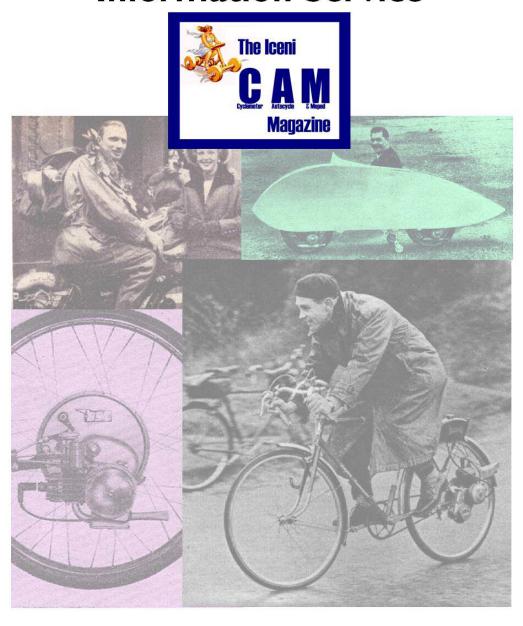
IceniCAM Information Service



Francis-Barnett

HINTS & SPARES

for

"POWERBIKE"

MODELS

The hints and tips are given mainly for the new-comers to motor cycling but we hope that even the experienced rider will gain some benefit from the information which we have endeavoured to compile as concisely as possible. If detailed information is required which is not covered by this booklet we shall be pleased at all times to write to those in difficulty.



ENSURE PROMPT SERVICE by following the simple suggestions made on page 10

Manufacturers:

FRANCIS & BARNETT, LTD.

LOWER FORD STREET

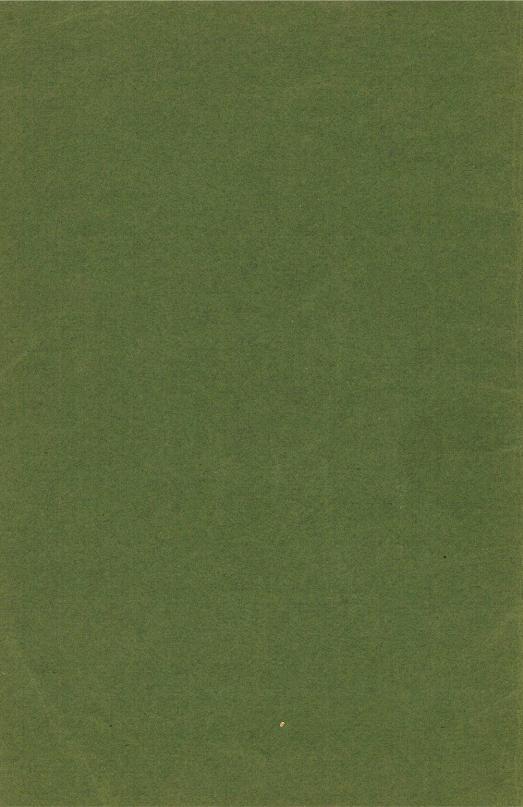
COVENTRY

ENGLAND

Telephone: 3054.

Telegrams: "Franbar, Coventry."

PRICE - - 1/-





HINTS & SPARES

for

"POWERBIKE"

MODELS

ENSURE PROMPT SERVICE

by following the simple suggestions made on page 10

Manufacturers:

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Telephone: 3054. Telegrams: "Franbar, Coventry."

Cuando se piden piezas de recambio basta mencionar el número completo del motor y los números de las piezas de repuesta que se necesitan.

Naar reservedele ordres er det tilstrae kkeligt at anføre det kømplette nummer af motoren og antallet af de onskede reservedale.

Lors d'une commande de pièces detachées, il suffit de mentionner le numéro complet du moteur et les numèros des pièces detachées requises.

Bij de bestelling van motoronderdeelen behoort de nummer van de motor en onderdeelnummer aantegeven.

Bei der Bestellung von Ersatzteilen genügt es Motornummer und Nummern der gewünschten Ersatzteile anzugeben.

FOREWORD

This booklet has been prepared mainly to cover 1946/47/48 Powerbikes. It can, however, be used as a guide for earlier machines providing that when ordering spare parts the full frame number with (prefix and suffix if any) is quoted. This is stamped on the left hand side of the steering head.

The importance of this is particularly emphasized as, owing to shortages of certain materials, changes in specification have to be made from time to time.

All such changes are of course recorded and correct parts can always be supplied if the foregoing is noted carefully.

IMPORTANT

RUNNING-IN.

This engine is capable of running at nearly full power even when new. Until the rider is thoroughly at home with his machine, however, he will probably be running at a slow speed and with a small throttle opening. Under these conditions carbon is formed more rapidly on the skirt of the piston.

These conditions gradually disappear as the rider gains confidence and a wider throttle opening is used, but the carbon already formed can cause a piston siezure. To prevent this it is advisable after about 500 miles to remove the cylinder and examine the piston, removing carefully any carbon on the Piston sides, and then re-assembling.

If by maintaining a higher road speed and opening the throttle more the engine is given more work to do during the running-in period, the formation of carbon will be greatly reduced.

For lubrication we recommend the use of Wakefield's Castrol X.L. If this is unobtainable the following grades of oils may be used; Mobiloil D., Motorine B de Luxe, Essolube Racer or Triple Shell.

CONTROLS

- **CARBURETTER**—The throttle is controlled by the top lever on the right of the handlebar and opens inwards towards the rider. The strangler control, to ensure easy starting, is attached to the petrol tank on the left-hand side.
- BRAKES—The rear brake is applied by back pedalling, only slight pressure on the pedals being necessary. Ensure that the trip is in the correct position—for further information, see "General Hints." Handbrake is operated by lifting the lever under the right-hand side of the handlebar.
- **RELEASE VALVE**—The small trigger lever on the left-hand side of the handlebar, when operated, releases engine compression.
- CLUTCH—The clutch is operated by lifting the longer lever on the left-hand side of the handlebar, and is then released from permanent disengagement by depressing the small ratchet lever.

To enable the machine to be pedalled as a cycle it is necessary to lift the long clutch lever which will be held by the ratchet.

