

Master CATALOGUE

1970

BIG END BEARINGS

SMALL END BUSHES

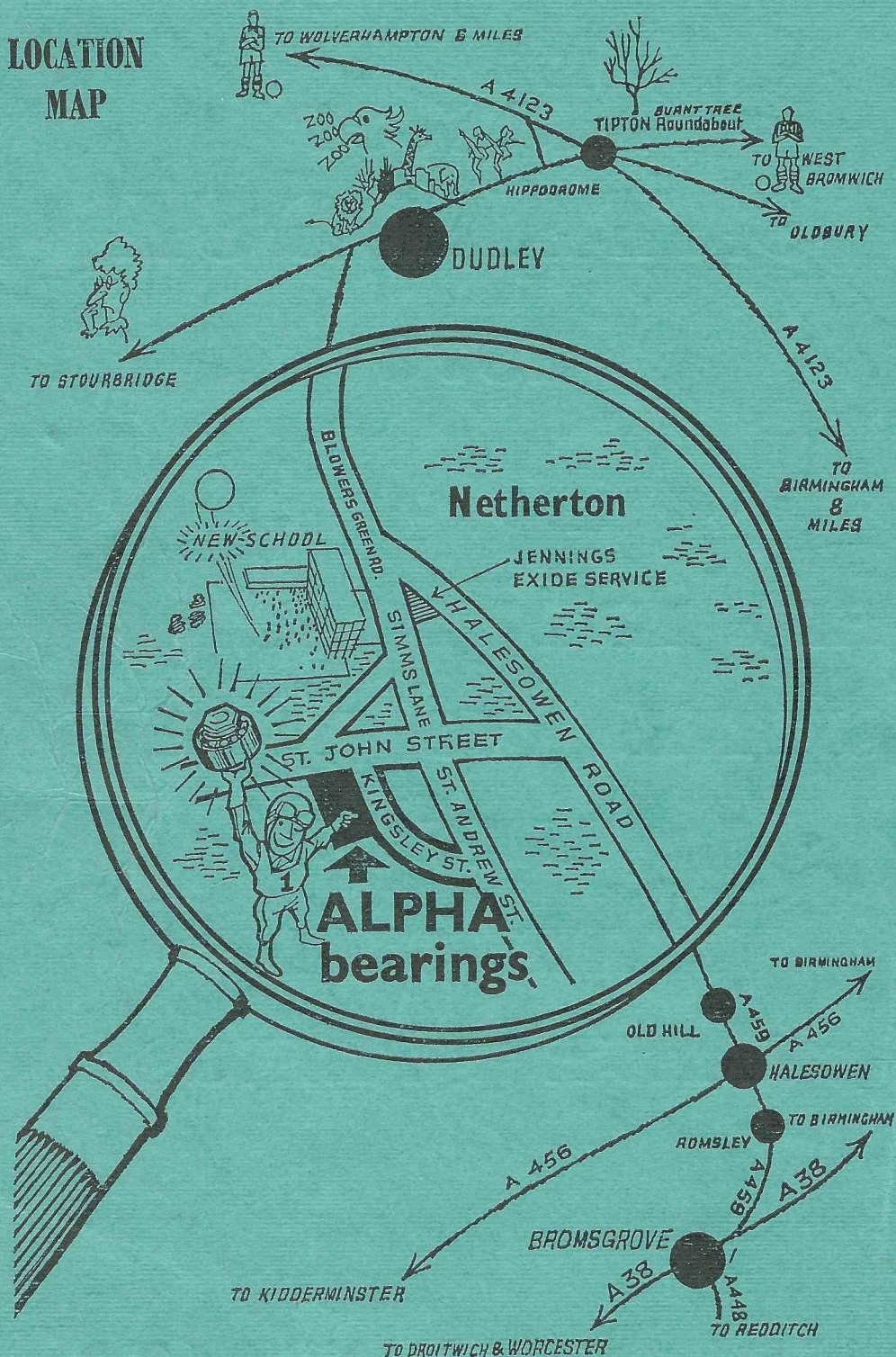
VALVES

VALVE GUIDES

VALVE SPRINGS

ALPHA BEARINGS LTD.

LOCATION MAP



See inside back cover for Route Directions.

Master Catalogue

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GENERAL INFORMATION Pages 2 — 3

ALPHA-TRU Page 4

SECTION 1

BIG END BEARINGS	}	Pages 5 — 38
SMALL END BUSHES	..	..	..
MAIN BEARINGS	..	..	..

SECTION 2

VALVES	}	Pages 39 — 55
VALVE GUIDES	..	..	..	..	..
VALVE SPRINGS	..	..	..	..	..

SECTION 3

DATA SECTION	}	Pages 56 — 64
(Sizes, Etc.)		

LOCATION MAP Inside Front Cover

HOW TO GET TO ALPHA BEARINGS .. Inside Back Cover

ALPHA BEARINGS LIMITED
P.O. BOX 13, DUDLEY, WORCESTERSHIRE

Telephone : DUDLEY 55151

General Information . . .

ORDERS AND ENQUIRIES

When we receive items for repair or as patterns a copy of our Job Sheet is sent to the customer. This sheet shows all items received and sets out the work to be done. Customers are requested to check these sheets and to advise us if there is any discrepancy in either the items received or the work that we intend carrying out. The Copy Job Sheet carries our Works Order Number, and any enquiry relating to the job in question should always be accompanied by this.

It is essential that all goods are accompanied by the customers official order.

Any variation by the Buyer to the terms of an Order shall be made in writing and shall only take effect if accepted by the Company in writing.

SAMPLES

Samples sent to us for reference will always be returned at the customer's request, but in the absence of this they will be destroyed when the order has been completed.

PART NUMBERS

Big end part numbers quoted in our Lists refer to the complete assembly less Cage. Where cages are normally fitted these are the subject of a separate part number. In the case of Bearings normally using a cage it is our standard practice not to supply one unless it is specially ordered. Where a bearing is assembled complete with cage the part number will be followed by the letter "K." Thus, AMC.6 refers to the crankpin, nuts, outer race and sufficient rollers to fill a cage. AMC.6.K refers to all the above parts assembled with the cage complete, whilst K.3 refers to a cage only suitable for use in the AMC.6 bearing.

EXCHANGE RODS AND CRANKSHAFTS

We have at our Works large stocks of connecting rods and crankshafts fully reconditioned with new big end bearings and small end bushes. Wherever possible these are sent to customers in exchange for their old units by return of post. There are times however, when customers require the return of their own parts or alternatively, do not require small end bushes. In such cases we request that they mark their orders accordingly so that their own parts may be given individual attention. Our price for an exchange connecting rod is the standard charge made for fitting the appropriate big end bearing and small end bush and in the case of crankshafts our truing charge is added to the exchange rod price. Some crankshafts require additional attention because mainshafts may be damaged and in such instances these items are invoiced separately.

It is of considerable help to us if pistons, sprockets and main bearings etc., are removed from crankshafts that are sent for repair because we regret that we cannot accept any responsibility for such parts, which are subsequently reported as not having been returned. In cases where new main bearings are needed as part of the reconditioning, then it is of course quite acceptable to leave the old ones on the mainshafts for pattern purposes. i.e. Honda twin crankshafts etc.

CRANKCASES

We have only specialised facilities for handling crankshafts and flywheels and cannot accept crank cases or other engine parts for dismantling or repair except by prior arrangement.

CARRIAGE

Carriage and Packing expenses are charged at cost. The Railway or Transport Company acting as carriers are deemed to operate as agents for the Buyer, and we consider delivery has been effected when goods pass into their hands.

RETURNED GOODS

When orders have been properly executed we cannot accept the return of goods except in special circumstances. All goods so returned will be credited at invoice price, less 15 per cent. for handling.

PAYMENT AND ACCOUNTS

Ledger accounts may be opened on production of satisfactory Trade References. Payment is due during the month that follows the month in which the goods were delivered.

Pending the opening of a credit account, goods are despatched by C.O.D. Post unless paid for in advance.

MAIN BEARINGS

Main bearing references are shown for most engines. In the case of ball and roller bearings Hoffman references are quoted unless otherwise shown. The part numbers of Mainshafts, Bushes, etc., refer to items of Alpha manufacture.

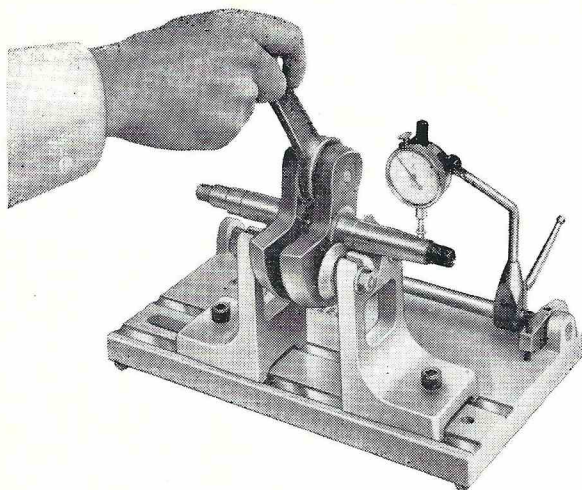
MANUFACTURERS PART NUMBERS

In the data section at the end of the Catalogue equivalent genuine part numbers are given for most ALPHA big ends and small ends. In the case of Valves and Valve Guides these are shown in the Valve section in brackets, beneath the Alpha part number. Makers numbers are shown for the convenience of customers only. All products referred to in this List except Valve Springs are of Alpha manufacture, suitable for the types specified.

