	Union and filter for oil pipe (screws into oil tank)	2	3	
P/OP.	31	Union and ball valve for oil pipe (screws into oil pump)		9	
		Union nut for petrol pipe (see tank) ...		4	

V

V/2E.	206	Valve stem only inlet (standard) ...	13	6	
V/2E.	305	Valve stem only inlet (special racing)...	15	0	
V/2E.	206A	Valve complete with springs, caps and collars (inlet standard type) ...	18	0	

V.—contd.

			£	s.	d.
V/2E.	305A	Valve complete with springs, caps and collars (inlet special racing type) ...	19	6	
V/2E.	206	Valve stem only (exhaust)	13	6	
V/2E.	206A	Valve complete with springs, caps and collars (exhaust standard type) ...	18	0	
L.E.	487/R	Valve spring only (outer)	1	0	
L.E.	488/R	Valve spring only (inner)		6	
L.E.	438/R	Valve spring top cap	1	2	
L.E.	490/R	Valve spring bottom cap or collar ...		10	
V/2E.	210	Split taper collars 2 pieces	1	0	
L.E.	148/S	Valve guide (inlet)	4	0	
L.E.	148/S	Valve guide (exhaust)	4	0	
M.E.	72	Valve tappet guide (inlet or exhaust) ...	4	9	
L/3E.	215	Valve lifter barrel (screwed)	1	0	
L/3E.	217	Valve lifter cable adjuster (screws in above)		7	
L/3E.	213	Valve lifter guide for shackle rod ...	1	0	
L/3E.	219	Valve lifter shackle rod	1	4	
L/3E.	216	Lock nut for cable adjuster		4	
V.E.	84	Valve lifter lever (inside timing case) ...		7	
L/3E.	211	Valve lifter cam block	3	3	
L/3E.	238	Pin securing above to shackle rod ...		6	
S.T.D.	14	Split pin for above		1	
L/3E.	252	Valve lifter spring		2	
L/3E.	214	Shackle rod end of cable nipple	1	0	
L/3E.	218	Valve lifter cable nipple (fits in above)		3	
L.E.	180S	Valve lifter cable nipple (lever end) ...		3	
L.E.	407/S	Valve lifter cable (inner and outer) ...	2	10	
L.E.	185/S	Valve lifter cable (inner only)		9	
L.E.	186/S	Valve lifter cable (outer only)	2	1	
		Valve lifter lever (see handlebars)			

ENGINE PLATES AND BOLTS.

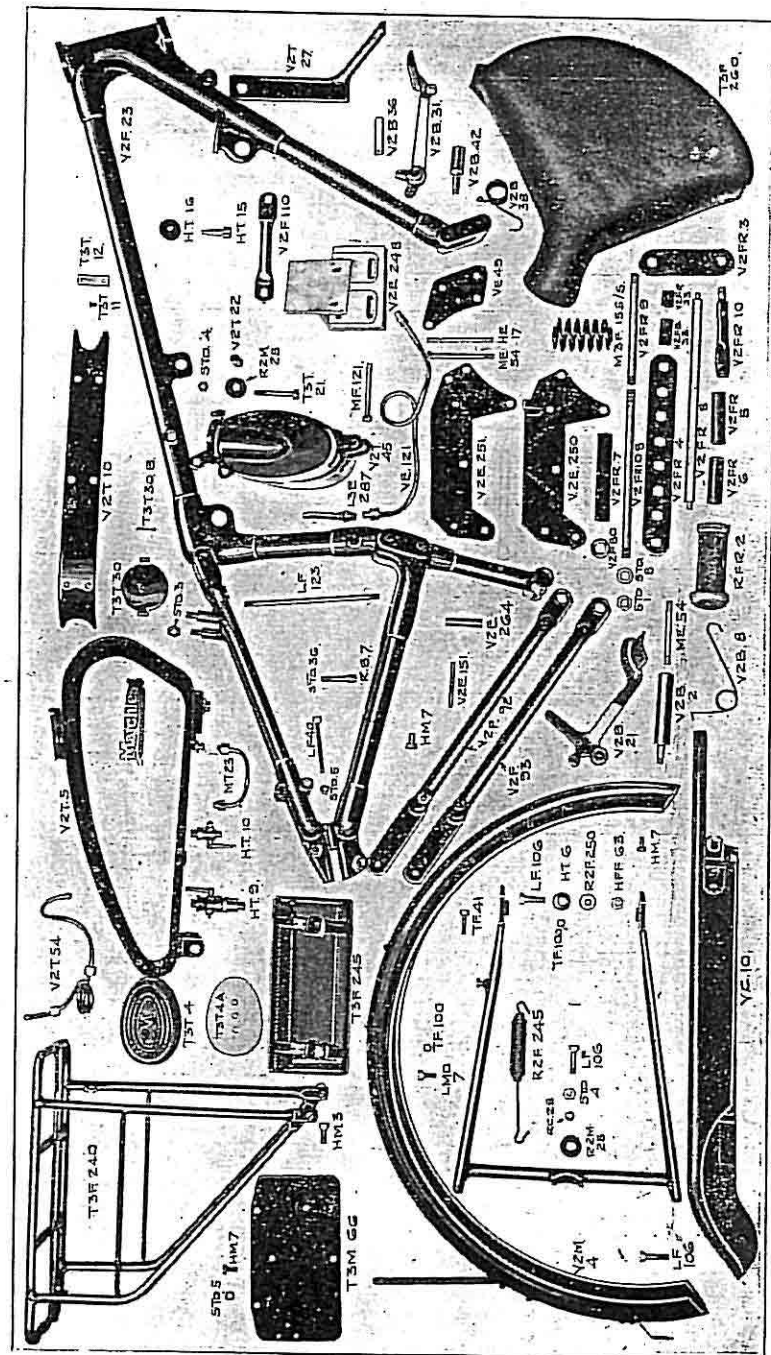
V/2E.	250	Rear engine plate (left side)	4	0	
V/2E.	251	Rear engine plate (right side)	3	6	
M.E.	54	Crankcase bolt $\frac{3}{8}$ in. diam. for rear or front plates		8	
S.T.D.	3	Nuts for above (each)		3	
H.E.	17	Lower bolt fixing rear end of rear plates $\frac{5}{16}$ in. diam.		5	
V.F.	19	Upper bolt fixing rear end of rear plates $\frac{5}{16}$ in. diam.		5	
S.T.D.	4	Nuts for above (each)		2	
H.E.	17	Short upper bolt $\frac{5}{16}$ in. diam. securing plates		5	

Engine Plates and Bolts—contd.

			£	s.	d.
R.C.	24	Long lower bolt 5/16in. diam. securing front plates	3
S.T.D.	4	Nuts for above	2
V.E.	49	Front engine plate	...	1	0

FRAME AND FORK PARTS.