RUNNING HINTS

- PETROIL MIXTURE—One part oil to 16 parts petrol—oil measure provided. Put in tank one gallon of petrol and take care to push tap "OFF." This precaution is taken to ensure that the four measures of oil which should now be added do not choke the carburetter before properly mixing. Shake the machine from side to side to enable the oil to mix properly with the petrol and then push tap "ON."
- PETROL TAP—(With Reserve Lever). The tap is turned on by pushing the hexagon end. The main supply is being drawn when the small lever immediately above the push control is in its extended anticlock position. Access to the reserve supply from the low level is obtained by moving the lever to its fully extended clockwise position.
- STARTING—Turn on petrol, lift strangler knob, flood carburetter and open the throttle lever a third of its travel. Now lift the release valve lever and pedal the machine forward as you would an ordinary cycle. Engine compression will offer a little resistance at first and under such conditions will tend to make pedalling somewhat heavy. Within a yard or so, however, the lever can be released, and when the engine takes up the drive, the pedals can be used merely as rests. The strangler control knob should be lowered gradually as the engine warms up.

ALTERNATIVE METHOD—Disengage the clutch and pedal the machine forward as an ordinary cycle. Then, as soon as you have obtained a moderate road speed and are comfortably seated, the clutch lever can be gradually released and the engine will respond to the throttle lever which should be opened slightly as before.

To stop the machine close throttle, lift clutch and apply brakes. Never flood the carburetter in preference to closing the strangler.

If the engine is difficult to start when hot DO NOT flood the carburetter—wheel the machine forward a few yards with the release valve lever lifted and the engine turning over. Then attempt a restart in the usual manner with the strangler control lifted.

Do not start the machine on the stand; this is entirely unnecessary and will only tend to overload the stand which has not been designed for such purposes.

GENERAL HINTS

- REAR BRAKE—The rear brake mechanism is a patented feature of the machine. To enable the machine to be wheeled backwards, the trip lever attached to the bottom bracket lug on the left-hand side must be moved to its fully extended clockwise position. To do this it may be necessary to lift the clutch and move the pedals slightly forward. It will be then seen that as soon as the pedals are used, either for propelling the machine or starting the engine, the trip lever is automatically thrown forward, and the brake mechanism is thereby ready for operating.
- **STEERING HEAD**—Construction here follows very closely ordinary cycle practice, but the importance of maintaining the head bearing properly adjusted must be emphasized.
- ENGINE SHIELDS—These are held in position beneath the petrol tank by two springs. By removing the bottom wing nuts the shields can be taken away from the machine entirely, it only being necessary to withdraw the shield from the tank base.
- CHAINS—To adjust main driving chain proceed as follows. Loosen wheel axle nuts and rear brake anchorage arm clip bolt. Now turn the adjuster screws on either side of the machine the same number of turns in the same direction until there is approximately half an inch up and down movement in the middle of the bottom run of the chain. The pedal chain is adjusted by means of a jockey sprocket. With the axle nuts loose the sprocket can be moved to such a position as permits three quarters of an inch up and down movement in the middle of the bottom run of the chain. After adjusting do not forget to tighten axle nuts AND BRAKE ANCHORAGE ARM CLIP BOLT. Check also the rear brake for correct adjustment.

- BOTTOM BRACKET—Excessive play here can be remedied by removing left-hand pedal crank and loosening the plated locking ring. The adjustable cup can then be turned in a clockwise direction and held in position by means of the locking ring which should be securely tightened. The fixed cup on the right-hand side has a left-hand thread
- CONTROLS—Lubricate all controls, wires, brake connections, etc., with engine oil every 1,000 miles, in order to ensure at all times complete control of machine. All control levers should be lubricated from time to time, but excessive use of oil on levers should be avoided as it will run down them, making them unpleasant to hold.
- CLUTCH CASE—This should be inspected periodically for oil level. Remove filler plug on magneto side just underneath the drive sprocket, and insert as much engine oil as will enter, the plug hole being so placed as to act as a level with the machine standing vertically. This should only be necessary about every 2,000 to 2,500 miles.
- CLUTCH—The clutch is adjusted by means of the screw in the operating lever. First loosen lock nut and then turn the adjuster screw in a clockwise direction until there is approximately $\frac{1}{16}$ slack in the cable at the handlebar lever end. Do not forget to tighten the lock nut after correctly adjusting.
- LUBRICATION OF CYCLE PARTS—The only parts of the machine which require occasional lubrication are the chains, bottom bracket, forks and control cables. We do not advise frequent use of the oil gun on the hubs, as surplus lubricant will invariably find its way to the brake linings and thus reduce their efficiency. A little oil worked between the cam bolts and bushes (front and rear hubs) say every 2,000 miles, will ensure smooth and progressive application of the brakes.
- TO DECARBONISE ENGINE—First of all detach the silencer and carburetter. The cylinder head can then be taken off and carbon carefully removed from the inside of the head. When doing this care should be taken to avoid cutting into the metal, as the combustion chamber must be kept as smooth as possible. The cylinder should then be withdrawn after undoing the four holding-down studs.

Carbon should be scraped from the exhaust ports, and then the piston should be attended to.

The gudgeon pin is parallel and a sliding fit. It is held in position by circlips at either end, which can be removed with a pair of thin nosed pliers.

Examine the piston rings, which must be quite free in their grooves. If they are stuck in, due to carbon, remove the rings very carefully and clean them. Also scrape away all carbon from the ring grooves.

Before refitting the cylinder to the piston, smear a little oil on the piston skirt.

WARNING—Do not rotate cylinder when withdrawing from or replacing on the piston; otherwise the piston rings may spring into one of the ports and damage will result.

MAGNETO—The flywheel should not be removed unless absolutely necessary, and then it is advisable to use a "hammer tight spanner"—Part No. 125/1043 for the centre nut. The centre nut has a right-hand thread, and will unscrew a little and then tighten again as the flywheel is extracted. When replacing the flywheel, the correct ignition timing, which is $\frac{1}{4}$ " before top dead centre, is obtained by placing the mark on the flywheel rim opposite mark on armature plate (near the H.T. terminal) with the piston at top of stroke. After checking this, lock up the centre nut, tapping the special spanner sharply with a hammer and using engine compression as resistance.

Access to contact breaker is obtained by removing the cover from the front of the magneto, this is held in place by three small screws which must be tight when replaced.

The gap at the contact breaker points when fully open should be .015".

CARBURETTER—The instrument fitted is designed specially to suit the "POWERBIKE" engine and will call for very little attention apart from an occasional clean out of the float chamber. It is important to keep the air intake gauze clean, and this can be achieved by dipping it in petrol. To adjust the throttle needle in order to alter the carburetter setting, first of all remove the throttle by unscrewing the top ring. At the head of the throttle there is a small screw; turning this screw in a clockwise direction, which lowers the needle, will give a weaker setting. Turning in an anti-clockwise direction will give a richer setting. When experimenting, not more than half a complete turn should be made at a time, as the setting is somewhat sensitive. When re-assembling the carburetter after cleaning, etc., take care not to over tighten the bottom nut, or the jet-piece thread may be strained. Periodically see that the gauze in the petrol pipe "banjo" connection is free from dirt, etc., or the petrol will not flow freely.

