COX CHAPMAN & Co., LTD.
101, Alscot Rd., London, S.E.1
V/5/1/1929/1500

Matchless
IN NAME & REPUTATION

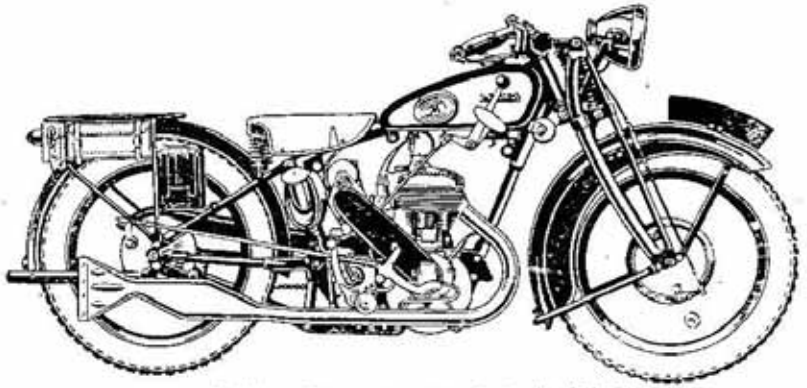
INSTRUCTION BOOK

AND

SPARE PARTS LIST

MODEL
V/5

DRIVING AND ADJUSTMENT INSTRUCTIONS.



"Matchless" Model "V/5"

Matchless Motor Cycles (COLLIERS) LTD.

Manufacturers.

REGISTERED OFFICES:

44-45, Plumstead Road, Plumstead, London, S.E.18, England.

Nearest Station:
WOOLWICH ARSENAL S.R.

Factories:
BURRAGE GROVE AND MAXEY ROAD, PLUMSTEAD, S.E., and Mast Pond Wharf, WOOLWICH.

Telegrams & Cables:
"MATCHLESS," WOOLWICH.
Telephone:
WOOLWICH 1010 (4 lines).

Code { A.B.C. 5th 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 illustration. A careful study of the contents will enable the possessor of a Model V5 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.

MATCHLESS MOTOR CYCLES (COLLIERS), LIMITED.

General Information.

STARTING.

Before describing the actual method of starting it is perhaps advisable to explain the various 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 extension in gear quadrant engages with a slot in the gear lever. The engine must always be started with 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 carburettor 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 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 carburettor 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 carburettor 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 kick-starter 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 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, 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:—Excessive flooding of Carburettor may cause hard starting, particularly in warm weather. In such a case, try the effect of opening compression tap fully and throttle about ⅓ to ½, closing compression tap immediately the engine starts. In attempting this method, the valve lifter should not be operated.

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 hills 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, as by so doing an abnormal and unfair strain would be imposed upon the rear driving chain under certain circumstances.

It is advisable to ease clutch slightly when rounding acute corners or when travelling slowly on top gear. If this practice is adopted from the first much unnecessary gear changing will be avoided.

"DONT'S" IN DRIVING.

DO NOT excessively inflate either front or rear tyre but particularly the former. The pressure recommended are 16 lbs. front and 22 lbs. rear. These pressures may best be checked by means of a Schrader Low Pressure tyre gauge, an accessory which every motor-cyclist should possess.

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 or drive above a maximum speed of 25 m.p.h. 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 existance 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.

ENGINE.

At all times when starting engine 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 on 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 XL or Castrol C, the former for preference. Refuse all others and accept only sealed tins. Above all avoid the just as good sort from bulk.

Note:—Wakefield XL or Wakefield Castrol C specially recommended.

To dismantle the pump, if this is ever necessary, first unscrew the driving spindle bush (R.H. thread part P.O.P. 6) and so remove worm.

WARNING.

The pump driving worm must never be revolved with either the end plate or end cam removed from the pump body.

The pump plunger must never be removed from pump body unless the driving worm and bush have been first removed.

Failure to observe these points will immediately render the pump plunger and driving worm liable to serious damage.

CHAINS.

It will probably be found that the front chain will receive sufficient lubrication from the engine air release valve, 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 Castrolease. 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 Castrolease 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 Castrolease 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.

ENGINE.

TO ADJUST INLET OR EXHAUST TAPPETS. 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.—The correct clearance between tappet head and exhaust valve stem when valve is down on its seating is :006 while that for inlet is :004. 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.

After 1500 miles or so have been covered it may be necessary to remove carbon deposit from piston top and cylinder head. The need for this decarbonizing process will be indicated by a tendency to pink or knock when climbing hills, particularly when the engine is hot. To remove cylinder head proceed as follows. Firstly remove sparking plug and with the spanner provided remove the bolts securing cylinder head to cylinder barrel when the head may be lifted clear to permit of the removal of all carbon deposit from piston top and from cylinder head itself. The only care necessary in the reassembling is to evenly tighten down each cylinder head bolt in turn.

NOTE. If ordinary care is taken when removing and refitting cylinder head the Copper and Asbestos jointing washer will last indefinitely. It should however be renewed if difficulty is experienced in maintaining an explosion tight joint.

TO REMOVE VALVES.

Proceed as above after which by means of a screwdriver or suitable lever gently force the bottom valve spring collar up the valve stem sufficiently to permit of the withdrawal of valve cotter holding valve head down on its seating while the lever is being applied.

TO EXPOSE VALVE TIMING GEAR.

First detach rear brake rod from brake pedal. Then remove the nut on end of brake pedal shaft and withdraw brake pedal. Next detach at tank end the oil pipe from tank to pump and to prevent the leakage of oil force into the union a small taper wooden plug. It may perhaps be explained here that a tap is not provided to cut off the oil supply owing to the real risk of same being on occasions left in a turned off position as a result of which the entire engine could be ruined. Now remove this oil pipe entirely and also the pipe from oil pump to crankcase. Next remove the outer half of magneto chain case after which remove the nut securing magneto sprocket and magneto driving sprocket on cam shaft. Then with a stout lever behind each sprocket gently force off each in turn. Next remove the large nut and small bolt securing rear half of magneto chain case which may then be taken away. After removing the five screws securing the timing gear cover this may be gently forced off leaving camwheel in position and timing gear exposed.

TO REMOVE CAM WHEEL.

After removing timing gear cover as described, turn engine slowly until marks on cam wheel and small pinion coincide, when cam wheel may be withdrawn.

TO REPLACE CAM WHEEL AND TIMING COVER ETC.

First see that the marked tooth on small pinion is vertical, then holding the cam levers up with the fingers, gently introduce the cam wheel with the mark on same coinciding with that on the small pinion. Then gently slide the cover and valve lifting cam into position, after which the fixing-screws should be firmly tightened.

NOTE:—It is advisable to smear the edge of the cover with seccotine or quick drying gold size just before fitting.

The replacement of magneto case, oil pump pipe, etc. is quite straight-forward and the actual retiming of magneto subsequently is carried out as follows.

TO RETIME MAGNETO.

With sprocket fixing nut on camshaft tight and that on armature shaft loose revolve engine carefully until the piston has just passed the top dead centre of firing stroke (This is the top most position of piston at which both valves are closed). Now fully retard the magneto and taking care not to move the engine from this slightly past dead centre position (about 1/16 down is the correct position of piston) gently turn the magneto armature in its normal direction of rotation until the contact points are just about to break in which position the nut securing sprocket on magneto shaft should be securely tightened. It is advisable to check the setting after fixing sprocket by again placing the piston in the position of 1/16 down firing stroke or past top dead centre and moving the ignition lever backward and forward from fully retard to about on third advanced. During this small movement the contact points should be observed to definitely part.

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 $\frac{1}{8}$ ins. to $\frac{1}{4}$ 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 the 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 $\frac{3}{8}$ ins. to $\frac{1}{2}$ 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 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.—Care is necessary when tightening rear chain to leave the wheel in correct alignment. When correct a piece of thin string stretched taut across both wheels and about 4 inches from and parrallel to the ground should be observed to just touch each tyre at both sides of wheel centre simultaneously. Alternatively a long straight wooden batten about 5 feet long is a very handy article to be used for the purpose of checking wheel alignment applied as in the case of string parallel to and about 4 inches from the ground.

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.

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 the 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 FRONT FORKS.

Adjustment to the front fork spindles for side wear. The need for adjustment of this part will be apparent by a creaking noise when steering head is turned abruptly with the machine stationary.

First ascertain which spindle or spindles require adjustment, and slack off both lock nuts. Then by means of the Hexagonal end, turn the spindle anti-clockwise to take up slack, or clockwise to give more freedom, after which tighten up the lock nuts securely.

Care is necessary in this operation to guard against over-tightening when the fork will be stiff in action, and will most likely refuse to function.

NOTE.—It is not necessary under any circumstances to interfere with the adjustment of the top front fork spindle, which adjustment, owing to the fork damper construction, is unimportant within very wide limits. It should perhaps be explained that the correct setting for this spindle is obtained as follows:—After removing both end nuts the spindle is revolved in a clockwise direction looking at the hexagonal end, until the fork side links are seen to commence to spread apart. The spindle is then turned backward two to three complete revolutions and then secured by the two end nuts.

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.

IMPORTANT NOTE.—It must be understood that taper roller bearings must not be adjusted tightly and unless a trifling amount of slackness is observed it is possible quite unknowingly to impose an enormous crushing strain on the slightly tapered rollers without same being made apparent by undue friction. This slight slackness must therefore always be maintained.

TO ADJUST FORK DAMPER.

The fork action damper can best be adjusted while cycle is actually in motion and a badly corrugated surface such as may be found on many bus routes provides the best condition for the purpose. The Ebonite damper hand nut should be screwed sufficiently tight to make the fork action sluggish under such circumstances as those described and will subsequently require very little variation for other conditions of road surface to provide the maximum degree of comfort.

TYRE INFLATION.

The importance of correct tyre inflation cannot be too strongly emphasized and for some unaccountable reason, motor-cyclists in general are the worst offenders in this respect subjecting themselves and their mounts to quite undesirable and unnecessary vibration from road shocks. The pressures we recommend to be strictly adhered to are 16 lbs. per square inch in the front tyre and 22 lbs per square inch in the rear. These pressures can be instantly checked by means of a Schrader Low Pressure Tyre gauge an accessory which every motorist should in his own interests possess.