V/2F.	23	Frame only	...	5	10	0
V/2T.	27	Front tank support plate (supports tank and gear quadrant)	...	3	0	0
H.M.	3	Fixing bolt for above (each)	...	4	2	0
S.T.D.	4	Nut for bolt	...	4	2	0
L.F.	40	Rear chain adjuster bolt (each)	...	9	9	0
S.T.D.	5	Locking nut for adjuster bolt	...	2	2	0
T3F.	315	Steering head stop discs (each)	...	9	9	0
M3F.F.	120/S	Bolt securing above to frame lug	...	4	4	0
S.T.D.	2	Nuts for above (each)	...	2	2	0
V/2F.F.	126	Front forks: complete with stand and mudguard	...	5	12	0
V/2F.F.	122	Front forks complete less stand and mudguard	...	4	5	0
V/2F.F.	1	Front fork girder only (right side)	...	17	6	0
V/2F.F.	2	Front fork girder only (left side)	...	16	0	0
M.F.F.	159	Front fork spindle (long)	...	1	0	0
M.F.F.	158	Front fork spindle (short)	...	1	1	0
M.B.	68	Fork spindle grease nipple	...	5	5	0
H.G.	56	Left side spindle lock nut	...	5	5	0
S.T.D.	3	Right side spindle nut	...	3	3	0
V/2F.F.	80	Fibre washers for fork spindles (each)	...	2	2	0
M.F.F.	161	Front fork link or shackle bottom (right)	...	1	3	0
M.F.F.	162	Front fork link or shackle bottom (left)	...	1	4	0
M.F.F.	163	Front fork link or shackle top (right)	...	1	3	0
M.F.F.	164	Front fork link or shackle top (left)	...	1	8	0
V/2F.F.	44	Fork spindle sleeve (top)	...	2	6	0
V/2F.F.	29	Fork spindle sleeve (bottom)	...	2	4	0
M.F.F.	96	Long distance collar for bottom sleeve	...	4	4	0
M.F.F.	95	Short distance collar for bottom sleeve	...	4	4	0
H.B.	1	Fork spindle sleeve lock nuts	...	4	4	0
S.T.D.	6	Split pin securing above (per doz.)	...	6	6	0
V/2F.F.	32	Front fork spring	...	3	0	0
V/2F.F.	31	Front fork spring bottom anchor lug (fits over sleeve)	...	1	6	0
T3F.F.	35	Front fork spring top anchor lug	...	1	3	0
H.B.D.	10	Bolt securing above to handlebar clip lug	...	6	6	0
V/2F.F.	19	Front fork crown and stem (lamp brackets integral)	...	16	0	0
V/2F.F.	21	Front fork head clip and handlebar lug	...	9	6	0



Frame and Fork Parts—contd.

			£	s.	d.
L/4F.F.	64	Pinch bolt for handlebar fixing ...			6
S.T.D.	3	Nut for above ...			3
M.F.F.	28	Head adjusting nut ...			8
V/2F.F.	46	Cap lock nut for above ...	1	0	
M/3F.F.	139/S	Fork damper friction washers ...			6
M/3F.F.	137/S	Fork damper rubber washers ...			5
M/3F.F.	138/S	Metal washers for above ...			4
L/4F.F.	38	Fork damper side plates (each) ...			6
M.F.F.	66	Bolt (long) securing above ...			3
S.T.D.	24	Nuts for bolt (each) ...			2
H.F.F.	30	Fork crown ball race (nickelled) ...	3	2	
H.F.F.	31	Fork frame and head clip race ...	2	5	
M.F.F.	181	Set of steering head balls ...	1	3	
V/2F.F.	116	Steering damper sleeve ...	3	6	
V/2F.F.	39	Steering damper friction discs (each) ...			1
V/2F.F.	115	Steering damper long bolt (screws in V/2F.F. 116) ...			6
V/2F.F.	97	Steering damper stationary plate ...			9
V/2F.F.	107	Steering damper moving plate ...			4
S.T.D.	16	Screw securing above to fork crown ...			2
V/2F.F.	101	Steering damper adjusting nut ...	2	9	
H.T.	16	Rubber washer (fits under above) ...			5
H.G.L.	7	Metal cap washer (one each side of above) ...			5
V/2F.	92	Left side torque tube ...	2	3	
V/2F.	93	Right side torque tube ...	2	3	
V/2F.	108	Long bolt securing forward end ...			10
S.T.D.	1	Nuts for above (each) ...			5
V/2F.	80	Cap washer for torque bridge ...			3
		Footrest rails (see Footrests) ...			
V/2E.	264	Left side distance tube for long bolt securing forward end ...			3

LUGGAGE CARRIER, TOOLBOX, ETC.

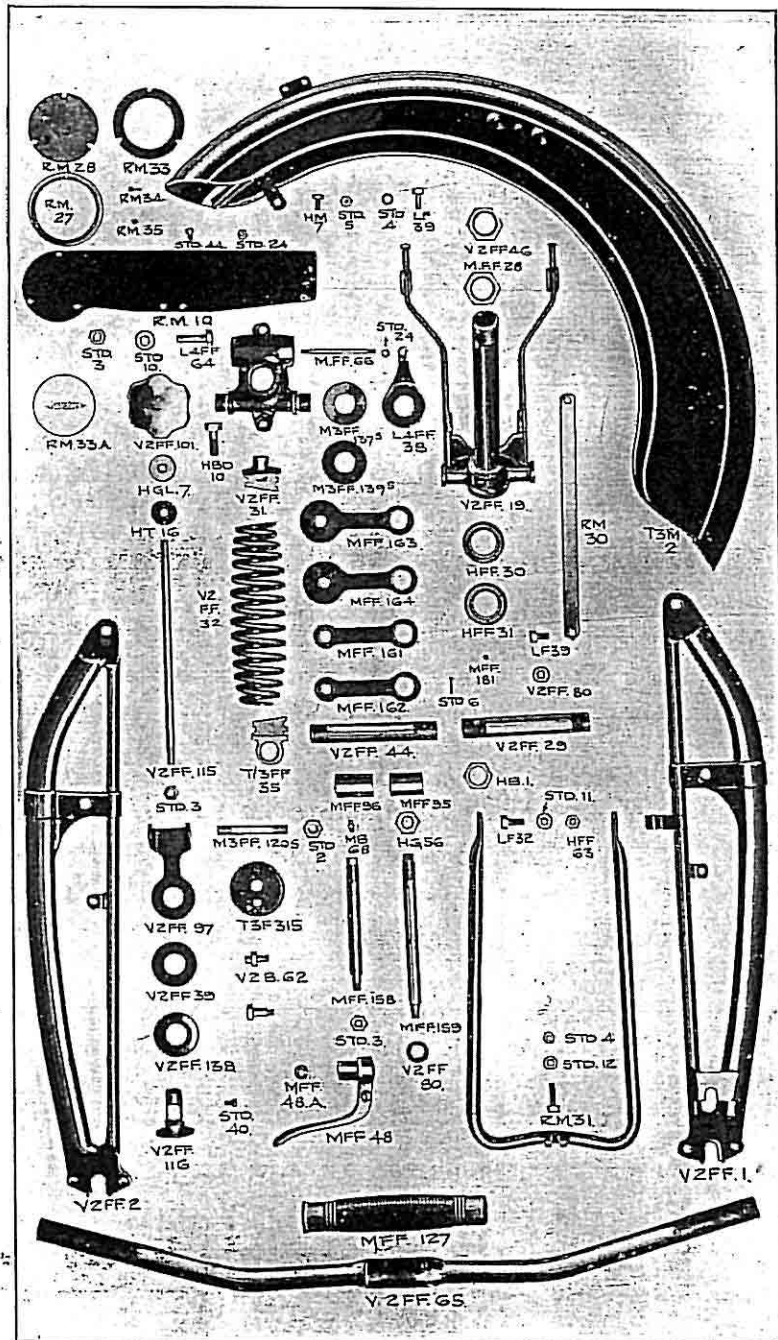
T/3F.	240	Luggage carrier only ...	15	0	
L.M.D.	7	Bolt securing to rear mudguard ...			4
S.T.D.	5	Nut for above ...			2
H.M.	3	Bottom fixing bolts (each) ...			4
H.F.F.	63	Nut for above ...			2
T/3F.	245	Toolbox, left or right ...	3	9	
H.M.	7	Toolbox fixing bolt (each) ...			3
S.T.D.	5	Nut for above ...			2
T/3M.	66	Rear number plate (acetylene) unlettered ...	1	1	
T/3M.	70	Rear number plate (electric) unlettered ...	1	3	
H.M.	7	Bolts securing above (each) ...			3
S.T.D.	5	Nut for above ...			2