SPARKING PLUG—A little regular attention here will help to ensure that the maximum efficiency is obtained from your engine. An occasional clean will improve starting. Take the plug to pieces and clean the insulator with a rag soaked in petrol; metal parts can be wiped in the same manner, or washed in paraffin or if necessary scraped. After cleaning and before re-assembling the surface of the points should be rubbed over with a piece of smooth emery cloth, and it is advisable

to see that there is no grit between the insulator and the body, or it will be difficult to make the plug gas tight. The correct gap at the points is .025" and the type of plug recommended is the Lodge CB.3.

Never experiment with sparking plugs of a type other than the type standardized—you have our assurance that the plug recommended is the most suitable.

Tyre Pressures — Front 16 lbs. — Rear 21 lbs.

POWERBIKE SERVICE

The importance of obtaining the utmost possible use of your machine with the least expense is a matter which has received our careful attention. A most up-to-date and efficient Service Department is at your disposal. All repairs are carried out by specialists; your difficulties, should they arise, are attended to by experts.

In connection with servicing the clutch the following special prices are offered:

Re-corking clutch sprocket	 ***	3	6
Re-centring clutch sprocket	 	3	0
Re-corking clutch plate	 	3	6

We do not supply crankpin, crankpin rivet or washer separately; when these parts are wanted the complete crankshaft assembly should be returned to us in exchange for a replacement assembly at a cost of 31/-.

Cylinder boring together with suitable oversize piston complete is undertaken at a cost of 31/6d. Normally a service exchange scheme is employed enabling us to offer service by return.

There is no economy in fitting cheap imitation parts; we accept no responsibility whatever for breakage or consequential damage resulting from the use of spare parts other than those manufactured or supplied by us. ALWAYS OBTAIN YOUR SPARES from the appointed Francis-Barnett dealer in your district, or from us.

REPAIRS SERVICE

It will be the wish of the owner to have all repairs and adjustments on his machine carried out efficiently to ensure the utmost reliability. Machines sent to us are attended to by experts who specialize in repair work. All repairs are carried out under the terms of our Guarantee set out at the end of this booklet—see concluding paragraph headed "Repairs."

SPARE PARTS ORDERS

ALL SPARES for the "POWERBIKE" including engine parts can be sent against receipt of remittance or under the C.O.D. system.

NOTE—When ordering spare parts it is always necessary to state the frame number of your machine which is stamped on the frame lug just beneath the saddle.

If engine parts are required, state also the letters and number stamped on the right-hand side of the crankcase immediately behind the cylinder base.

If possible the old parts should be sent as pattern, or if this is impossible, full specification of the machine should be given.

Repairs and spares must always be treated on a cash basis.

All invoices will be surcharged by 5% to cover postage or carriage and packing (subject to a minimum of 6d.)

Unless otherwise instructed, spares will be sent by C.O.D. post, weight permitting, when remittance does not accompany order.

When making remittances by telegraph money order, the name and address of the sender MUST be included in the space provided on the Post Office requisition form for a private message from remitter to payee; unless this is done, the Post Office does not give this information upon a telegram.

When sending parts for replacement, repair, or as pattern, the name and address of the sender should always be securely attached and full instructions explaining what is required should be sent separately by post.

Old or worn out parts sent as pattern are not returned unless specially asked for by the owner at the time of sending them to us.

Never forget to quote our invoice numbers in correspondence relating to Spares or Repairs.

DEPOSIT ACCOUNT—Where it is preferred, we are prepared to open a Deposit Account if an amount of not less than £2 is sent to us. This arrangement will ensure prompt service and will of course dispense with the C.O.D. system. In such circumstances, "DEPOSIT ACCOUNT" should be mentioned every time spares are ordered.

SPARE PARTS PRICE LIST

(subject to variation)

5% should be added to cover carriage and packing (minimum 6d.)

FRAME

Part No.	Description	£ s. d.
3730	FRAME CENTRE with head cups less bottom bracket	
3154	assembly	each
3155	Balls for steering head	per set
3014	Steering head ball race	each
3138	Engine suspension plate	"
625	" " " bolt (top or bottom)	. ,,
3139	" " " nut	,,
625	,, ,, bolt (rear)	
2661	Chain adjuster service	31
128	Chain adjuster screw	**
3083	Crank axle	"
924203		11
924204	Bottom bracket cup (fixed)	3)
914075	,, ,, (adjusting)	31
909	Balls for bottom bracket	"
3159	Coddle piller	per set
2413	Saddle pillar	each
14	" " lug bolt	"
14	" " " " nut	11
	CTANIE AND CARRIER	
	STAND AND CARRIER	
3306	Rear stand	
3042	hale	each
127	,, ,, bolt	"
3160	" " " nut	11
	" " spring washer	"
2963	" " split pin	11
3118	" " clip complete	**
3144	", ", ", outer plate	31
3145	" " " inner plate	,,
3146	" " " bolt	,,
3147	" ," ,, spring	11
3148	, " " " wing nut	. ,,
3052	Luggage carrier	,,
2413	" ,, top front fixing bolt	
14	,, ,, ,, ,, ,, ,, nut	33
04/8	" " bottom fixing bolt	***
127	,, ,, ,, nut	,,
	FRONT FORK 1944 C	
	FRONT FORK—1946—Compression Spring typ	е.
3751	Early assembly assembly	
3752	Fork assembly complete	each
100000000000000000000000000000000000000	Fork blade assembly only	11
3753	Steering head stem and bottom lug	**
3754	", ", top nut	***
3755	Steering head stem top lug	**
3756	,, ,, ,, ,, bolt	,,
3757	" " " " nut	,,
	NOTEAlways quote frame number of your ma-	chine.

