



INSTRUCTION BOOK

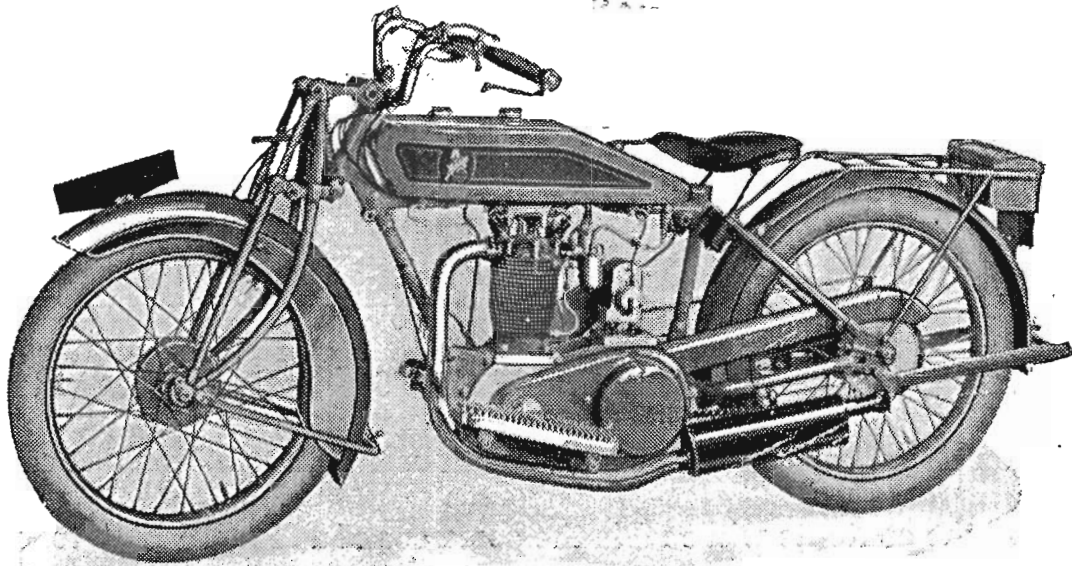
AND

SPARE PARTS LIST

1924-28

MODEL M

DRIVING AND ADJUSTMENT INSTRUCTIONS



"Matchless" Model "M."

H. COLLIER & SONS, LIMITED,
Manufacturers,

Registered Offices :

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

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

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

Telegrams & Cables — "Matchless, Woolwich."

Telephone — Woolwich 1010 (4 lines)

Code { *A.B.C. 5th Edition*
Benlleys,
& Private Code

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 "M" to carry out any small adjustments that may be necessary from time to time, and so obtain the best service from his mount, which result is our earnest desire.

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

H. COLLIER & SONS, LIMITED.

General Description.

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 is at a point where the extension on gear quadrant engages slot in gear lever (about one-third forward from rearmost position) and at this position engine should always be started.

Ignition is advanced or retarded by means of a lever on the left side of handlebar. To advance spark this lever should be drawn inwards; for starting it should be about three-quarters 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 the carburettor by depressing the button on the float chamber until the petrol actually overflows, then raise the left side handlebar lever to its fullest extent, and at the same time give the kickstarter crank a sharp and vigorous push downwards. This operation should not require at the most more than three or four attempts and it must be observed that the decompressor requires to be held up until the engine is actually running and must not be released on the downward movement of kickstarter crank as with the earlier Model 'M' fitted with valve lifter.

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

When fairly under way, smartly declutch and simultaneously shift gear lever forward into second gear position, which is in middle of quadrant, at the same time releasing clutch lever gently but smartly as engine takes up the drive, after which repeat the operation to obtain

STARTING—contd.

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 opening or ignition not sufficiently advanced.

It should be observed that the decompressor lever (left side on handlebar) must not be released until the engine is running.

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 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.

“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 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 existence is far more important than the next 5,000.
- DO NOT ignore these instructions or think them too elaborate. They have been compiled at a great amount of trouble, and are the outcome of practical experience extending over many thousand miles riding.
- DO NOT under any circumstances use the decompressor as a means of checking speed. This device is for starting only.

LUBRICATION

ENGINE.

The mechanical oil pump is very carefully set to deliver the correct quantity of oil to the engine and unless the owner has good cause we do not advise attempting to alter the delivery. At all times when starting up from cold a thin film of oily smoke should be apparent in the exhaust, and if at any time this should not be observed although the tell tale indicates that oil is passing, the two screws holding down the top plate on oil pump should be loosened and the centre barrel (the part with handle extension) turned one division of the indicator in a left hand or contra clockwise direction. The tell tale referred to above consists of a small plunger extension to the oil pump on the delivery side which must lift before oil can pass. Therefore, when oil is passing, this small plunger must necessarily be somewhat extended and at low speeds it will be seen to fluctuate with the action of the plunger of oil pump. It may be explained that at high engine speeds the deliveries of oil from pump are too rapid to allow of the tell tale plunger returning to its normal position between each impulse and therefore it constantly remains in an extended position. The movement of this tell tale must be noticed before and occasionally during each run as this is the only means by which driver can readily observe that the pump is functioning properly. At night time the position of the plunger can be felt quite easily, even though gloves are worn, and it must always be remembered that oil cannot pass into the engine until this tell tale plunger is extended thereby uncovering the oil passage.

WAKEFIELD'S CASTROL " C " WAKEFIELD'S " XL " } Advised.
GOLDEN SHELL or MOBIL OIL TT

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

CHAINS.

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

FORK SPINDLES.

Every 200 miles grease should be forced through the fork spindles by means of the grease pump provided until the grease can be observed exuding from either end of spindle bearings. (Special Foliac Graphite Grease recommended as a lubricant).

LUBRICATION—contd.**GEAR BOX.**

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

HUBS.

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

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

ADJUSTMENTS**ENGINE.**

To Adjust Tappets. To adjust inlet or exhaust tappets first unscrew the lower portion of the respective tappet rod protecting tube and slide this bottom portion up to expose the adjustable tappet. Then holding the tappet head with the special spanner provided, slack off the locking nut. The head may then be screwed up or down as required until the correct clearance is obtained after which securely tighten the locking nut and screw down the telescopic tappet covering tube.

NOTE.—The correct clearance for each valve, tested when engine is warm (not hot) is .002.

To obtain the best results as regards silence of valve gear this clearance should be accurately maintained and a cheap engineers feeler gauge will be found very useful for checking purposes.

TO ADJUST DECOMPRESSOR CABLE.

Start up engine. Then slack off the lock nut of cable adjuster fitted to the top end of tube projecting from timing gear cover and unscrew gradually the knurled edge adjuster until the decompressor comes into action when of course the engine will at once slow down and the exhaust will become very muffled. When this occurs, screw the adjuster in three complete revolutions when the locking nut should be securely tightened.

NOTE.—Care must be exercised in this adjustment to follow out the foregoing in strict detail.

TO REMOVE CYLINDER HEAD.

First revolve engine until both valves are closed after which unscrew the lower portion of each tappet rod protecting tube and telescope each

To Remove Cylinder Head—*contd.*

up into the longer top portion. Then unscrew the three bolts securing the overhead rocker housing when after detaching the oil pipes this housing together with tappets can be withdrawn intact. Next detach exhaust pipe and carburettor. Then remove the two links attached to two of the cylinder head bolts upon which the overhead rocker assembly is mounted, after which unscrew the six cylinder head fixing bolts when the head is free to be lifted clear.

NOTE.—No jointing material or washer of any description may be used for making the joint between cylinder and head. This joint is obtained by grinding the head on to cylinder top in exactly the same manner as grinding in a valve. The only care necessary upon refitting the head is to screw all six bolts down evenly.

GRINDING IN VALVES.

Proceed as above, after which rest the head of each valve in turn upon a block (of wood preferable) about 2" cube while the valve spring is being compressed to allow of the withdrawal of the cotter. After all carbon deposit has been removed the seating of valve should be smeared with a good grinding paste which may be obtained already mixed, and the valve turned slightly backward and forward by means of a stout screw-driver. Occasionally during this process the valve should be lifted off its seating. In the case of the exhaust valve two or three applications of grinding paste may be necessary to restore the seating, but generally a few seconds is sufficient to make the inlet seating perfect. Care is necessary upon replacing the valves to see that the valve stamped EX is fitted to the exhaust side, and prior to finally fixing, all traces of grinding material should be carefully removed, the guides thoroughly cleaned and the stem of each valve smeared with a graphite grease lubricant.

TO EXPOSE VALVE TIMING GEAR.

First detach at tank end the suction oil pipe, and to prevent leakage of oil, force into the oil pipe union on tank a taper wooden plug. Then detach the oil pipe entirely after which remove the delivery oil pipe, when upon unscrewing the fixing nut, the outer half of magneto chain case may be removed. Next remove the wide spacer nut on chain case supporting bolt, and the two nuts securing cam shaft and magneto chain sprockets respectively, then with a lever behind the chain case gently force off each sprocket in turn when the rear portion of chain case may be taken away. Next slacken the decompressor cable adjuster lock nut and screw the adjuster itself down into the tubular barrel until this barrel may be unscrewed to allow the cable end to be detached. Next remove all timing cover screws, when the cover with valve lifter parts intact may be gently forced off.

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.

NOTE.—Decompressor lever and link ME.100 and ME.97 must be withdrawn with cam wheel.

TO REPLACE CAM WHEEL AND TIMING GEAR COVER (Decompressor Type).

First see that the marked tooth on small pinion is vertical, then offer up the camwheel with the decompressor lever ME.100 in its groove on camwheel together, sliding the decompressor link ME.97 about half way down its fulcrum pin. Then holding both cam levers ME.107 up with the fingers gently press camwheel home with marked teeth on wheel and small pinion coinciding. To permit of this it will be observed that the link piece ME.97 must slide down its fulcrum at the same time as the camwheel is moved inwards. After making certain that the wheels are correctly meshed, i.e., with their respective marked teeth coinciding the engine should be revolved until the exhaust valve is up when the decompressor link ME.97 must be twisted on its pin until the rounded pad on decompressor lever ME.100 is approximately central under the ledge or projection on cam lever ME.107 (*see marks A-A on print*). While holding the decompressor link in this position the engine should be slowly revolved until the exhaust valve is at the top of the decompressing movement. This movement it should be explained is caused by the cam shaped contour of the groove in which the decompressor lever operates in camwheel, and occurs almost immediately after the inlet valve has closed. The diagram shows the cam wheel in section across this groove, and depicts the decompressor lever on top of the humped contour which is the position required. Next gently apply the timing gear cover sliding the outer half of decompressor link on to its pin at the same time. When about $\frac{1}{2}$ " from home the decompressor rod, i.e., the rod to which the operating cable is connected should be pulled up to its fullest extent to enable the slotted joint of the two parts of the decompressor link engaging properly. Just prior to fixing the cover the edge of same should be lightly smeared with quick drying gold size or seccotine.

NOTE.—A careful study of the accompanying illustration will render the foregoing quite clear, and will enable the reader to readily follow the operations of the decompressing arrangement by which, part of the charge is released upon the compression stroke.

TO REMOVE MAGNETO.

Remove magneto chain and sprockets, also magneto chain case. (See To Expose Timing Gear). Then detach sparking plug cable from sparking plug and all frame clips. Then disconnect magneto control wire and after removing the four bolts securing the magneto to platform, the whole is ready to be lifted clear.