MUDGUARDS.

			£	s.	d.
T.M.	2	Front mudguard only ...	15	6	
R.M.	30	Front mudguard stay (left or right) ...			8
L.M.D.	7	Fixing bolt for sides of mudguard (each) ...			4
S.T.D.	5	Nut for above ...			2
L.F.	39	Bottom mudguard stay fixing bolt ...			2
H.M.	7	Top mudguard stay fixing bolt ...			3
S.T.D.	5	Nut for above ...			2
R.M.	31	Front stand clip bolt or stud ...			3
S.T.D.	5	Nuts for above (each) ...			2
S.T.D.	10	Washer for nut ...			1
V/2M.	4	Rear mudguard (standard) ...	13	0	
H.M.	7	Fixing bolt for chain stay bridge ...			4
T.F.	41	Fixing bolt for top stay bridge ...			4
L.M.D.	7	Bolt fixing to rear luggage carrier ...			4
S.T.D.	5	Nuts for above bolts (each) ...			2
R/2M.	25	Rear stand clip rubber buffer ...			6
R.C.	28	Tubular sleeve for rubber buffer ...			3
L.F.	106	Fixing bolt for rubber buffer ...			4
S.T.D.	4	Nut for bolt ...			2
H.M.	6	Front number plate (only) Sidecar type ...	1	2	
R.M.	9	Front number plate and license holder (solo type) ...	3	0	
R.M.	10	Front number plate less license holder (solo type) ...	1	1	
S.T.D.	44	Fixing screws for front number plate (each) ...			1
S.T.D.	24	Nuts for above (each) ...			1
R.M.	27	License holder rim (solo type) ...			4
R.M.	34/35	Screws and nuts fixing above (per pair) ...			2
R.M.	28	License holder transparent panel ...			3
R.M.	29	Rubber ring for above ...			3
M.E.Q.	60	License holder complete (for sidecar) ...	1	9	
		Rear number plate (see Carrier and Tool Box) ...			

TANKS AND FITTINGS.

V/2T.	5/A	Petrol tank with all fittings ...	3	0	0
V/2T.	5	Petrol tank less all fittings ...	2	15	0
H.T.	9	Petrol tap and filter ...			4
H.T.	9a	Petrol tap filter only ...			6
H.T.	10	Petrol drain tap ...			1
M.T.	23	Petrol U pipe connecting both tank compartments ...			2
M.T.	24	Screwed union for above (screws into tank) ...			3



Tanks and Fittings—contd.

			£	s.	d.
V/2T.	54	Petrol pipe	...	3	6
R.T.	28	Nipples for U pipe and tank end of petrol pipe (each)	...		3
R.T.	28a	Nipple for carburettor end of petrol pipe	...		3
R.T.	27	Union nut for carburettor end of petrol pipe	...		4
R.T.	29	Union nut for U pipe or tank end of petrol pipe	...		4
H.T.	16	Rubber buffer for front end support of petrol tank (each)	...		5
R/2M.	25	Rubber washer for rear end support of petrol tank (each)	...		5
T/3T.	21	Bolt securing rear end of petrol tank	...		5
V/2T.	22	Tubular sleeve for above	...		3
S.T.D.	4	Nut for bolt	...		2
H.T.	15	Fixing bolt for front of petrol tank	...		6
V/2T.	27	Front support plate (supports tank and gear quadrant)	...	3	0
H.M.	3	Bolt securing above to frame lug (each)	...		4
S.T.D.	4	Nut for bolt	...		2
V/2T.	45/A	Oil tank complete with fittings	...	17	6
V/2T.	45	Oil tank less all fittings	...	15	0
V/2F.	123	Long bolt or stud securing top end of oil tank	...		8
S.T.D.	4	Nuts for above (each)	...		2
M.F.	121	Bolt securing bottom end of oil tank	...		6
S.T.D.	4	Nut for above	...		2
T/3T.	30	Petrol or oil tank filler caps only (each)	...	3	6
T/3T.	30b	Split hinge pin for above	...		2
L/3E.	287	Screwed union and filter for oil tank	...	2	3
V.E.	101	Oil pipe tank to pump	...	5	3
V.E.	103	Oil pipe pump to underneath timing case	...	1	9
V.E.	111	Oil pipe pump to rear of cylinder	...	3	0
L.E.	448/R	Oil pipe elbow for cylinder or under timing case	...	2	0
L.E.	449/R	Locking nut for above	...		4
P.O.P.	14	Oil pipe union nut pump end	...		4
P.O.P.	13	Oil pipe nipple pump end	...		3
L/3E.	284	Oil pipe union nut, tank or elbow end	...		4
L/3E.	290	Oil pipe nipple, tank or elbow end.	...		3
V/2T.	10	Nickelled strip for petrol tank top	...	2	9
V/2T.	12	Fixing plates for above (each)	...		4
T/3T.	11	Fixing plate screws (each)	...		2
T/3T.	4/L	Knee grip only (left side)	...	2	6
T/3T.	4/R	Knee grip only (right side)	...	2	6
T/3T.	4/A	Knee grip fixing plate	...		6
H.M.	7	Knee grip fixing bolt	...		3

SPECIAL PARTS FOR HAND STAY IN LIEU OF CARRIER.