Part No.	Description	£ s. d.
3165	Ball head clip	. each
3166	" " " bolt	. ,
-3167	", ", ", nut	. "
3758	Top fork link	. 11
3759	Top fork link spindle	. 11
3760	" " " " nut	. 0
3761	", ", ", plain washer	,
3762	Bottom fork link	. ,,
3763	,, ,, ,, spindle	. "
3764	" " " " nut	
3765	", ", " plain washer	, ,,
3766	Front fork spring	• 11
3767	,, ,, ,, top nut	1 91
3164	Fork crown race	. "
3155	Ball head clip race	
3768 3591	Grease gun nipple	
3391	Headlamp bracket	. "
	FRONT FORK—1947—Rubber Suspension type	
3770	Fork assembly complete	. each
4035	Dill Fault soft	
4036	L.H. Fault sub-	
3698/9	Charling head stom and hatter live	
3916	Steering head stem top lug	26)
2413	L-12	
14	6116	
3701	Steering stem top nut	
3702	Fork link assembly—top or bottom	
3705	Fork link bolt—top or bottom	
14	" " " nut	
3706	Fork link top front pin	
14	,, ,, ,, ,, nut	
3707	Fork link bottom front pin	
14	,, ,, ,, ,, nut	
3709	Fork rubber band	. 11
3708	Band anchorage top tube and lamp bracket	, ,,
3012	Band anchorage top through stud	
14	,, ,, ,, ,, nut	. ,,
3713	Band anchorage bottom tube	. ,,
3725	,, ,, ,, ,, washer	. "
. 3771	,, ,, ,, ,, split pin	, ,,
3772	Fork link hardened steel washers	
P.6	Grease gun nipples	, ,,
3164	Fork crown race	• 11
3711	Steering head top race	
3712	Front mudguard hanger bracket	. "
	HANDLEBAR AND CONTROLS	
	HANDLEBAR AND CONTROLS	,
3170	HANDLEBAR only	. each
3171	" rubber grips	per pair
3172	Clutch lever complete with ratchet	. each
3173	,, ,, body only	. 11
3174	" " only with ratchet	. 0
3175	,, ,, ratchet	

Part No.	Description			£ s. d.
3176	Clutch lever top clip			each
3177	" " " screw and nut			
3178	" " fulcrum screw and nut			**
3179	" inner cable			"
3180	" outer cable			11
3181	" " " stop for lever			***
3182	Handhualta lavere			11
2400		***	***	"
3183		***	***	,,
3176	" " body only	***	•••	
3177	" " top clip			***
3184	" " " screw and nut			"
3181	" " fulcrum screw and nut		•••	"
3185	" cable stop for lever	*** ***	***	***
3186	,, outer cable			311
3187	" inner cable			"
3188	" cable adjuster and nut			**
	,, ,, yoke end			"
3189	n , , , , , rivet			,,
3190	Release valve trigger complete			,, *
3191	,, ,, only			,,
3192	" " body only …	*** ***		,,
3193	,, ,, ,, top clip			,,
3194	" " ,, screw			.,,
3195	" " " fulcrum screw and i	nut		,,
3196	" " " innér cable	`		,,
3197	", " outer cable	*** ***		,,
3198	Throttle control lever complete			.,
V.1026	,, ,, cable complete			
V.7	" " " adjuster and nut			
V.1076	" " lever body			.,
V.1077	Throttle control lever			,,
V.1078	" " body clip			.,
VJ.4	,, ,, ,, screw	***		
V.1079	,, ,, top cover			n
V.1080	" " " friction plate		•••	"
V.1081	" " " spring washer			
V.45	,, ,, top screw		***	11
V.1082	" " " fibre washer		***	31
	" " " " " " " " " " " " " " " " " " "		•••	"
	PETROL TAN	,		
	PETROL IAN			
2724	DETECT TO THE PARTY OF THE PART			
3734	PETROL TANK only			each
2958	" " front clip			.,
2959	,, ,, ,, plate			,,
04/10	,, ,, ,, bolt	*** ***		,,
901	,, ,, ,, ,, washer	***	***	,,
3012	" " bottom support stud			1)
14	n n n n n	nut		"
3013		stance tube		,,
X.49	., ,, ,, ,, ,, di	stance tube er		"
2936	Petrol tap (two level with filter)			"
3199	", ", filter only			
1008	" " fibre washer			***
3368	Petrol pipe		***	11
3111	Tank filler cap and measure			
2890	,, ,, washer			"
1896	" transfers		···	nair
			per	Pall
	NOTE - Always quote frame numb			

SPECIAL NOTE REGARDING WHEELS & BRAKES

HARWIL HUBS ARE FITTED TO ALL POWERBIKES WHERE THE LETTER "H" FOLLOWS THE FRAME NUMBER—STAMPED ON FRAME IMMEDIATELY BELOW SADDLE.

BRITISH HUBS ARE FITTED IN ALL OTHER CASES.

WHEELS-Front (British Hubs)

Part No.	Description			£ s. d.
3200	Front wheel complete with all brake parts			each
3201	" " less brake parts			**
3202	" " rim			,,
3720	Hub complete with all brake parts			**
3203	" shell with cups and dust washers			**
3204	Wheel spokes			per set
3205	Wheel spoke nipples			"
3206	Front wheel axle			each
3207	Fixed cone			,,
3208	Adjusting cone			١,,,
3209	Wheel hub cup			**
3210	Hub cap dust washer	***		11
3211	Adjusting cone lock washer	***		**
3212	" " " nut			***
3213	Wheel axle nut			"
3214		olate)		"
P.6	Grease gun nipple			11
909	Balls			per set
,,,				
	WHEELS-Rear (Britis	h Hube	78	
	WHEELS-Rear (British	ii i iubs).		
	B Lad and less with all broke parts			each
3215	Rear wheel complete with all brake parts			"
3216	" " less brake parts	150.000		
3818	" " rim		rake par	rte "
3078	hub complete with sprocket			
3079	Rear wheel sprocket only			**
3218	Hub shell with cups and dust washers	180000		per set
3219	Wheel spokes		•• •••	
3220	" nipples ···	200		each
3221	.,, axle			
3222	Fixed cone			"
3223	Adjusting cone	12720 8		each
3224	Wheel hub cup			
3225	" " dust washer			**
3226	", ", ", felt washer …			
3227	Adjusting cone lock washer	080800		
3228	,, ,, nut	100000		
3229	Brake plate distance piece		**	11
3230	,, ,, ,, lock nut			**
3231	Outside wheel axle nut			per set
909	Balls			per sec
	Market Shirt State of the San Control	812 9 2 ¹		
	BRAKES—Front (British	Hubs)		
3232	Front brake plate with anchor arm cam b	polt and c	perating	
	lever			each
3233	Cam bolt only (for rivetting)	***		"
3234	Operating lever ,, ,,			
0.00				abino
	NOTE.—Always quote frame num	per of y	our ma	chine.