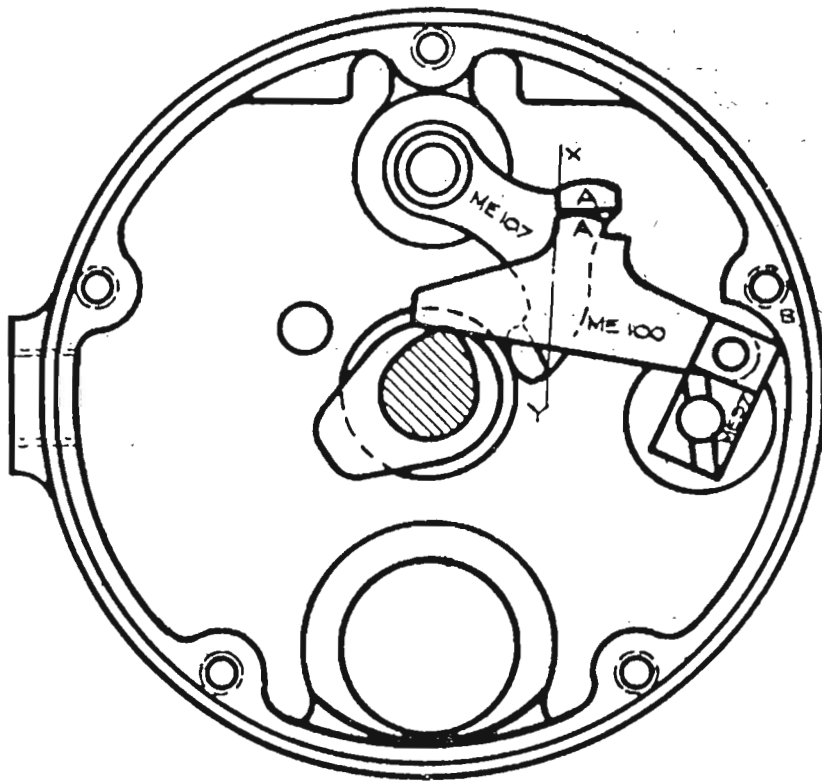
NOTE.—When replacing, care must be exercised to fix magneto with sprockets exactly in line with one another. This should be tested with a straight edge (12 inch rule will serve).

TO RE-TIME MAGNETO.

Revolve the engine by hand until piston is approximately seven-sixteenths of an inch from top of compression stroke (i.e., the stroke upwards immediately after inlet valve has closed).

NOTE.—To ascertain position of piston, remove compression tap and insert a piece of stout wire, preferably of sufficient length to reach piston

TIMING GEAR, ETC.



To Re-time Magneto—*contd.*

when at bottom, then with ignition lever in fully advanced position, and magneto sprocket loose on shaft (the other sprocket being previously tightened), turn the magneto armature backwards until the points are just about to break. Holding carefully in this position tighten up the magneto sprocket nut securely.

TO ADJUST MAGNETO CHAIN.

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

Correct chain adjustment is such that when the top of chain is lightly pressed up and down a whip of about $\frac{1}{2}$ inch is obtained.

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

TO INSPECT GEAR BOX INTERIOR

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

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

GEAR ROD ADJUSTMENT.

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

When the gear is correctly adjusted the gear lever should move an equal amount either side of the neutral notch without engaging either middle or low gear.

CLUTCH ADJUSTMENT.

In the event of clutch slip being experienced the adjustment of clutch operating cable should be suspected. When correctly adjusted it should be possible to move the clutch actuating worm (part to which lower end of cable is attached) forward slightly with the fingers and if this free movement cannot be felt the cable stop should be adjusted accordingly. If necessary the bolt securing the clutch worm lever may be slackened and the worm portion revolved slightly backward to provide slacker cable adjustment or forward to tighten.

TO ADJUST FRONT CHAIN.

Slack off the four nuts on gear box fixing studs which pass through the aluminium bracket upon which magneto is mounted and also slacken the bolt which passes through engine plates immediately above gear

To Adjust Front Chain—*contd.*

box, after which to tighten chain screw in the adjuster bolt which passes through the centre of the frame lug at foot of seat tube. Turning this adjuster bolt in a clockwise or right hand direction will draw the gear box backward bodily, thereby taking up chain slackness as desired. The four gear box stud nuts and the bolt above gear box must be excessively tightened after adjustment to prevent movement of the gear box under the influence of chain pull.

NOTE.—If the above nuts are not properly tightened the chain pull is likely to draw the gear box backward and so tighten the front chain to an undesirable extent.

TO ADJUST REAR CHAIN.

Put down rear stand, then slack off rear wheel spindle nuts and bolt which secures brake cover plate to special lug on frame tube. Then adjust chain as required by means of the bolts which pass through each of the fork ends, after which securely tighten spindle nuts and bolt securing brake cover plate. Tension of chain should be tried in a number of places, and the correct adjustment (which should allow a whip of $\frac{3}{8}$ in. to $\frac{1}{2}$ in. when chain is pressed up and down) should be obtained for the tightest place.

IMPORTANT.—It must be noted that correct position of rear wheel to obtain rear chain alignment is $\frac{1}{4}$ in. out of central between rear chain stays. Nearest side to wheel rim being chain side or left side as when seated.

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.

TO ADJUST FRONT FORKS

Adjustment to front fork spindles for side wear. The need for adjustment will be made apparent by a creaking noise heard when steering head is turned abruptly while machine is stationary. To correct this first ascertain which spindle or spindles require attention. Then slack off the grease cap and small spindle nut on same side and also slack off the large lock nut on opposite end after which turn the spindle itself in a left hand or contra clockwise direction not more than half a revolution and while still holding the spindle by means of the hexagonal end, tighten the small end nut, after which the locking nut on other end should be secured. Repeat this operation if necessary, but considerable care is necessary to guard against over-tightening when the fork will be stiff in action or most likely refuse to function.

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

TO REMOVE REAR WHEEL

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

TO REMOVE FRONT WHEEL.

Put down front stand (*see note below*). Then disconnect front brake rod at the bottom end, slack off wheel axle nuts and with a stout screw-driver or tyre lever gently spring each side of the fork out in turn, at the same time pressing wheel downwards.

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

TO ADJUST WHEEL BEARINGS.

To adjust either back or front wheel first loosen the left side axle nut. Then with the thin cone adjusting spanner turn the cone slightly in a right hand direction, and when wheel is almost free from shake, tighten axle nut securely.

NOTE.—It is advisable to verify adjustment of bearing after axle nut has been retightened. Slightest possible amount of shake should be felt.

PERIODICAL INSPECTION OF NUTS (IMPORTANT).

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

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

CLEANING.

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

Stoppages and the Likely Causes

ENGINE SUDDENLY STOPS. Probable cause:

- Petrol low in tank.
- Dirt in petrol pipe.
- Choked jet.
- Water in float chamber.
- Choked petrol pipe or tap.
- Air lock in tank.

Stoppages and the Likely Causes—*contd.*

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 magneto contacts.

ENGINE WILL NOT START. Probable cause :

- Too liberal throttle opening.
- Valve stuck up.
- Water on plug.
- Choked jet.
- Valve or valves not seating properly.

LEGAL MATTER.

To comply with the law relating to motorcycles the owner of a "Matchless" Model 'M' must :—

1. Hold a driver's licence, which can be obtained from the Chief Constable or Corporation of a County Borough, or from the County Council. The charge for this licence is 5/- yearly, and must be renewed annually from the date of issue. A motor-car driver's licence covers the driving of a motorcycle.
2. Apply to the Taxation Department of the Local Authority of the district in which the vehicle is to be ordinarily kept, for Inland Revenue Licence and Registration Form RF 1/2 (Motorcycles only). The address of the above Taxation Department can be obtained by enquiry at a Post Office.
3. The form RF 1/2 when obtained must be filled in and returned, accompanied by a remittance of £3/0/0 if used solo, and £4/0/0 if desired for use with sidecar, and in some districts evidence that the vehicle to be licenced is new and has not previously been registered may be demanded. Manufacturers' or Agents' invoice will serve.
4. See that his front plate is illuminated at night on both sides. See that his machine, if used with sidecar, is provided with a lamp on the extreme near side of same showing a light forward, and is also provided with a lamp which shows a red light to the rear. The law regarding this matter 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.

LEGAL MATTER—contd.

For registration purposes, the following particulars will be required :—

Weight of cycle unladen	...	...	220-lbs.
Weight of sidecar (if requested only)	...	...	160-lbs.
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 Terms and Conditions.

We give the following Guarantee with our motorcycles instead of the Guarantee implied by statute or otherwise as to the quality of fitness of such machines for the purpose of motorcycling, and such implied Guarantee being in all cases excluded. In the case of machines which have been used for “ Hiring out ” or racing purposes, or in respect of which our trade mark or manufacturing number has been removed, no Guarantee of any kind is given or is to be implied.

WE GUARANTEE, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship : but this Guarantee is to extend and be in force for six months only from date of purchase, and the damages for which we make ourselves responsible under this guarantee are limited to the replacement of any part which may have proved defective.

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

CONDITIONS.

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

If a defective part should be found in our motorcycles it must be sent to us, carriage paid, and accompanied by an intimation from the sender that he desires to have it repaired free of charge under our Guarantee and he must also furnish us at the same time with the number of the machine, the name of the Agent from whom he purchased, and the date of purchase.

GUARANTEE TERMS AND CONDITIONS—*contd.*

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

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

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

THE TERM "AGENT."

is used in a complimentary sense only, and those firms whom we style our agents are not authorised to advertise, incur any debts or transact any business whatsoever on our account other than the sale of goods which they may have purchased from us ; nor are they authorised to give warranty or make any representation on our behalf other than those contained in the above Guarantee.

MACHINE NUMBERS.

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

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

H. COLLIER & SONS, LIMITED

INTRODUCTION.

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

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

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

Read carefully rules on pages 17 and 18.

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

H. COLLIER & SONS, LIMITED.

TERMS OF BUSINESS.

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

All repairs accounts are strictly cash before delivery.

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

DEPOSIT ACCOUNT.

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

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

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

REPAIRS.

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

OVERHAULING.

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

ESTIMATES

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

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

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

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

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

All repair accounts are strictly cash before delivery.

RULES TO BE OBSERVED.

1. Parts sent to us for repair, replacement, or as pattern must bear distinctly sender's full name and address. Instructions regarding same must be sent under separate cover, otherwise goods may lie at our works and not be unpacked until instructions regarding same are received.

2. All goods must be consigned to us carriage paid.

3. Do not enclose cash (whether in the form of coin or paper) with goods. Remittance should be sent by letter post for your own protection.

4. Customers having no account with us should not fail to remit at the time of order and also to include postage.

5. When customer has no account, a Telegraph Money Order will ensure immediate attention.

6. When making enquiries respecting any part on order or repair it is advisable to quote date of order.

7. In case of doubt regarding correct names of parts required it is advisable to send old part as pattern.

DAMAGE IN TRANSIT.

Our responsibility ceases when goods leave our works, and claims must be made on carriers in the event of damage occurring in transit. All goods easily damaged by rough handling are consigned (when by rail) at Railway Company's Risk, and all complete combinations consigned by rail, whether crated or otherwise, are until present conditions of transport improve, insured against damage in transit. Any such damage should be immediately reported.

NOTE.—By Railway Companies special regulations, unless damage in transit is reported within 3 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	
M.E.	20	Axle for flywheel (timing gear side) ...	6	9	
M.E.	7	Axle for flywheel (crankpin) ...	8	0	
		See flywheels for other parts ...			

B.

M.E.	31	Bush for flywheel axle (timing side) ...	3	9	
M.E.	32	Bush for camshaft (crankcase side) ...	1	9	
M.E.	122	Bush for camshaft (outer or cover side) ...	2	0	
M.E.	124	Bush for gudgeon pin ...	3	10	
M.E.	129	Bush (hardened steel for roller bearing transmission side of crankcase) ...	5	7	
		Breather for crankcase (see release valve)			

C.