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 motor cycle 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 motor cycle 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.

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 taken 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, allowing air to enter petrol pipe.
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:—

Magneto contact breaker sticking.
Valve sticking.
Weak valve spring.
Plug points too close.
Water on plug or magneto pick up (carbon brush holder).
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:—

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

LEGAL MATTER.

NOTE.—In view of the growing public objection to noisy motor-cycles, 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 motor-cycle, 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 motor-cycles, the owner of a "Matchless" Model V.5, 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 5s. yearly, and must be renewed annually from date of issue. A motor-car driver's licence covers the driving of a motor-cycle.
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 (Motor-cycles 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 the requisite remittance which varies according to the date of registration and the term to be covered. For a full year January 1st to December 31st the fee is £3 (Solo) or £4 with sidecar attached. 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.
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 motor-cycle.

For registration purposes the following particulars will be required:

Weight of cycle unladen (with equipment required by Law) 300 lbs.
Type or Model—Matchless Model V.5.
Manufacturers' horse-power, 5.86.

Note.—The above Weight applies only to Machines without Electric Equipment.

GUARANTEE.

We give the following guarantee with our Motor-cycles, motor-cycle 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 over riding 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 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 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 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 desired 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 purchase or the date which the alleged defective part was exchanged, as the case may be.

Failing compliance with above, such articles will lie here at THE RISK OF THE OWNER, and this guarantee and any implied guarantee, warrantee 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.

IMPORTANT NOTE.—Any part sent to us for any reason whatsoever must bear distinctly the senders name and address and instructions or requests relative to parts must be sent separately by letter post.

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.

MATCHLESS MOTOR CYCLES (COLLIERS) LIMITED.

INTRODUCTION.

We have pleasure in presenting this Spares List for the "Matchless" Model V.5.

Every part likely to be required can readily be found by reference to illustration 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.

MATCHLESS MOTOR CYCLES (COLLIERS) 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 Matchless Motor Cycles (Colliers) 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 net cash before delivery.

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

Goods to the value of 5s. and over only are sent upon request per C.O.D.

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 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 undertake this 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 to 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.

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 net 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 inquiries 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.

8. Goods to the value of 5s. and over only can be sent upon request per C.O.D.

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 of receipt of goods, no claim can be entertained.

Goods not unpacked at the time of receipt should always be signed for as "Unexamined."

ENGINE PARTS.

			£	s.	d.
		A.			
M.E.	8	Axle for flywheel (transmission side) ...			
V/5E.	526	Axle for flywheel (timing gear side) ...			
M.E.	7	Axle for flywheel (crankpin)			
L/3E.	231	Axle for cam levers also for valve lifter block			
		B.			
M E.	9	Bush (hardened steel for crankcase) transmission side			
V.E.	27	Bush for flywheel axle (timing gear side)			
L/3E.	89	Bush for gudgeon pin			
L/3E.	233	Bush for camshaft (cover side) ...			
L/3E.	234	Bush for camshaft (crankcase side) ...			
L/3E.	213	Bush (screwed) for valve lifter rod ...			
		Breather for crankcase (see release valve)			
		C.			
V/5E.	501	Cylinder barrel only			
V/5E.	502	Cylinder head only			
V/5E.	588	Cylinder head fixing bolts (each) ...			
V/5E.	515	Cylinder head C & A gasket			
V/2E.	126	Cylinder holding down studs (each) ...			
V/2E.	197	Cylinder holding down studs nuts (each)			
V/5E.	506	Crankcase complete with bushes and cylinder studs (supplied complete only)			
L/3E.	239	Crankcase oil drain plug			
M.E.	255	Crankcase bolt $\frac{3}{8}$ diam. (short) ...			
M.E.	54	Crankcase bolt $\frac{3}{8}$ diam. (long) ...			
S.T.D.	3	Nut for bolt $\frac{3}{8}$ diam. (each)			
S.T.D.	10	Washer for nut (each)			
H.E.	18	Crankcase bolt 5/16 diam.			
S.T.D.	4	Nut for bolt 5/16 diam.			
V/2F.R.	9	Crankcase bolt $\frac{1}{2}$ in diam. for footrest rail support			
H/2F.B.	33	Distance tube for above (right side) ...			
V/2F.R.	33	Distance tube for above (left side) ...			
S.T.D.	1	Nut for $\frac{1}{2}$ in. diam. bolt			
L/3E.	203	Crankcase cover for timing gear (see timing gear)			
V/5E.	544	Connecting rod with small end bush ...			

			£	s.	d.
M.E.	7	Crankpin only			
L/3E.	306	Crankpin rollers (per set) each 2d. ...			
L/3E.	70	Crankpin nuts (each)			
V.E.	33	Camshaft			
M.E.	107	Cam lever (inlet or exhaust)			
L/3E.	231	Cam lever axle			
L/3E.	249	Cam lever distance collar			
L.E.	448/R.	Crankcase oil elbow			
L.E.	449/R.	Locking nut for elbow			

D.

L/3E.	239	Drain plug for crankcase			

E.

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

F.

V/5E.	525	Flywheel (timing side)			
V/5E.	519	Flywheel (transmission side) ...			
M.E.	7	Flywheel crankpin			
L/3E.	70	Flywheel crankpin fixing nuts each ...			
S.T.D.	15	Lock screw for fixing nuts each ...			
V/5E.	526	Flywheel axle timing gear side ...			
L/3E.	70	Flywheel axle timing gear side fixing nut			
S.T.D.	15	Lock screw for nut			
L/3E.	71	Nut securing small timing pinion ...			
M.E.	8	Flywheel axle transmission side ...			
M.E.	120	Nuts for above (each)			
S.T.D.	15	Lock screw			
L/3E.	95	Key for flywheel axle			

G.

M/3E,	308	Gudgeon pin			
L/3E.	88	Gudgeon pin retaining spring ring (each)			
L/3E.	89	Gudgeon pin bush			
M/3E.	343	Guide for valves (inlet or exhaust) ...			
L/5E.	512	Guide for tappets (inlet or exhaust) ...			
L/3E.	213	Guide (screwed) for valve lifter rod ...			

I.

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

			£	s.	d.

M.

Magneto and parts (see page 41)

O.

L/3E.	239	Oil drain plug for crankcase			
V.E.	103	Oil delivery pipe (pump to crankcase ...			
V.E.	131	Oil supply pipe (tank to pump) ...			
L.E.	448/R.	Oil pipe elbow for crankcase ...			
L.E.	449/R.	Locking nut for above			
L/3E.	287	Oil pump connection and filter for tank			
V.E.	99	Oil pump, complete			
P/O.P.	1S.	Oil pump body only			
P/O.P.	2	Oil pump cap (with cam projection) ...			
P/O.P.	3S.	Oil pump plunger			
P/O.P.	4	Oil pump, regulator spindle			
P/O.P.	5	Oil pump driving worm			
P/O.P.	6	Oil pump screwed bush for above ...			
P/O.P.	7	Oil pump fibre washer for regulator ...			
P/O.P.	8	Oil pump steel washer for regulator ...			
P/O.P.	9	Oil pump spring washer for regulator ...			
P/O.P.	11	Oil pump glass window			
P/O.P.	10	Oil pump cap or cover for above ...			
P/O.P.	29S.	Oil pump screwed union for cylinder oil pipe			
L/3E.	284	Oil pump nut for above			
L/3E.	290	Oil pipe nipple for above			
P/O.P.	14	Oil pipe gland nut			
P/O.P.	17	Oil pump screwed cap			
P/O.P.	23	Fibre washer for above			
P/O.P.	19	Screw securing cam cap (each) ...			
P/O.P.	20	Washer for cam cap			
L.E.	479	Oil pump driving worm block ...			
P/O.P.	22	Oil pump spring			
P/O.P.	24	Ratchet pin for regulator			
P/O.P.	25	Ratchet spring for regulator ...			
P/O.P.	26	Screw for window cap			
V.E.	99A.	Oil pump fixing screw			
R.E.	121	Locking washer for above			
R.E.	131	Oil pump paper joint washer			

P.

V/5E.	512	Piston only			
V/5E.	512/A.	Piston complete with gudgeon pin and rings			
M/3E.	311	Piston ring only			
L/3E.	230	Pinion (small timing)			
		Petrol pipe (see carburettor)			
L/3E.	231	Pin or axle for cam levers			
L/3E.	211	Pin or axle for valve lifter block ...			

£ s. d.

R.

			£	s.	d.
M.E.	265	Release valve complete with pipe ...			
M.E.	75	Release valve pipe and top only ...			
L/3E.	228	Release valve screwed body			
L/3E.	107	Release valve screwed cap for above ...			
S.T.D.	4	Nut securing pipe and top			
S.T.D.	10	Washer for nut			
L/3E.	240	Release valve diaphragm			
L/3E.	108	Release valve diaphragm seating ...			
M.E.	47	Rollers and cage for flywheel axle ...			
M.E.	9	Outer hardened steel race for above ...			
L/3E.	306	Rollers for big end (each) per set of 42			
L/3E.	207	Rocker or cam lever inlet			
L/3E.	207	Rocker or cam lever exhaust			

S.

L/3E.	158	Sparking plug with washer (lodge type T.S.3)			
L/3E.	246	Sparking plug C & A washer only ...			
X.E.	119	Spring for valves (inlet or exhaust) ...			
L/3E.	252	Spring for valve lifter			
X.E.	9	Spring cap or collar for valves (cotter end)			
M/3E.	426/S.	Spring cap or collar for valves (top end)			
V/2E.	223/21	Sprocket for transmission (Solo) ...			
V/2E.	223/19	Sprocket for transmission (sidecar) ...			
M.E.	120	Sprocket fixing nut			
M.E.	38	Sprocket for magneto chain (camshaft end)			
M.M.D.	14	Sprocket for magneto (fits on magneto)			
L/3E.	269	Special nut for magneto sprocket (camshaft end)			
L/3E.	237	Screw for timing gear cover ...			
V/5E.	561	Silencer and exhaust pipe			
S.T.D.	4	Nut securing silencer to torque stay bridge bolt			
S.T.D.	4	Nut securing silencer to rear end of torque stay			

T.