GUARANTEE

"Every ALPHA product is of British manufacture throughout, and is fully guaranteed against defective material or workmanship. We will replace free of charge, and without question, any faulty parts returned to us within six months from date of purchase. We cannot accept responsibility for parts used under improper operating conditions or for any consequential loss or damage whatsoever."

Introducing the ALPHA-TRU



ALPHA'S
latest contribution
to
Workshop Efficiency.

The Problem

When motor cycle flywheels and bobweights are re-aligned it is usual to employ lathe centres on which the crankshaft can be held and the alignment measured by a clock micrometer. Unfortunately this method suffers a serious disadvantage. Certain makes of bobweight are finished by centreless grinding and the centres in the shaft ends have no relation to the axis of the finished shaft, with the result that if such a crankshaft is trued using these centres, when apparently true, the shaft will actually be out of line by whatever amount the centre is away from the true axis of the shaft. Not all cranks are produced in this fashion, but frequently shafts are damaged on the ends when an engine is dismantled or become slightly bent with similar results.

Realising this problem our engineers developed a machine so that crankshafts and flywheels could be trued without using the shaft centres.

The machines produced were used in our works for some years and often customers expressed a desire to purchase for their own use. Thus the beginning of Alpha-Tru. Described in detail below, we know from our own experience that this machine will revolutionise the handling of flywheels and crankshafts.

. . . . and the Answer

Alpha-Tru consists of a baseplate with one fixed and one adjustable bracket. On each bracket is mounted a pair of wheels running on ball bearings and ground on the outside diameter to a knife edge. By adjusting the movable bracket, shafts of different widths can be accommodated, and where the timing side shaft differs in thickness to that of the driving side then the rotating wheels on one side can be raised to allow for this.

When in use the brackets are adjusted so that they are as near to the flywheels as is possible; and the clock gauge can be brought into contact with the ends of the shafts. (*See photograph*).

Alpha-Tru should not be confused with flywheel assembling equipment such as the "Simple Simon" Jig. Such tools are for assembling flywheels whilst Alpha-Tru provides a method of aligning. Also, of course, Alpha-Tru will handle bobweights as simply as flywheels, and in addition may be used for checking straightness of any round item—push rods, valves, etc., etc.

TRADE PRICES

ALPHA-TRU complete with all attachments and John Bull	
Series 1 (1½" dial) Clock Micrometer	£17 . 10 . 0
As above, but less Clock Micrometer	£13 . 5 . 0

Carriage extra.

SECTION I



BIG END BEARINGS

SMALL END BUSHES

MAIN BEARINGS



A.J.S.

AJS models 14, 14S, 14CS, 14CSR, 8 (Light 350) and 7R all employ crankpins that are rather slender and which are subject to frequent breakage.

To overcome this difficulty we can bore out the flywheels and fit oversize crankpins that are most satisfactory in service.

All such conversion bearings are denoted by the letter "X" following the standard bearing reference:

e. g. AMC12L indicates Standard bearing.

AMC12LX indicates conversion.

Further details are available on application.

250 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1958-60	14, 14CS	WHT	AMC14	K50	SE143	2 × LS9	042239
1961-63	14, 14S, from Engine No. 10367	—	AMC14L	K50	SE143	RLS9	042239
1961-66	14CS, 14CSR	043021	AMC17H	K51	SE143	MS10	

350 c.c.

1940-51	16MS, 16MC	WHT	AMC6	K3	SE1	2 × LS10	STD650
1952-53	16MS, 16MC, 16MCS ..	WHT	AMC6	K3	SE1	2 × LS10	017489
1954	16MS, 16MC, 16MCS ..	WHT	AMC6	K3	SE1	2 × LS10	021481
1955-63	16 MS, 16MC, 16MCT ..	} WHT	AMC6	K3	SE1	MS10	021962
1955	16MCS					LS10	
1956-59	16MCS	WHT	AMC12	K51	SE1	MS10	✱
1948-55	7R, Racing	Polished	AMC7R	K46	✱	✱	MS11
1956-63	7R, Racing	Polished	AMC12L	K51	SE209	✱	MS11
1960	8 (Light 350)	44023	AMC17	K51	SE143	LS9(2 off)	042239
1961-63	8 (Light 350)	44023	AMC17	K51	SE143	MS10	RLS9
1964-66	16, 16C	—	AMC20	K51	SE1	MS10	030184
						LS10	RL10L

500 c.c.

1937-51	18, 18S, 18C	WHT	AMC6	K3	SE1	2 × LS10	STD650
1952-53	18S, 18C, 18CS	WHT	AMC6	K3	SE1	2 × LS10	017489
1954	18S, 18C, 18CS	WHT	AMC6	K3	SE1	2 × LS10	021481
1955-63	18S, 18C	} WHT	AMC6	K3	SE1	MS10	021962
1955	18CS					LS10	
1956-63	18CS	WHT	AMC12	K51	SE1	MS10	023346
						LS10	
1964-66	18, 18CS	—	AMC20	K51	SE1	MS10	030184
						LS10	RL10L

500 c.c. and 600 c.c. TWIN

1949-66	Model 20,30,31 Spring Twin	—	—	—	—	RLS12½	RLS12½
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✱ Indicates items for which patterns are required.

750 c.c. TWIN

1964-68	Model 33, 33CSR ..	—	—	—	—	R330L	330
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990 c.c. TWIN

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1937-40	37-2, 40-2, O.H.V. ..	WHT	AMC8	K1 (2 off) K2 (1 off)	SE1	✱	✱

Aer-Macchi

Late model Ala-D'Oro machines are fitted with big ends Ref. AM3 which have larger crankpin shanks than the previous Ref. AM2. We can bore out early type flywheels and fit AM3 type bearings which greatly improves the reliability of the flywheel assembly.

175 c.c. and 250 c.c.

1961-68	175 c.c. Ala-Rossa	}	—	AM1	K68	✱	325	✱
1960-62	250 c.c. Ala-Verde		—	AM2	K11	✱	325	325
1962-69	250 c.c. Ala-D'Oro		—	AM3	K11	✱	325	325

Ariel**50 c.c.**

1963-65	Pixie	53-71	A10	—	SE220	117	117 115
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200 c.c.

1964-65	Arrow	T16	A9	—	SE159	125	(3 req'd) Bush 65-2052
1954-58	"Colt"	45-2409	AB5	—	SE11	325	

250 c.c.

1935-40	LG, LH, O.H.V. ..	A7-339	A5	—	SE3	{ MS10 LS10 125 (3 req'd)	LS10
1958-65	'Leader,' and 'Arrow' ..	T16	A9	—	SE159		

350 c.c.

1936-59	NG, NH, Etc., all Models	A7-339	A5	—	SE3	{ MS10 LS10	LS10
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✱ Indicates items for which patterns are required.

500 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1936-50	VG and '500 Standard' ..	A7-524	A5	—	SE4	MS10 LS10	LS10
1938-59	VH, Red Hunter	A7-473	A7	K5	SE4	LS10 RMS10	RL10L
1953-54	VCH, VHA, Alloy Engine	A7-473	A7	K5	SE4		
1955-59	HS, HT, Scrambles and Trials	A7-473	A7	K5	SE4		

500 c.c. TWIN

1948-54	KG, KH, Series 'A' ..	—	—	—	SE7	RM11L	—
1955-59	KG, KH, Series 'B' ..	—	—	—	—	RM11L	—

600 c.c.

1936-58	VB, SV	A7-524	A5	—	SE4	{ MS10 LS10	LS10
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650 c.c. TWIN

1954-59	FH 'Huntmaster' ..	—	—	—	SE109	R130L	—
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1000 c.c. FOUR CYL.

1937-59	4G, 'Square Four' ..	—	—	—	SE7	RL11L (2 off)	8769
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✱ Indicates items for which patterns are required.

Bianchi

75 c.c., 125 c.c. and 175 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1960-66	75 c.c. Gardena	—	Bianchi 1	—	SE210	117	117
1961-66	125 c.c. Bernina	—	Bianchi 2	—	SE211	125	120
1961-66	175 c.c. Tonale	—	Bianchi 3	—	SE211	120 120P	125

BMW

250 c.c.

1950-69	R25, R26, R27	224-2	BMW1	K57	SE164	130	130
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300 c.c.

1956-59	Isetta 3 Wheeler	Alloy	BMW3	K85	Rod req'd for repair	135	135
1959-65	Isetta 3 Wheeler	Steel	BMW4	K57	SE190	135	135

500 c.c.

All Years Up to 1969	R50, R50S	224-2	BMW2	K57	SE164	135	135
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600 c.c.

All Years Up to 1969	R60	224-2	BMW2	K57	SE164	135	135
	R69, Sports	224-2	BMW2	K57	SE164	✱	135

British Anzani

250 c.c. and 325 c.c.

All Years	Twin, Type 1, Type 2 ..	BAE	ANZ1	K58	SE165	RL9L	LS9
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✱ Indicates items for which patterns are required.

B.S.A.

Certain B.S.A. C15 and B40 models employ plain type big end bearings and Alpha Reference B21 and B23 for these models, relate to special caged roller conversions.

Also available is a similar roller conversion to replace the timing side plain bush (Original Part No. 40-0389) that is fitted to all

C15 and B40 machines.

Additionally we produce a polished oval section connecting rod assembly for all types of B.S.A. Bantam.

These special components are most satisfactory in service and very desirable where sporting use is made of the machines. Leaflets describing all of these parts are available upon request.