M.E.	1	Cylinder ...	1	15	3
M.E.	126	Cylinder holding down stud (each) ...			5
S.T.D.	2	Nut for same (each) ...			5
M.F.	2	Cylinder head (only) ...	1	15	0
M.F.	88	Cylinder head bolts (plain top) ...			10
M.E.	87	Cylinder head bolts (with threaded extension) ...	1	2	
M.E.	86	Cylinder head bolts (drilled and tapped)	1	0	
M.E.	146	Compression tap ...	2	6	
M.E.	147	C. and A. washer for above ...			2
M.E.	91	Cylinder head stud for inlet or exhaust pipe flange ...			4
M.E.	254	Nut for same ...			4
M.E.	253	Crankcase (complete with bushes and studs)	4	15	0
M.M.D.	17	Crankcase bolt long for magneto chain case support ...			9
S.T.D.	3	End nuts for same (see also chain guards) each ...			3
M.M.D.	3	Special sleeve nut for magneto chain case interior ...			5
M.C.C.	7	Distance or spacing tube chain case to engine plate ...			5
M.C.C.	12	Crankcase bolt long for front chain guard support ...			7
S.T.D.	3	Nuts for same (each) ...			3
M.E.	54	Crankcase bolt short $\frac{3}{8}$ " diameter ...			8
S.T.D.	3	Nuts for same (each) ...			3
M.E.	10	Crankcase timing gear cover (see also timing gear ...)	6	6	

C.—contd.

			£	s.	d.
M.E.	3	Connecting rod (bare) (see also flywheels) ...		15	3
M.E.	130	Connecting rod with small end bush ...		19	3
		Camshaft (see also timing gear) ...	1	2	0
M.E.	59	Cam lever or rocker, inlet ...		11	0
M.E.	60	Cam lever or rocker, exhaust ...		11	0
M.E.	7	Crank pin only ...		8	0
M.E.	120	Nuts for same (each) ...			5
M.E.	110	Crankpin rollers (each) ...			2

D.

M.E.	35	Drain plug for crankcase ...			4
M.E.	97	Decompressor link for lever ...	1		0
M.E.	98	Decompressor link for shackle rod ...		10	
M.E.	21	Decompressor shackle rod ...	1		4
M.E.	26	Pin for shackle rod yoke end ...			6
S.T.D.	14	Split pin for above ...			1
M.E.	100	Decompressor cam lever ...			9

E.

		Engine bolts (see engine plates) ...			
		Exhaust valve (see valves) ...			
		Exhaust pipe (see silencer) ...			
		Exhaust tappet (see timing gear) ...			
		Exhaust tappet rod (see timing gear) ...			

F.**FLYWHEELS AND AXLES, ETC.**

M.E.	6	Flywheel (timing gear side) ...		17	9
M.E.	5	Flywheel (transmission side) ...		17	9
M.E.	7	Flywheel crank pin ...		8	0
M.E.	120	Fixing nut for same (each) ...			5
S.T.D.	15	Lock screw for nut (each) ...			2
M.E.	8	Flywheel axle (transmission side) ...		6	9
M.E.	120	Nut for same (each) ...			5
S.T.D.	15	Lock screw for nut (each) ...			2
M.E.	31	Flywheel axle (timing side) ...		6	9
M.E.	42	Nut for same (inside) ...			5
S.T.D.	15	Lock screw for nut ...			2
M.E.	25	Nut for securing small timing pinion ...			5
M.E.	24	Keys for flywheel axle (each) ...			5

G.

M.E.	135	Gudgeon pin only ...		5	0
M.E.	41	Gudgeon pin securing rings (each) ...			1
		Gudgeon pin bush (see bushes) ...			

G.—*contd.*

			£	s.	d
M.E.	72	Guide for tappet (inlet or exhaust) ...		4	9
M.E.	105	Guide for inlet valve		4	6
M.E.	106	Guide for exhaust valve		2	10
M.E.	109	Gasket for inlet pipe flange			4
M.E.	52	Gasket for exhaust pipe flange			4

I.

Inlet valve (see valves)	
Inlet valve guide (see valves)	
Inlet tappet (see valves)	
Inlet tappet rod (see valves)	

M.

Magneto and parts (see Page 41) ...	
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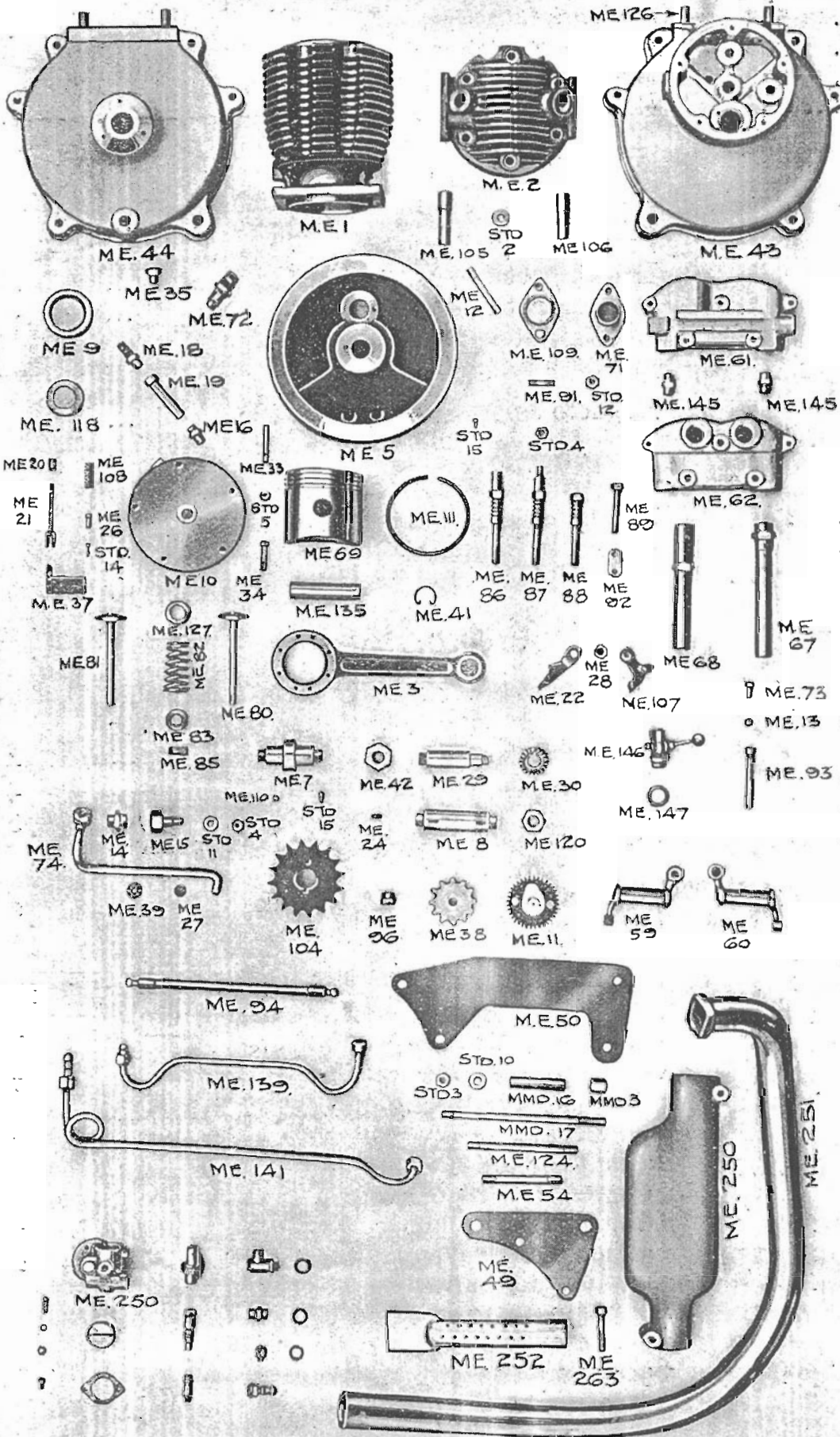
N.

M.E.	261	Nipple for oil pipes (each)			3
M.E.	26	Nipple for petrol pipe (tank end)			3
M.E.	268	Nipple for petrol pipe (carburettor end) ...			3

O.

M.E.	35	Oil drain plug for crankcase			4
M.E.	141	Oil delivery pipe (pump to O/H rocker housing)		4	0
M.E.	140	Oil feed pipe (pump to tank)		4	6
M.E.	139	Oil pipe (O/H rocker housing to cylinder)		3	8
M.E.	145	Oil pipe union for cylinder or O/H rocker housing)			3
M.T.	32	Oil pipe union and filter for tank		2	3
M.E.	260	Oil pipe union nut only (each)			4
M.E.	261	Oil pipe nipple (each)			3
M.E.	116	Oil pump complete	19		0
M.E.	5475/1	Oil pump body only	3		0
M.E.	5475/5	Oil pump centre worm spindle (steel) ...	1		0
M.E.	5475/3	Oil pump worm sleeve (bronze)	1		6
M.E.	5475/2	Oil pump regulating block (with handle extension)	1		6
M.E.	5475/9	Locking plate for above			6
		Screws for plate (per dozen)			6
M.E.	5475/4	Oil pump steel plunger	1		6
M.E.	5475	Oil pump tell tale complete... ..	2		6
M.E.	5475/2 & 9	Oil pump tell tale plunger and cap only ...			9
		Oil pump fixing screws (each)			1
		Nut for above (each)			1
M.E.	96	Special nut for oil pump drive (see timing gear)			11

ENGINE PARTS



O.—*con. d.*

			£	s.	d.
M.E.	134	Overhead valve rocker aluminium housing		18	6
M.E.	59	Overhead rocker (inlet)		11	0
M.E.	60	Overhead rocker (exhaust)		11	0
M.E.	92	Links for supporting housing (fitted to M.E. 87)			10
S.T.D.	4	Nut for fixing above			2

P.

M.E.	69	Piston bare		13	0
M.E.	264	Piston complete with gudgeon pin and rings	1	1	2
M.E.	111	Piston ring (each)		1	0
M.E.	30	Pinion small for timing gear		4	6
M.E.	25	Nut for fixing above			5
M.E.	12	Pin or axle for cam levers (see also timing gear)		2	0
M.E.	12	Pin or axle for decompressor link (see also timing gear)		2	0
		Petrol pipe (see carburettor)			

R.

M.E.	265	Release valve complete with pipe		6	0
M.E.	74	Release valve pipe and top only		3	7
M.E.	14	Release valve screwed body			10
M.E.	15	Release valve screwed cap		1	4
S.T.D.	4	Nut for securing pipe			2
S.T.D.	11	Washer			1
M.E.	27	Release valve diaphragm			2
M.E.	39	Seating for above			9
M.E.	110	Rollers for big end (each 2d.) per set		7	0
M.E.	47	Rollers and cage for transmission side of crankcase		8	6
M.E.	9	Hardened steel outer race for same		5	7
M.E.	107	Rocker or cam lever (inlet)		4	9
M.E.	107	Rocker or cam lever (exhaust)		4	9
M.E.	59	Rocker (overhead) inlet		11	0
M.E.	60	Rocker (overhead) exhaust		11	0
M.E.	134	Rocker housing (overhead) complete		18	6
M.E.	92	Link piece for supporting above (fitted to M.E. 87)			10
M.E.	89	Bolts for fixing housing (each)			5

S.

M.E.	113	Sparking plug with C. and A. washer		5	0
M.E.	147	Sparking plug C. and A. washer only			2
M.E.	82	Spring for valves (inlet or exhaust) each			6
M.E.	108	Spring for exhaust valve lifter			2
M.E.	104	Sprocket for engine shaft (transmission)		7	0

S.—*contd.*

			£	s.	d.
M.E.	34	Screw for timing gear cover (each) ...			3
M.E.	33	Stud for timing gear cover (each) ...			5
S.T.D.	5	Nut for stud			2
M.E.	38	Sprocket for magneto chain (see magneto)	2		0
M.E.	300	Silencer (pressed steel)	5		3
M.F.	82	Bolt for silencer support strap			3
S.T.D.	4	Nut for same			2
M.E.	126	Screwed stud for cylinder fixing			5
S.T.D.	4	Nut for same (each)			2
M.E.	91	Screwed stud for inlet or exhaust pipe flange			4
M.E.	254	Nut for same (each)			4
M.E.	250	Silencer (earlier aluminium type)	12		9
M.E.	252	Fish tail extension for above	2		6

T.