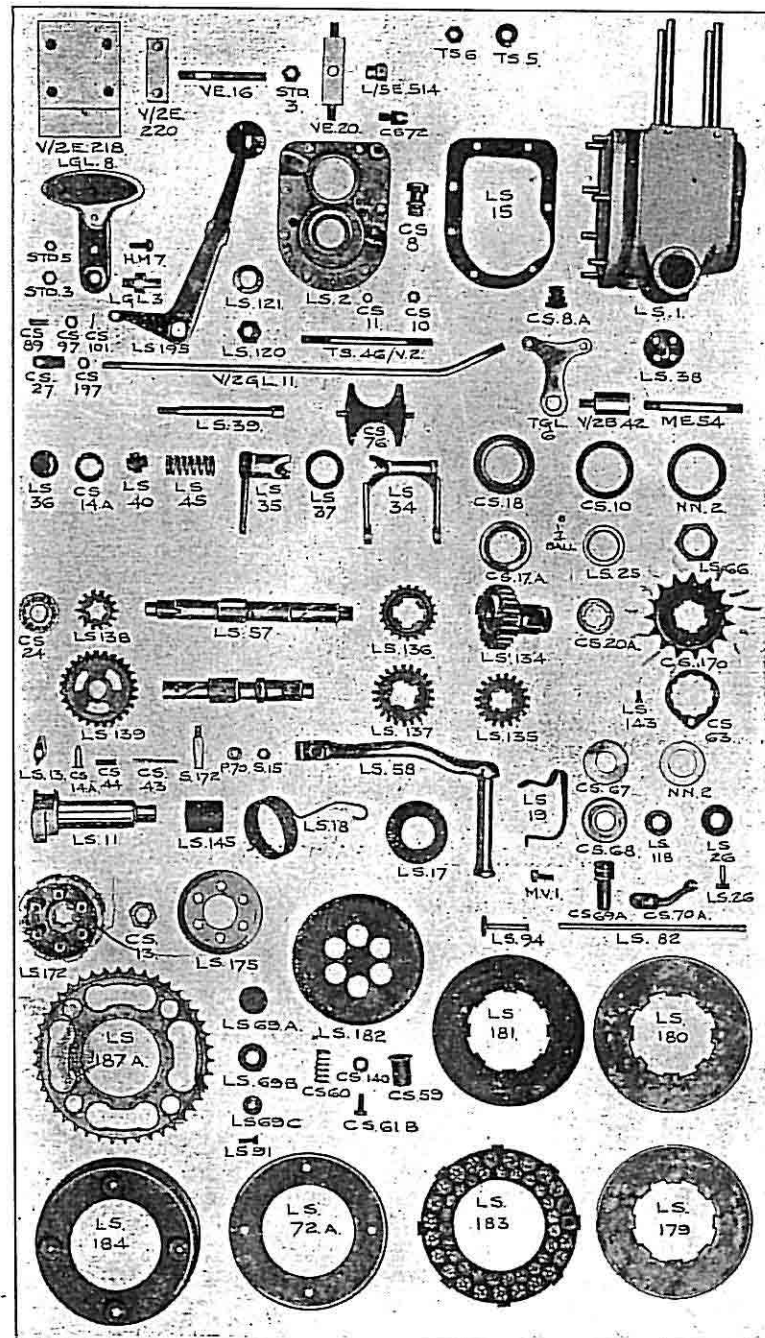
			£	s.	d.
V/2F.	30	Handhold tubular arch	7	6	
V/2M.	6	Rear mudguard stay L or R		10	
H.M.	7	Top bolt for stay		3	
V/2M.	13	Rear number plate bracket stay		4	
V/2M.	5	Rear mudguard	13	0	
V/2F.	45	Toolboxes (each)	5	0	
L.F.	39	Bolts securing toolboxes, number plate, bracket and handhold arch to mudguard (each)		3	
S.T.D.	4	Nuts for above (each)		2	
S.T.D.	11	Washer for nut		1	

STANDS.

V/2F.	44	Rear stand only	12	6	
R/2F.	247	Bush for above (fits over bolt)		3	
L.F.	106	Rear stand fixing bolts (each)		4	
H.T.	6	Rear stand fixing bolt spring washer		2	
R/2F.	250	Rear stand fixing bolt plain washer		1	
H.F.F.	63	Front stand fixing bolt nut		2	
R/2F.	245	Rear stand pull up spring		6	
		Rubber buffer for rear stand (see Mudguards)			
T.F.F.	67	Front stand only	4	6	
L.F.	32	Front stand fixing bolt		3	
H.F.F.	63	Rear stand fixing bolt nut		2	
S.T.D.	5	Front stand clip nut (see mudguards)		2	

GEAR BOX.

L.S.	1	Gear box shell only (4 stud fixing)	2	2	0
L.S.	2	Gear box end plate		16	0
L.S.	57	Gear box main driving shaft		13	0
L.S.	4	Layshaft only		13	0
L.S.	51	High speed sleeve pinion less cones		18	0
C.S.	17A	Left or right cone for above		2	6
C.S.	25	Adjusting shims or washers (each)		1	
L.S.	52	Middle gear sliding pinion for mainshaft	10	0	
L.S.	55	Middle gear sliding pinion for layshaft	11	0	
L.S.	54	Layshaft pinion		6	0
L.S.	53	Mainshaft pinion		4	6
L.S.	56	Low gear and K.S. pinion		11	6
L.S.	11	Kickstarter axle or shaft layshaft bush (supplied assembled only)	12	6	
L.S.	13	K.S. pawl		1	3
L.S.	14A	K.S. pawl pin			3



Gear Box—contd.

			£	s.	d.
C.S.	43	K.S. pawl spring			1
C.S.	44	K.S. pawl spring plunger			3
L.S.	48c	K.S. crank	12		6
L.S.	18	K.S. crank return spring		1	0
L.S.	17	K.S. crank return spring cover		1	0
L.S.	19	K.S. crank stop spring			7
L.S.	20A	K.S. relief cam			3
C.S.	170V	Sprocket for rear chain (15 tooth)	10		0
C.S.	66	Sprocket fixing nut			9
C.S.	63	Sprocket locking plate			5
L.S.	143	Screw for same			1
L.S.	32	Ball bearing cup			3
L.S.	33	K.S. 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	3
L.S.	40	Rocking shaft nut			6
L.S.	45	Compensator spring for rocking shaft			5
C.S.	75	Striking fork plate or slipper		2	6
V/2E.	217	Gear box top guide plate		4	0
S.	172	K.S. crank cotter pin (only)			2
S.	15	Nut for same			2
P.	70	Washer			1
L.S.	2A	Gear box end plate paper washer			1
C.S.	24	Ball bearing for layshaft or mainshaft		8	0
C.S.	8A	Gear box filling or drain oil plug			9
C.S.	67	Packing or adjusting washers for main axle (each)			1
T.S.	4	Gear box fixing stud (each)			5
T.S.	6	Gear box fixing stud nuts (each)			3
T.S.	5	Gear box fixing stud spring washer			2
C.S.	9	Gear box end plate studs (each)			3
C.S.	10	Gear box end plate stud nuts (each)			2
N.N.	1	Gear box end plate bolt for K.S. stop spring			3
V.E.	16	Gear box adjuster for front chain			4
V.E.	20	Cross bar for above (fits between engine plates)			8
V/2E.	220	Cross bar for above (fits over gear box studs)			6
S.T.D.	4	Nuts for crossbar (each)			2
S.T.D.	3	Standard nut for gear box adjuster			3
L/5E.	514	Special double nut for gear box adjuster			6
C.S.	20A	Main axle bronze thrust washer		1	6

CLUTCH PARTS.