L/5E.	512	Tappet guide (inlet or exhaust) ...			
L/4E.	321	Tappet complete (inlet or exhaust) ...			
L/3E.	210	Tappet top only			
L/3E.	223	Tappet top lock nut			
L/3E.	208	Tappet body portion only			
L/3E.	256	Timing gear cover and bush			
L/3E.	233	Timing gear cover bush only			

£ s. d.

V.E.	33	Timing gear camshaft			
L/3E.	230	Timing gear small pinion			
L/3E.	71	Nut for fixing above			
L/3E.	269	Nut for camshaft (for oil pump drive) ...			
L/3E.	207	Timing gear cam lever (inlet or exhaust)			
L/3E.	249	Timing gear cam lever spacer ...			
L/3E.	231	Timing gear cam lever axle			
L/3E.	231	Timing gear axle for valve lifter block...			
L/3E.	237	Timing gear cover screw			

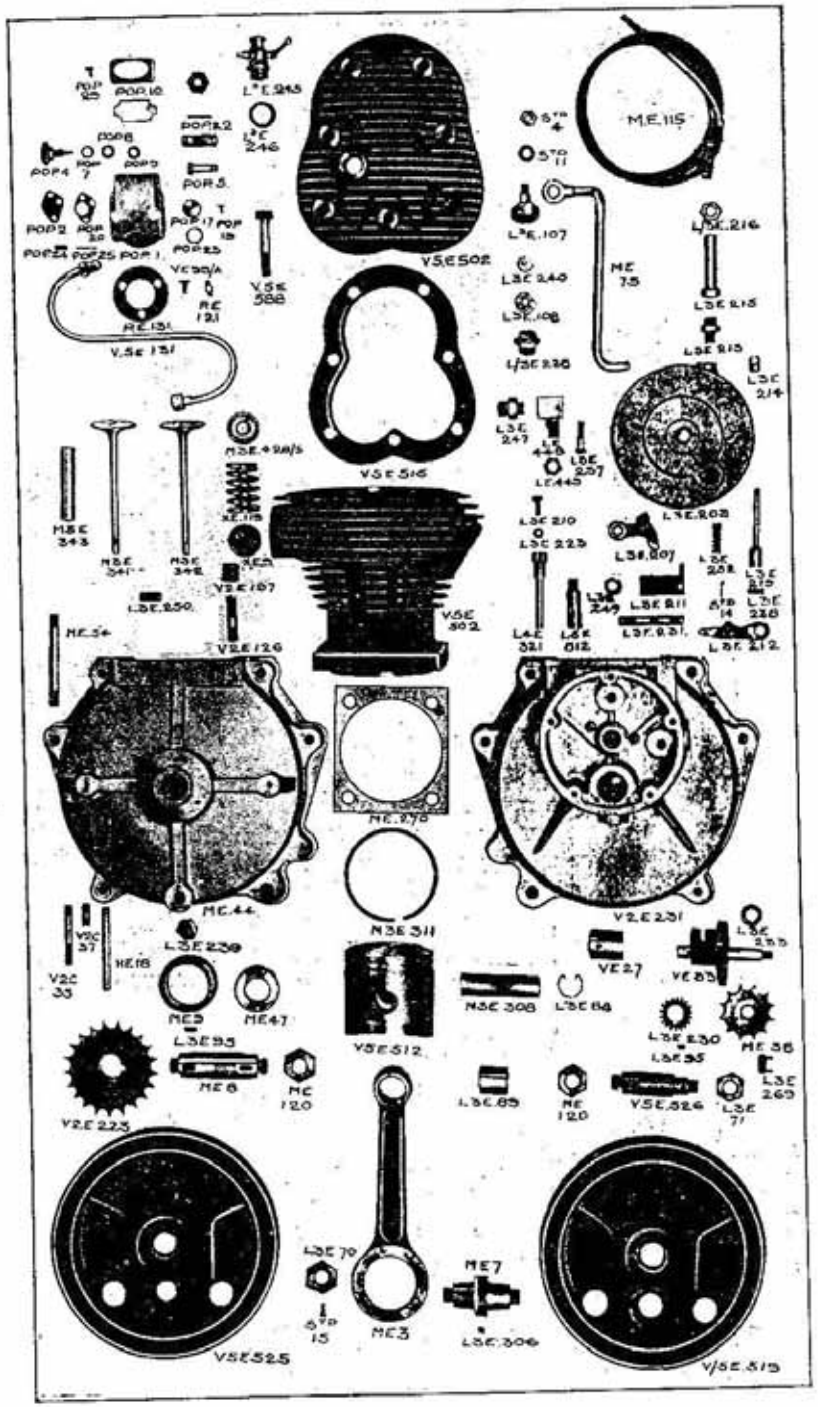
U.

		Union nut for oil pipes (see Section O)			
L.E.	448/R.	Elbow for oil pipe (screws into crankcase)			
L.E.	449/R	Locking nut for above			
L/3E.	287	Union and filter for oil pipe (screws into oil tank)			
		Union nut for petrol pipe (see carburettor)			

V.

M/3E.	341	Valve stem only (inlet)			
M/3E.	435	Valve (inlet) complete with spring, caps and cotter			
M/3E.	342	Valve stem only (exhaust)			
M/3E.	436	Valve (exhaust) complete with springs, caps and cotter			
X.E.	119	Valve spring only inlet or exhaust ...			
X.E.	9	Valve spring collar (cotter end) ...			
M/3E.	426/S.	Valve spring collar (top end) ...			
L/3E.	250	Valve cotter only			
M/3E.	343	Valve guide (inlet or exhaust) ...			
L/3E.	213	Valve lifter guide for shackle rod (screws in timing cover			
L/3E.	219	Valve lifter shackle rod			
L/3E.	211	Valve lifter block			
L/3E.	231	Valve lifter block axle			
L/3E.	238	Valve lifter shackle rod pin			
S.T.D.	14	Split pin for above			
L/3E.	252	Valve lifter spring			
L/3E.	215	Valve lifter tubular sleeve			
L/3E.	217	Valve lifter cable adjuster (screws in above			
L/3E.	216	Lock nut for cable adjuster			
L/3E.	214	Shackle rod end for cable nipple ...			
L/3E.	218	Cable nipple fits above			

ENGINE PARTS.



			£	s.	d.
L.E.	180/S.	Valve lifter cable nipple handlebar end			
V/5E.	212/A.	Valve lifter cable complete (inner and outer)			
L.E.	185/S.	Valve lifter cable inner only			
L.E.	186/S.	Valve lifter cable outer only			
		Valve lifter lever (see Handlebars) ...			

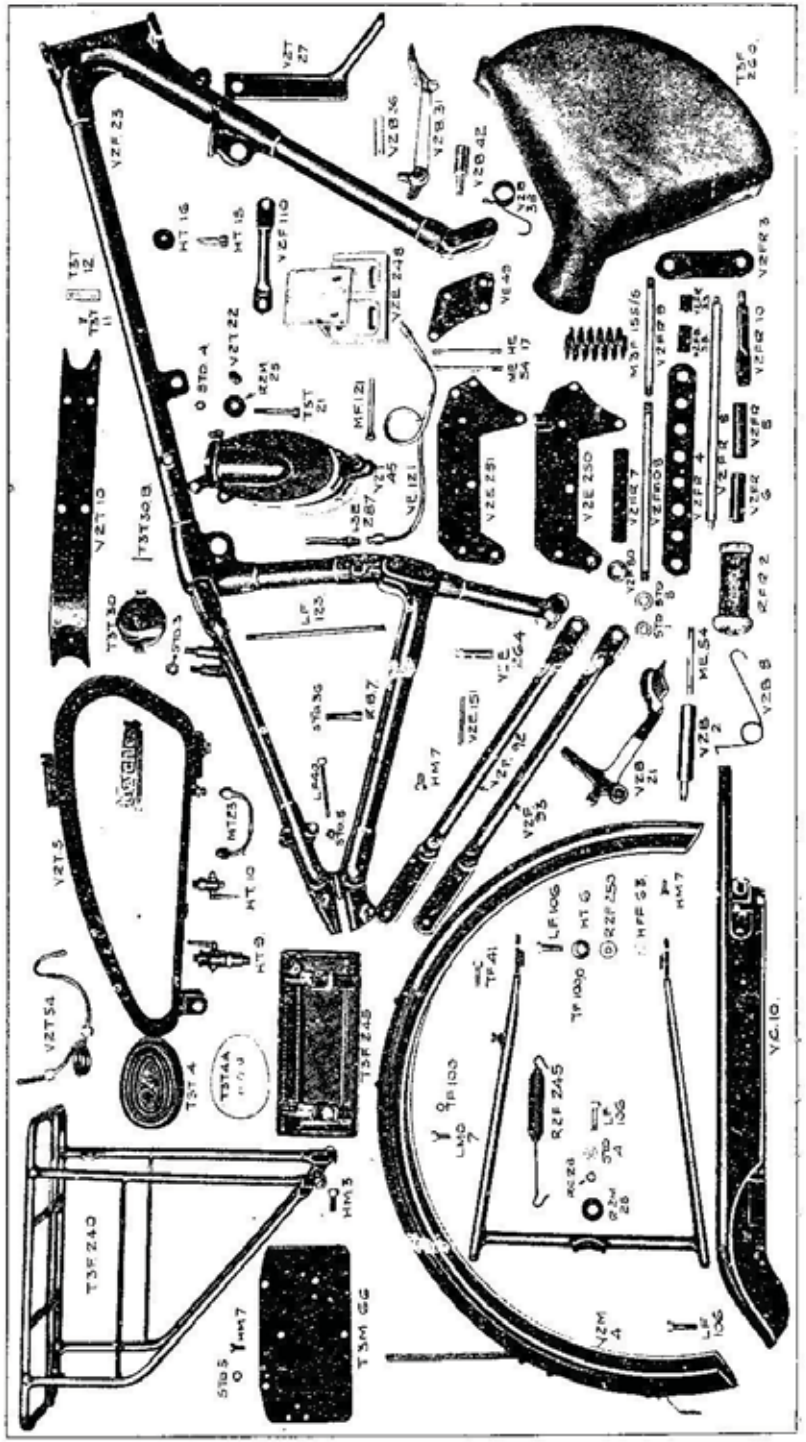
ENGINE PLATES AND BOLTS.