TIMING GEAR, ETC.

M.E.	72	Tappet guide (inlet or exhaust)	4		9
M.F.	93	Tappet complete (inlet or exhaust)	2		0
M.E.	77	Tappet head only			7
M.E.	13	Tappet head lock nut			4
M.E.	76	Tappet body (inlet or exhaust)	1		4
M.E.	94	Tappet rod assembled (inlet or exhaust)	3		3
M.E.	67/68	Telescopic tube for covering tappet rod (inlet or exhaust)	5		10
M.E.	67	Top portion of above only	2		10
M.E.	68	Bottom portion only	3		0
M.E.	132	Timing gear cover with bush	8		6
M.E.	122	Timing gear cover bush only (see also bushes)	2		0
M.E.	11	Timing gear camshaft	1		2 0
M.E.	30	Timing gear small pinion	4		6
M.E.	25	Nut for fixing above			5
M.E.	96	Nut for camshaft (securing magneto sprocket)... ..			11
M.E.	107	Timing gear cam lever (inlet or exhaust)	4		9
M.E.	97	Timing gear link for decompressor lever	1		0
M.E.	98	Timing gear link for shackle rod			10
M.E.	21	Decompressor shackle rod	1		4
M.E.	26	Pin for same			6
M.F.	100	Decompressor lever			9
M.E.	99	Spacer for cam levers			4
M.E.	12	Timing gear cam lever axle	2		0
M.E.	28	Timing gear cam lever spacing collar			7
M.E.	33	Timing gear cover stud			5
S.T.D.	5	Nut for above			2
M.E.	34	Timing gear cover screw			3

U.

			£	s.	d.
M.E.	260	Union nut for oil pipe			4
M.E.	145	Union for oil pipes (screws into cylinder, etc.)			3
M.T.	28	Union for oil pipe (screws into tank) ...	2		3
M.E.	269	Union nut for petrol pipe (carburettor end)			4
M.T.	27	Union nut for petrol pipe (tank end) ...			4

V.

M.E.	81	Valve inlet (stem only)	5		3
M.E.	271	Valve inlet complete with spring, cap and cotter	6		6
M.E.	80	Valve exhaust (stem only)	7		9
M.E.	272	Valve exhaust complete with spring, cap and cotter	9		0
M.E.	82	Valve spring (inlet or exhaust)			6
M.E.	83	Valve spring cap (bottom)			7
M.E.	127	Valve spring cap (top)			7
M.E.	85	Valve cotter (each)			5
M.E.	105	Valve guide (inlet)	4		6
M.E.	106	Valve guide (exhaust)	3		0
M.E.	72	Valve tappet guide (inlet or exhaust) ...	4		9
M.E.	17	Decompressor screwed barrel	1		0
M.E.	18	Decompressor cable adjuster (screws into above)			7
M.E.	19	Lock nut for above			4
M.E.	16	Decompressor shackle rod guide (screws into timing cover)	1		0
M.E.	100	Decompressor lever (inside timing case)			9
M.E.	97	Decompressor lever link	1		0
M.E.	98	Shackle rod link (engages above)			10
M.E.	21	Decompressor shackle rod	1		4
M.E.	26	Pin for above			6
S.T.D.	14	Split pin			1
M.E.	108	Decompressor spring			2
M.E.	36	Shackle rod end (carrier cable nipple) ...	1		0
M.E.	20	Decompressor cable nipple (engine end)			3
M.E.	273	Decompressor cable nipple (handlebar end)			3
M.E.	274	Decompressor cable (inner and outer) ...	2		10
M.E.	275	Decompressor cable (inner only)			9
M.E.	276	Decompressor cable (outer only)	2		1
M.F.	104	Decompressor lever for handlebar (see handlebars)			

ENGINE PLATES AND BOLTS.

M.E.	50	Rear engine plate (left or right)	3		4
M.E.	49	Front engine plate (left or right)	1		4
M.E.	54	Engine plate bolt for crankcase $\frac{3}{8}$ " short ...			8
S.T.D.	3	Nuts for above (each)			3
M.M.D.	17	Engine plate bolt $\frac{3}{8}$ " supporting magneto chain case			9

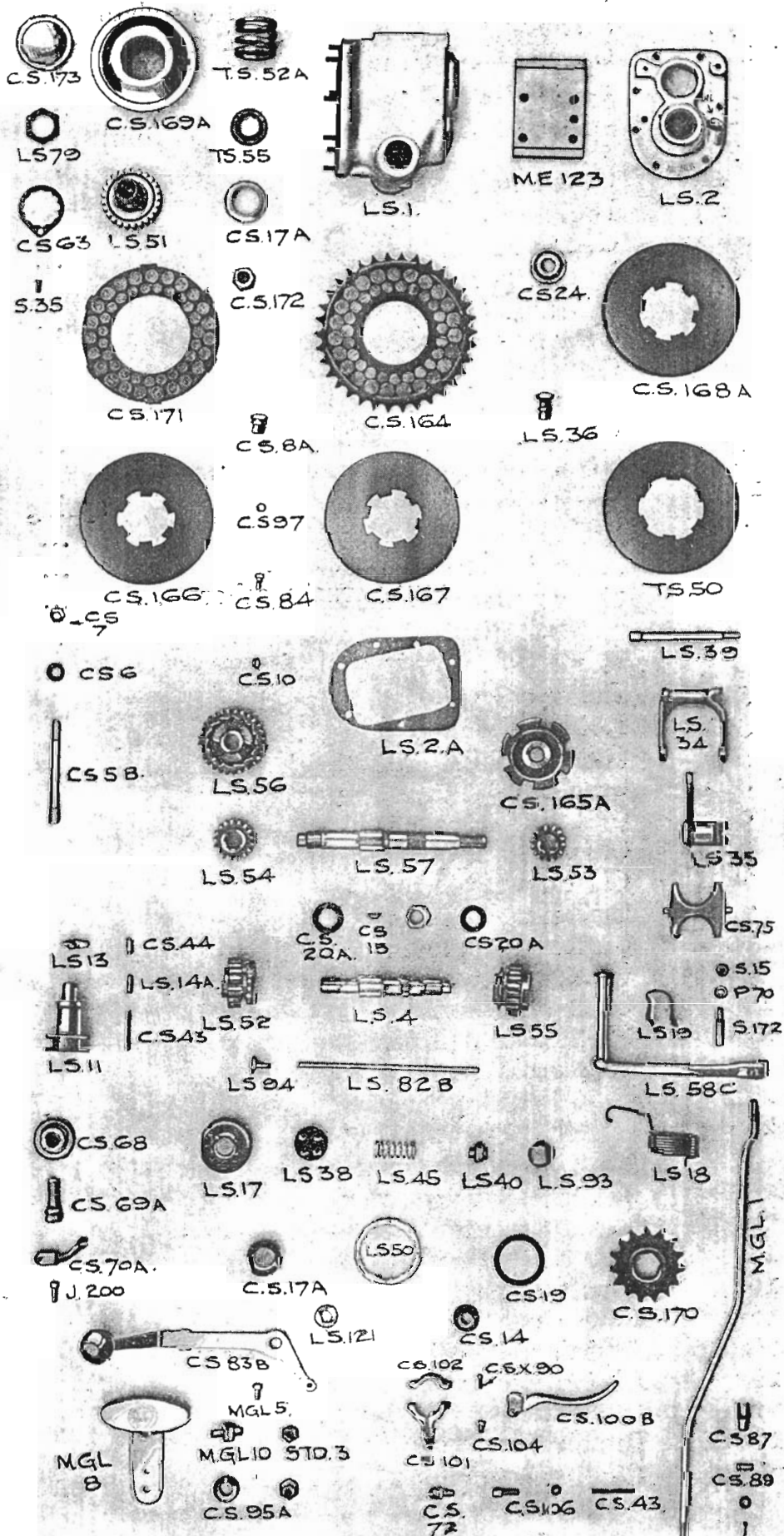
Engine Plates and Bolts—*contd.*

			£	s.	d.
M.C.C.	12	Engine plate bolt supporting front chain guard			7
M.E.	124	Engine plate bolt for frame lug front			7
S.T.D.	1	Nuts for above			5
M.F.	58	Engine bolt for frame lug rear (bottom)			8
S.T.D.	3	Nuts for same (each)			3
M.E.	125	Spacing collar for rear engine plate crank-case bolt			7
M.F.	86	Engine bolt for frame lug rear (top)			8
S.T.D.	3	Nut for above			3
M.F.	86	Engine plate bolt (above gear box)			8
S.T.D.	3	Nuts for above (each)			3

GEAR BOX.

L.S.	1	Gear box shell only (4 stud fixing)	2	2	6
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	Main shaft high speed pinion		18	0
L.S.	52	Middle gear sliding pinion for main shaft		10	0
L.S.	55	Middle gear sliding pinion for layshaft		11	0
L.S.	54	Layshaft pinion		6	0
L.S.	53	Main shaft pinion		4	6
L.S.	56	Low gear and K.S. pinion		11	6
L.S.	11	Kickstarter axle or shaft) supplied		12	6
L.S.	12	Layshaft bush (assembled only)			
L.S.	13	K.S. Pawl		1	3
L.S.	14a	K.S. pawl pin			3
C.S.	43	K.S. pawl spring			1
C.S.	44	K.S. pawl spring plunger			3
L.S.	58c	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.	170	Sprocket for rear chain (15 tooth)		10	0
C.S.	66	Sprocket fixing nut			9
C.S.	63	Sprocket locking plate			5
C.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

GEAR BOX PARTS



Gear Box—*contd.*

			£	s.	d.
L.S.	45	Compensater spring for rocking shaft ...			5
C.S.	75	Striking fork plate or slipper ...	2	6	
M.E.	123	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
T.S.	9	Gear box end plate studs (each) ...			3
T.S.	10	Gear box end plate stud nuts (each) ...			2
T.S.	143	Gear box end plate bolt for K.S. stop spring ...			3
M.E.	46	Gear box adjuster (for front chain) ...			9
M.E.	45	Special long bolt for above ...			7
C.S.	20a	Main axle bronze thrust washer ...	1	6	

CLUTCH PARTS.