70 c.c. and 75 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1956-62	Dandy, T/S	64-58	B22	—	SE135	115. LS8	—
1963-65	Beagle	53-71	A10	—	SE220	117	117×115

125 c.c.

1947-53	Bantam, D1	90-253	B20	—	SE24	117 LS8	LS8
1954-57	Bantam, D1	90-497	B20C	—	SE24		
1958-63	Bantam, D1	90-497	B20KS	K59	SE24		

150 c.c. and 175 c.c.

1954-59	Bantam Major, D3	90-497	B20M	—	SE24	117 LS8	LS8
1958-64	Bantam Super, D5, D7 ..	90-497	B20KL	K59	SE134		
1958-59	B1 'Sunbeam Scooter' ..	90-497	B20KL	K59	SE134		
1960-65	B1 'Sunbeam Scooter' ..	90-1457	B20KT	K59	Roller Type		
1965-66	Bantam D7				90-1457		
1967-68	Bantam D10	90-1525	B20KTO	K59	Roller Type	117 LS8	LS8
1969	Bantam D14/4, Supreme, Bushman	90-1525	B27	K59	90-1457		

250 c.c.

1937-57	B20, C10, C10L, S.V. ..	65-444	B5	—	SE11	325	65-2052
1940-57	C11, C12	29-2277	B5	—	SE11	325	65-2052
1958-63	C15	40-48	B21	K73	SE142	325	40-389
1959-60	C15S to Engine No. C15S 2112						
1959-61	C15T to Engine No. C15T 1320						
1961	C15S (Jan. to May) to Engine No. C15S 3001 ..	40-473	B23	K83	SE142	325	40-389
1961-64	C15S from Eng. No. C15S 3002	41-181S	B24	K84	SE142	325	40-389
1961-63	C15T from Eng. No. C15T 1321	41-181S					
1961-63	C15 SS80	41-181S					
1964	C15	40-514	B25.	K84	SE142	325	40-389
1965	C15S						
1964-65	C15T						
1964-65	C15 SS80						
1965-66	C15 Star Sportsman ..	41-234	—	—	SE199	325	✱
1959-64	Sunbeam Scooter						
1967-68	B25 Starfire, C25 Barracuda Engine Nos. B25-101, C25-101						
1969	B25 Starfire from Engine No. KC06301 B25S ..	—	—	—	SE200	325	325
1970	B25 Starfire from Engine and Frame No. JD00101 B25S	—	—	—	—	325	325
		—	—	—	—	R325L	325

✱ Indicates items for which patterns are required.

350 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1946-59	B31 and 1946-54 B32 ..	66-483	B14	K11	SE13	{ 125 R325L	RM9L
1954-57	B32 }	65-1614 65-1614	{ B14	K11	SE13	{ 125 R325L	RM9L
1949-53	Gold Star }	65-1614 65-1321	{ B14GS	K11	SE13	{ 125 R325L	RM9L
1954-59	Gold Star }	65-1836	B14GS	K11	SE13	{ 125 RMS11	RM9L
1960-61	B40-350 Star	41-55	B23	K83	SE13	325	40-389
1962-64	B40-350 Star, B40 SS90 ..	41-181L	B24	K84	SE13	325	40-389
1965	B40-350 Star, B40 SS90 ..	41-234	B25	K84	SE13	325	40-389

440 c.c.

1965-68	Victor	41-550	B26	K84	SE13	R325L	325
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500 c.c.

1937-38	M20	66-481	B14	K11	SE15	{ 325 R325L	RM9L
1939-59	M20	66-481	B14	K11	SE15	{ 125 R325L	MS9 RM9L
1937-39	M22, M23, M24, O.H.V. }	66-483	B14	K11	SE13	125 R325L	RM9L
1947-59	M33, O.H.V. ..						
1946-54	B33 }						
1946-59	B34 }						
1954-59	B33, O.H.V.	65-1614	B14	K11	SE13	{ 125 R325L	RM9L
1949-50	Gold Star	65-1321	B14GS	K11	SE13	{ 125 R325L	RM9L
1951-63	Gold Star }	65-1321 65-1836	{ B14GS	K11	SE13	{ 125 RMS11	RM9L

500 c.c. TWIN

1947-50	A7 Twin and Star Twin ..	—	—	—	SE108	MS11	67-790*
1951-62	A7, Star Twin, Shooting Star	—	—	—	SE107	R130L	
1962-65	A50 Star Twin, Cyclone, Royal Star, Wasp ..	—	—	—	SE109	MS11	{ 68-0015* 68-0036*
1966-69	A50 Royal Star, Wasp ..	—	—	—	SE109	RM11L	{ 68-0636* 68-0657*

* Also available in under sizes, please see price list.

600 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1937-38	M21	66-481	B14	K11	SE15	{ 325 R325L	RM9L
1939-59	M21	66-481	B14	K11	SE15	{ 125 R325L	MS9 RM9L

650 c.c. TWIN

1950-53	A10 Twin	—	—	—	SE109	R130L	67-790*
1954-62	A10 and Super Rocket ..	—	—	—	SE109	R130L	
1962-65	A65 Star Twin, Rocket, Hornet, Lightning ..	—	—	—	SE109	RM11L	{ 68-0015* 68-0336*
1966-69	A65 Lightning, Hornet, Thunderbolt, Spitfire ..	—	—	—	SE109	RM11L	{ 68-0636* 68-0657*

* Also available in under sizes, please see price list.

Bultaco**125 c.c. and 150 c.c.**

1959-63	Tralla 101, TSS Racer, Tralla 155, Kart Engine and Sherpa N	—	BUL1	K86	SE212	125	125
1965-66	TSS Racer, Tralla ..	—	BUL2	K94	—	125	125

200 c.c. and 250 c.c.

1965-69	Sherpa Trials, Metralla and TSS Racer	—	BUL2	K94	—	125	125
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360 c.c.

1969	El Bandido	—	BUL3	K95	—	130	130
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Capri**50 c.c., 70 c.c., 80 c.c., 98 c.c., 125 c.c., and 150 c.c.**

1964-66	50 c.c.	—	Capri 4	K110	—	117	117
1959-64	70 c.c.	—	Capri 1	K107	SE192	117	117
1960-64	80 c.c.	—	Capri 2	K108	SE196	112	112
1962-65	98 c.c.	—	Capri 3	K109	—	117	117
1964-66	100 c.c., 125 c.c., 150 c.c.	—	Capri 5	K111	—	120	125

Capriolo

75 c.c. and 125 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1959-66	75 c.c. "Touring" and De Luxe	—	CRO1	K88	—	✱	✱
1959-66	125 c.c. "Touring" and De Luxe	—	CRO2	K89	—	✱	✱

Diana

200 c.c.

1955-62	Standard and Sports ..	—	Diana 1	K63	SE145	117	A20 120
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Douglas

By arrangement with Douglas (Kingswood) Ltd. for whom we carry out the whole of their crankshaft reconditioning, we offer service exchange crankshafts for Vespa whose prices include renewal of mainshafts as necessary without extra charge, but we cannot any longer supply big ends only to customers' own crankshafts.

50 c.c.

1968-69	Ciao	—	DV11	—	SE231	115	115
1968-69	Vespino	—	DV12	—	SE231	115	R115

90 c.c.

1963-66	Model 90	—	DV9	—	SE222	317	RLS8
1965-69	Model 90 c.c. Super Sprint	—	DV9	—	—	317	R120

125 c.c.

1951-54	Rod Type and Model "G"	5354	DV	—	SE32	1806 (FBC)	1806 (FBC)
1954-55	GL2	18602M	DV1	—	SE146	M25N	M25N
1955-59	42.L2, 92.L2	037987	DV2	—	SE146	M25N	M25N
1959-62	152.L2	023792	DV4	—	SE193	M25N	M25N
1963	"125"	—	DV7	—	SE208	M25N	M25N
1967-69	VMA1	—	DV9	—	—	317	R120

150 c.c. and 160 c.c.

1955-62	"Gransports"	—	DV.GS	—	SE146	M25N	M25N
1957-59	"Clubman"	—	DV3	—	SE146	M25N	M25N
1960-61	"New 150"	—	DV5	—	Send Rod for Repair	M25N	M25N
1961-65	"Sportique", 150GT, GL ..	089289	DV6	—		M25N	M25N
1962-65	"GS-160"	—	DV8	—		M25N	R125E
1966	Sprint 150	—	DV6	—			

180 c.c.

1966	180 Super Sports	—	DV10	—	Send Rod for Repair	M25N	R125E
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✱ Indicates items for which patterns are required.

350 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1935-37	"Endeavour," "Blue Chief"	8636	DB	K52	SE148	130DR	✱
1946-51	T35, MK3, MK4, MK5	26048	DP	K53	SE31	130DR	26057
1951-57	MKV	26048	DP	K53	SE31	130DR	26057
1950-54	Plus Series "80," "90" ..	Polished	DP +	K53	SE31	130DR	{ 130 38259
1955-59	"Dragonfly"	S26048	DPD	K53	SE31	130DR	{ 34168DF (Split)

500 c.c. and 600 c.c.

1930-34	A32, E29, K, M	—	DBT	—	SE29	130DR	✱
1930-35	T6 S6	—	DBT	—	SE147	130DR	✱
1936-39	"Aero"	8636	DB	K52	SE148	130DR	✱

Ducati

In addition to types shown below there are also 125 c.c. and 175 c.c. "Formula III" machines and the special Desmodromic and Grand Prix types. The big ends of all these are covered by the general reference DC5, but they vary slightly from each other and pattern crankpins should be sent with any orders.