V/2E.	250	Rear engine plate (left side) ...			
V/2E.	251	Rear engine plate (right side) ...			
M.E.	54	Crankcase bolt $\frac{3}{8}$ in. diam for rear or front plates			
S.T.D.	3	Nuts for above (each)			
H.E.	17	Lower bolt fixing rear end of rear plates 5/16 in. diam.			
V.F.	19	Upper bolt fixing rear end of rear plates 5/16 in. diam.			
S.T.D.	4	Nuts for above (each)			
H.E.	17	Short upper bolt 5/16 in. diam. securing plates			
R.C.	24	Long lower bolt 5/16 in. diam. securing front plates			
S.T.D.	4	Nuts for above			
V.E.	49	Front engine plate			

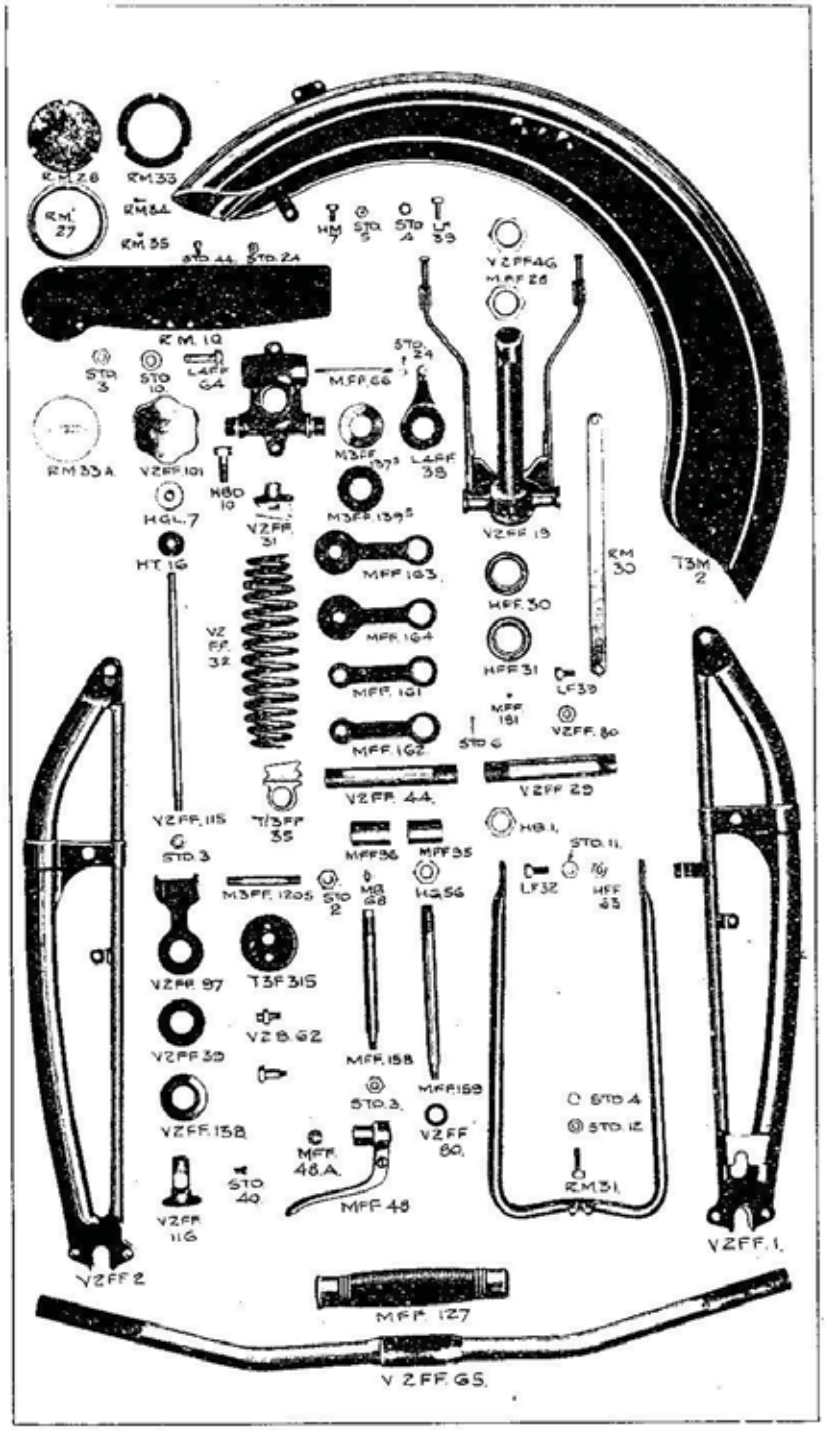
FRAME AND FORK PARTS.

V/2F.	223	Frame only			
V/2T.	27	Front tank support plate (supports tank and gear quadrant)			
H.M.	3	Fixing bolt for above (each)			
S.T.D.	4	Nut for bolt			
L.F.	40	Rear chain adjuster bolt (each) ...			
S.T.D.	5	Locking nut for adjuster bolt			
T3F	315	Steering head stop discs (each) ...			
M/3F.F.	120/S.	Bolt securing above to frame lug ...			
S.T.D.	2	Nuts for above (each)			
V/2F.F.	126	Front forks complete with stand and mudguard			
V/2F.F.	122	Front forks complete less stand and mudguard			
V/2F.F.	1	Front fork girder only (right side) ...			
V/2F.F.	2	Front fork girder only (left side ...			
M.F.F.	159	Front fork spindle (long)			
M.F.F.	158	Front fork spindle (short)			
M.B.	68	Fork spindle grease nipple			
H.G.	56	Left side spindle lock nut			
S.T.D.	3	Right side spindle nut			
V/2F.F.	80	Fibre washers for fork spindles (each)			

FRAME AND PARTS.



FORK AND PARTS.



			£ s. d.
M.F.F.	161	Front fork link or shackle bottom (right)	
M.F.F.	162	Front fork link or shackle bottom (left)	
M.F.F.	163	Front fork link or shackle top (right) ...	
M.F.F.	164	Front fork link or shackle top (left) ...	
V/2F.F.	44	Fork spindle sleeve (top)	
V/2F.F.	29	Fork spindle sleeve (bottom)	
M.F.F.	96	Long distance collar for bottom sleeve	
M.F.F.	95	Short distance collar for bottom sleeve	
H.B.	1	Fork spindle sleeve lock nuts ...	
S.T.D.	6	Split pin securing above (per doz.) ...	
V/2F.F.	32	Front fork spring	
V/2F.F.	31	Front fork spring bottom anchor lug (fits over sleeve)	
T3F.F.	35	Front fork spring top anchor lug ...	
H.B.D.	10	Bolt securing above to handlebar clip lug	
V/2F.F.	19	Front fork crown and stem (lamp brackets integral)	
V/2F.F.	21	Front fork head clip and handlebar lug	
L/4F.F.	64	Pinch bolt for handlebar fixing ...	
S.T.D.	3	Nut for above	
M.F.F	28	Head adjusting nut	
V/2F.F.	46	Cap lock nut for above	
M/3F.F.	139/S.	Fork damper friction washers ...	
M/3F.F.	137/S.	Fork damper rubber washers ...	
M/3F.F.	138/S.	Metal washers for above	
L/4F.F.	38	Fork damper side plates (each) ...	
M.F.F.	66	Bolt (long) securing above	
S.T.D.	24	Nuts for bolt (each)	
H.F.F.	30	Fork crown ball race (nickelled) ...	
H.F.F.	31	Fork frame and head clip race ...	
M.F.F.	181	Set of steering head balls	
V/2F.F.	116	Steering damper sleeve	
V/2F.F.	39	Steering damper friction discs (each) ...	
V/2F.F.	115	Steering damper long bolt (screws in V/2FF. 116)	
V/2F.F.	97	Steering damper stationary plate ...	
V/2F.F.	107	Steering damper moving plate ...	
S.T.D.	16	Screw securing above to fork crown ...	
V/2F.F.	101	Steering damper adjusting nut ...	
H.T.	16	Rubber washer (fits under above) ...	
H.G.L.	7	Metal cap washer (one each side of above)	
V/2F.	92	Left side torque tube	
V/2F.	93	Right side torque tube	
V/2F.	108	Long bolt securing forward end ...	
S.T.D.	1	Nuts for above (each)	
V/2F.	80	Cap washer for torque bridge ...	
		Footrest rails (see Footrests)	
V/2E.	264	Left side distance tube for long bolt securing forward end	

LUGGAGE CARRIER, TOOLBOX, ETC.

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

MUDGUARDS.

T.M.	2	Front mudguard only	
R.M.	30	Front mudguard stay (left or right) ...	
L.M.D.	7	Fixing bolt for sides of mudguard (each)	
S.T.D.	5	Nut for above	
L.F.	39	Bottom mudguard stay fixing bolt ...	
H.M.	7	Top mudguard stay fixing bolt ...	
S.T.D.	5	Nut for above	
R.M.	31	Front stand clip bolt or stud ...	
S.T.D.	5	Nuts for above (each)	
S.T.D.	10	Washer for nut	
V/2M.	204	Rear mudguard (standard)	
H.M.	7	Fixing bolt for chain stay bridge ...	
T.F.	41	Fixing bolt for top stay bridge ...	
L.M.D.	7	Bolt fixing to rear luggage carrier ...	
S.T.D.	5	Nuts for above bolts (each)	
R/2M.	25	Rear stand clip rubber buffer	
R.C.	28	Tubular sleeve for rubber buffer ...	
L.F.	106	Fixing bolt for rubber buffer	
S.T.D.	4	Nut for bolt	
H.M.	6	Front number plate (only) Sidecar type	
R.M.	9	Front number plate and license holder (solo type)	
R.M.	10	Front number plate less license holder (solo type)	
S.T.D.	44	Fixing screws for front number plate (each)	
S.T.D.	24	Nuts for above (each)	
R.M.	27	License holder rim (solo type) ...	
R.M.	34/35	Screws and nuts fixing above (per pair)	
RM.	28	License holder transparent panel ...	
R.M.	29	Rubber ring for above	
M.E.Q.	60	License holder complete (for sidecar) ...	
		Rear number plate (see Carrier and Tool Box)	

TANKS AND FITTINGS.