L.S.	50	Roller cage ...	2	0	
L.S.	50a	Roller cage plate ...			3
L.S.	50b	Roller $\frac{1}{4}$ " diameter (each) ...			2
L.S.	82b	Clutch rod ...			10
L.S.	94	Clutch rod thrust pin ...			10
C.S.	68	Clutch worm nut ...	5	0	
C.S.	69a	Clutch worm ...	1	9	
C.S.	70a	Clutch worm lever ...	2	6	
J.	200	Clutch worm lever pinch bolt ...			1
C.S.	72	Clutch cable adjuster support stud ...	1	0	
C.S.	106	Clutch cable stop with lock nut ...			9
M.E.	277	Clutch cable (inner and outer) ...	5	6	
M.E.	278	Clutch cable (inner only) ...	1	6	
M.E.	279	Clutch cable (outer casing only) ...	3	6	
M.E.	280	Clutch cable spring ...			3
		Clutch handlebar lever (see handlebars)			
M.E.	281	Lever portion only ...	4	6	
M.E.	282	Lever fulcrum bolt and nut ...			5
M.E.	283	Lever clip screws (each) ...			2
C.S.	164	Clutch sprocket ...	1	10	0
C.S.	165a	Clutch centre ...	13	6	
C.S.	166	Clutch plate (dished) ...	2	6	
C.S.	167	Clutch plate flat ...	2	6	
C.S.	171	Clutch friction ring with fibre plugs ...	5	0	
C.S.	168a	Clutch outer plate ...	2	6	
C.S.	169a	Clutch spring cup ...	3	0	

Clutch Parts—*contd.*

						£	s.	d.
T.S.	52a	Clutch spring	...	...	...		1	8
T.S.	50	Clutch back plate	...	...	...		2	6
C.S.	173	End cap (screws into C.S. 169a)	...	...	...		1	6
C.S.	13	Clutch centre axle nut	...	...	...			5
C.S.	15a	Clutch centre axle key	...	...	...			3
C.S.	14	Clutch axle nut lock washer	...	...	...			1
C.S.	172	Clutch spring nut	...	...	...			9
T.S.	55	Clutch spring collar (fits over above)	...	...	...			6
L.S.	116/a	Ferodo inserts	...	...	per doz.		1	0

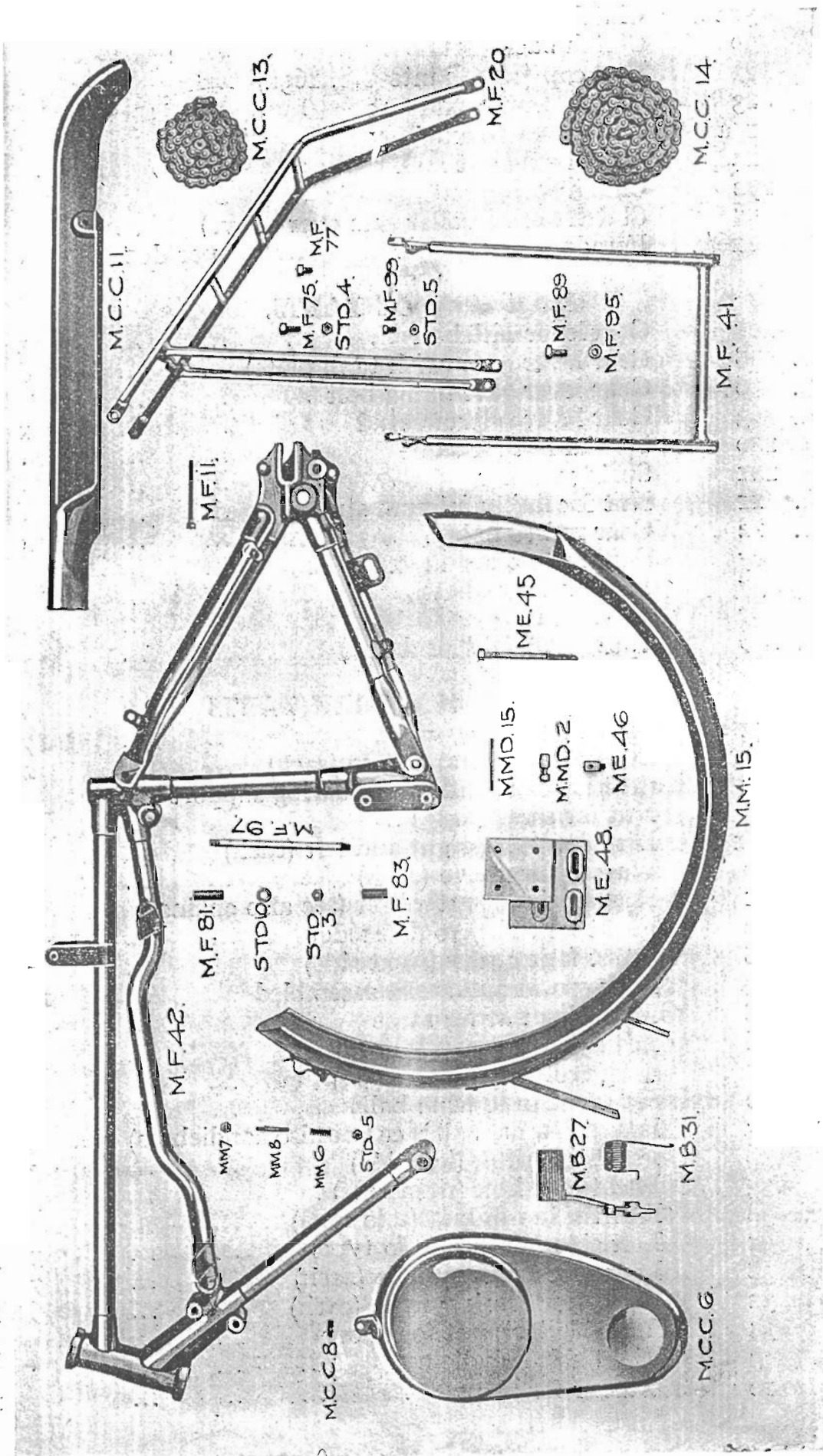
GEAR CHANGE PARTS.

L.S.	107	Gear lever with ball	...	...	...		5	0
M.G.L.	8	Gear lever gate (with tank plate)	...	...	...		6	6
M.G.L.	6	Gear lever gate fixing bolt	...	...	...			3
M.G.L.	3	Gear lever fulcrum stud	...	...	...		1	0
L.S.	120	Special nut for same	...	...	...			5
L.S.	121	Spring washer	...	...	...			4
M.G.L.	11	Nut for fixing fulcrum stud...	...	...	...			3
M.G.L.	12	Gear rod complete	...	...	...		4	6
C.S.	87	Gear rod yoke end	...	...	...			10
C.S.	37	Lock nut for above	...	...	...			1
C.S.	97	Yoke end pin	...	...	...			2
C.S.	108	Split pin only (per dozen)	...	...	...			6

FRAME AND 1924 FORK PARTS

M.F.	42	Complete frame	...	...	...	5	17	6
M.F.F.	37	Steering head frame race (each)	...	...	...		2	5
M.F.	97	Seat lug bolt and saddle spring support	...	...	...			7
S.T.D.	3	Nut for same (each)	...	...	...			3
M.F.	83/81	Distance tube, right and left (each)	...	...	...			4
S.T.D.	10	Washer for above (each)	...	...	...			1
M.F.	11	Rear chain adjuster bolt (see also chains)	...	...	...			10
M.F.F.	19	Front fork girders (left side)	...	...	...	1	6	0
M.F.F.	18	Front fork girder (right side)	...	...	...	1	7	6
M.F.F.	29	Fork crown and stem, assembled	...	...	...		15	0
M.F.F.	28	Adjusting nut for same	...	...	...			6
M.F.F.	26	Adjusting nut cap lock nut	...	...	...		1	2
M.F.F.	5	Fork crown ball race	...	...	...		3	2
M.F.	80	Set of steering head balls	...	...	...		1	3
M.F.F.	37	Handlebar lug ball race (see also handlebars)	...	...	...		2	5
M.F.F.	36	Front fork link (left side)	...	...	...		3	2
M.F.F.	35	Front fork link (right side)	...	...	...		3	0
M.F.F.	30	Right side top link (solo type)	...	...	...		3	1
M.F.F.	31	Left side top link (solo type)	...	...	...		3	3
M.F.F.	38	Long front fork spindle (each)	...	...	...		7	2
M.F.F.	32	Short front fork spindle (each)	...	...	...		6	1
M.F.F.	34	Left side lock nut for above	...	...	...			5
S.T.D.	3	Right side spindle nut	...	...	...			3
S.T.D.	10	Washer for above	...	...	...			1

FRAME PARTS.



Frame and 1924 Fork Parts—contd.

			£	s.	d.
M.F.F.	39	Fork spindle grease cap			5
M.F.F.	22	Top front fork spindle sleeve (top) ...	3	0	
M.F.F.	46	Spacing tube (fits over above)			7
M.F.F.	10	Front fork springs (each)	1	3	
M.F.F.	11	Front fork spring swivelling anchor lug (each)		2	4
M.F.F.	33	Lock nuts for spindle sleeves (each) ...		9	
S.T.D.	14	Split pin for securing above		1	
M.F.F.	23	Front fork spindle sleeve (bottom) ...	3	2	
M.F.F.	47	Handlebar with grips (see also handlebars, etc.)	1	5	6
M.F.F.	44	Handlebar less grips	1	2	0

1925 FORK DETAILS DIFFERING FROM 1924 TYPE

M.F.F.	62	Right side fork link sidecar type (top) ...	1	2	
M.F.F.	63	Left side fork link sidecar type (top) ...	1	2	
M.F.F.	64	Right side top link solo type	1	3	
M.F.F.	65	Left side top link solo type	1	3	
M.F.F.	70	Fork head clip	7	9	
M.F.F.	77	Pinch bolt for handlebar		6	
S.T.D.	3	Nut for above		3	
M.F.F.	61	Spring damper or friction plate		6	
M.F.F.	66	Anchor stud (passes through above) ...		3	
S.T.D.	24	Nuts for stud (each)		2	
M.F.F.	60	Fork damper leather washer		1	
M.F.F.	75	Fork damper spring washer		3	
M.F.F.	78	Fork crown and stem with lamp bracket	18	3	
M.F.F.	69	Handlebar only bare (standard)	15	0	
M.F.F.	83	Handlebar only bare (sports)	15	0	
M.F.F.	73	Fork girder R.H. (oval rear girder) ...	1	3	6
M.F.F.	74	Fork girder L.H. (oval rear girder) ...	1	2	0

LUGGAGE CARRIER AND TOOL BOX.

M.F.	20	Luggage carrier	15	0	
M.F.	75	Bolt for fixing same, top		4	
S.T.D.	4	Nut for above		2	
S.T.D.	11	Washer		1	
M.F.	77	Luggage carrier bottom fixing bolt ...		2	
M.F.	99	Bolt for fixing carrier to rear mudguard ...		3	
S.T.D.	5	Nut for same		2	
M.F.	65	Tool box for luggage carrier	15	0	
M.F.	99	Bolts for fixing above (each)		3	
S.T.D.	5	Nut (each)		2	
M.F.	90	Rear number plate (for Acetylene lamp) ...	1	2	
M.F.	91	Rear number plate (for Electric lamp) ...	1	2	

MUDGUARDS AND MUDSHIELDS.