48 c.c.

1963-66	B48, P48, Falcon	—	DC1	—	SE217	117	117
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98 c.c.

1956-58	98T	—	DC4	—	✱	✱	✱
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125 c.c., 175 c.c. and 200 c.c.

1957-63	125T, Sports, Monza ..	—	DC2	—	SE202	{ 117 125	125
1957-62	175T, Sports Silverstone }	—	DC3	K100	SE189	{ 117 130	130
1960-66	Elite, G/T, S/S.. }						

250 c.c.

1962-67	Daytona, Mach 1, GT }	—	DC6	K100	SE189	{ 117 130	130
1968-69	Monza, Mark III .. }	—	DC7	K100	SE189	{ 330N	130
1969-70	Mark IIID (Desmodromic)						

✱ Indicates items for which patterns are required.

350 c.c.

1968-69	Sebring, Mark III ..	—	DC7	K100	SE189	330N	130
1969-70	Mark IIID (Desmodromic)	—	DC7	K100	SE189	330N	130

ESO

—	Speedway	—	ESO1	—	✱	✱	✱
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Excelsior

See also Villiers.

One outer bobweight on Talisman Twin crankshafts has a slightly enlarged crankpin eye and is only a light push fit on the crankpin. This arrangement is necessary in order that the two halves may be bolted together after fitting into the crankcase after which the end bobweight is pressed on. This procedure is quite correct and customers should not be concerned that the crankpin is not the usual press fit.

98 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1945-56	Goblin, Spryte, etc. .. (also Brockhouse Corgi)	834	XA	—	SE36	L25N	—
1945-50	MK.IV (for Brockhouse Corgi)	834	XB	—	SE36	09067- 09195(S.K.F.)	09067- 09195(S.K.F.)

150 c.c.

1952-56	Courier	3007	XT	—	SE33	LS8 (2 off)	LS8
1959-62	Monarch Scooter	3007	X4	—	SE33	LS8 (2 off)	RLS8

250 c.c.

1950-62	Talisman	3007	XT	—	SE33	{ LS8 (2off) RLS8 Pattern required for Centre Main	
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350 c.c.

1955-62	Talisman 328 c.c.	3007	XT	—	SE33	D/S LS8 (2 off)	Centre RL10L (2 off)	T/S RLS8
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Francis Barnett

For other Models see Villiers.

150 c.c.

1959-66	Plover 86, Fulmar 88, 90 .. Plover 95, 96	045011	AMC19	K71	SE179	LS8 (2 off)	JH1612 (Torr'ton)
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✱ Indicates items for which patterns are required.

175 c.c.

1957-60	Light Cruiser 79	41442	AMC15	K71	SE179	LS 8 (2 off)	RLS8
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200 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1959-66	Falcon 87	041044	AMC18	K72	SE198	LS8 (2 off)	RLS8

250 c.c.

1957-63	Cruiser, 80 and 84 ..	41044	AMC13	K72	SE180	MS9 (2 off)	RMS9
1957-62	Scrambler, Trials, 82 and 83	41044	AMC16	K72	SE180	MS9 (2 off)	RMS9
1962-63	Cruiser and Sports Cruiser 89, 91 ..	E8368	VIL.13	—	SE101	D/S 320	Centre R125
1964-66		A28248 or 28165	VIL.15	—	SE218	125	T/S R125

Gilera**125 c.c. and 175 c.c.**

125 c.c. "Extra"	—	GL2	—	✱	✱	✱
G175	—	GL1	—	SE157	125P 35N	R320L

Goggomobil

See page 38.

Greeves**250 c.c.**

—	Long Stroke Crankshaft Part No. G1140 ..	—	CAG250S	—	SE104	{ CAG4 Shaft CAG1 CAG5 Race CAG2 K91 Cage K90
—	Short Stroke Crankshaft Part No. G1356 ..	—	CAG250L	—	SE232	

✱ Indicates items for which patterns are required.

GREEVES—continued

350 c.c., 360 c.c. and 380 c.c.

—	350 c.c. Racer Crankshaft Part No. G1357 ..	—	GAG360	—	SE232	CAG4 Shaft CAG5 Race K91 Cage	CAG1 CAG2 K90
—	360 c.c. and 380 c.c. Scrambler Crankshaft Part No. G1206 ..	—	GAG360	—	SE232	CAG4 Shaft CAG5 Race K91 Cage	CAG1 CAG2 K90

Guazzoni

See page 38.

Harley Davidson

750 c.c.

1932-51	45 cu. ins. S.V. ..	{ UA-705T UA-706T }	HD1	K40	SE149	✱	✱
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1000 c.c., 1200 c.c. and 1300 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1936-52 1937-48 1937-48	61 cu. ins. O.H.V. 74 cu. ins. S.V. .. 80 cu. ins. S.V. ..	{ XA705 XA706 XA705 XA706 }	HD2S	K13 (1 off) K41 (2 off)	SE150	✱	✱
1941-51	70 cu. ins. O.H.V.		HD2L	K13 (1 off) K41 (2 off)	SE150	✱	✱

Heinkel

NOW TROJAN

The three types of Heinkel big end are most easily identified by referring to the T/S main-shaft of the flywheel assembly. Details of each are shown below.

The T/S shaft fitted to bearing reference HKL1 frequently breaks away at the end and when replacing these it is our practice to fit a shaft reference HKL4 complete with rotor fixing nut but in such cases the loose distance piece used on shaft HKL1 should be discarded as the HKL4 shaft has a correspondingly larger journal.

Original Heinkel con rods are rather thin and frequently break. New big ends for Heinkel (except Perle) are only supplied complete with new heavy section connecting rods specially made by Alpha.

50 c.c.

1954-58	Perle	R477	HKL3	—	SE177	115	115
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✱ Indicates items for which patterns are required.

150 c.c.

1962-66	Scooter	—	HKL5	—	—	125	125
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175 c.c. and 200 c.c. SCOOTER and CAR

1956-66	SIBA. Stepped T/S mainshaft with 8 mm. internal thread and cut-away crankpin	R404	HKL1	K70	SE178	325	325
1956-66	BOSCH. Stepped T/S mainshaft with 12 mm. external thread	R404	HKL4	K70	SE178	325	325
1956-66	SIBA/BOSCH. Straight T/S mainshaft with 10 mm. internal thread	R404	HKL2	K70	SE178	325	325

Honda

Most kinds of Honda twin crankshafts are fitted with crankpins that are an integral part of the inner flywheels. For this reason, we always require the complete crankshaft for repair and the price shown in our list is inclusive of replacement main bearings where these are needed.

50 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1963-68	C100, C102	—	HON 1S	K92	—	317	117
1963-68	C110, C114	—	HON 1L	K92	—	320	120
1968-69	P50	—	HON 4	K102	—	117	115
1968-69	C50	—	HON 5	K103	—	320	320
1969	SS50						

65 c.c.

1967-68	S65	—	HON 6	K103	—	320	320
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90 c.c.

—	C200 (O.H.V. Model)	—	HON 2	K93	—	325	325
—	C200, S90 (All O.H.C. Models)	—	HON 3	K101	—	325	325

125 c.c.

—	C92 Twin (Disc-1964)	—	HON 7	K104	—	Service exchange crankshafts are supplied with new main bearings as necessary.	
1962-65	CB92 Twin	—	HON 8	K93	—		
—	CR93 Racing Twin	—	HON 13	K106	—		

150 c.c.

1966-68	C95 Twin	—	HON 9	K93	—	As above	
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HONDA—continued

160 c.c.

1964-68	CB 160 c.c. Twin	—	HON 10	K113	—	Service exchange crankshafts are supplied with new main bearings as necessary.
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175 c.c.

1967-69	CD175A	—	HON 10	K113	—	As above
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250 c.c.

—	C72 (STD) Con rods in line	—	HON 11	K105	—	As above
—	CB72 (Sports) con rods opposed	—	HON 11	K105	—	As above

305 c.c.

—	C77 (STD) Con rods in line	—	HON 12	K105	—	As above
—	CB77 (Sports) Con rods opposed	—	HON 12	K105	—	As above

Indian

Alpha bearings reference IND1 and IND2 are modified slightly in order to use standard English size rollers. Because of this it is necessary to purchase a bearing complete with cages because Indian size cages will not accept British sized rollers.

250 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1951-55	Brave, 248 c.c. S.V. ..	4364	IND3	—	SE156	MS9	R125

750 c.c.

1939-49	45 cu. ins. S.V.	—	IND1	K55 (1 off) K42 (2 off)	Rod req'd. for repair	✱	✱
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1200 c.c.

1941-49	74 cu. ins. S.V.	—	IND2	K56 (1 off) K43 (2 off)	Rod req'd. for repair	✱	✱
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ISO

150 c.c.

1958-63	150 c.c. Scooter	20015	ISO1	—	SE160	6003 (S.K.F.) 120	120
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Itom

See page 38.

✱ Indicates items for which patterns are required.

James

For details of other Models see Villiers.

150 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1959-66	Flying Cadet L15A, M15 150 Scooter, M16 ..	{ 045011	AMC19	K71	SE179	LS8 (2 off)	JH1612 (Torr'ton)

175 c.c.

1957-60	Cavalier, L17	41442	AMC15	K71	SE179	LS8 (2 off)	RLS8
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200 c.c.

1959-66	Captain L20, L20S ..	041044	AMC18	K72	SE198	LS8 (2 off)	RLS8
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250 c.c.