			£ s. d.
V/2T.	5/A.	Petrol tank with filler cap	
V/2T.	5	Petrol tank less filler cap	
H.T.	9	Petrol tap and filter	
H.T.	9A.	Petrol tap filter only	
H.T.	10	Petrol drain tap	
M.T.	23	Petrol U pipe connecting both tank compartments	
M.T.	24	Screwed union for above (screws into tank)	
V/2T.	54	Petrol pipe	
R.T.	28	Nipples for U pipe and tank end of petrol pipe (each)	
R.T.	28A.	Nipple for carburettor end of petrol pipe	
R.T.	27	Union nut for carburettor end of petrol pipe	
R.T.	29	Union nut for U pipe or tank end of petrol pipe	
H.T.	16	Rubber buffer for front end support of petrol tank (each)	
R/2M.	25	Rubber washer for rear end support of petrol tank (each)	
T/3T.	21	Bolt securing rear end of petrol tank ...	
V/2T.	22	Tubular sleeve for above	
S.T.D.	4	Nut for bolt	
H.T.	15	Fixing bolt for front of petrol tank ...	
V/2T.	27	Front support plate (supports tank and gear quadrant)	
H.M.	3	Bolt securing above to frame lug (each)	
S.T.D.	4	Nut for bolt	
V/2T.	45/A.	Oil tank complete with fittings ...	
V/2T.	45	Oil tank less all fittings	
V/2F.	123	Long bolt or stud securing top end of oil tank	
S.T.D.	4	Nut for above (each)	
M.F.	121	Bolt securing bottom end of oil tank ...	
S.T.D.	4	Nut for above	
T/3T.	30	Petrol or oil tank filler caps only (each)	
T/3T.	30B.	Split hinge pin for above	
L/3E.	287	Screwed union and filter for oil tank ...	
V.E.	101	Oil pipe tank to pump	
V.E.	103	Oil pipe pump to underneath timing case	
L.E.	448/R.	Oil pump elbow (screws in crankcase)...	
L.E.	449/R.	Locking nut for above	
P.O.P.	14	Oil pipe union nut pump end ...	
P.O.P	13	Oil pipe nipple pump end	
L/3E.	284	Oil pipe union nut, tank or elbow end ...	
L/3E.	290	Oil pipe nipple tank or elbow end ...	
V/2T.	10	Nickelled strip for petrol tank top ...	

			£ s. d.
V/2T.	12	Fixing plates for above (each) ...	
T/3T.	11	Fixing plate screws (each)	
T/3T.	4/L.	Knee grip only (left side)	
T/3T.	4R.	Knee grip only (right side)	
T/3T.	4A.	Knee grip fixing plate	
H.M.	7	Knee grip fixing bolt	

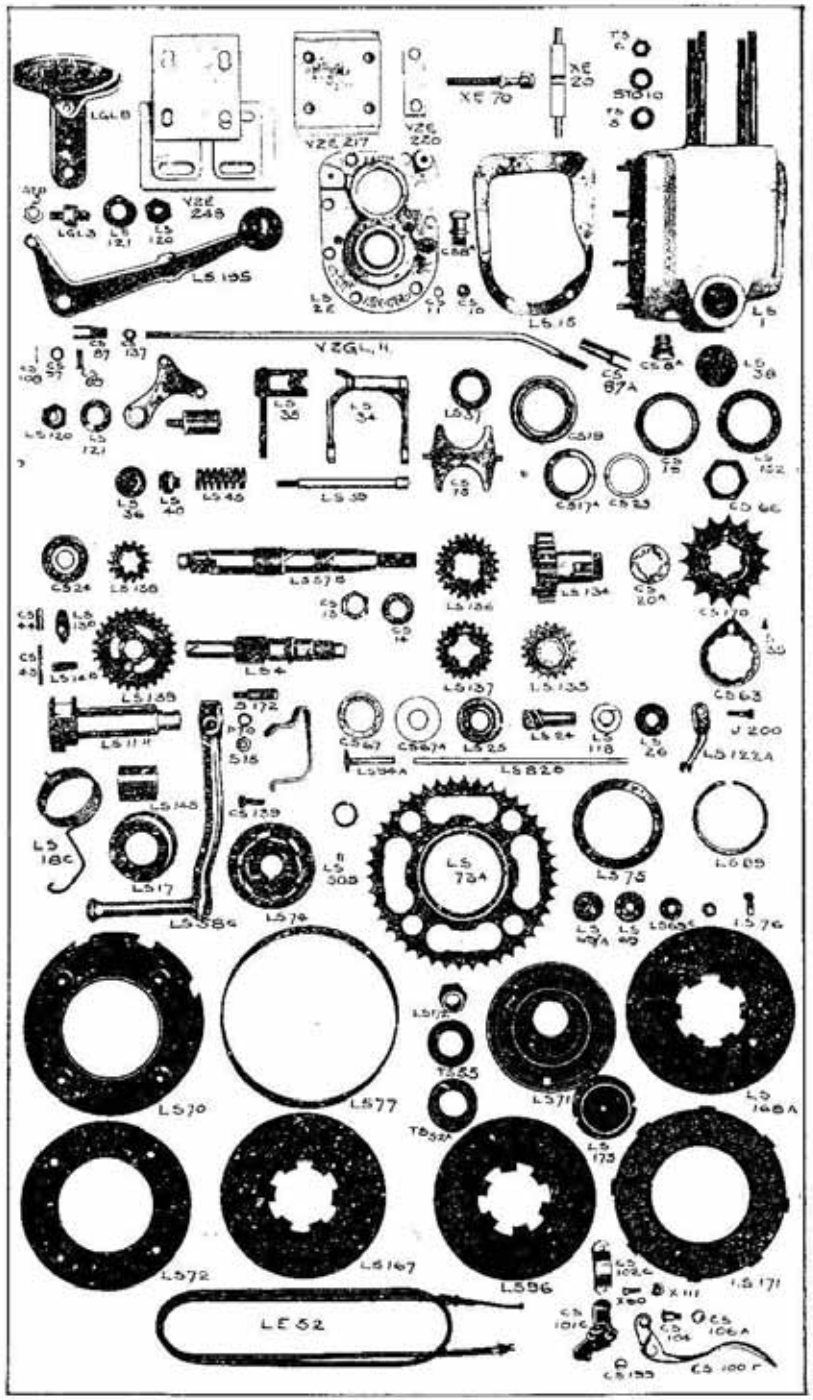
STANDS.

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

GEAR BOX.

L.S.	1P.	Gear box shell only (4 stud fixing) for speedometer drive ... ...
L.S.	1	Gear box shell only (4 stud fixing) non-speedometer ... ...
L.S.	2E.	Gear box end plate ... ...
L.S.	57C.	Gear box main driving shaft ...
L.S.	4	Layshaft only ... ...
L.S.	134	High speed sleeve pinion less cones ...
C.S.	17A.	Left or right cone for above ... ...
C.S.	25	Adjusting shims or washers (each) ...
L.S.	136	Middle gear sliding pinion for mainshaft
L.S.	137	Middle gear sliding pinion for layshaft...
L.S.	135	Layshaft pinion ... ...
L.S.	138	Mainshaft pinion ... ...
L.S.	139	Low gear and K.S. pinion ... ...
L.S.	11H.	Kickstarter axle or shaft with bush (supplied assembled only) ... ...
L.S.	13B.	K.S. pawl ... ...
L.S.	14B.	K.S. pawl pin ... ...
C.S.	43	K.S. pawl spring ... ...
C.S.	44	K.S. pawl spring plunger ... ...
L.S.	58I.	K.S. crank ... ...
L.S.	18A.	K.S. crank return spring ... ...
L.S.	17A.	K.S. crank return spring cover ...

GEAR BOX PARTS



			£	s.	d.
L.S.	19B.	K.S. crank stop spring			
L.S.	20B.	K.S. relief cam			
C.S.	65A.	Sprocket for rear chain (15 tooth) ...			
C.S.	66	Sprocket fixing nut			
C.S.	63	Sprocket locking plate			
L.S.	143	Screw for same			
C.S.	18	Ball bearing cup			
L.S.	33	K.S. axle bush			
L.S.	34	Striking gear fork			
L.S.	35	Striking gear lever			
L.S.	36	Oil retainer cap			
L.S.	37	Rocking shaft lever bush			
L.S.	38	Rocking shaft end bush or cap ...			
L.S.	39	Rocking shaft			
L.S.	40	Rocking shaft nut			
L.S.	45	Compensator spring for rocking shaft...			
C.S.	75	Striking fork plate or slipper			
V/2E.	217	Gear box top guide plate			
[illegible]	172	K.S. crank cotter pin (only)			
S.	15	Nut for same			
[illegible]	70	Washer			
L.S.	15	Gear box end plate paper washer ...			
C.S.	24	Ball bearing for layshaft or mainshaft			
C.S.	8A.	Gear box filling or drain oil plug ...			
C.S.	67	Packing or adjusting washers for main axle (each)			
C.S.	5C.	Gear box fixing stud (each)			
T.S.	6	Gear box fixing stud nuts (each) ...			
T.S.	5	Gear box fixing stud spring washer ...			
C.S.	9	Gear box end plate studs (each) ...			
C.S.	10	Gear box end plate stud nuts (each) ...			
C.S.	139	Gear box end plate bolt for K.S. stop spring			
X.E.	70	Gear box adjuster for front chain ...			
X.E.	20	Cross bar for above (fits between engine Plates)			
V/2E.	220	Cross bar for above (fits over gear box studs)			
S.T.D.	4	Nuts for crossbar (each)			
C.S.	20A.	Main axle bronze thrust washer ...			
L.S.	329A.	Gear box cover for speedometer drive aperture			
L.S.	330	Stud for above			
L.S.	331	Washer for stud			
C.S.	106A.	Nut for stud			

CLUTCH PARTS.