M.M.	19	Front mudguard	17	6	
M.M.	28	Front mudguard fixing bolts (each) ...		2	

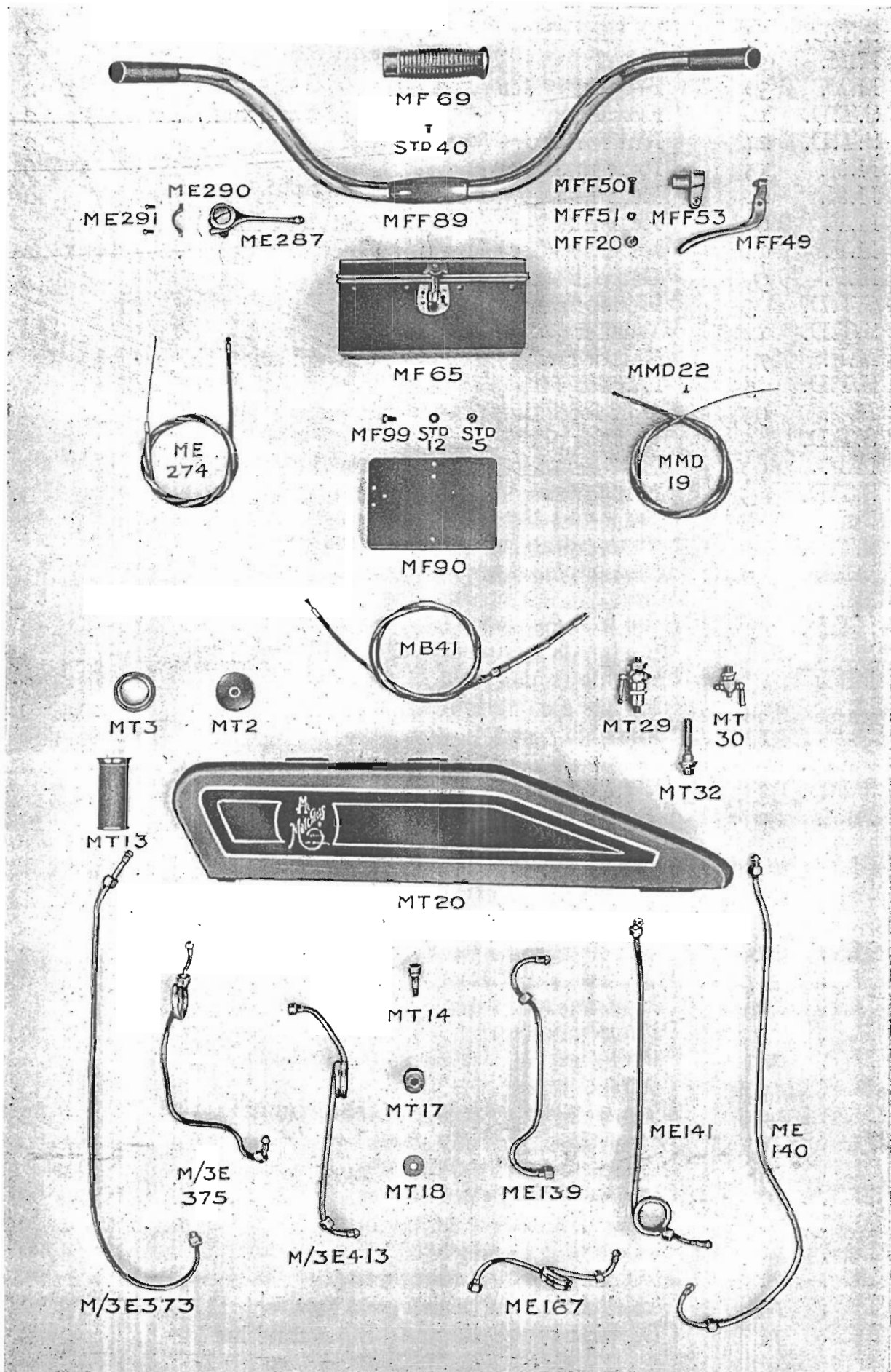
Mudguards and Mudshields—contd.

			£	s.	d.
S.T.D.	4	Nut for above			2
M.M.	2	Front stand clip screw			4
M.M.	30	Front number plate	I		2
S.T.D.	16	Front number plate fixing screws (each) ...			2
S.T.D.	24	Nut for above (each)			2
M.M.	15	Rear mudguard	13		6
M.M.	28	Rear mudguard bottom fixing bolt ...			2
M.F.	90	Rear number plate (for Acetylene lamp) ...	I		2
M.F.	91	Rear number plate (for Electric lamp) ...	I		2
M.F.	99	Bolt for fixing above			3
S.T.D.	5	Nut for same			2
S.T.D.	12	Washer			I
M.F.	75	Bolt securing mudguard to back stay bridge			6
S.T.D.	5	Nut for same			2
M.F.	99	Bolt for fixing to rear carrier			3
S.T.D.	5	Nut for above			2
M.F.	99	Bolt for fixing rear mudguard to tool box			3
S.T.D.	5	Nut for same			2
M.M.	8	Rear stand clip screwed stud			4
S.T.D.	5	Nut for same (inside mudguard)			2
M.M.	6	Stand clip spring			I
M.M.	7	Stand clip spring cup nut			3
S.T.D.	5	Lock nut for above			2
M.M.	26	Mudshields complete with all fittings ...	12		6
M.M.	25	Left side shield only	4		9
M.M.	24	Right side shield only	4		9
M.M.	29	Mudshield rod			9
S.T.D.	5	End nuts for above (each)			2
S.T.D.	12	Washer only			I
M.M.	27	Top spacing tube			4

TANK AND FITTINGS.

M.T.	20	Tank complete with all fittings... ..	4	5	0
M.T.	5	Tank less all fittings	3	12	6
M.T.	29	Petrol tap and filter		4	2
M.T.	30	Petrol drain tap		I	9
M.T.	149	Petrol pipe for B. and B. carburettor ...		4	9
M.T.	23	Petrol U pipe		2	4
M.T.	24	Screwed nipple for U pipe attachment ...			3
M.T.	3	Petrol tank filler cap glass top		2	0
M.T.	2	Oil tank filler cap plain top... ..		I	7
M.T.	33	Glass only for petrol cap			9
M.T.	13	Gauze strainer for petrol tank		I	9
M.T.	14	Tank fixing bolts (each)			6
M.T.	17	Tank fixing bolt rubber pad			5
M.T.	18	Tank fixing bolt rubber pad washer ...			2
M.T.	32	Oil pipe connection and filter combined	2		3

TANK, ETC., AND PARTS.



STANDS.

			£	s.	d.
M.F.	41	Rear stand		12	6
M.F.	89	Rear stand fixing bolt only			3
S.T.D.	3	Nut for same			3
M.F.F.	40	Front stand	4		6
M.F.F.	7	Bolt for fixing only			3
S.T.D.	4	Nut for above			2
S.T.D.	11	Washer			1
M.M.	2	Front stand fixing screw (see also mudguards)			4
M.M.	8	Rear stand clip stud (see also mudguards)			4
M.M.	6	Rear stand clip spring (see also mudguards)			1
M.M.	7	Rear stand clip spring cup nut (see also mudguards)			3
S.T.D.	5	End nuts for stand clip stud (each) (see also mudguards)			2

REAR WHEEL AND BRAKE PARTS.
(Ball Bearing Type).

M.H.	45	Rear wheel complete with brake and tyre	8	3	6
M.H.	38	Rear wheel complete with brake less tyre	5	10	0
M.H.	43	Rear wheel only (less all fittings)	2	7	6
M.H.	17	Rear wheel chain sprocket		8	6
M.H.	16	Fixing bolts for same (each)			2
S.T.D.	11	Washer for above			1
S.T.D.	4	Nuts (each)			2
M.B.	7	Rear wheel brake drum	4		6
M.B.	10	Fixing bolts (each)			2
S.T.D.	4	Nut for above			2
S.T.D.	11	Washer			1
M.B.	8	Rear brake cover plate with shoes and expander, etc.	1	2	6
M.B.	17	Cover plate only		5	9
M.B.	36	Rear brake shoes, per pair	11		6
M.B.	36	Rear brake shoe Ferodo linings only (per pr.)	3		0
M.B.	39	Aluminium rivets for above (per set)			4
M.B.	25	Springs for brake shoes (each)			3
M.B.	4	Brake shoe fulcrum stud			5
S.T.D.	3	Nut for above			3
M.B.	3	Brake shoe expander	6		0
M.B.	5	Brake shoe expander lever	1		3
S.T.D.	3	Nut for expander end			3
M.B.	11	Washer for same			1
M.B.	26	Brake shoe expander grease cap			5
M.B.	28	Rear brake rod	2		5
S.T.D.	4	Adjusting nuts (each)			2
M.B.	29	Brake rod yoke end	1		4
M.B.	35	Brake rod yoke end bolt			4
S.T.D.	5	Nut for above			2
M.B.	27	Rear brake pedal	5		6

Rear Wheel and Brake Parts—contd.

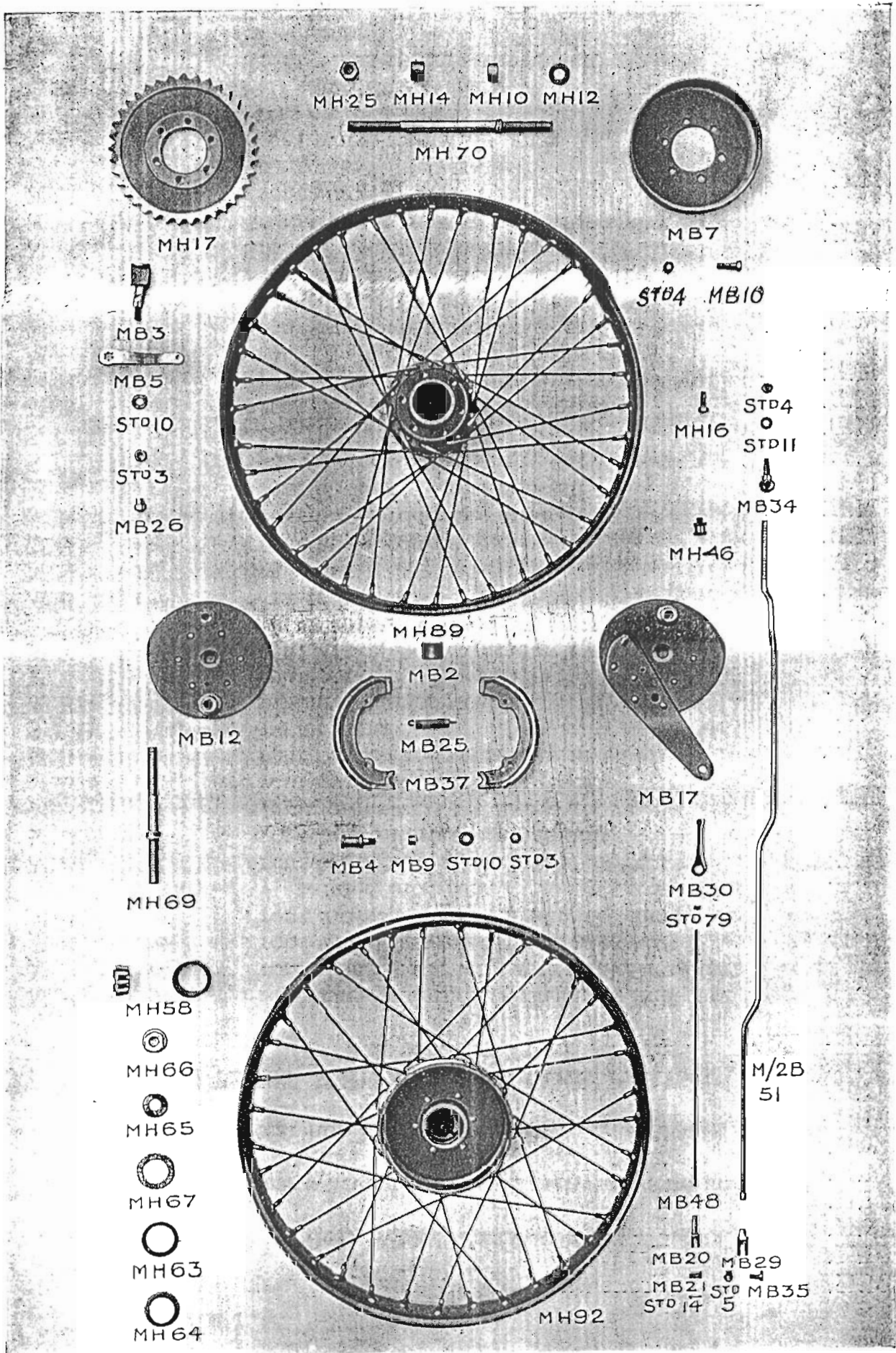
			£	s.	d.
M.B.	34	Brake rod toggle or crosshead (fits on above)		1	4
S.T.D.	4	Nut for same			2
S.T.D.	11	Washer			1
M.B.	23	Brake pedal post		1	10
S.T.D.	3	Nut for pedal end			3
S.T.D.	10	Washer			1
M.B.	31	Brake pedal return spring			4
M.E.	54	Brake pedal post bolt for crankcase			8
S.T.D.	3	Nut for same			3
M.B.	16	Bolt for anchoring brake cover plate			4
S.T.D.	3	Nut for above			3
S.T.D.	10	Washer			1
M.H.	2	Rear wheel axle		7	0
M.H.	6	Rear wheel fixed cone		4	6
M.H.	7	Rear wheel adjusting cone		5	6
M.H.	5	Press on dust cap			9
M.H.	4	Felt gland dust washer			4
M.H.	25	Rear wheel spindle nuts (each)			4
M.H.	12	Rear wheel spindle nut washer			2
M.H.	14	Washer or collar for brake cover plate			6
M.H.	26	Set of rear wheel balls		1	4
M.H.	46	Rear wheel hub lubricator...			7
M.H.	15	Rear hub cups		4	6
M.H.	52	Tyre security bolts (each)			9
M.H.	29	Tyre (cover and tube) 700 × 80	2	13	6
M.H.	48	Cover only	2	6	6
M.H.	49	Inner tube		7	0
M.H.	30	Rear wheel spokes (each)			1
M.H.	33	Nipples (each)			2

REAR WHEEL PARTS.**(Ball Bearing Type).**

Parts not mentioned are common to both types.