1957-63	Commodore and Comman- do L25, L25T, M25T ..	41044	AMC13	K72	SE180	MS9 (2 off)	RMS9
1957-62	Cotswold L25S	41044	AMC16	K72	SE180	MS9 (2 off)	RMS9
1962-63	{ Superswift, Sports Super- swift, M25, M25S ..	E8368	VIL.13	—	SE101	D/S 320	Centre R125
1964-66		A28248 or 28165	VIL. 15	—	SE218	T/S R125	T/S R125

JAP

There are many types of JAP big end bearing, all of which are available, but only the more common ones are listed below, including the popular 80 c.c. type which is fitted to numerous small implements, etc. for which our Ref. is JAP80.

350 c.c.

All Years	350 Speedway	Alloy	JAP4	K22	SE44	✱	✱
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✱ Indicates items for which patterns are required.

500 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1937-39	KO-Z	S378M	JAP3A	K20	SE42	✱	✱
All Years	Speedway Alloy Rod ..	—	JAP4	K22	SE44	✱	✱
All Years	Speedway Steel Rod ..	—	JAP4S	K22	✱	✱	✱

600 c.c.

All Years	600 Industrial	—	JAP3A	K20	SE42	✱	✱
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1000 c.c. and 1100 c.c.

1936-40	980 c.c. and 1100 c.c. Twin	—	JAP5	—	✱	✱	✱
1945-61	1100 c.c. Racing Twin ..	Polished	JAP11	K76	SE188	{ LS12 RLS12	✱

Jawa

50 c.c. and 98 c.c.

1960-63	50 and 555	—	JAWA3	—	SE204	115	115
1960-66	Manet Scooter	—	JAWA4	—	SE195	317	317
1963-66	O5	—	JAWA6	—	SE221	315	315

90 c.c.

1969	90 Roadster .. } 90 Cross	—	JAWA8	—	—	320	320
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125 c.c. and 175 c.c.

1965-66	Manet Scooter S125 ..	—	JAWA7	—	SE195	320 (2 off)	320
1958-63	Cezeta Scooter	—	JAWA5	—	SE205		

250 c.c.

1950-64	Single Cylinder 353/03 ..	—	JAWA1	—	SE144	325 (2 off)	325
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350 c.c.

1950-63	Twin 354	—	JAWA2	—	SE144	D/S 325	Centre 330	T/S 325
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✱ Indicates items for which patterns are required.

Lambretta

48 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1957-60	Moped '48'	CG2	LAM1	—	SE186	117	115

75 c.c.

1969	75S Vega 75SL Cometa	—	LAM8	K114	—	Pattern required Pattern required	
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100 c.c.

1964-67	Cento	—	LAM8	K114	—	317	✱
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125 c.c.

1950-55	C, LC, Bolted Crankshaft	—	LAM2	—	SE130	117 (2 off)	117 (2 off)
1950-55	LD, 14 mm. Small End ..	—	LAM3	—	SE130	I.AA.NON (RIV)	I.AA.NON (RIV)
1956-62	LD, 16 mm. Small End ..	—	LAM4	—	SE131	I.AA.NON (RIV)	I.AA.NON (RIV)
1959-61	Li Series I	—	LAM6S	K115	SE181	✱	R125
1960-66	Li Series II, III, T/S shaft has oil seal adjacent to flywheel	—	LAM6S	K115	—	325	R125
1964-67	J125	—	LAM8	K114	—	317	✱

150 c.c.

1950-55	150D, 150LD, 14 mm. Small End	—	LAM3	—	SE130	I.AA.NON (RIV)	I.AA.NON (RIV)
1956-59	150LD, Early Mk.3, 16 mm. Small End	—	LAM4	—	SE131	I.AA.NON (RIV)	I.AA.NON (RIV)
1958-59	150LD, Mk.3 (2 Slots in Small End)	—	LAM5	—	SE181	I.AA.NON (RIV)	120DR
1958-61	150Li Series I	—	LAM6S	K115	SE181	✱	R125
1960-68	150Li Series II, III, T/S mainshaft has oilseal adjacent to flywheel ..	}	LAM6S	K115	—	325	R125E
1963-68	150 Special		LAM9	K115	—	325	R125E
1968-69	SX150		LAM9	K115	—	325	✱
1969	GP150	—	LAM9	K115	—	325	✱

175 c.c.

1957-59	TV Series I has external thread at end of D/S mainshaft	—	LAM7	K115	SE181	✱	✱
1960-64	TV Series II and III flywheels have portion cut-away across top of crank-pin eye	—	LAM7	K115	—	325	R125E

✱ Indicates items for which patterns are required.

200 c.c.

1963-66	GT200	..	..	..	—	LAM6S	K115	—	325	R125E
1967-69	SX200	..	..	..	—	LAM9	K115	—	325	R125E
1968-69	GP200	..	..	..	—	LAM9	K115	—	325	✱

Maico**175 c.c. and 250 c.c.**

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1957-66	Maicoletta, 175 c.c., 250 c.c.	—	MAICO1	—	SE162	325	R32E

200 c.c.

1956-57	Mobil	..	..	..	—	MAICO.2	—	SE161	2 × 320	320
1958-63	Mobil	..	..	..	—	MAICO.2	—	SE162	2 × 320	320

Matchless

Matchless models G2, G2CS, G2CSR, G5 and G50 all employ crankpins that are rather slender and which are subject to frequent breakage. To overcome this difficulty we can bore out the flywheels and fit oversize crankpins that are most satisfactory in service. All such conversion bearings are denoted by the letter "X"

following the standard bearing reference:

e.g. AMC12L indicates Standard bearing.

AMC12LX indicates conversion bearing.

Further details are available on application.

250 c.c.

1958-60	G2, G2CS	..	..	..	WHT	AMC14	K50	SE143	2 × LS9	042239
1961-63	14, 14S, after Engine No. 10367	..	..	..	042225	AMC14L	K50	SE143	MS10	RLS9
1961-66	G2CS, G2CSR	..	..	..	043021	AMC17H	K51	SE143	MS10	RLS9

350 c.c.

1940-51	G3L, G3LS, G3LC	..	..	..	WHT	AMC6	K3	SE1	2 × LS10	STD650
1952-53	G3LS, G3LC, G3LCS	..	..	..	WHT	AMC6	K3	SE1	2 × LS10	017489
1954	G3LS, G3LC, G3LCS	..	..	..	WHT	AMC6	K3	SE1	2 × LS10	021481
1955-63	G3LS, G3LC	..	..	..	WHT	AMC6	K3	SE1	MS10	021962
1955	G3LCS	..	..	..					LS10	
1956-59	G3LCS	..	..	..	WHT	AMC12	K51	SE1	MS10	✱
1960	G5	..	..	..	44023	AMC17	K51	SE143	LS9 (2 off)	042239
1961-62	G5	..	..	..	44023	AMC17	K51	SE143	MS10	RLS9
1964-66	G3, G3C	..	..	..	—	AMC20	K51	SE1	MS10	030184
									LS10	RL10L

✱ Indicates items for which patterns are required.

500 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1937-51	G80S, G80C ..	WHT	AMC6	K3	SE1	2×LS10	STD650
1952-53	G80S, G80C, G80CS ..	WHT	AMC6	K3	SE1	2×LS10	017489
1954	G80S, G80C, G80CS ..	WHT	AMC6	K3	SE1	2×LS10	021481
1955-63	G80S, G80C ..	WHT	AMC6	K3	SE1	{ MS10 LS10	021962
1955	G80CS ..						
1956-63	G80CS ..	WHT	AMC12	K51	SE1	{ MS10 LS10	023346
1964-66	G80, G80CS } ..	—	AMC20	K51	SE1	{ MS10 LS10	030184
1966-67	G85CS }						
All Years	G50 (see Note at Title) ..	—	AMC12L	K51	SE209	✱	✱

500 c.c. and 600 c.c. TWIN

1949-66	20, 30, Springtwin G12, G12, CSR ..	—	—	—	—	RLS12½	RLS12½
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750 c.c. TWIN

1964-66	G15, G15CSR ..	}	—	—	—	R330L	330
1967-68	G15, G15CSR ..						
1968-69	P11, P11A ..						

990 c.c. TWIN

1933-39	Side Valve Twin ..	WHT	AMC7D	2×K2	SE1L	✱	✱
1936-40	X, O.H.V. Twin ..	WHT	AMC8	{ 2×K1 1×K2 }	SE1	✱	✱

Messerschmitt

See under Sachs.

Motobi

See page 38.

Moto-Guzzi

See page 38.

Motobecane**50 c.c.**

1954-69	Mobylette, Mobymatic Super, Standamatic, etc.	—	MB1	—	SE152	315	315
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✱ Indicates items for which patterns are required.

150 c.c.

1954-63	Moby Scooter	813008	MB2	K54	SE151	325	335
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There are a number of M.V. machines not listed below including the 83 c.c. "Motoretta" and 150 c.c. "Chicco" scooter. We can recondition all types on receipt of old crankshafts.

M.V. Agusta**125 c.c. and 203 c.c.**

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1952-61	Road Racing (Hollow Fly-wheels)	—	MV1	K67	Rod req'd. for repair	RIV26BPM	RIV26BPM

175 c.c.

	Modello Sport, Super Sport, Competizione ..	—	MV2	K68	SE175	125	125
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Norton

Following the great success of the special Alpha Big End for Manx Norton we have discontinued the manufacture of bearings to original Norton design, and bearings reference N5 and N6 are now all of the special Alpha modification. Prior to 1955 Manx Norton big end bearings used hexagon nuts and after that date, round castle type nuts were employed. Both types use a smaller one for the 350 c.c. than for the 500 c.c. When ordering Manx bearings it is necessary to state the size and type of nut required.