L.S.	74	Clutch hub or centre			

			£ s. d.
C.S.	13	Clutch hub fixing nut	
C.S.	14	Washer for above	
L.S.	96	Clutch hub back plate (thick) ...	
L.S.	70	Clutch driver	
L.S.	72	Clutch sprocket back plate	
L.S.	73C.	Clutch sprocket	
L.S.	50B.	Clutch sprocket rollers (each) ...	
L.S.	69C.	Rubber shock absorber with hole in centre	
L.S.	69B.	Rubber shock absorber solid	
L.S.	93S.	Rubber friction damper washer ...	
L.S.	71	Clutch spring cup	
L.S.	75	Clutch sprocket securing ring	
T.S.	52A.	Clutch spring (each)	
T.S.	55	Clutch spring collar (fits over C.S. 172)	
C.S.	172	Clutch spring adjusting nut	
		Packing washers for above (each) fits on mainshaft	
C.S.	171	Clutch friction ring with inserts (each)	
C.S.	167	Clutch centre plate (flat) each ...	
C.S.	168A.	Clutch outer plate (dished)	
L.S.	77	Clutch driver cover	
L.S.	116&116A.	Clutch inserts (per doz.) large or small	
L.S.	116&116A.	Clutch inserts (per set of 69) each size	
L.S.	82B.	Clutch thrust rod (long)	
L.S.	94A.	Clutch thrust pin	
C.S.	69A.	Clutch thrust worm	
C.S.	70A.	Clutch thrust worm lever	
J.	200	Clutch thrust worm lever pinch bolt ...	
C.S.	68	Clutch worm nut (screws into end plate)	
C.S.	68A.	Clutch worm nut oil retaining cap ...	
C.S.	68B.	Clutch worm felt washer	
C.S.	100	Clutch handlebar lever complete (less cables)	
C.S.	100B.	Lever portion only	
C.S.	104	Clutch lever fulcrum screw	
C.S.	106A.	Nuts for above (each)	
C.S.	101A.	Lower half of handlebar clip	
C.S.	102A.	Upper half of handlebar clip	
X.	90	Screw and nut for handlebar clip ...	
L.E.	52	Clutch cable complete, inner and outer	
L.E.	54	Clutch cable inner only	
L.E.	53	Clutch cable, outer only	
L.S.	89	Clutch sprocket securing split ring ...	
C.S.	173	Clutch spring cup screwed cap ...	
T.E.	97A.	Clutch cable thimble for lever ...	
C.S.	106	Clutch cable stop only	
C.S.	106A.	Lock nut for above	
C.S.	72	Clutch cable stop T piece	

			£ s. d.
L.S.	91	Screws securing clutch back plate (each)	
M.C.	503	Nuts for above (each)	
C.S.	199	Roller type adaptor for clutch cable nipple (fits in handlebar lever) ...	

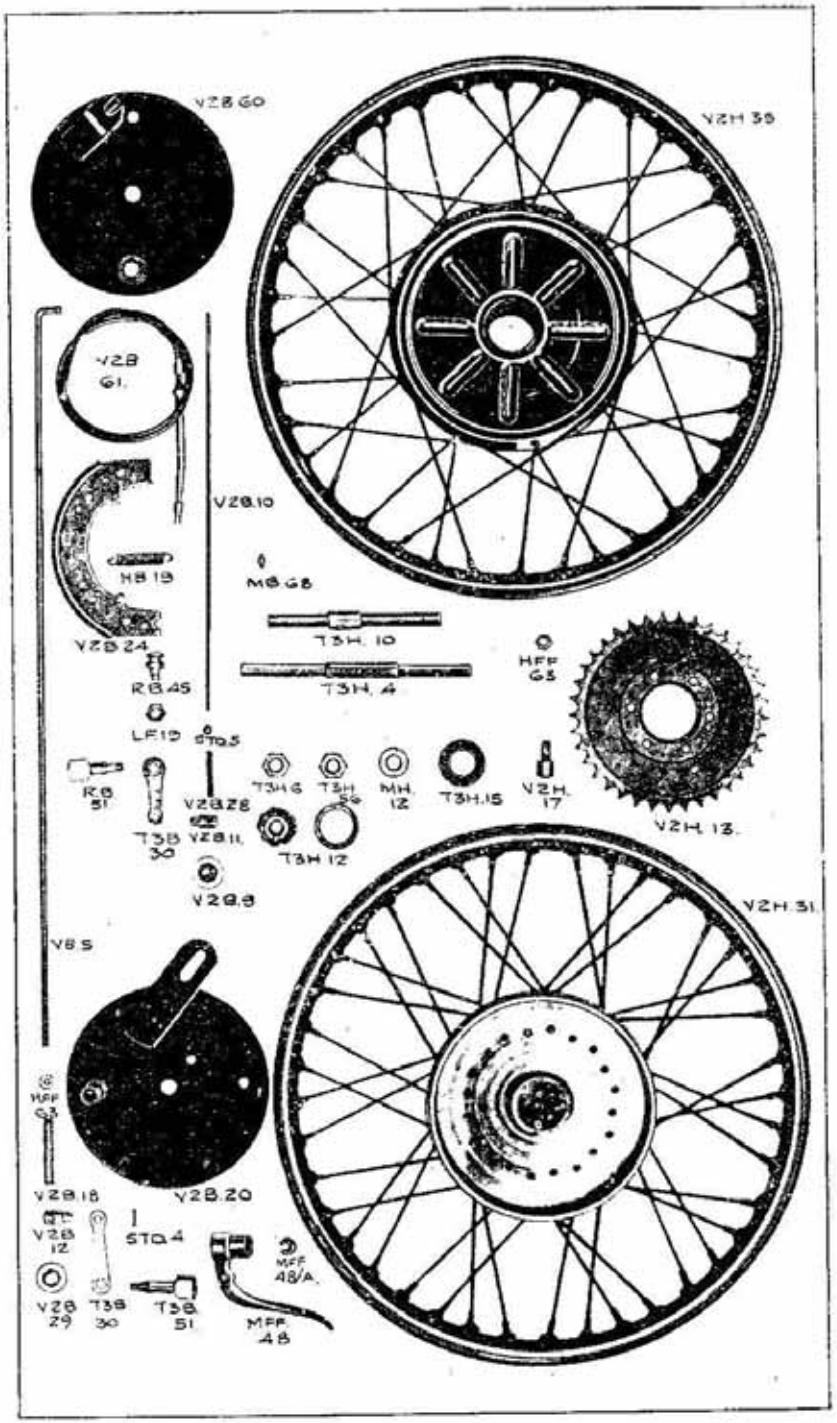
GEAR CHANGE PARTS.

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

REAR WHEEL AND BRAKE PARTS.

V/2H.	26	Rear wheel complete less tyre ...	
V/2H.	28	Rear wheel complete with tyre (26 x 3.25 Palmer Flexicord)	
V/2H.	31	Rear wheel less all hub and brake fittings	
V/2H.	13	Rear wheel chain sprocket (49 teeth)	
V/2H.	17	Fixing bolts for sprocket (each) ...	
H.F.F.	63	Lock nuts for above (each)	
V/2B.	20A.	Rear brake cover plate with shoes and expander etc.	
V02B.	20	Cover plate only	
V/2B.	4 & 5	Rear brake shoes (per pair)	
V/2B.	50	Rear brake shoe linings only with rivets	
H.B.	19	Internal brake shoe springs (each) ...	
T/3B.	51	Rear brake shoe expander	
T/3B.	30	Rear brake shoe expander lever ...	
L.F.	19	Nut securing above to expander ...	
S.T.D.	10	Washer for nut	

WHEEL AND PARTS.



			£	s.	d.
V.B.	5	Rear brake rod			
V/2B.	12	Rear brake rod cross head (fits in lever)			
S.T.D.	36	Split pin securing cross head (per doz.)			
S.T.D.	11	Washer for above			
H.F.F.	63	Brake rod end nuts (each) rear end ...			
V/2B.	29	Knurled edge hand adjusting nut ...			
V/2B.	18	Spring for brake rod			
S.T.D.	36	Split pin for front end (per doz.) ...			
V/2B.	21	Rear brake foot pedal			
V/2B.	32	Rear brake foot pedal fulcrum stud ...			
M.E.	54	Long bolt securing above to engine ...			
S.T.D.	3	End nuts for above and fulcrum stud end			
S.T.D.	10	Washer for fulcrum stud			
R.B.	7	Anchoring bolt for cover plate ...			
S.T.D.	4	Nut securing above to fork end ...			
S.T.D.	14	Split pin for nut (per doz.)			
T/3H.	4	Rear wheel axle			
T/3H.	12	Rear wheel taper bearing complete ...			
T/3H.	12/A.	Taper cone with rollers and cage only ...			
T/3H.	12/B.	Outer hardened race only			
T/3H.	6	Inside lock nut for brake side cone (thin)			
T/3H.	56	Outside lock nut for chain side cone ...			
T/3H.	56	Lock nut for brake cover plate ...			
M.H.	25	Axle end nuts			
M.H.	12	Axle end nuts washer			
T/3H.	15	Metal dust cap for hub end			
M.B.	68	Hub grease nipple			
R.H.	43	Rear wheel spoke (left side) each ...			
R.H.	43	Rear wheel spoke ((right side) each ...			
R.H.	34	Spoke nipples (each)			
T/3H.	21	Rear wheel rim drilled and enamelled ...			
V/2H.	18/A.	Rear hub complete with brake ...			
V/2H.	18	Rear hub shell only			
T/3H.	29/30	Rear wheel tyre and tube (26 x 3.25 Palmer Flexicord)			
T/3H.	30	Inner tube only			
T/3H.	29	Cover only			
V/2B.	8	Rear brake pedal pull off spring ...			
R.B.	45	Rear brake shoe fulcrum stud ...			
L.F.	19	Nut securing above to cover plate ...			
S.T.D.	10	Washer for nut			

FRONT WHEEL AND BRAKE PARTS.