M.H.	87	Rear wheel complete with brake assembly and tyre	7	6	6
M.H.	88	Rear wheel complete with brake assembly, but less tyre	4	11	6
M.H.	89	Rear wheel only less all fittings	1	13	9
M.H.	70	Rear wheel axle		5	6
M.H.	58	Rear wheel screwed taper roller bearing (complete)		9	6
		Outer roller race only		3	4
		Screwed centre with rollers and cage		6	2
M.H.	66	Adjusting sleeve or washer (engages above)			8
M.H.	67	Rear hub felt gland washer			4
M.H.	64	Rear hub dust cap (fits in hub shell)			3
M.H.	63	Rear hub gland washer fits on M.H. 66			3

WHEELS AND PARTS.



Rear Wheel Parts—*contd.*

			£	s.	d.
M.H.	65	Rear wheel end cap (fits between cone and brake cover)			3
M.H.	96	Rear hub bearing lock nut			5

FRONT WHEEL AND BRAKE PARTS.
(Ball Bearing Type).

M.H.	40.	Front wheel complete with brake and tyre	7	5	6
M.H.	50	Front wheel complete with brake less tyre	4	12	0
M.H.	42	Front wheel less all fittings... ..	2	4	0
M.B.	22	Front brake cover plate with shoes, ex- -pander, etc	1	1	0
M.B.	37	Front brake shoes (per pair)	11		6
M.B.	36	Front brake Ferodo linings only	3		0
M.B.	39	Aluminium rivets for fixing above (per set)			4
M.B.	25	Front brake shoe springs (each)			3
M.B.	4	Front brake shoe fulcrum pin			5
S.T.D.	3	Nut for same			3
M.B.	13	Tubular collar or sleeve			11
M.B.	3	Front brake shoe expander	6		0
M.B.	30	Front brake shoe expander lever	1		2
S.T.D.	3	Nut for expander end			3
M.B.	11	Washer for above			1
M.B.	26	Expander grease cap			5
M.B.	33	Front brake rod only			8
M.B.	20	Front brake rod yoke end	1		1
M.B.	21	Front brake rod yoke end pin			5
S.T.D.	14	Split pin for above			1
S.T.D.	79	Lock nut for yoke end			1
M.B.	40	Front brake rod adaptor (top end)			6
M.B.	41	Front brake cable and spring box assembled	3		4
M.B.	42	Front brake cable and nipples only	2		4
M.B.	43	Front brake spring box	1		0
M.B.	44	Spring for above only			3
		Front brake lever (see also handlebars)	7		6
M.B.	45	Front brake cable outer only	1		7
M.B.	46	Adjuster stop and lock nut for above			7
M.H.	13	Front wheel spindle	5		0
M.H.	6	Front wheel fixed cone	4		6
M.H.	7	Front wheel adjusting cone	5		6
M.H.	5	Press on dust cap			9
M.H.	4	Felt gland dust washer			4
M.H.	25	Front wheel spindle nuts (each)			4
M.H.	12	Washer for above			2
M.H.	10	Washer or collar for brake cover plate	5		0
M.H.	46	Front wheel hub lubricator			7
M.H.	26	Front wheel balls (per set)	1		4
M.H.	15	Front hub cups (each)	4		6
M.H.	31	Front wheel spokes (long) (each)			1

Front Wheel and Brake Parts—contd.

			£	s.	d.
M.H.	32	Front wheel spokes (short) (each) ...			1
M.H.	33	Nipples for same (each)			2
M.H.	52	Tyre security bolts (each)			9
M.H.	29	Tyre (cover and tube) 700 × 80	2	13	6
M.H.	48	Cover only	2	6	6
M.H.	49	Inner tube only		7	0

FRONT WHEEL PARTS**(Roller Bearing Type).**

Parts not mentioned are common to both types.

M.H.	90	Front wheel complete with brake assembly and tyre	6	3	6
M.H.	91	Front wheel complete with brake assembly, but less tyre	3	10	0
M.H.	92	Front wheel only less all fittings	1	13	0
M.H.	69	Front wheel axle		4	6
M.H.	58	Front wheel screwed taper roller bearing (complete)		9	6
		Outer roller race only		3	4
		Screwed centre with rollers and cage		6	2
M.H.	66	Adjusting sleeve or washer (engages above)			8
M.H.	67	Front hub felt gland washer			4
M.H.	64	Front hub dust cap (fits in hub shell)			3
M.H.	63	Front hub gland washer fits on M.H. 66			3
M.H.	65	Front hub end cap (fits between cone and brake cover)			8
M.H.	96	Front hub bearing lock nut... ..			5

CHAIN GUARDS AND CHAINS.

M.C.C.	11	Rear chain guard	8	0	
M.C.C.	12	Stud for fixing rear end			6
S.T.D.	4	Nut for above			2
		Bolt for fixing front end (see engine bolts)			
S.T.D.	3	Nut for above			3
M.C.C.	6	Front chain guard	16	0	
S.T.D.	4	Nut for fixing rear end			2
S.T.D.	11	Washer			1
		Bolt for centre support (see engine bolts)			
M.C.C.	7	Distance tube for above			6
S.T.D.	3	Nuts (each)			3
S.T.D.	10	Washer			1
M.M.D.	12	Magneto chain case	12	0	
M.M.D.	17	Magneto chain case support bolt (see engine bolts)			
M.M.D.	16	Distance tube for above			5
S.T.D.	3	End nuts for bolt			3

Chain Guards and Chains—*contd.*

			£	s.	d.
M.M.D.	3	Special nut (inside chain case)			5
M.M.D.	2	Magneto chain adjuster (nut)			9
M.M.D.	15	Magneto chain adjuster screwed stud			3
M.M.D.	18	Magneto chain	2		6
M.C.C.	14	Rear driving chain (gear box to rear wheel)	17		6
M.C.C.	13	Front driving chain (engine to gear box) ...	10		9
M.C.C.	15	Detachable connecting link only per doz.	5		7
M.C.C.	16	Cranked link per doz.	7		10
M.E.Q.	42	Chain rivet extractor (driving chains only)	5		0

FOOTBOARDS AND PARTS.

M.F.B.	20	Footboard with base straps (each) ...	12		6
M.F.B.	9	Footboard rod (front)	1		7
M.F.B.	10	Footboard rod rear	1		3
M.F.B.	8	Left side front distance tube			8
M.F.B.	7	Right side front distance tube			8
M.F.B.	23	Left side rear distance tube... ..			6
M.F.B.	24	Right side rear distance tube			6
M.F.B.	22	Rear footboard link plate L or R	1		2
M.F.B.	25	Rear footboard link spindle			11
S.T.D.	3	End nuts for above (each)			3
M.F.B.	4	Spigot washer for above			3
S.T.D.	1	Footboard rod end nuts (each)			5
S.T.D.	8	Footboard rod end washers (each) ...			1
M.F.B.	2	Distance tubes for footboard straps (each)			4
M.F.	102	Special extended sleeve nut for single seater sidecar attachment	1		1

HANDLEBAR AND PARTS.

M.F.F.	85	Handlebar only with grips	18		6
M.F.F.	69	Handlebar only less grips	15		0
M.F.F.	48	Inverted lever (left or right)	7		6
M.F.F.	49	Lever portion only	3		9
M.F.F.	50	Fulcrum screw for above			4
M.F.F.	51	Nut			2
M.F.F.	52	Screw for securing lever body to handlebar			2

SADDLE AND PARTS.

M.F.	100	Saddle complete with springs	18		6
M.F.	74	Nose bush (hardened steel)			9
M.F.	98	Saddle nose bolt			6
S.T.D.	4	Nut for same			2
M.F.	97	Long spring support bolt			9
M.F.	81	Distance tubes (each)			5
S.T.D.	4	Nuts for bolt (each)			2
S.T.D.	11	Washers for bolt			1
M.F.	105	Saddle spring only	2		6
S.T.D.	3	Nuts for saddle spring post (each) ...			3

MAGNETO AND PARTS.

		£	s	d.
M.M.D. 10	Complete magneto (Lucas)...	4	7	6
M.M.D. 41b	Contact breaker only complete ...	1	2	6
M.M.D. 4152/4122	Contact screws (pair) ...		12	6
M.M.D. 7p	High tension pick up with carbon brush		6	0
M.M.D. 1052	Carbon brush only (with spring) ...			6
M.E. 256	Sparking plug cable with terminal end ...		1	0
M.M.D. 14	Magneto chain sprocket ...		3	4
	Nut for fixing same to magneto ...			4
	Washer ...			1
M.E. 38	Magneto chain sprocket for camshaft ...		2	0
M.E. 96	Nut for fixing (special for oil pump drive)			11
S.T.D. 11	Washer ...			1
M.E. 48	Magneto platform ...	12		6
M.M.D. 1	Bolts for securing magneto to above (each)			4
M.M.D. 15	Magneto chain adjuster screwed stud ...			3
M.M.D. 2	Special nut for above ...			9
M.F.F. 48	Magneto control handlebar lever (complete)		7	6
M.M.D. 19	Magneto control cable (inner and outer) ...		2	9
M.M.D. 20	Magneto control cable (inner only) ...			9
M.M.D. 21	Magneto control cable (outer only) ...		2	0
	Dust cap for magneto contact breaker ...			6

MECHANICAL OIL PUMP AND PARTS.

M.E. 116	Oil pump complete ...	19		0
M.E. 5475	Tell tale only complete ...	2		6
M.E. 5475/2 & 9	Tell tale plunger with cap only ...			9
M.E. 5475/1	Aluminium pump body ...	3		0
M.E. 5475/5	Steel worm shaft ...	1		0
M.E. 5475/2	Large centre regulating block ...	1		6
M.E. 5475/9	Cap for same ...			6
	5/32" screws for fixing cap (per dozen) ...			6
M.E. 5475/4	Pump plunger (steel) ...	1		6
M.E. 5475/3	Pump body brass worm sleeve ...	1		6
M.E. 5475/6	Pump body screwed oil pipe connection ...			4
M.E. 141	Oil delivery pipe (pump to O/H rocker housing) ...		4	0
M.E. 140	Oil suction pipe (tank to pump) ...		4	6
M.E. 139	Oil pipe (O/H rocker housing to cylinder wall) ...		3	8

CARBURETTOR B. AND B.