350 c.c.

1955-63	50	E8852	N3	—	SE51	{ RL10L LS10	RL10L
1964-66	50 Mk2	—	AMC20	K51	SE1	{ MS10 LS10	030184 RL10L
1933-52	40, International ..	—	N5IS	K28	SE54	{ LS11 RLS11	MS10
1946-59	40, Manx (see Note above re Manx Bearings) ..	—	N5M	K80	SE139	✱	✱
1960-63	40, Manx	—	N6	K81	SE139	✱	✱

500 c.c.

1934-55	16H	E4101	N3	—	SE51	{ LS10 RL10L	RL10L
1935-63	ES2, 18	E4099	N3	—	SE51	{ LS10 RL10L	RL10L
1964-66	ES2, Mk2	—	AMC20	K51	SE1	{ MS10 LS10	030184 RL10L
1935-55	30, International ..	—	N5IL	K29	SE54	{ LS11 RLS11	MS10
1946-59	30, Manx (see Note above re Manx Bearings) ..	—	N5M	K30	SE139	✱	✱
1960-63	30, Manx	—	N6	K81	SE139	✱	✱

✱ Indicates items for which patterns are required.

500 c.c., 600 c.c. and 650 c.c. TWIN

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1949-66	Dominator Twin, 77, 88,	—	—	—	SE121	R330L	330
1949-69	Manxman 650SS						

600 c.c.

1935-58	Model 19, O.H.V. ..	E4099	N3	—	SE51	LS10 RL10L	RL10L
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633 c.c.

1933-54	Big 4 and Model 1 ..	E4101	N3	—	SE51	LS10 RL10L	RL10L
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750 c.c. TWIN

1964-68	Atlas	—	—	—	—	R330L	330
1968-69	Commando	—	—	—	—	R330L	330

N.S.U.**49 c.c.**

1954-68	Quickly	—	NSU1	—	SE132	115	115
1963-66	Quick 50	—	NSU 10	—	SE229	6002SKF	6002SKF

125 c.c.

1950-55	Fox, Two Stroke	—	NSU3	—	SE167	✱	{ L2ON 125
1955-59	Super Fox	—	NSU4	K64	SE167	125	

150 c.c and 175 c.c.

1950-62	Prima Scooter 'D' ..	11041501	NSU2	—	SE137	{ 117 317 125 320 320 320	117
1950-59	Maxi	2404508	NSU5	K65	SE167		320
1956-59	IIIKL and V Star ..	—	NSU8	—	SE191		125
1959-63	IIIKL and V Star ..	—	NSU9	—	SE191		320

✱ Indicates items for which patterns are required.

200 c.c. and 250 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1951-58	Lux, Super Lux	71704526	NSU6	—	SE168	325	{ 325 317
1953-62	Max, Max Sport, Super	—	NSU7	K66	SE168	R325P	R325P
1953-62	Max Super Max (Racing)						

Panther

See also Villiers.

Panther flywheels employing taper type crankpins (P2, P3) generally become enlarged in the crankpin eyes and standard size crankpins allow the flywheels to close in and lock the connecting rod. For this reason Alpha bearings reference P2, P3 are supplied slightly oversize to take up this enlargement. In exceptional cases larger crankpins can be supplied to order.

250 c.c.

1947-55	M65	WP565	P2	—	SE63	} R3 (Bush)	R3 (Bush)
1956-60	M65	WP565	P4	—	SE63		

350 c.c.

1933-55	30, 70, 80, 85, M75 ..	WP4372	P2	—	SE63	} R3 (Bush)	R3 (Bush)
1956-63	M75	WP4372	P4	—	SE63		

500 c.c. 600 c.c. and 650 c.c.

1933-49	All Models	5396	P3	—	SE65	} RLS11 LS11	LS11
1950-55	All Models	5396	P3	—	SE66		
1956-64	Model 100	5396	P6	—	SE66		
1959-66	Model 120	—	P6	—	SE66		

✱ Indicates items for which patterns are required.

Parilla

See page 38.

Puch

See page 38.

Raleigh

For 50 c.c. Models see Motobecane (MB1)

80 c.c.

Year	Model	Con Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush No.	MAIN BEARINGS	
						Drive Side	Timing Side
1961-63	Roma RS1	—	RAL1	—	SE223	} 120	117
1963-65	Roma RS2 & 3	—	RAL2	—	SE224		

Royal Enfield

A number of Royal Enfield engines use main bearings made up of a mainshaft, cage, rollers and outer race. All such parts are available and part numbers for these use the prefix REM.

A number of Royal Enfield connecting rods do not employ small end bushes, but when the eye becomes enlarged it can be bored out and a bush fitted for which our charges are shown in the price list.

125 c.c. and 150 c.c.

1939-45	RE125, EXWD	WHT	RE1N	—	SE70	{ 115 315	315
1943-50	RE125	W27420	RE1W	—	SE70	{ 115 315	315
1951-53	RE125, RE2	} W27420	RE1W	—	SE70	120 (2 off)	120 (2 off)
1953-62	Ensign, Prince, 150 c.c.						

✱ Indicates items for which patterns are required.

225 c.c. and 250 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1951-53	S, O.H.V.	W21346	RE12S	K60	SE64	{ REM 1 Shaft REM 3 REM 7 Race REM 9 REM 19 Cage REM 13	
1954-57	Clipper	W39546	RE12	K61	SE64	{ REM 2 Shaft REM 3 REM 7 Race REM 9 REM 19 Cage REM 13	
1958-66 1957-66 1963-66	Clipper Crusader, Crusader Sports Continental GT	—	—	—	Rod req'd for repair	{ 135	R135

350 c.c.

1938-50	C, Side Valve	W22647	RE8	—	SE75	{ REM5 Shaft REM4 REM10 Race REM8 REM18 Cage REM14	
1936-47	CO O.H.V.	W22647	RE8	—	SE75	{ REM5 Shaft REM4 REM10 Race REM11 REM18 Cage REM15	
1946-57	G, G de Luxe, 350 Clipper	W32321	RE8	—	Rod req'd for repair	{ REM1 Shaft REM3 REM7 Race REM9 REM19 Cage REM13	
1958-62	350 Clipper	—	RE13	K62	„	LS10 { Shaft REM6 Race REM12 Cage REM16	
1948-50	Bullet	W32321	RE8	—	„	LS10 (2 off) REM17 (Bush)	
1951-55	Bullet	W32321	RE8	—	„	{ LS10 Shaft REM3 RLS10 Race REM9 Cage REM13	
1956-62	Bullet	Alloy	RE13	K62	„	{ LS10 Shaft REM6 RLS10 Race REM12 Cage REM16	
1963-65	Bullet	Alloy	RE14	K62	„	135	R135

500 c.c.

1933-40	J, J2, etc.	W22593	RE7	—	SE75	✱	✱
1936-40	H, Side Valve	WHT	RE7	—	SE74	✱	✱
1945-49	J, J2	W22593	RE9	—	SE75	{ REM20 Shaft REM6 REM21 Race REM12 REM22 Cage REM16	
1950-54	J2	W32437	RE9	—	Rod req'd for Repair	{ REM20 Shaft REM6 REM21 Race REM12 REM22 Cage REM16	
1953-62	Bullet	Alloy	RE13	K62	„	{ LS10 Shaft REM6 RLS10 Race REM12 Cage REM16	
1949-63	500 Twin, 'Meteor Minor'	—	—	—	—	145	R145

700 c.c. and 750 c.c.

1953-66	Super Meteor, Constellation, Interceptor .. }	—	—	—	—	145	R145
1963-69							

✱ Indicates items for which patterns are required.

Sachs

50 c.c.

1954-59	Model 50	—	SC1	—	SE138	A15	A15
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175 c.c. and 200 c.c.

1953-60	Early type con rod has no slots in big end eye ..	—	SC3	Each of these three types of big end are employed with 15 mm. small ends reference SE154 and 18 mm. bushes reference SE155. Similarly all types may have mainshafts 20 mm. diameter and fitted with main bearings R320P or mainshafts 25 mm. diameter employing main bearings reference R125P.
1959-66	Later type con rod has oil slots in big end eye ..	—	SC3S	
1962-66	Latest type big end slightly larger than preceding patterns	—	SC4	

Scott

98 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1941-56	Cyc-Auto	—	Scott 1	—	SE183	✱	✱

500 c.c. and 600 c.c.

1935-53	Flying Squirrel	Polished	Scott 2	—	SE184	✱	✱
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Sunbeam

See page 38.

✱ Indicates items for which patterns are required.

Suzuki

50 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
—	M30 up to Engine No. M10-296181	MA1411B	SUZ1	K96	SE225	317	317
—	M15, M15D and M12 up to Engine No. M10-296181	MA1411B	SUZ1	K96	SE225	317	117
—	M30 after Engine No. M10-296181	—	SUZ1	K96	SE230	317	317
—	M15, M15D, M12 after Engine No. M10-296181	—	SUZ1	K96	SE230	317	117
1969	AS50	—	SUZ8	K96	—	320N	✱

80 c.c.

1964-67	K10, K11	K10-1411	SUZ2	K97	SE226	120	320
1968-69	K10P, K11P	K10-1411A	SUZ7	—	—	120	320

125 c.c.

1967-69	B100P	—	SUZ4	K99	—	320	320ACD 120
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200 c.c.

1968-69	T200 Invader	—	SUZ5	K112	—	D/S 320	Centre 320	T/S 320
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250 c.c.