			£	s.	d.
L.S.	173	Clutch hub or centre		17	6
C.S.	13	Clutch hub fixing nut			5
C.S.	14A	Washer for above			1
C.S.	15A	Clutch hub key for mainshaft			3
L.S.	179	Clutch hub back plate		2	6
L.S.	185	Clutch driver		8	0
L.S.	72A	Clutch sprocket back plate		2	6
L.S.	188	Clutch sprocket		1	0
L.S.	50B	Clutch sprocket rollers (each)			2
L.S.	93	Rubber shock absorber with hole in centre			2
L.S.	93A	Rubber shock absorber, solid			2
L.S.	93S	Rubber friction damper washer			2
L.S.	176	Clutch spring stud (each)			6
L.S.	178	Clutch spring stud nuts (each)			2
C.S.	60	Clutch spring (each)			2
C.S.	59	Clutch spring thimble			4
C.S.	61B	Clutch spring stud screw (each)			2
C.S.	61C	Washer for above (each)			1
L.S.	183	Clutch friction ring with inserts (each)		5	0
L.S.	180	Clutch centre plate (flat) each		2	6
L.S.	181	Clutch outer plate		2	6
L.S.	182	Clutch thrust plate		2	6
L.S.	116	Clutch inserts (per doz.) large or small		1	0
L.S.	116A	Clutch inserts (per set of 92)		7	6
L.S.	189A	Clutch thrust rod (long)			10
L.S.	94A	Clutch thrust pin			10
C.S.	69A	Clutch thrust worm		1	9
C.S.	70A	Clutch thrust worm lever		2	6
J.	200	Clutch thrust worm lever pinch bolt			1
C.S.	68	Clutch worm nut (screws into end plate)		1	9
C.S.	68A	Clutch worm nut oil retaining cap			3
C.S.	68B	Clutch worm felt washer			2
C.S.	100	Clutch handlebar lever complete (less cables)		8	0
C.S.	100B	Lever portion only		4	0
C.S.	104	Clutch lever fulcrum screw			1
C.S.	106A	Nuts for above (each)			1
C.S.	101A	Lower half of handlebar clip		2	6
C.S.	102A	Upper half of handlebar clip		1	0
X.	90	Screw and nut for handlebar clip			2
L.E.	52	Clutch cable complete, inner and outer		5	6
L.E.	54	Clutch cable, inner only		1	6
L.E.	53	Clutch cable, outer only		3	6
T.E.	97A	Clutch cable thimble for lever			4
C.S.	106	Clutch cable stop only			9
C.S.	106A	Lock nut for above			1
C.S.	72	Clutch cable stop T piece		1	0

Clutch Parts—contd.

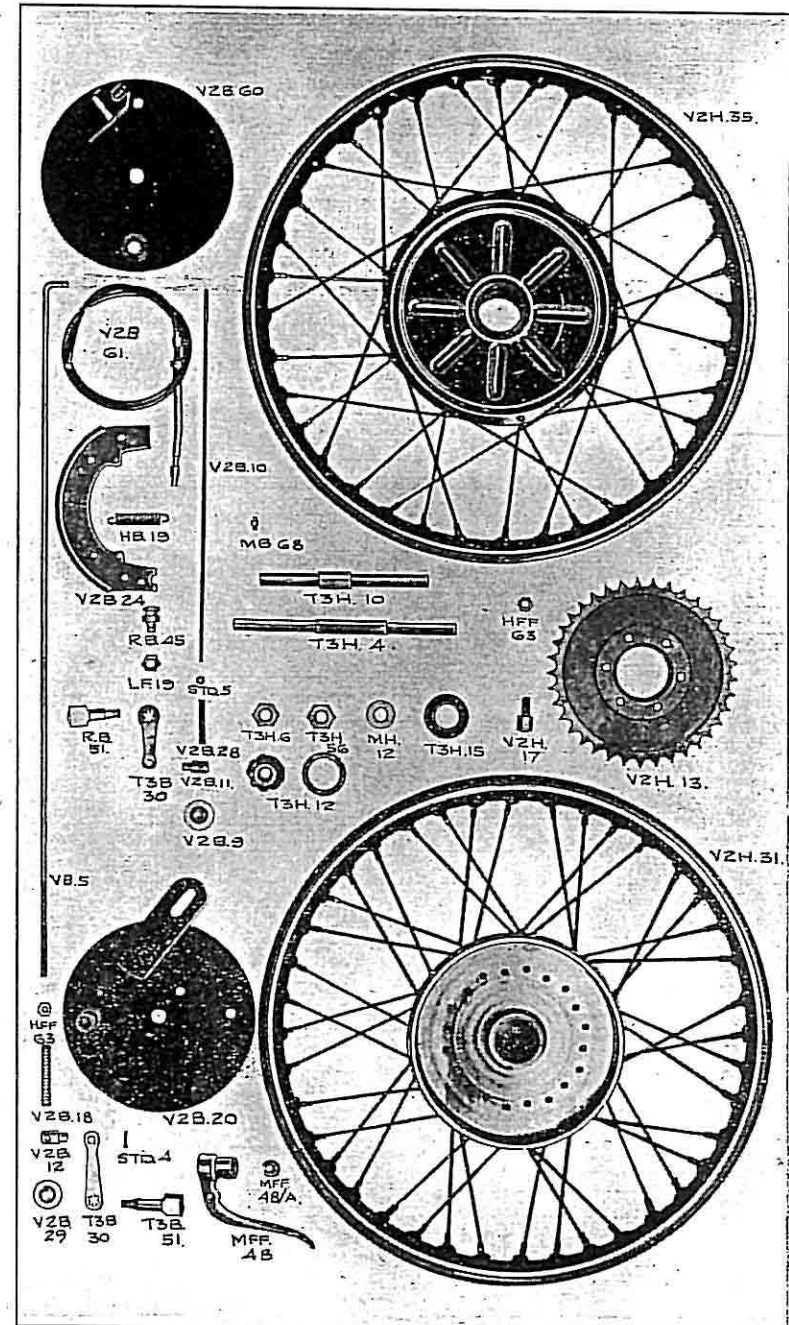
			£	s.	d.
L.S.	91	Screws securing clutch back plate (each)			1
M.C.	508	Nuts for above (each) ...			1
C.S.	199	Roller type adaptor for clutch cable nipple (fits in handlebar lever) ...			4

GEAR CHANGE PARTS.

L.S.	195	Gear lever with ball ...	5	0	
L.G.L.	8	Gear lever gate with back plate ...	6	6	
H.M.	7	Bolt securing above (each) ...			3
V/2T.	27	Support for gear lever gate (supports also tank) ...	3	0	
L.G.L.	3	Gear lever fulcrum stud ...	1	0	
S.T.D.	3	Nut securing above to quadrant back plate ...			3
L.S.	121	Spring washer for fulcrum stud ...			5
L.S.	120	Spigot nut for fulcrum stud ...			4
V/2G.L.	11	Long gear rod only ...	1	0	
L.S.	194/F	Short gear rod only ...	1	0	
C.S.	87	Gear rod yoke end ...			10
C.S.	137	Gear rod yoke end lock nut ...			1
C.S.	89	Gear rod yoke end pin ...			2
C.S.	108	Gear rod yoke end pin split pin (per doz.) ...			6
C.S.	97	Gear rod yoke end pin washer ...			1
T.G.L.	6	Gear rod bell crank lever ...	1	0	
V/2G.L.	4	Gear rod bell crank lever fulcrum stud ...	1	0	
L.S.	121	Gear rod bell crank lever spring washer ...			5
L.S.	120	Gear rod bell crank lever spigot nut ...			4

REAR WHEEL AND BRAKE PARTS.