V/2H.	27	Front wheel complete with tyre ...			
V/2H.	25	Front wheel complete less tyre ...			
V/2H.	35	Front wheel less all hub and brake fittings			
V/2B.	60/A.	Front brake cover plate assembled with shoes, expander, etc.			

			£	s.	d.
V/2B.	60	Front brake cover plate only			
V/2B.	4/5	Front brake shoes only (per pair) ...			
V/2B.	50	Front brake shoe linings with rivets ...			
H.B.	19	Internal springs for brake shoes (each)			
R.B.	51	Front brake shoe expander			
T/3B.	30	Front brake shoe expander lever ...			
L.F.	19	Nut fixing above			
S.T.D.	10	Washer for nut			
V/2B.	61/A.	Front brake cable, inner only			
V/2B.	61	Front brake cable (inner and outer assembled) for foot control ...			
V/2B.	61/B.	Front brake cable, outer only			
M.B.	47	Front brake cable spring box			
M.B.	44	Front brake cable spring (fits inside above)			
M.B.	46	Front brake cable adjusting stop with lock nut			
V/2B.	36	Front brake cable stop (pedal end) screws on engine bolt... ...			
L/3E.	218	Front brake cable nipple (pedal end) ...			
M.B.	47/A.	Front brake cable end (spring box end)			
M.B.	40	Screwed extension adaptor (fits on above) for rod			
V/2B.	10	Front brake rod (screw in above) ...			
S.T.D.	79	Front brake rod nuts (each) ...			
V/2B.	9	Front brake rod knurled adjuster nut ...			
V/2B.	28	Front brake rod spring			
V/2B.	11	Cross head for expander lever ...			
S.T.D.	36	Split pin securing above (per doz.) ...			
S.T.D.	11	Washer (fits behind split pin) ...			
M.B.	68	Front hub grease nipple			
T/3H.	10	Front wheel axle			
T/3H.	12	Front wheel taper bearing complete ...			
T/3H.	12/B.	Hardened outer race only			
T/3H.	12/A.	Taper cone with rollers and cage only			
T/3H.	6	Thin lock nut for left side cone ...			
T/3H.	6	Lock nut for right side cone (inside hub)			
T/3H.	56	Lock nut for brake cover plate ...			
M.H.	25	Axle end nuts (each)			
M.H.	12	Axle end washer (each)			
T/3H.	15	Metal dustcap for hub end			
V/2H.	19/A.	Front hub complete with brake, etc. ...			
V/2H.	19	Front hub shell only			
T/3H.	20	Front wheel rim drilled and enamelled			
R.H.	73	Front wheel spoke, left side			
R.H.	52	Front wheel spoke. right side			
R.H.	34	Spoke nipples (each)			
T/3H.	29/30	Front wheel tyre and tube (26 x 3.25 Palmer Flexicord			

			£	s.	d.
T/3H.	30	Inner tube only			
T/3H.	29	Cover only			
R.B.	45	Front brake shoe fulcrum stud ...			
L.F.	19	Nut securing above to cover plate ...			
S.T.D.	10	Washer for nut			
V/2B.	62	Anchoring stud for cover plate ...			
S.T.D.	3	Nut securing above to fork girder ...			
S.T.D.	10	Washer for nut			
V/2B.	31	Front brake foot pedal			
V/2B.	42	Fulcrum stud for above (screws on engine bolt)			
S.T.D.	3	End nut for fulcrum stud			
S.T.D.	10	Washer for nut			

CHAIN GUARDS AND CHAINS.

V.C.	10	Rear chain guard			
L.F.	106	Rear chain guard fixing bolt rear end ...			
S.T.D.	4	Nut for above			
S.T.D.	11	Washer for fixing bolt rear end ...			
V.F.	19	Rear chain guard fixing bolt front end (see engine bolts)			
V/2C.	36	Front chain guard (inside portion) ...			
V/2C.	37	Stud securing front end to crankcase ...			
V/2C.	35	Stud securing centre to crankcase ...			
S.T.D.	4	Nuts for studs (each)			
R.E.	91	Distance tube for centre stud			
V/2C.	31	Front chain guard (outer portion) ...			
L/3F.	200	Stud securing rear end to frame ...			
L/3C.	53	Distance tube for rear stud			
S.T.D.	4	Nuts for centre and rear end fixing			
S.T.D.	11	Washer for nut (each)			
L.C.	14	Front driving chain (Solo)			
T.C.	24	Front driving chain (Sidecar)			
L.C.	19	Connecting link complete			
L.C.	20	Spring only for connecting link ...			
L.C.	21	Cranked or half link			
V.C.	13	Rear driving chain			
M.C.C.	15	Connecting link complete			
M.C.C.	15A.	Spring only for connecting link ...			
L.C.	21	Cranked or half link			
M.M.D.	18	Magneto chain (endless)			
L.C.	25	Chain rivet extractor			
V.M.D.	12	Magneto chain case (supplied complete only			
H.E.	4	Long centre fixing bolt to engine plate			
V.M.D.	16	Distance tube for above			
L/3M.D.	50	Special spacer nut inside case			

		£ s. d.
V/2M.D. 1	Special fixing nut forming brake pedal stop	
H.M. 7	Screw securing magneto chain case to timing gear cover	

FOOTRESTS.

V/2F.R. 108	Footrest rod	
S.T.D. 3	Footrest rod end nuts (each)	
S.T.D. 10	Washer for above	
V/2F.R. 16	Footrest distance tube (left side) ...	
V/2F.R. 7	Footrest distance centre (between rails)	
V/2F.R. 4	Footrest rails (left or right)	
V/2F.R. 9	Supporting bolt front end (see engine bolts)	
H/2F.B. 33	Distance tube for above (right side) ...	
V/2F.B. 33	Distance tube for above (right side) ...	
S.T.D. 1	End nuts for supporting bolt ...	
V/2F. 108	Rear end supporting bolt (see frame torque tube)	
S.T.D. 1	End nuts for above	
V/2F.R. 10	Footrest pad spindle	
S.T.D. 1	Footrest pad spindle fixing nut ...	
S.T.D. 8	Footrest pad spindle fixing nut washer	
R.F.R. 2	Footrest rubber pad	
V/2F.R. 51	Footrest bracket, left	
V/2F.R. 52	Footrest bracket, right	

HANDLEBAR.

V/5F.F. 165	Handlebar (bare)	
M.F.F. 127 & 127/A.	Handlebar grips, per pair (one closed end)	
L/4F.F. 64	Handlebar clip pinch bolt	
S.T.D. 3	Nut for above	
M.F.F. 48	Inverted handlebar lever complete ...	
M.F.F. 49	Lever portion only	
M.F.F. 50	Fulcrum screw for lever	
M.F.F. 51	Nut for fulcrum screw	
S.T.D. 40	Screw securing lever body to handlebar	
V/2F.F. 129	Cap for open end of handlebar (for use with twist grip control) ...	

SADDLE AND PARTS.

T/3F. 260	Saddle top only (Special Lycett Aero)...	
M/3F. 155/S.	Saddle springs (each)	
S.T.D. 3	Nut securing spring to saddle top and frame	
S.T.D. 10	Washer for nut	
L.F. 324/R.	Shouldered bolt for shadow nose fixing	
S.T.D. 4	Nut for above	

MAGNETO AND PARTS.

		£ s. d.
M.M.D. 10	Complete magneto	
41B.	Contact breaker complete	
4152/4122	Contact screws only with bell crank levers	
7P.	High tension pick-up complete ...	
1052	Carbon brush and spring only ...	
V.E. 113	Sparking plug cable with terminal end	
M.M.D. 14	Magneto chain sprocket magneto ...	
M.M.D. 10/A.	Nut fixing above to magneto	
M.M.D. 10/B.	Washer for nut	
M.E. 38	Magneto chain sprocket on camshaft ...	
L/3E. 269	Special nut securing sprocket to camshaft	
V.E. 48	Magneto aluminium platform ...	
M.M.D. 1	Bolt securing magneto to above (each)	
V.M.D 15	Magneto chain adjuster stud screws in above	
M.M.D. 21	Magneto advance and retard cable (outer)	
M.M.D. 20	Magneto advance and retard cable (inner)	
M.M.D. 11	Handlebar lever for above complete ...	
M.M.D. 11/A.	Lever portion only	
M.M.D. 11/B.	Screw centre screw securing lever ...	
M.M.D. 11/C.	Large washer for centre screw ...	

MECHANICAL OIL PUMP AND PARTS.

V.E. 99	Oil pump complete	
R.E. 131	Oil pump paper joint washer for timing gear	
P/O.P. 1S.	Oil pump body only	
P/O.P. 2	Oil pump cap (with cam projection) ...	
P/O.P. 3S.	Oil pump plunger	
P/O.P. 4	Oil pump regulator spindle	
P/O.P. 5	Oil pump driving worm	
P/O.P. 6	Oil pump screwed bush	
P/O.P. 7	Oil pump fibre washer for regulator ...	
P/O.P. 8	Oil pump steel washer for regulator ...	
P/O.P. 9	Oil pump spring washer for regulator ...	
P/O.P. 10	Oil pump cap for glass window ...	
P/O.P. 11	Oil pump glass window	
P/O.P. 19	Screws securing cam cap (each) ...	
P/O.P. 20	Washer for cam cap	
P/O.P. 22	Oil pump spring	
P/O.P. 24	Ratchet pin for regulator	
P/O.P. 25	Ratchet spring for regulator ...	
P/O.P. 26	Screw for window cap (each)	
V.E 99A.	Oil pump fixing screw	

			£	s.	d.
P/O.P.	28	Locking washer for screw			
V.E.	101	Oil pipe pump to tank			
V.E.	103	Oil pipe pump to crankcase			
P/O.P.	14	Oil pipe gland nut (pump end) ...			
P/O.P.	13	Oil pipe nipple			
L/3E.	284	Oil pipe union nut tank end, etc. ...			
L/3E.	290	Oil pipe nipple, tank end etc.			
L/3E.	287	Oil pipe union and filter (screws into tank)			
L.E.	479R.	Oil pump worm shaft block for drive (fits on flattened end of shaft) ...			