1964-67	T10	—	SUZ3	K98	SE227	D/S 125	Centre 125	T/S 125
1967-68	T20	—	SUZ6	K99	—	✱	✱	✱
1969	Hustler	—	SUZ6	K99	—	✱	✱	✱

Triumph

Alpha bearings reference T7, T8, T9 and T11 are special caged roller replacements for the Triumph Terrier and Cub. Plain bush-type bearings of the original design are also available in which case the reference is T7P, T8P and T9P respectively.

100 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1962-66	Tina Scooter, T10	54-33	T10	K87	SE213	120V3	120V3

✱ Indicates items for which patterns are required.

150 c.c.

1953	Terrier, T15	E3164	T6	—	SE105	6304	} E3655A†
1954-56	Terrier, T15	E3342	T7	K74	SE105	6304	

175 c.c.

1959-64	Tigress Scooter	90-497	B20KL	K59	SE134	} 117 LS8	LS8
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200 c.c.

1954-56	Tiger Cub, T20 to Engine No. 17388	E3342	T7	K74	SE105	320	E3655A†
1956-62	Tiger Cub, T20 from Engine No. 18596 to 84269	..	..	E3342	T8	K75	SE105	320	E3655A†
1962-63	Tiger Cub, T20 from Engine No. 84269	..	..	E4446	T9	K75	SE105	320	320
1964-66	Tiger Cub from Eng. No. 99720	..	..	E4446	T11	K75	SE105	320	320
1967-68	Tiger Cub, Super Cub	..	..	—	T12	K116	SE105	320	320

† Available in Standard .010", .020" and .025".

250 c.c.

1936-40	2H, 21, T70	..	..	E1426	T3	—	SE85	{ LS11 LS10	LS10
1959-63	Twin Scooter	..	..	—	—	—	SE199	325	—
1968	TR25W	..	..	—	—	—	SE200	325	325
1969	TR25W	..	..	—	—	—	—	325	325
1970	TR25W	..	..	—	—	—	—	325	R325L

350 c.c.

1937-45	3S, Side Valve	..	..	E1578	T3	—	SE88	{ LS11 LS10	LS10
1936-40	3H, 3HW, T80	..	..	E1401	T3	—	SE84	{ LS11 LS10	LS10
1945-51	3T	..	..	—	—	—	SE105	MS10	—
1957-66	Twenty One, 3TA, Tiger 90	..	..	—	—	—	SE105	330V2	E4322*
1968-69	Tiger 90	..	..	—	—	—	SE105	R330L	135

* Available in under sizes, please see price list.

✱ Indicates items for which patterns are required.

500 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1937-40	5S, 5SW	E1578	T3	—	SE88	{ LS11 LS10	LS10
1946-54	5T and T100	—	—	—	SE106	MS11	RM10LL
1955-59	5T, T100 and TR5 ..	—	—	—	SE106	MS11	MS11
1959-66	5TA and T100A S/S	—	—	—	SE200	330V2	E4322*
1966-67	T100C, T100S, T100R and T100T						
1968-69	T100C, T100S, T100R and T100T						
1970	T100S, T100T	—	—	—	SE200	R330L	135
		—	—	—	—	R330L	135

* Available in under sizes, please see price list.

600 c.c.

1937-40	6S	E1299	T4	—	SE91	{ MS11 LS10	LS10
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650 c.c. TWIN

1950-53	6T, Thunderbird	—	—	—	SE106	MS11	RM10LL
1954-65	6T, T110, TR6, T120 ..	—	—	—	SE106	MS11	MS11
1966	6T, TR6, T120	—	—	—	SE106	RM11L	MS11
1967-70	TR6, T120						

Velocette

200 c.c.

1957-64	Valient Twin	WHT	V7	—	SE140	—	—
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250 c.c.

1930-40	GTP Two Stroke	WHT	V1	—	SE96	✱	✱
1935-48	MOV	WHT	V2	K37	SE97	A805	N2787
1962-65	Viceroy Twin	WHT	V8	—	—	—	—

350 c.c.

1935-60	MAC	WHT	V3	K38	SE97	A805	N2787
1935-48	KTS, KSS	WHT	V3	K38	SE97	L462	N2787
1936-50	KTT	WHT	V5	K38	✱	A805	A805
1954-66	Viper, Scrambler	WHT	V6	K39	SE141	{ 1994X-1922 (Timken)	1994X-1922 (Timken)
1966-69	Viper	WHT	V9	K39	SE141	{ 1994X-1922 (Timken)	1994X-1922 (Timken)

✱ Indicates items for which patterns are required.

500 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1935-46	MSS	WHT	V4	K39	SE98	A805	N2787
1947-48	MSS	WHT	V4	K39	SE98	{ 1994X-1922 (Timken)	1994X-1922 (Timken)
1954-66	MSS Venom, Endurance	WHT	V6	K39	SE141	{ 1994X-1922 (Timken)	1994X-1922 (Timken)
1966-69	MSS, Venom, Endurance, Thruxton	WHT	V9	K39	SE141	{ 1994X-1922 (Timken)	1994X-1922 (Timken)

Villiers

Special full circle flywheel assemblies are available for Villiers 9E and 34A engines. Also offered are special racing type big end bearings with oval sectioned "slimline" polished connecting rod complete with small end bush for use with genuine crankshafts.

Part No.: VIL4RS(7117) for 6E and 8E engines.

Part No.: VIL12RS(7117) for 9E and 31A engines.

Part No.: VIL12RS(11861) for 32A, 33A, 34A, 36A and 37A engines.

A most informative leaflet, reference VL, which fully describes these items is available upon request.

70 c.c.

2G, 3G, 4G, 5G, 6G, 7G, 8G	E9023 D7641	VIL8	—	SE201	✱	✱
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98 c.c.

JOP, Single Bobweight ..	2769	VIL1A	—	SE100	✱	—
J, D/L, Single Bobweight	D5773	VIL1A	—	SE36	S9	—
Midget, Double Bobweight	2769/1	VIL1M	—	SE100	✱	✱
Midget, MK2, MK3 ..	D6693	VIL10	—	SE170	✱	✱
MK1F, 2F, 4F, 6F ..	{ D7494 D6130 }	VIL2	—	SE169	125	125
MK7F	{ D9035 D9533 }	VIL9	—	SE103	L25N	M20N

125 c.c.

9D	D5154	VIL3	—	SE103	LS8 (2 off)	LS8
10D	{ D7533 D7349 }	VIL6	—	SE103	120 (2 off)	120
12D, 13D	{ D8665 D8388 }	VIL7	—	SE103	120 (2 off)	120

150 c.c.

12C, 15C	D1613	VIL5	—	SE104	✱	✱
25C	D2692	VIL11	—	SE173	MS8	MS8
26C	D2692	VIL11	—	SE173	✱	✱
29C, 30C	{ D8665 D8388 }	VIL7	—	SE103	120 (2 off)	120
31C	{ D10293 D9007 }	VIL4	—	SE173	{ 120 320 }	R125

✱ Indicates items for which patterns are required.

173 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
	MK2L	{ D10294 D8988 }	VIL4	—	SE104	{ 120 320 }	R125

197 c.c.

	.. .. .	D2089	VIL11	—	SE104	✱	✱
6E and 7E	.. .. .	{ D7506 D7117 }	VIL4	—	SE104	120 (2 off)	320
8E	.. .. .	{ D7506 D7117 }	VIL4	—	SE104	{ 320 120 }	320
9E, 11E	{ D7506 D7117 }	VIL12	—	SE104	{ 120 320 }	R125

225 c.c.

	MK, 1H	{ D9136 D8074 }	VIL4	—	SE104	325 (2 off)	325
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250 c.c.

	All Threaded Crank Pin Types	Various	VIL5 VIL11	— —	Various SE172	✱ 325DR	✱ 325DR
25A	.. .. .	D5135	VIL11	—	SE172	325DR	325DR
26A	.. .. .	{ E10434 E7789 }	VIL14	—	SE104	325 (2 off)	325 (2 off)
MK2T (Twin)	.. .. .	{ E10450 E8368 }	VIL13	—	SE103	D/S 125 | Centre R125 | T/S R125	
31A, 35A	.. .. .	D7117	VIL12	—	SE104	{ 120 320 }	{ R125
32A, 33A, 34A, 36A, 37A		11861	VIL12K	K82	SE104	{ 120 320 }	{ R125
MK4T Twin	.. .. .	{ A28248 28165 }	VIL15	—	SE218	D/S 125 | Centre R125 | T/S R125	
Starmaker	.. .. .	—	VIL16	—	SE228	{ R125LL JH1416 }	R125LL

350 c.c.

	14B, 17B, 24B	2655	VIL5	—	✱	✱	✱
27B	.. .. .	D1412	VIL11	—	SE174	325DR	325DR
28B	.. .. .	{ D9539 D7805 }	VIL14	—	SE171	325 (2 off)	325 (2 off)
3T, Twin	.. .. .	{ E10450 E8368 }	VIL13	—	SE103	D/S 125 | Centre R125 | T/S R125	

✱ Indicates items for which patterns are required.

Vincent

Where Vincent machines are used for sprinting or racing purposes, we can offer a special type of big end bearing having an enlarged shank diameter which considerably improves crankshaft rigidity.

To accommodate this conversion it is necessary to enlarge the big end holes in the flywheels and we have special facilities at our factory for this operation.

Such conversion bearings are noted by the suffix "X" following the standard reference.