V/2H.	26	Rear wheel complete less tyre ...	4	12	6
V/2H.	28	Rear wheel complete with tyre (26x3.25 Palmer Flexicord) ...	7	7	6
V/2H.	31	Rear wheel less all hub and brake fittings ...	1	14	3
V/2H.	13	Rear wheel chain sprocket (49 teeth) ...			8
V/2H.	17	Fixing bolts for sprocket (each) ...			3
H.F.F.	63	Lock nuts for above (each) ...			2
V/2B.	20A	Rear brake cover plate with shoes and expander, etc. ...	15	0	
V/2B.	20	Cover plate only ...			3
V/2B.	4 & 5	Rear brake shoes (per pair) ...			6
V/2B.	50	Rear brake shoe linings only with rivets ...	1	0	
H.B.	19	Internal brake shoe springs (each) ...			3
T/3B.	51	Rear brake shoe expander ...			2
T/3B.	30	Rear brake shoe expander lever ...			10
L.F.	19	Nut securing above to expander ...			2
S.T.D.	10	Washer for nut ...			1



Rear Wheel and Brake Parts—contd.

	£	s.	d.
V.B.	5		
V/2B.	12		
S.T.D.	36		
S.T.D.	11		
H.F.F.	63		
V/2B.	29		
V/2B.	18		
S.T.D.	36		
V/2B.	21		
V/2B.	32		
M.E.	54		
S.T.D.	3		
S.T.D.	10		
R.B.	7		
S.T.D.	4		
S.T.D.	14		
T/3H.	4		
T/3H.	12		
T/3H.	12/A		
T/3H.	12/B		
T/3H.	6		
T/3H.	56		
T/3H.	56		
M.H.	25		
M.H.	12		
T/3H.	15		
M.B.	68		
R.H.	43		
R.H.	43		
R.H.	34		
T/3H.	21		
V/2H.	18/A		
V/2H.	18		
T/3H.	29/30		
T/3H.	30		
T/3H.	29		
V/2B.	8		
R.B.	45		
L.F.	19		
S.T.D.	10		
FRONT WHEEL AND BRAKE PARTS.			
V/2H.	27		
V/2H.	25		
V/2H.	35		

Front Wheel and Brake Parts—contd.

	£	s.	d.
V/2B.	60/A		
V/2B.	60		
V/2B.	4/5		
V/2B.	50		
H.B.	19		
R.B.	51		
T/3B.	30		
L.F.	19		
S.T.D.	10		
V/2B.	61		
V/2B.	61/A		
V/2B.	61/B		
M.B.	47		
M.B.	44		
M.B.	46		
V/2B.	36		
L/3E.	218		
M.B.	47/A		
M.B.	40		
V/2B.	10		
S.T.D.	79		
V/2B.	9		
V/2B.	28		
V/2B.	11		
S.T.D.	36		
S.T.D.	11		
M.B.	68		
T/3H.	10		
T/3H.	12		
T/3H.	12/B		
T/3H.	12/A		
T/3H.	6		
T/3H.	6		
T/3H.	56		
M.H.	25		
M.H.	12		
T/3H.	15		
V/2H.	19/A		
V/2H.	19		
T/3H.	20		
R.H.	73		

Front Wheel and Brake Parts—contd.

			£	s.	d.
R.H.	52	Front wheel spoke, right side ...			1
R.H.	34	Spoke nipples (each) ...			2
T/3H.	29/30	Front wheel tyre and tube (26x3.25 Palmer Flexicord) ...	2	15	0
T/3H.	30	Inner tube only ...		8	6
T/3H.	29	Cover only ...	2	6	6
R.B.	45	Front brake shoe fulcrum stud ...	1	10	
L.F.	19	Nut securing above to cover plate ...			2
S.T.D.	10	Washer for nut ...			1
V/2B.	62	Anchoring stud for cover plate ...			3
S.T.D.	3	Nut securing above to fork girder ...			3
S.T.D.	10	Washer for nut ...			1
V/2B.	31	Front brake foot pedal ...	4	3	
V/2B.	42	Fulcrum stud for above (screws on engine bolt) ...			10
S.T.D.	3	End nut for fulcrum stud ...			3
S.T.D.	10	Washer for nut ...			1

CHAIN GUARDS AND CHAINS.

V.C.	10	Rear chain guard ...	7	6	
L.F.	106	Rear chain guard fixing bolt rear end ...			3
S.T.D.	4	Nut for above ...			2
S.T.D.	11	Washer for fixing bolt rear end ...			1
V.F.	19	Rear chain guard fixing bolt front end (see engine bolts) ...			5
V/2C.	36	Front chain guard (inside portion) ...	4	0	
V/2C.	37	Stud securing front end to crankcase ...			2
V/2C.	35	Stud securing centre to crankcase ...			3
S.T.D.	4	Nuts for studs (each) ...			2
R.E.	91	Distance tube for centre stud ...			4
V/2C.	31	Front chain guard (outer portion) ...	7	6	
L/3F.	200	Stud securing rear end to frame ...			3
L/3C.	53	Distance tube for rear stud ...			4
S.T.D.	4	Nuts for centre and rear end fixing ...			2
S.T.D.	11	Washer for nut (each) ...			1
L.C.	14	Front driving chain (Solo) ...	8	6	
T.C.	24	Front driving chain (Sidecar) ...	8	4	
L.C.	19	Connecting link complete ...			5
L.C.	20	Spring only for connecting link ...			1
L.C.	21	Cranked or half link ...			5
V.C.	13	Rear driving chain ...	1	1	0
M.C.C.	15	Connecting link complete ...			7
M.C.C.	15a	Spring only for connecting link ...			2
L.C.	21	Cranked or half link ...			5
M.M.D.	18	Magneto chain (endless) ...	2	6	
L.C.	25	Chain rivet extractor ...	5	0	

Chain Guards and Chains—contd.

			£	s.	d.
V.M.D.	12	Magneto chain case (supplied complete only) ...	12	0	
H.E.	4	Long centre fixing bolt to engine plate ...			8
V.M.D.	16	Distance tube for above ...			5
L/3M.D.	50	Special spacer nut inside case ...			5
V/2M.D.	1	Special fixing nut forming brake pedal stop ...			5
H.M.	7	Screw securing magneto chain case to timing gear cover ...			2

FOOTRESTS.