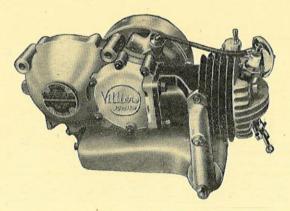
Part No.	Description		£ s.	d.
3235	Brake shoe fulcrum pin (for rivetting)		each	
3236	" " and liners		. per pair	
3237	" liner and rivets		. ,,	
3238	Shoe springs	*** **		
	Brake liners fitted to service shoes			
	OLD SHOES MUST FIRST BE RETURNED			
	PRANTE D. (P. M. L. L. L.			
	BRAKES—Rear (British Hubs	,		
3239	Rear brake plate with anchor arm, cam bolt ar	nd operating	2	
3237	lever			
3240	Cam bolt (for rivetting)			7
3241	Operating lever		. "	
3242	Brake shoe fulcrum pin (for rivetting)		. "	
3243	Brake shoes and liners		. per pair	
1395	Brake liner and rivets		. "	
1396	Brake shoe springs	***		
	Brake liners fitted to service shoes		. "	
04/0	OLD SHOES MUST FIRST BE RETURNED		. each	
04/8	Brake anchor clip bolt			
2953	", ", ", nut Brake rod		. "	
2473	adition nut		. ,,	
1094	" " hinge pin		. ,,	
3285	Brake operating lever—front		. ,,	
3096	" " " rubber buffer		. ,,	
3244	", " " " " rivet		. 11	
3084	Brake release trip lever	•••	,,	
3284	" " " " spring			
867	" " " hinge pin …		"	
2963	Operating lever stop bolt			
2413	Operating lever stop bolt		"	
3086/7	Brake release trip ratchet		. ,	
3088A	" " hinge pin …		11	
	WHEELS-Front (Harwil H	lubs).		
3789	Front wheel complete with all brake parts		each	
3774	" " " less brake parts …		,,	
3788	Front wheel rim		"	
3720H	Hub complete with all brake parts Hub shell with cups and dust washers		"	
3775 3776				
3777	Wheel spokes			
3778	Front wheel axle		,,	
3779	Fixed cone		., ,,	
3773	Adjusting cone	· · · · ·	,,	
3780	Wheel hub cup—right hand side		,	
1390	Wheel hub cup—left hand side			
3781	Hub cup dust washer—right hand side		,	
1391	Hub cup dust washer—left hand side		,,	
3783	Adjusting cone lock nut		"	
3784 3785	Wheel axle nut Fixed cone spacing washer (inside cover plate		,,	
3786	Wheel axle nut washer			
909	Balls		per set	
3787	Brake plate lock nut washer		each	

WHEELS-Rear (Harwil Hubs).

D						
Part No.	Description				£	s. d.
3790	Rear wheel complete with all brake parts				each	
3791	Rear wheel complete, less brake parts				,,	
3792	Rear wheel rim				"	
3562H	Rear hub complete with all brake parts				,,	
3793	Rear wheel sprocket				,,	
3794	Hub shell with cups and dust washers					
3795	Wheel spokes				"	
3796	Wheel spoke nipples				"	
3797	Wheel axle		***		1)	1
3222	Fixed cone	***			"	
3223	Adjusting cone				"	
3798	Wheel hub cup-right hand side		***	***	"	
1390	Wheel hub cup-left hand side	•••	•••	***	**	
3799	Hub cup dust washer-right hand side	•••	•••	***	,,	
1391	Hub cup dust washer—left hand side	•••	***	•••	"	
3800	Hub cup folt weeken		***		**	
3227	Adjusting cone lock weeks		***	***	,,	
3228	Adjusting some look was	•••	•••	•••	11	
3801	Rustia plata distant	***	***	•••	11	
3230	Brake plate last nut		***	•••	1)	
3231	Outside wheel are also a		***	***	,,	
3231A	Outside wheel axle sleeve nut	•••		***	"	
909	Outside wheel axle sleeve nut washer Balls		***		,,	
,0,	bails	***			per set	
	PRAVES E . (III					
	BRAKES—Front (Harwil	Hub	s).			
2000						
3802	Front brake plate with anchor arm only				each	
1372	Front brake operating lever					
1371	Cam bolt with nut and washer				,,	
3803	Handbrake lever yoke				"	
3800	Handbrake lever yoke pin				"	
3805	Handbrake lever yoke pin split pin				"	
1394	Brake shoes and liners				"	
1395	Brake liners and rivets			***	,,	
1396	Brake shoe springs			•••	***	
		•••	••••	* * *	,,	
	BRAKES—Rear (Harwil	Hub	(2			
			٠,٠			
3806	Brake plate with anchor arm only	*				
1371	Cam holt with nut and weeks	•••	•••	•••	each	
13805	Brake Operating loves	•••	•••	•••	"	
1659L	Brake operating lever roller	•••		•••	**	
1394	Brake shoes and linears	• • • •		•••	"	
1395	Brake shoe liners and rivets	•••	•••	•••	"	
1396	Brake shee annings	•••	***	***	"	
04/8	Brake anchor clip holt	•••	•••	•••	11	
127	nut	• • •	•••		**	
901	spring weeken	•••			1)	
2953	Brake rod	•••	• • •	***	11	
2473	adjustor	•••	• • •	•••	***	
1094	hingo pin				,,	
3285	", ", hinge pin				,,	
3096				***	"	
3244		•••			,,	
2277	" " " " " " " rivet	ti.			,,	

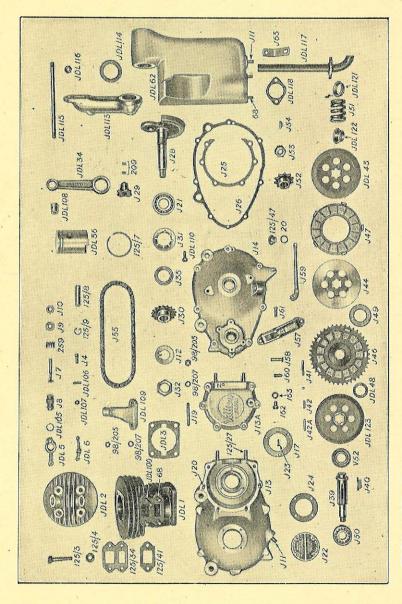
Part No.	Description	£ s. c
3084	Dualta valagas tuin lavau	each
3284		,,
867	Linear ale	,,
2963	and the state	11
2413	One washing layer step helt	p
14		11
3086/7	Brake release trip ratchet	,,
3088a	" " " " hinge pin	,,
M	UDGUARDS, ENGINE SHIELDS AND CI	HAIN GUARD.
3716	Enema muslement	The second second
1285		each
3246		
1296		
1199		
900		
3090	and during atom D. U.	"
3091		,,
127	", ", ", nut	,,
3092	Dean Mudauand	,,
3118	stand slip complete	,,
3144	" " " outer plate	,,
3145	,, ,, inner plate	,,
3146		,,
3147		*** -*** 39
3148		11
3594		,,,
3095		,,,
04/8 127		,,
04/14	", ", ", ", ", ", nut ", ", top fixing bolt	
127	top fixing halt nut	
3365E	Engine shield D LI	1997
3366E		,,
3140	Front engine shield spring	,,
3141	Poor engine shield enging	,,,
3283	Engine shield wing nut	,,
3249		11
3715		,,
14	" " " front fixing nut	,,
1296 1199		,, ,,
1045	mandament selle alle	,,
4026	Dedat about accord	,
1020	Pedal chain guard ,	•••
	PEDALS, CRANKS AND TRANSMI	ISSION
	TEPALS, CHANGE AND TRANSPIL	1331011
3081	R.H. crank with 36T chain wheel	each
3082	I H avant with hyaka sam	,,
3086/7	Puelse velegge twin wetchet	,,
3088A	" " " hinge pin	,,
3250	Crank cotter with nut and washer	,,
3251		,,
3252		,,
3253		
3254	Single conn. link ,, ,,	"
3256	Spring elip	,,
3257		,,
	NOTE.—Always quote frame number of you	our machine.