CARBURETTOR B. & B.

L.E.	402/S.	Complete carburettor (special type B & B)			
B. & B.	101	Float chamber body only			
B. & B.	102	Float chamber cap and tickler ...			
B. & B.	106	Float chamber needle valve			
B. & B.	104	Float			
B. & B.	118/134	Main jet complete			
B. & B.	158/1	Fibre washer for same			
B. & B.	138	Pilot jet			
B. & B.	139	Pilot jet air screw and spring ...			
B. & B.	135	Jet taper needle			
B. & B.	136/7	Needle holder and screw			
B. & B.	120	Spraying chamber			
B. & B.	128	Spraying chamber cap with bushes ...			
B. & B.	129	Spraying chamber cap lock ring ...			
B. & B.	130	Clip and bolt for inlet port			
B. & B.	116	Bolt only			
B. & B.	126	Throttle valve, air valve (per pair) ...			
B. & B.	145	Valve springs (pair)			
M.E.	289	Control levers (complete)			
M.E.	286	Air lever only			
M.E.	287	Throttle lever only			
V.E.	64	Control cables (inner and outer) complete			

EQUIPMENT.

P.H.	125	Head lamp, Acetylene (P. & H. 125) ...			
S.S.	47	Headlamp, Electric (Lucas S.S. 47) without brackets			
P.H.	135	Tail lamp, Acetylene (P. & H. 135) ...			
M.T.	110	Tail lamp, Electric (Lucas M.T. 110) ...			
P.H.	137	Side lamp, Acetylene (P. & H. 137) ...			
R.	335/S.	Side lamp, Electric (Lucas R. 335/S.) ...			
L.E.Q.	18	Acetylene generator with bracket ...			

			£	s.	d.
L.E.Q.	22	Electric head lamp bulb			
L.E.Q.	23	Electric side or tail lamp bulb ...			
L.E.Q.	19	Generator bracket only			
L.E.Q.	27	Accumulator in carrier			
L.E.Q.	28	Accumulator carrier only (68L/52S.)			
L.E.Q.	29	Accumulator only (L.J.W. 7E.) ...			
L.E.Q.	24	Head or tail lamp cable (per foot) ...			
L.E.Q.	20A.	Acetylene generator rubber tubing (per yard)			
P.H.	125A.	Acetylene head lamp glass			
P.H.	137A.	Acetylene side lamp glass			
S.S.	47A.	Electric head lamp glass			
L.E.Q.	33B.	Bonniksen speedometer complete (trip)			
L.E.Q.	33/B2.	Bonniksen speedometer complete (non-trip)			
L.E.Q.	34/B.	Bonniksen speedometer gear box ...			
L.E.Q.	35/B.	Bonniksen speedometer drive wheel complete			
L.E.Q.	39/40/B	Bonniksen speedometer cable (outer and inner)			
L.E.Q.	39/B.	Bonniksen speedometer cable (outer only)			
L.E.Q.	40/B.	Bonniksen speedometer cable (inner only)			
P.H.	202	Bulb horn (P. & H. No. 202)			
P.H.	202A.	Rubber bulb only			

TOOLS.

L.T.K.	15	Six-inch combination pliers ...			
L.T.K.	13	Six-inch screwdriver			
L.T.K.	10	Double end forged spanner ($\frac{1}{4}$ in. x 5/16 in.)			
L.T.K.	11	Double end forged spanner ($\frac{1}{2}$ in. x $\frac{3}{8}$ in.)			
L.T.K.	9	Tappet adjusting spanner			
L.T.K.	1	Thin open end spanner for cone lock nut			
L.T.K.	14	Tyre lever			
H.T.K.	11	Adjustable spanner			
L./3T.K.	21	Tyre pump			
L.T.K.	5	Magneto spanner			
T/3T.K.	17	Tool rolls only (each) 2 off			
T.T.K.	7	Tool rolls complete with all tools (less pump)			
T/3F.	245	Tool box only (see also luggage carrier)			
L./3T.K.	20	Grease gun (Tecalemit)			
T.T.K.	4	Carburettor lock nut spanner (1.480) ...			
H.T.K.	19	Ring spanner (.919)			
V.T.K.	19	Cone adjusting spanner			

SIDECAR AND PARTS (SINGLE SEATER).

			£	s.	d.
X.F.	221	Sidecar frame with 3 clip lugs attached			
L.F.	148	Pinch bolt for clip lug (each) ...			
S.T.D.	3	Nut for pinch bolt			
X.F.	223	Sidecar attachment bent arm front (upper)			
X.F.	224	Sidecar attachment bent arm front (lower)			
V/5F.	223	Sidecar attachment rear bent arm ...			
L.F.	95	Nut securing arm to frame lug ...			
L.F.	147	Washer for above			
X.F.	128	Clip lug for lower front arm attachment to frame tube complete			
L.F.	101	Bolts for clip lug only (each)			
V/2F.	138	Packing sleeve for clip lug (2 pieces) ...			
L.F.	94	Large bolt for fixing sidecar frame to clip lug above			
S.T.D.	1	Nut for bolt			
L/F.	91	Sidecar body rear springs (each) 3 leaves			
L/F.	96	Sidecar body rear spring fixing bolt (long)			
L/F.	106	Sidecar body rear spring fixing bolt (short)			
S.T.D.	4	Nuts for above			
L.F.	145	Rear spring pad lug plate			
L.F.	152	Sidecar body front coil spring ...			
S.T.D.	3	Nut for fixing bottom end of spring ...			
S.T.D.	10	Washer for nut			
L.F.	153	Bolt securing top end of spring ...			
L.F.	154	Large washer for above			
S.T.D.	3	Nut for above bolt			
L.B.D.	1	Sidecar body rear bearer bar			
S.T.D.	3	End nuts for above (each)			
H.B.D.	14	Spring washer for bearer bar ends ...			
H.B.D.	10	Plain washer for bearer bar ends ...			
S.T.D.	14	Split pin for bearer bar ends			
H.B.D.	9	Coach bolt for fixing rear bearer bar ...			
H.B.D.	13	Large washer for coach bolt ...			
H.B.D.	24	Nut for above bolt			
L.M.	24	Sidecar mudguard only			
S.T.D.	4	Nuts for fixing to body studs (each) ...			
S.T.D.	11	Washer for nut (each)			
L/4B.D.	25	Windscreen complete with all fittings (Matchless hinged)			
M.B.D.	317	Hood to suit above screen with all fittings			
T.B.D.	114	Sidecar body only (latest type touring with apron)			

			£	s.	d.
L./4B.D.	38	Sidecar body only (aluminium sports type) with apron			
L.B.D.	4	Sidecar body apron only, sports type ...			
M.B.D.	289	Sidecar body apron only, touring type ...			
H.B.D.	58	Apron turn buttons (each)			
L.F.	81/A.	Sidecar wheel with ball cups only ...			
C.H.	1	Sidecar wheel fixed cone			
C.H.	2	Sidecar wheel adjusting cone			
C.H.	3	Locking washer for adjusting cone ...			
C.H.	4	Castellated lock nut for adjusting cone			
C.H.	5	Split pin for above			
L.F.	6	Sidecar wheel hub end cap			
L.F.	7	Sidecar hub balls (per set)			
L.F.	8	Sidecar hub lubricator			
L.B.D.	11	Sidecar door handle (touring body) ...			
T/3H.	29/30	Sidecar tyre and tube (26 x 3.25 Palmer Flexicord			
T/3H.	29	Cover only			
T/3H.	30	Inner tube only			
X.F.	232	Sidecar wheel rim drilled and enamelled			
R.H.	43	Wheel spokes (each)			
R.H.	34	Spoke nipples (each)			
C.H.	10	Sidecar wheel axle			
C.H.	11	Fixing nut for above			
C.H.	13	Inner hub cup			
C.H.	14	Outer hub cup			

SIDECAR AND PARTS (2 seater type) (differing from single seater model).

			£	s.	d.
X.F.	126	Sidecar frame with 3 clip lugs attached			
V/5F.	225	Sidecar attachment bent arm front (upper)			
X.F.	224	Sidecar attachment bent arm front (lower)			
V/5F.	222	Sidecar attachment bent arm rear ...			
M.F.	119	Sidecar body rear springs (5 leaf type) each			
M.F.	120	Sidecar body rear springs fixing bolt each			
M.F.	66	Sidecar body front body springs ...			
M.F.	154	Sidecar body front body top fixing bolt			
S.T.D.	4	Sidecar body front body springs top fixing bolt nut			
M.F.	137	Sidecar body front bearer bar ...			
M.B.D.	1	Sidecar body rear bearer bar			
M.B.D.	116	Coachbolts securing bearer bars (each)			

			£	s.	d.
M.B.D.	118	Nut for bearer bar fixing bolt (each) ...			
M.B.D.	321	Front and side wind screens complete with all fittings			
M.B.D.	333	Hood to suit above with all fittings ...			
M.B.D.	334	Sidecar body only (without screen or hood)			
M.B.D.	335	Sidecar body only with screen and hood			
V/5H.	95	Sidecar wheel only less hub fittings and tyre			
V/5H.	94	Sidecar wheel less tyre but with all fittings			
M.H.	68	Sidecar wheel axle			
M.H.	59	Sidecar wheel axle fixed taper cone and rollers			
M.H.	72	Sidecar wheel adjusting taper cone and rollers			
M.H.	21	Sidecar wheel adjusting taper cone lock nut			
M.H.	20	Sidecar wheel adjusting taper lock nut washer			
S.T.D.	6	Split pin for lock nut			
M.H.	11	Sidecar wheel hub end cap			
M.H.	63	Sidecar wheel axle dust cap			
M.H.	59	Taper outer sleeve for wheel bearing ...			
M.H.	21	Wheel axle nut			
M.H.	12	Wheel axle nut washer			
S.T.D.	6	Wheel axle nut split pin			
M.F.	64	Sidecar wheel stand			
M.F.	63	Sidecar wheel stand fixing bolt ...			
M.F.	67	Sidecar wheel stand fixing bolt spring washer			