V/2F.R.	8	Footrest rod ...	1	9	
S.T.D.	3	Footrest rod end nuts (each) ...			3
S.T.D.	10	Washer for above ...			1
V/2F.R.	6	Footrest distance tube (left side) ...			9
V/2F.R.	5	Footrest distance tube (right side) ...			9
V/2F.R.	7	Footrest distance centre (between rails) ...			10
V/2F.R.	4	Footrest rails (left or right) ...	2	6	
V/2F.R.	9	Supporting bolt front end (see engine bolts) ...			8
H/2F.B.	33	Distance tube for above (right side) ...			4
V/2F.B.	33	Distance tube for above (right side) ...			4
S.T.D.	1	End nuts for supporting bolt ...			5
V/2F.	108	Rear end supporting bolt (see frame torque tube) ...			10
S.T.D.	1	End nuts for above ...			5
V/2F.R.	3	Footrest brackets (left or right) ...	1	0	
V/2F.R.	10	Footrest pad spindle ...	1	0	
S.T.D.	1	Footrest pad spindle fixing nut ...			5
S.T.D.	8	Footrest pad spindle fixing nut washer ...			1
R.F.R.	2	Footrest rubber pad ...	1	2	

HANDLEBAR.

V/2F.F.	65	Handlebar (bare) ...	1	2	0
		Handlebar grips, per pair (one closed end) ...			3
L/4F.F.	64	Handlebar clip pinch bolt ...			6
S.T.D.	3	Nut for above ...			3
M.F.F.	48	Inverted handlebar lever complete ...	7	6	
M.F.F.	49	Lever portion only ...	3	9	
M.F.F.	50	Fulcrum screw for lever ...			4
M.F.F.	51	Nut for fulcrum screw ...			2
S.T.D.	40	Screw securing lever body to handlebar ...			2
V/2F.F.	129	Cap for open end of handlebar (for use with twist grip control) ...			9

SADDLE AND PARTS.

			£	s.	d.
T/3F.	260	Saddle top only (Special Lycett Aero)	1	0	10
M/3F.	155/S	Saddle springs (each)			6
S.T.D.	3	Nut securing spring to saddle top and frame			3
S.T.D.	10	Washer for nut			2
L.F.	324/R	Shouldered bolt for saddle nose fixing			8
S.T.D.	4	Nut for above			2
MAGNETO AND PARTS.					
M.M.D.	10	Complete magneto	4	2	6
	41b	Contact breaker complete	1	2	6
4152/4122		Contact screws only with bell crank levers		14	0
	7p	High tension pick-up complete		2	6
		Carbon brush and spring only			6
V.E.	113	Sparking plug cable with terminal end	1	0	
M.M.D.	14	Magneto chain sprocket magneto	2	3	
M.M.D.	10/A	Nut fixing above to magneto			2
M.M.D.	10/B	Washer for nut			1
M.E.	38	Magneto chain sprocket on camshaft ...	2	0	
L/3E.	269	Special nut securing sprocket to camshaft			11
V.E.	48	Magneto aluminium platform	7	6	
M.M.D.	1	Bolt securing magneto to above (each)			4
V.M.D.	15	Magneto chain adjuster stud screws in above. Nuts for above (each)			3
M.M.D.	21	Magneto advance and retard cable (outer)	2	0	
M.M.D.	20	Magneto advance and retard cable (inner)			9
M.M.D.	11	Handlebar lever for above complete ...	6	9	
M.M.D.	11/A	lever portion only	1	9	
M.M.D.	11/B	Screw centre screw securing lever ...			4
M.M.D.	11/C	Large washer for centre screw			4
MECHANICAL OIL PUMP AND PARTS.					
V.E.	99	Oil pump complete	17	6	
R.E.	131	Oil pump paper joint washer for timing cover			1
P/OP.	1S	Oil pump body only	6	0	
P/OP.	2	Oil pump cap (with cam projection) ...	1	0	
P/OP.	3S	Oil pump plunger	3	0	
P/OP.	4	Oil pump regulator spindle	1	6	
P/OP.	5	Oil pump driving worm	1	6	
P/OP.	6	Oil pump screwed bush			9
P/OP.	7	Oil pump fibre washer for regulator ...			1
P/OP.	8	Oil pump steel washer for regulator ...			1
P/OP.	9	Oil pump spring washer for regulator ...			1
P/OP.	10	Oil pump cap for glass window	1	0	

Mechanical Oil Pump and Parts—contd.

			£	s.	d.
P/OP.	11	Oil pump glass window			2
P/OP.	29S	Oil pump screwed union with ball valve			9
P/OP.	19	Screws securing cam cap (each)			1
P/OP.	20	Washer for cam cap			1
P/OP.	22	Oil pump spring			3
P/OP.	24	Ratchet pin for regulator			1
P/OP.	25	Ratchet spring for regulator			1
P/OP.	26	Screw for window cap (each)			1
V.E.	99A	Oil pump fixing screw			1
P/OP.	28	Locking washer for screw			1
V.E.	101	Oil pipe pump to tank	4	6	
V.E.	103	Oil pipe pump to crankcase	2	6	
V.E.	11	Oil pipe pump to cylinder wall	3	6	
L/3E.	247	Oil pipe union (screws into crankcase and cylinder)			3
P/OP.	14	Oil pipe gland nut (pump end)			4
P/OP.	13	Oil pipe nipple			3
L/3E.	284	Oil pipe union nut, tank end, etc. ...			4
L/3E.	290	Oil pipe nipple, tank end, etc.			3
L/3E.	287	Oil pipe union and filter (screws into tank)	2	3	
L.E.	479R	Oil pump worm shaft block for drive (fits on flattened end of shaft) ...			8
CARBURETTER B. & B.					
L.E.	402/S	Complete carburetter (special type B. and B.)	2	10	0
B. & B.	101	Float chamber body only	8	0	
B. & B.	102	Float chamber cap and tickler	4	3	
B. & B.	106	Float chamber needle valve	1	2	
B. & B.	104	Float	2	6	
B. & B.	118/134	Main jet complete	1	9	
B. & B.	158/1	Fibre washer for same			1
B. & B.	138	Pilot jet			10
B. & B.	139	Pilot jet air screw and spring			7
B. & B.	135	Jet taper needle	1	3	
B. & B.	136/7	Needle holder and screw			7
B. & B.	120	Spraying chamber	8	6	
B. & B.	128	Spraying chamber cap with bushes ...	1	8	
B. & B.	129	Spraying chamber cap lock ring	1	0	
B. & B.	130	Clip and bolt for inlet port	1	8	
B. & B.	116	Bolt only			3
B. & B.	126	Throttle valve, Air valve (per pair) ...	6	9	
B. & B.	145	Valve springs (pair)	1	2	
M.E.	289	Control levers complete	7	0	
M.E.	286	Air lever only	2	6	
M.E.	287	Throttle lever only	2	6	
V.E.	64	Control cables (inner and outer) complete	2	3	

EQUIPMENT.