Part No.	Descri	ntion				£	s. d.
3258	Main driving chain, rear, 115 P.	Repold	No 1120	145		each	s. u.
3259	Single conn. link. Renold No.	112045			•••	each	
3261	Double crapked link		***	3.53	***	11 .	
3262	Spring clip	"	***			11	
1.52		,,		•••	•••	1)	
3079	Engine final drive sprocket		***	***	• • •	11	
3263	Rear wheel sprocket		***	***	***	>>	
3264	Podel she's is also		***		***	per set	
3269	Pedal chain jockey sprocket co		•••	***	•••	each	
	De live for wheel lot	plate	***	• • •		11	
3270	De luxe freewheel 18T		***	***		, ,,	
	CIIN	NDRIES					
	301	ADVIES					
3615	Speedometer complete					each	
3271	Saddle complete		***	***	***		
3272	Caddle sail sauture		***	***	***	,,,	
3273	Saddle seat springs					per pair	
3274	Saddle hinge pin	• •••	***	•••	•••	each	
3275	Saddle hinge pin nut	***	***	***	***	"	
1405		2000	***	***	***	11	
1053	Bulb horn complete	• •••	***		***	11	
2109	Licence holder complete		•••			. 11	
ATT CONTROL OF THE PARTY OF THE	T ; glass		***	***		11	
1040A	Tyre inflator complete		***	***	***	**	
1040B	,, connection		***	***	***	**	
3103	Tool box complete					,,	
2705	,, lid					11	
04/14	" fixing bolt		***	***	***	,,	
127	,, nut		***		***	**	
3819	Lodge CB.3-sparking plug				***	**	
	Tr	OLS					K Trans
	MA TO THE REAL PROPERTY OF THE PERSON OF THE	OLS					Not
3276	Toolroll complete						pplied
2811		• •••	•••	***	***	each as	spares
3277	Cone spanner	• • • •			•••	,,	
3278	Cycle block spanner		***			99	
3279	Peg and cone spanner		***	***		91	
	Screw driver		***	***		,,	
3280	Tubular box spanner and tomn	ny bar	•••			,,	
3281	Oil gun				• • • •	,,	
2810	Sponge cloth		***			,,	
1039	Chain rivet extractor (not incli	uded in t	oolroll)	***	***	,,	
125/1043	Hammer tight spanner			***		,,	
1038	Contact breaker point spanner					,,	
3820	Clutch Assembling Jig		***			**	



LIST OF REPLACEMENT PARTS FOR VILLIERS "JUNIOR-DE-LUXE" ENGINE.

Part No.	Dtt					Price each
	Description					£ s. d.
3960	Engine complete with magneto and carbu	rettor		***		
JDL.I	Cylinder					
JDL.2	,, head	***				
JDL.3	" base washer					
125/3	" head bolt					
125/4	" " washer					
JDL.109	Inlet manifold					
125/34	" and exhaust washer					
125/41	Exhaust manifold washer					
JDL.100	Cylinder stud, long				•••	
68	" " short			••••	•••	
98/205	nut	•••	***		•••	
98/207	weeken	•••	***	***	***	
JDL.5	Release valve bracket	•••	• • • •	•••		
IDL.6	loven	***	• • •	•••		
JD L.0		***	***	***		
J.7	", ", split pin $\frac{1}{8}$ " $\times \frac{13}{16}$ "	•••	•••	* ***		
259	" " stem	•••	•••		***	
257	,, ,, spring					
	" " stem spire pin 32 X 16					
J.4	" " bracket screw			***		
J.8	,, ,, body					
JDL.105	,, ,, ,, washer					
J.9	" ,, outer cover					
J.10	" " inner cover	***				
JDL.106	" " lever adjusting screw					
JDL.107	Lock nut for adjusting screw					
JDL.36	Piston only, with bushes					
125/7	" ring					
JDL.36/01	5 ,, only with bushes .015" Oversize			200		
125/7/015	" ring .015" Oversize				•••	,
JDL.36/03			***			
125/7/030	ring 030" Oversize	•••	***	•••	***	
125/8	Gudgoon pin	•••	•••	***	•••	
125/9	2120	•••	•••	•••	•••	
IDL.108	Cmall and bush	•••	•••		***	
J.13				***		
1.15	Crankcase half and clutch case (less beari		•••			
	NOTE.—Always quote frame num	ber of	your	machi	ne.	



SPECIAL NOTE.—The Villiers type expansion chamber JDL.62, support J.63 and tail pipe JDL.117 are not fitted to the "Powerbike." These are replaced by parts of our own design. For further particulars refer page 22.