B. & B.	Complete carburettor (special type) B.S.V.	3	1	0
B. & B. 1	Float chamber body only ...	10		3
B. & B. 2	Float chamber cap and tickler ...		7	8
B. & B. 5 & 6	Float chamber needle valve ...		1	2
B. & B. 9	Float ...		2	6

Carburettor B. and B.—*contd.*

			£	s.	d.
B. & B.	11	Main jet only		1	0
B. & B.	46	Main jet extension		2	1
B. & B.	21 & 22a	Main jet fibre washers (each)			1
B. & B.	3	Jet taper needle		1	9
B. & B.	4	Needle holder and set screw			7
B. & B.	30	Spraying chamber		8	6
B. & B.	33 & 36	Spraying chamber cap and bushes		2	4
B. & B.	49	Spraying chamber cap lock ring		1	3
B. & B.	50	Clip and bolt for inlet port		1	8
B. & B.	50a	Clip bolt only			4
B. & B.	49	Cap for air port		1	3
B. & B.	38	Throttle valve		4	7
B. & B.	38	Air valve		2	2
B. & B.	41	Valve springs (per pair)		1	2
B. & B.	50 & 57	Air adjusting screw and spring for pilot jet			7
		Control levers complete	1	2	0
M.E.	286	Air lever only		2	11
M.E.	287	Throttle lever only		2	11
M.E.	288	Control cables, inner and outer (each)		2	11
B. & B.	52	Pilot jet with fibre washer			10

SIDECAR AND PARTS (SINGLE SEATER).
(Ball Bearing Wheel).

M.F.	60	Sidecar main frame with clip lugs attached	4	2	6
M.F.	87	Pinch bolt for clip lug			7
S.T.D.	3	Nut for same			3
M.F.	49	Sidecar front bent arm		9	6
M.F.	84	Yoke end bolt for above			5
S.T.D.	1	Nut for bolt			5
M.F.	92	Front arm eye bolt		1	7
S.T.D.	2	Nut for above			5
M.F.	50	Rear sidecar bent arm		10	0
M.F.	84	Yoke end bolt for same			5
S.T.D.	1	Nut for bolt			5
M.F.	92	Eye bolt for rear arm		1	7
S.T.D.	2	Nut for above			5
M.F.	85	Yoke end bolt for rear chain stay connection			6
S.T.D.	1	Nut for same			5
M.F.	55	Eye bolt for rear chain stay connection		1	7
M.F.	93	Castellated nut for above			8
S.T.D.	14	Split pin			1
M.F.	102	Special long sleeve nut for footboard support lug		1	1
M.F.	66	Front sidecar body spring		2	6
S.T.D.	3	Nut for fixing (bottom end)			3
S.T.D.	10	Washer for nut			1
M.F.	113	Bolt for fixing top end to body			3
M.F.	88	Large washers for same (each)			4

Sidecar and Parts—*contd.*

			£	s.	d.
S.T.D.	3	Nut for bolt			3
M.F.	37	Sidecar body rear springs (each)	10	0	
M.F.	71	Fixing bolt long			4
M.F.	70	Fixing bolt short			4
S.T.D.	4	Nuts for above (each)			2
M.F.	94	Rear spring lug pad plate	1	1	
M.B.D.	1	Rear body bearer bar	3	9	
S.T.D.	3	End nuts for above (each)			3
M.B.D.	17	Spring washer for end			3
S.T.D.	10	Plain washer for end			1
S.T.D.	14	Split pin			1
M.B.D.	116	Coach bolts for fixing bar to body (each)			2
M.B.D.	117	Large washer for above			4
M.B.D.	118	Coach bolt nuts (each)			1
M.M.	11	Sidecar mudguard	15	0	
S.T.D.	4	Nuts for fixing to body studs			2
S.T.D.	11	Washer for above			1
M.B.D.	111	Sidecar luggage grid	16	6	
M.B.D.	119	Sidecar luggage grid folding stay (each) ...			9
M.B.D.	120	Sidecar luggage grid fixing links (each) ...	1	9	
M.B.D.	121	Sidecar luggage grid fly nuts	1	5	
S.T.D.	4	Nuts for luggage grid body stud (each) ...			2
M.B.D.	124	Washer for above			1
M.B.D.	122	Luggage grid body stud top (complete) ...	1	7	
M.B.D.	123	Luggage grid body stud bottom (complete)	1	10	
M.B.D.	12	Sidecar body (with apron only) standard			
		touring	10	15	0
M.B.D.	18	Windscreen complete (Sandum Gem, black			
		apron)	1	5	0
M.H.	40	Sidecar wheel complete with tyre	5	16	0
M.H.	51	Sidecar wheel complete less tyre	3	2	6
M.H.	44	Sidecar wheel less all fittings	2	0	6
M.H.	23	Sidecar wheel axle		8	6
M.H.	21	Sidecar wheel axle castellated fixing nut			8
M.H.	12	Washer for above			2
S.T.D.	14	Split pin			1
M.H.	19	Sidecar wheel fixed cone	4	6	
M.H.	5	Dust cap for above (press on)			9
M.H.	4	Felt dust washer			4
M.H.	22	Sidecar wheel adjusting cone	4	9	
M.H.	25	Locking nut for above			4
M.H.	20	Special peg washer (under nut)			2
S.T.D.	14	Split pin			1
M.H.	11	Sidecar wheel hub cap	4	0	
M.H.	31	Sidecar wheel spoke (each)			1
M.H.	33	Nipple (only)			2
M.H.	29	Sidecar wheel tyre (cover and tube) 700 × 80	2	16	3
M.H.	48	Sidecar tyre (cover only) 700 × 80	2	6	6
M.H.	49	Inner tube, 700 × 80		7	0

Sidecar and Parts—contd.

			£	s.	d.
M.H.	52	Security bolt (each)			9
M.H.	46	Sidecar wheel hub lubricator			7
M.H.	26	Set of hub balls	I		4
M.H.	15	Hub cups (each)	4		6

SIDECAR AND PARTS (Two-Seater Type).

See also foregoing for other parts

M.F.	126	Sidecar main frame with clip lugs attached	5	0	0
M.F.	133	Long front bent arm		9	3
M.F.	135	Short front bent arm	10		0
M.B.D.	148	Body bearer bar with bolts welded in ...	4		6
S.T.D.	4	Nuts for above			2
M.F.	137	Front body bearer bar	3		6
M.F.	66	Front body spring (each)	2		6
M.F.	154	Top bolt for fixing to bearer bar			3
S.T.D.	3	Nut for same			3
M.F.	119	Rear body spring (each)	11		6
M.F.	121	Long fixing bolt for above			5
M.F.	120	Short fixing bolt for above			4
S.T.D.	4	Nuts for above (each)			2
		Tandem body only	13	0	0
		Windscreens for above per pair including rear side flap	3	15	0
		Hood for above	4	0	0
		Dual purpose body only (folds up when rear seat is not required)	14	8	9
		Windscreens for above (per pair)	2	10	0
		Hood for above with cover	4	4	0

NOTE.—For all other parts see Single Seater Sidecar parts.

SIDECAR WHEEL, ROLLER BEARING TYPE.

M.H.	93	Wheel complete with tyre (Dunlop Cord)	5	6	9
M.H.	94	Wheel complete less tyre	2	13	3
M.H.	95	Wheel only less all fittings	1	8	0
M.H.	68	Wheel axle only		5	9
M.H.	21	Castellated fixing nut			8
M.H.	72	Screwed taper bearing complete		9	6
		Screwed centre with rollers and cage ...		6	2
		Outer roller race only		3	4
M.H.	59	Plain bore taper bearing complete ...	10		0
		Centre race only (plain bore) with rollers and cage		6	8
		Outer race only		3	4
M.H.	71	Collar for wheel axle... ..			3
M.H.	63	Dust cap			3

Sidecar Wheel—contd.

			£	s.	d.
M.H.	67	Gland felt washer			4
M.H.	65	Back plate or washer for felt gland ...			3
M.H.	21	Castellated adjusting cone lock nut ...			8
M.H.	20	Special peg washer (fits under above) ...			1
		NOTE.—For other parts see Ball Bearing type			

EQUIPMENT.

M.E.Q.	49	Cowey speedometer complete with all fittings. Model 7a	3	5	0
M.E.Q.	50	Cowey speedometer gear box		15	0
M.E.Q.	51	Cowey speedometer driving wheel... ..		3	0
M.E.Q.	52	Cowey speedometer driving wheel screw and clamps		2	0
M.E.Q.	53	Cowey speedometer driving wheel complete		5	0
M.E.Q.	54	Cowey speedometer flexible drive complete		12	6
M.E.Q.	55	Cowey speedometer sheath and coil (per foot)		1	6
	Solo Set	Acetylene head lamp set comprising Lucas head lamp with ball joint socket generator with special brackets ...	2	10	6
	S/C Set		Comprising above and additional No. 62 generator with No. 354 S/C lamp and all necessary fittings	4	5	0
M.E.Q.	56	Cowey speedometer cable (per foot) ...		1	4
		Acetylene generator only		11	6
		Generator bracket		3	6
M.E.Q.	13	Head lamp only	1	6	0
M.E.Q.	14	Tail lamp only		3	6
M.E.Q.	15	Sidecar lamp only		12	0
M.E.Q.	16	Head lamp burner		2	1
M.E.Q.	17	Tail lamp burner			6
M.E.Q.	18	Sidecar lamp burner		1	2
M.E.Q.	19	Head lamp glass		1	4
M.E.Q.	20	Head lamp reflector		10	6
M.E.Q.	21	Sidecar lamp glass			3
M.E.Q.	22	Head lamp bracket with ear pieces ...		8	6
M.E.Q.	23	Sidecar lamp bracket with bolts		2	6
M.E.Q.	24	Electric head lamp complete	1	5	0
M.E.Q.	25	Electric head lamp bulb (double filament)		3	6
M.E.Q.	26	Electric sidecar lamp		12	6
M.E.Q.	27	Electric sidecar lamp bulb		1	6
M.E.Q.	28	Electric rear lamp		8	6
M.E.Q.	29	Electric rear lamp bulb		1	6
M.E.Q.	30	Switch box complete	1	15	0
M.E.Q.	31	Accumulator in case (Solo) LO5E	1	10	0
M.E.Q.	32	Accumulator (Solo) only LO5E	1	5	0
M.E.Q.	33	Accumulator case (Solo) only		6	0

Equipment—*contd.*

			£	s.	d.
M.E.Q.	34	Accumulator and case (Sidecar) LH5E	...	1	10 0
M.E.Q.	35	Accumulator (Sidecar) only LH5E	...	1	7 6
M.E.Q.	36	Accumulator case (Sidecar) only	...		3 6
M.E.Q.	37	Junction plug (two hole) for Sidecar	...	1	6
M.E.Q.	38	Cable (rubber covered) per yard	...		6
M.E.Q.	39	Cable clips $1\frac{1}{8}$ "	...		3
M.E.Q.	40	Cable clips 1"	...		3
M.E.Q.	41	Cable clips $\frac{1}{2}$ " (3 parts)	...		5

TOOLS.

M.T.K.	16	Oil injector	...	2	4
M.T.K.	15	6" combination pliers	...	4	10
M.T.K.	7	6" wire screwdriver	...	1	7
M.T.K.	10	Double end forged spanner $\frac{1}{4} \times \frac{5}{16}$ "	...	1	10
M.T.K.	11	Double end forged spanner $\frac{3}{4} \times \frac{1}{2}$ "	...	1	10
M.T.K.	9	Tappet adjusting spanner	...		7
M.T.K.	1	Thin cone adjusting spanner	...		9
M.T.K.	12	6" adjustable spanner	...	7	6
M.T.K.	14	Tyre lever	...	1	1
M.T.K.	2	Tyre pump	...	4	10
M.T.K.	5	Magneto spanner	...	1	0
M.T.K.	17	Tool roll only...	...	3	4
M.T.K.	3	Tool roll complete with all tools (less pump)	...	1	16 0
M.F.	65	Tool box only (see also luggage carrier)	...	15	0
M.T.K.	8	Grease gun	...	7	3

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