			£	s.	d.
P.H.	125	Head lamp, Acetylene (P. & H. 125) ...	1	0	0
S.S.	47	Headlamp, Electric (Lucas S.S. 47) with- out brackets) ...	2	11	0
P.H.	135	Tail lamp, Acetylene (P. & H. 135) ...	2	9	
M.T.	110	Tail lamp, Electric (Lucas M.T. 110) ...	8	6	
P.H.	137	Side lamp, Acetylene (P. & H. 137) ...	7	6	
R.	335/S	Side lamp, Electric (Lucas R. 335/S) ...	12	6	
L.E.O.	18	Acetylene generator with bracket ...	11	0	
L.E.O.	19	Generator bracket only ...	2	6	
L.E.O.	22	Electric head lamp bulb ...	3	6	
L.E.O.	23	Electric side or tail lamp bulb... ..	1	6	
L.E.O.	27	Accumulator in carrier ...	1	10	0
L.E.O.	28	Accumulator carrier only (68L/52S) ...	5	0	
L.E.O.	29	Accumulator only (L.J.W.7E) ...	1	5	0
L.E.O.	24	Head or tail lamp cable (per foot) ...			2
L.E.O.	20A	Acetylene generator rubber tubing (per yd.)			8
P.H.	125A	Acetylene head lamp glass ...	1	0	
P.H.	137A	Acetylene side lamp glass ...			8
S.S.	47A	Electric head lamp glass ...	2	6	
L.E.O.	33B	Bonniksen speedometer complete (trip) ...	4	10	0
L.E.O.	33/B2	Bonniksen speedometer complete (non- trip)	4	0	0
L.E.O.	34/B	Bonniksen speedometer gear box ...	16	0	
L.E.O.	35/B	Bonniksen speedometer drive wheel complete	2	6	
L.E.O.	39/40/B	Bonniksen speedometer cable (outer and inner)	4	1	
L.E.O.	39/B	Bonniksen speedometer cable (outer only) inner)	6	3	
L.E.O.	40/B	Bonniksen speedometer cable (inner only) ...	2	2	
P.H.	202	Bulb horn (P. & H. No. 202) ...	11	6	
P.H.	202A	Rubber bulb only ...	3	6	

TOOLS.

L.T.K.	15	Six-inch combination pliers ...	1	6	
L.T.K.	13	Six-inch screwdriver ...			9
L.T.K.	10	Double end forged spanner (1/2in.x5/16in.) ...	1	3	
L.T.K.	11	Double end forged spanner (1/2in.x3/8in.) ...	1	6	
L.T.K.	9	Tappet adjusting spanner ...			9
L.T.K.	1	Thin open end spanner for cone lock nut ...			6
L.T.K.	14	Tyre lever ...			3
H.T.K.	11	Adjustable spanner ...	4	6	
L/3T.K.	21	Tyre pump ...	3	9	
L.T.K.	5	Magneto spanner ...			4
T/3T.K.	17	Tool rolls only (each) 2 off ...	4	0	

Tools—contd.

			£	s.	d.
T.T.K.	7	Tool rolls complete with all tools (less pump)			18 0
T/3F.	245	Tool box only (see also luggage carrier) ...			3 9
L/3T.K.	20	Grease gun (Tecalemit) ...			2 6
T.T.K.	4	Carburettor lock nut spanner (1.480) ...			1 3
H.T.K.	19	Ring spanner (.919) ...			1 3
V.T.K.	19	Cone adjusting spanner ...			6

SIDECAR AND PARTS.

L/4F.	221	Sidecar main frame with 2 clip lugs attached	2	17	6
L.F.	148	Pinch bolt for clip lug (each) ...			7
S.T.D.	3	Nut for pinch bolt ...			3
T/3F.	225	Sidecar attachment front bent arm ...	9	6	
L/4F.	223	Sidecar attachment rear bent arm ...	9	6	
L/F	95	Nut securing arm to frame lug ...			3
L/F	147	Washer for above ...			2
L/F	89	Clip lug for attachment to rear chain stay ...	5	6	
L/F	101	Bolts for clip lug only (each) ...			4
V/2F.	138	Packing sleeve for clip lug (2 pieces) ...	1	2	
L/F	94	Large bolt for fixing sidecar frame to clip lug above			6
S.T.D.	1	Nut for bolt ...			2
L/F	91	Sidecar body rear springs (each) 3 leaves ...	10	6	
L/F	96	Sidecar body rear spring fixing bolt (long) ...			4
L/F	106	Sidecar body rear spring fixing bolt (short)			4
S.T.D.	4	Nuts for above ...			2
L.F.	145	Rear spring pad lug plate ...	1	1	
L.F.	152	Sidecar body front coil spring ...	1	6	
S.T.D.	3	Nut for fixing bottom end of spring ...			3
S.T.D.	10	Washer for nut ...			1
L.F.	153	Bolt securing top end of spring ...			3
L.F.	154	Large washer for above ...			4
S.T.D.	3	Nut for above bolt ...			3
L.B.D.	1	Sidecar body rear bearer bar ...	3	3	
S.T.D.	3	End nuts for above (each) ...			3
H.B.D.	14	Spring washer for bearer bar ends ...			3
H.B.D.	10	Plain washer for bearer bar ends ...			1
S.T.D.	14	Split pin for bearer bar ends ...			1
H.B.D.	9	Coach bolt for fixing rear bearer bar ...			2
H.B.D.	13	Large washer for coach bolt ...			4
H.B.D.	24	Nut for above bolt ...			1
L.M.	24	Sidecar mudguard only ...	12	6	
S.T.D.	4	Nuts for fixing to body studs (each) ...			2
S.T.D.	11	Washer for nut (each) ...			1

Sidecar and Parts—contd.

			£	s.	d.
L/4B.D.	25	Windscreen complete with all fittings (Matchless hinged)	1	7	6
M.B.D.	317	Hood to suit above screen with all fittings	1	15	0
T.B.D.	114	Sidecar body only (latest type touring) with apron	10	0	0
L/4B.D.	38	Sidecar body only (aluminium sports type) with apron	7	10	0
L.B.D.	4	Sidecar body apron only, sports type ...	10	6	
M.B.D.	289	Sidecar body apron only, touring type	10	6	
H.B.D.	58	Apron turn buttons (each)			5
L.F.	81/A	Sidecar wheel with ball cups only ...	1	2	3
C.H.	1	Sidecar wheel fixed cone		1	6
C.H.	2	Sidecar wheel adjusting cone		1	1
C.H.	3	Locking washer for adjusting cone ...			2
C.H.	4	Castellated lock nut for adjusting cone			6
C.H.	5	Split pin for above			1
L.F.	6	Sidecar wheel hub end cap		1	6
L.F.	7	Sidecar hub balls (per set)		1	2
L.F.	8	Sidecar hub lubricator			5
L.B.D.	11	Sidecar door handle (touring body) ...	2	6	
T/3H.	29/30	Sidecar tyre and tube (36x3.25 Palmer Flexicord)	2	15	0
T/3H.	29	Cover only		8	6
T/3H.	30	Inner tube only	2	6	6
L/4F.	232	Sidecar wheel rim drilled and enamelled	10	0	
R.H.	43	Wheel spokes (each)			1
R.H.	34	Spoke nipples (each)			2
C.H.	10	Sidecar wheel axle	3	6	
C.H.	11	Fixing nut for above			9
C.H.	13	Inner hub cup			10
C.H.	14	Outer hub cup			10