Price each Part No. £ s. d. Description 1.13A Outer crankcase half 1.14 Clutch cover, with bush 1.14A Bush only, for clutch cover **J.25** Crank case joint washer ... J.26 Clutch cover ... 1.19 Crankcase stud, long ... * ... 1.20 short ,, 98/205 nut ... ,, 98/207 washer Clutch cover bolt for top two bosses JDL.110 J.15 Clutch case stud, short 1.16 " long 98/205 Clutch case stud nut 98/207 " washer 125/27 Cylinder base stud 125/28 " nut 174 " washer J.17 Clutch case bearing plate].23 screw ... 1.11 stud, silencer support 175 nut... Crank case drain plug ... 162 ... 163 Oil filler plug 125/47 20 washer ... 3827 Driving shaft assembly, with connecting rod 1.21 Ball bearing, type EE8 1.31 Gland Spring **J.35** bush 1.30 Engine Sprocket 1.33 key ... ,,12 lock washer ... ,, ,, 1.32 nut52 Ball bearing, type EE6 1.39 Clutch shaft 1.40 sliding cotter ... 1.41 Clutch push rods, set 1.52 Ball bearing, type EE6 ... JDL.121 Spring location bush, short 1.51 Clutch spring JDL.122 Spring locating bush, long **JDL.43** Outer clutch plate, boss on inside ... 1.47 Clutch plate, corked Set of corks for clutch plate ... 1.44 Clutch plate, centre J.46 " sprocket, corked, with ball race Set of corks for sprocket ... **IDL.48** Clutch sprocket ball race 1.49 side plate Set of 33 1 balls IDL. 123 Outer clutch plate, boss on outside 1.50 Ball bearing, type LS7 1.52 Final drive sprocket Set of 5 rivets, sprocket side plates ... 1.53 Final drive sprocket nut 1.54 key ...

NOTE.—Always quote frame number of your machine.

...

• • •

J.55

Primary drive chain

					Pr	ice each
Part No.	Description				£	s. d.
1.57	Clutch Bridge		***	***	***	
J.61 1.59	" " fixing screw		•••	***		
J.58	,, operating lever Fulcrum pin		***	***	***	
J.50	"," ", split pin $\frac{1}{16}$ " $\times \frac{7}{16}$ "		•••	•••	***	
1.60	Clutch adjusting screw, with lock nut				•••	
1.22	Clutch case end plate					
J.24	" " joint washer					
J.23	" " fixing screw					
	EXHAUST SYST	EM				
2255						
3355	Expansion chamber assembly	•••		***	•••	
3358 3357	" ,, washer—front end	•••	•••	***	***	
IDL.113	Exhaust manifold rear end			•••	***	
JDL.114	to the second second second second	•••	***	•••	***	
125/41			•••		•••	
125/34	Exhaust/inlet manifold joint washer					
JDL.65	Exhaust branch					
3359	" " through stud					
1015	", ", ", " nut					
125/4	,, ,, ,, washer					
3360	Exhaust silencer					
127	" " front fixing nut	,,,				
901	,, ,, ,, washer					
	3-POLE FLYWHEEL M	IAGN	ETO			
3828	Magneto complete					
IDL.200	Flywheel complete, comprising flywheel	Cam.	Balan	e Wei	ght.	
	Magneto, Pole Shoe and Screws					
JDL.202	Pole shoe					
JDL.203	Magnets, per pair					
JDL.204	Screw, pole shoe					
4079	Armature plate, assembled with lighting	coils				
JDL.207	Armature plate fixing screw			•••	***	
125/109	Ignition coil	•••		•••	•••	
125/110 125/110D	Flywheel cover, flat	•••	•••	•••	•••	
JDL.208	,, ,, domed	•••	•••	•••	•••	
125/111	Condenser box only	••••	•••	***	•••	
3821	,, assembled with condenser	and i	noints	***	***	
476	,, ,, stud					
466	,, nut					
465	" washer					

NOTE.—Always quote frame number of your machine.

" washer ...

screw and washer top bush ...

bottom bush

Condenser only...

Screwed point, with lock nut...

Point clamp ...

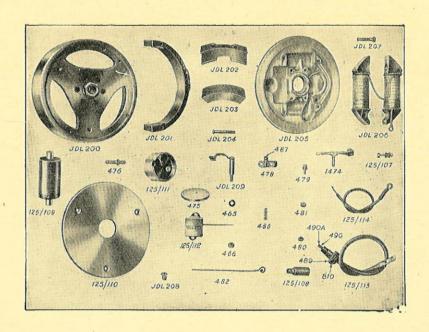
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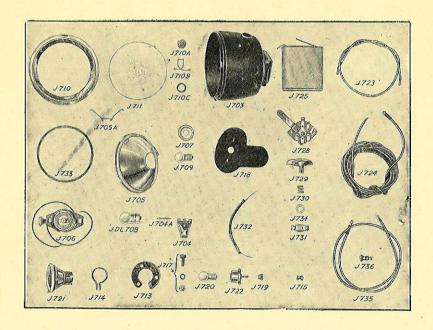
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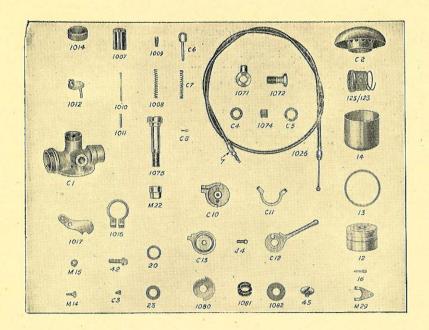
							Pri	ce ea	ich
Part No.	Descriptio	n					£	S.	d.
1474	Rocker arm, with point and pad	***	***			***			
486	,, ,, spring	***	***	•••					
JDL.206	Lighting coils, per pair		***	***	***	***			
125/107	Lighting terminal screw, with nut	and w	ashers	***					
125/114	Lighting cable, from magneto	***	•••	•••					
125/108	Cable connector, with sleeve	***	***		***				
482	Low tension lead, with sleeve	***	***	***	***	***			
125/113	High tension lead, complete	• • • •	***	***	***				
810	" " terminal	***							
489	" " " washer	***							
491	,, ,, screw	•••		• • •	***	•••			
490	" " spring	***	***	***					
490A	,,, ,, pad	***	***						
125/1043	Hammer tight spanner	***							
125/1038	Contact point spanner		***	***					
	Spark plug spanner	***	*** 9						
M.1232	Rubber grommet, lighting lead	•••	***			***			



LIGHTING SET

Part No.	Description			Price each
1.701	Complete lighting set with head lamp, tail lamp,	bulbs	and cables	
1.702	Head lamp complete with switch and cables			
1.703	Head lamp body shell with bracket			
1.710	Front rim with green windows, less front glass			
1.711		• • • •		
1.733	Dubban washan for front also	•••	***	
1.704	Front rim clip	***	***	e .
1.704A				
1.705	Reflector			
1.705A			•••	
1.707	,, retaining spring (set of 3) Pilot bulb holder	•••		*
1.709		• • • •		0
1.706	,, ,, 4 v3 amp	•••		
IDL.708	Main bulb holder with contacts	***	***	
	" " 6 v. l amp		***	
J.718	Dry battery insulator			la,
J.728	Switch, with contacts	•••		
J.729	" lever with spindle and split pin			
1.730	" spindle spring		***	
J.734	" " washer			
J.731	" contact wiper	***		
J.732	Resistance			
J.712	Tail lamp complete, fixing plate and screws		***	
J.721	Tail lamp body		***	
J.714	,, ,, ,, clip			
J.713	" " fixing plate			9 x = 2

Part No	Description		£ s. d.
J.717	,, ,, screw with nut and washer		
J.709	" " Bulb, 4 v3 amp	***	
J.722	" " " holder		***
J.719	" " cable terminal nut		
J.715	" " fixing screw and nut (set of 3)		
J.713	Cable from magneto to head lamp		
J.724	" " head lamp to tail		
J.725	Earth wire		
J.724 J.725 J.736 J.739	" " terminal		
J.739	,, ,, nut		·



CARBURETTER

							Price each
Part No.	Des	£ s. d.					
3822	Carburetter complete						•••
C.I	Body						
1014	Top Ring			***	***		***
1012	,, Disc	***	***	***			
1007	Throttle						***
1008	,, spring						
1010	Taper Needle				***		***
1009	,, ,, adjuster		***		***		
1011	,, ,, spring			***	***	***	•••
1075	Centre piece and jet			•••	•••	•••	***
20	", ", washer	***		•••	•••	•••	***
C.3	", ", locating screw			***		***	
M.22	Bottom nut	***			***	***,	***
23	_, ,, ,, washer		•••	•••	• • • •		***
12	Float						
14	,, cup		•••		***	•••	***
13	", " washer		***		***	***	8 eee
16	Fuel needle	•••	***	***	***	• • •	***
M.29	tongue and pin	***	***	***	•••	•••	***
1016	Body clip	***	•••	•••	•••	•••	•••
42	,, ,, screw	•••		•••		• • • •	***
1017	Strangler plate	•••	***	***		•••	***
M.14	,, ,, screw		***			•••	•••
M.15	" " spring washer		•••	***	•••	***	•••

									Pi	rice eac	h
Part No.			Desc	ription	n				1	S. c	1.
C.2	End cap										
125/123	Air intake g	gauze	***								
1071	Banjo union										
1072	" "	bolt									
1074	" filter	gauze	***								
C.4	" fibre	washer,	large ho	le							
C.5	" "		small ,,								
C.6	Tickler)									
C.7	" sprin	g }									
C.8	" split										
1026	Control cal										
7		uster and									
C.10	,, bo						•••	•••	•••		
C.11			ebar clip		***	***	•••		•••		
1.4	,, ,			screw		••••	***	***	***		
C.12	I av	or.	" "					***	***		
C.13			***	•••	***	***			•••		
1080		plate		•••			***				
1081		dy frictio		•••	***	***	***	***	***		
	3) 3		ng wash		•••	• • •	***	***	***		
1082	,, ,		e washer			•••					
45			screw		***	***					
3198	Control, con		***								
3074	Strangler wi				***		***				
3076	100	rubbe	r bush	Santa I							

NOTICE

We do not appoint agents for the sale on or behalf of our motor cycles or other goods, but we assign to motor cycle Dealers areas in which we supply to such Dealers exclusively for re-sale in such areas. No such Dealer is authorised to transact any business, give any warranty, make any representation or incur any liability on our behalf.

CONDITIONS OF SALE AND GUARANTEE

We give the following guarantee with our motor cycles, motor cycle combinations and sidecars including all accessories and component parts other than tyres, saddles, chains, and lighting and electrical equipment and other than accessories and component parts supplied to the order of the Purchaser and differing from those comprised in the standard specifications supplied with our motor cycles, motor cycle combinations and sidecars, but including accessories and parts supplied by way of exchange as hereinafter provided. This guarantee is given in place of any implied conditions or warranties or any liabilities whatsoever statutory or otherwise; no guarantee except that hereinafter contained and no condition or warranty whatsoever statutory or otherwise is given or is to be implied, nor are we to be under any liability whatsoever except under the guarantee hereinafter contained. 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 anything herein contained. In the case of machines (a) which have been used for "hiring out" purposes or (b) any motor cycles and/or sidecar used for any dirt track, cinder track or grass track racing or competitions (or any competition of any kind within an enclosure for which a charge is made for admission to take part in or view the competition) or (c) machines from which the trade mark, name or manufacturing number has been altered or removed or (d) any machines in which parts have been used not supplied by or approved by the motor cycle manufacturer, or (e) any machine from which the silencing system as fitted by the manufacturer has been partially or wholly removed or interfered with, no guarantee, condition or warranty of any kind statutory or otherwise is given or is to be implied nor are we to be under any liability whatsoever in respect of any such machine.

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 reasonable have been taken by us to secure excellence of materials and workmanship, but with guarantee is to extend and be in force for six months only from the date of purchase, or date of exchange in case of any accessory or part supplied by way of exchange as hereinafter provided, and damages for which we make ourselves responsible under this guarantee are limited to the free repair of or supply of a new part or accessory in exchange for the part of the motor cycle, motor cycle combination or sidecar or accessory which may have proved defective. We undertake, subject to the conditions mentioned below, to make in good manner aforesaid any part or accessory covered by this guarantee which has proved defective within the said period of six months. We do not undertake to replace or refix, or bear the cost of replacing or refixing any such new part or accessory in the motor cycle, motor cycle combination or sidecar. As motor cycles, motor cycle combinations and sidecars are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse or neglect.

The term "misuse" shall include amongst others the following acts:—
I—The attaching of a sidecar to a motor cycle in such a manner as to cause damage or calculated

to render the latter unsafe when ridden.

The use of a motor cycle or of a motor cycle and sidecar combined, when carrying more persons or a greater weight than that for which the machine was designed by the manu-

3—The attaching of a sidecar to a motor cycle by any form of attachment not provided, supplied or approved by the manufacturers, or to a motor cycle which is not designed for such use.

We do not guarantee tyres, saddles, chains or lighting and electrical equipment, or any accessories or component parts supplied to the order of the purchaser, differing from those comprised in the standard specifications supplied with our motor cycles, motor cycle combinations or sidecars. As regards all such tyres, saddles, chains, lighting and electrical equipment, accessories and component parts, no guarantee, condition or warranty of any kind statutory or otherwise is given or is to be implied, and we are to be under no liability whatsoever in respect thereof.

CONDITIONS OF GUARANTEE

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

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

REPAIRS

Any motor cycle, motor cycle 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 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, and this guarantee is in lieu and in exclusion of all conditions and warranties statutory or otherwise and all liabilities whatsoever 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.