The roller main bearing reference ET92 (special) is the equivalent of Hoffman RMS10 with the outer race reduced in width to $\frac{5}{8}$ ". Alpha can supply this type from stock.

500 c.c.

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS	
						Drive Side	Timing Side
1935-39	Comet Series A	E6/2	HRD1	K16	SE39	{ MS10 RM10L	RMS10 MS8
1949-54	Comet, Grey Flash, Series C	E6/2	HRD1	K16	SE39	{ MS10 ET92 (Special)	RLS8 ET92 (Special)

1000 c.c.

Early Pre War	Rapide	E6/2	HRD2S	K16	SE39	{ MS10 RM10L	MS8 RMS10
1935-39	Rapide, Series A	E6/2	HRD2L	K16	SE39	{ MS10 RM10L	MS8 RMS10
1946-49	Rapide, Black Shadow, Series B	E6/2	HRD2L	K16	SE39	{ MS10 ET92 (Special)	RLS8 ET92 (Special)
1949-54	Rapide, Shadow, Lightning Series C						

Yamaha

50 c.c.

1965	MF2	—	YA1	—	—	120	117
1965-67	YF1	—	YA2	—	—	120	120
1967	U5	—	YA3	—	—	120	120
1968-69	USE	—					

80 c.c.

—	YG1K	—	YA2	—	—	120	120
—	YG1K	—	YA4	—	—	120	120
1965	YG1K	—	YA5	—	—	120	120

* Indicates items for which patterns are required.

100 c.c. TWIN

Year	Model	Con-Rod Casting No.	Big End Part No.	Cage Part No.	Small End Bush Part No.	MAIN BEARINGS		
						Drive Side	Timing Side	
—	YL1 up to Engine No. 39244	—	YA6	—	—	D/S 120	Centre SKF 6005 (2 off)	T/S 120
—	YL1 after Engine No. 39244	—	YA7	—	—	D/S 120	Centre 125 (2 off)	T/S 120

125 c.c.

—	YA5	..	..	..	—	YA8	—	—	320	320
—	YA6	..	..	..	—	YA9	—	—	320	320
—	125 c.c. Twin	—	YA10	—	—	D/S 320	Centre 125 (2 off)

180 c.c.

1969	YCS1	—	YA11	—	—	D/S 325	Centre 125 (2 off)
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250 c.c. TWIN

—	YDS1 and 2	—	YA12	—	—	D/S 320	Centre 125 (2 off)
—	YDS3	—	YA13	—	—	D/S 320	Centre 125 (2 off)
—	YDS 3 and 5	..	..	..	—	YA14	—	—	D/S 325	Centre 130 (2 off)

Zundapp**50 c.c. 70 c.c. and 75 c.c.**

1954-60	Combinette	..	..	..	1163 (Alloy)	Z1	—	SE163	115	L15N
1960-63	"428"	..	..	..	—	Z2	—	—	115	115
1960-62	"438" KS70	..	..	..	—	Z3	—	—	115	115
1963-65	KS75	..	..	..	—	Z4	—	SE219	315 2 off	315

150 c.c. and 200 c.c.

All Years	Bella	{ Alpha cannot service Bella Crankshaft }		SE182	M25 (S.K.F.)	M25 (S.K.F.) R120P
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* Indicates items for which patterns are required.

In addition to the makes already described we are able to recondition the majority of less popular types, including:—

GOGGOMOBIL

GUAZZONI

ITOM

J. A. P. (Moped and Stationary Engines)

MOTOBI

MOTO - GUZZI

MOTO - PARILLA

PEUGEOT

PUCH

RALEIGH ROMA

SUNBEAM

SHAY

Etc., Etc.

Details of any type not mentioned
may be had upon application

SECTION 2



VALVES

VALVE GUIDES

VALVE SPRINGS



A.J.S.**250 c.c.**

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1958-60	14 O.H.V.	V87 (042032)	††	G487 (042068)	G488 (042069)	††
1960-61	14CS	} V87 (042032)	V192 (042868)	G487 (042068)	G517 (042869)	††
1961-63	14, 14S					
1962-66	14CSR	V197 (044002)	V192 (042868)	G487 (042068)	G517 (042869)	††

†† No longer available.

350 c.c.

1949-51	16, 16M, 16MC	} V21 (013985)	V22 (013986)	G425 (017019)	G425 (014510)	††
1952-53	16M, 16MC, 16MCS					
1954	16M, 16MC, 16MCS	} V21 (013985)	V22 (013986)	G425 (017019)	G463 (021185)	††
1955	16M, 16MS					
1955	16MC, 16MCS					
1956-61	16, 16M, 16MS	} V21 (013985)	V22 (013986)	G425 (017019)	G485 (022208)	—
1956-63	16MCT, 16C					
1956	16MCS					
1960	Light 350, Model 8	V197 (044002)	††	G487 (042068)	G488 (042069)	††
1961-62	Light 350, Model 8	V197 (044002)	V192 (042868)	G487 (042068)	G517 (042869)	††
1964	16C	} V208 (028028)	V222 (028105)	G515 (028030)	G506 (024519)	††
1962-66	16, 16S					

†† No longer available.

500 c.c.

1949-51	18, 18S, 18C	V55 (013988)	V56 (013989)	G425 (017019)	G425 (014510)	††
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†† No longer available.

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

500 c.c. continued.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1952-53	18, 18S, 18C, 18CS	V55 (013988)	V56 (013989)	G425 (017019)	G425 (014510)	††
1954-55	18, 18S, 18C, 18CS	V55 (013988)	V56 (013989)	G425 (017019)	G463 (021158)	††
1956-59 1956	18, 18S 18CS	V55 (013988)	V56 (013989)	G425 (017019)	G485 (022208)	††
1960-66	18, 18CS				G515 (026030)	††
		V208 (026028)	V209 (026029)	G506 (024519)		

†† No longer available.

500 c.c. TWIN

1949-58	20, Spring Twin	V38 (014163)	V39 (014165)	G452 (014170)	G453 (014171)	VS451-423
1959	20, Spring Twin	V38 (014163)	V39 (014165)	G452 (014170)	G514 025320	VS451-423
1960-61	20, Spring Twin	V203 (026040)	V204 (026042)	G513 (026044)	G512 (026045)	VS451-423

600 c.c. 650 c.c. and 750 c.c. TWIN

1957 1958	30, Spring Twin 30, Spring Twin	V171 (023403)	V39 (014165)	G452 (014170)	G453 (014171)	VS451-423
1959	31, Twin					
1960-66	31, Twin	V205 (026041)	V206 (026043)	G513 (026044)	G512 (026045)	VS451-553
1964-68	33, 33CSR	V240 (24330)	V27 (T2204)	G454 (T2011)	G454 (T2011)	VS451-584
1968-69	PII, PIIA	V263 (25501)	V264 (25500)	G454 (T2011)	G454 (T2011)	VS451-584

Ariel**50 c.c.**

1963-65	Pixie	V241 (53-219)	V242 (53-246)	¶	¶	††
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¶ No longer stocked.

†† No longer available.

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

350 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1935-50 1951-55	NF, NG, NH ... NH, Red Hunter ...	} V40 (423-33)	†	†	G399 (494-35)	††
1956-59	NH, Red Hunter ...					
		V75 (423-56)	V76 (453-56)	G483PB (480-56)	G484PB (480-56)	††

† No longer stocked.

†† No longer available.

500 c.c.

1955-58 1955-58	VH, HT, Hunter ... HS, Scrambles ...	} V77 (415-35)	V80 (441-55)	G481PB (470-50)	G482PB (491-50)	††

†† No longer available.

500 c.c. TWIN

1948-55	KG, KH ...	} V81 (K15-48)	V81 (K15-48)	G444 (K17-48)	G444 (K17-48)	††
1953-55 1956-58	KHA ... KH, Field Master ...					
		V81 (K15-48)	V81 (K15-48)	G444PB (K17-53)	G444PB (K17-53)	††

†† No longer available.

600 c.c.

1936-51	VB, SV ...	V30 (400-36)	†	G41 (460-29)	G41 (460-29)	††
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† No longer stocked.

†† No longer available.

650 c.c. TWIN

1954-59	FH, Hunt Master ...	V17 (10103-54)	V18 (10104-54)	G478 (10100-54)	G478 (10100-54)	VS451-454
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Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

1000 c.c. FOUR

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1949-50 1950-54	Square Four Square Four	V93 (417-49)	V94 (455-49)	G446PB (477-49)	G446PB (477-49)	††
1955-59	Square Four	V93 (417-49)	V94 (455-49)	G489PB (477-55)	G489PB (477-55)	††

†† No longer available.

B.S.A.

Valve reference V215 is also available with head diameter $\frac{1}{16}$ " oversize for which the reference is V215/1.

75 c.c.

1963-65	Beagle	V241 (53-219)	V242 (53-246)	¶	¶	††
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¶ No longer stocked.

†† No longer available.

250 c.c.

1939-58	CI0, S.V.	V34 (29-2121)	V35 (29-2121)	¶	¶	††
1939-58	CI1, CI1G, CI2	V12 (65-208)	V12 (65-208)	G355 (65-37)	G355 (65-37)	VS451-37
1959-66 1959-61	CI5 CI5T, to Engine No. CI5T-1320	V169 (40-165)	V170 (40-166)	G461 (40-133)	G461 (40-133)	VS451-531
1959	CI5S	V210 (40-337)	V170 (40-166)	G461 (40-133)	G461 (40-133)	VS451-531
1960	CI5S, to Engine No. CI5S-2112	V210 (40-337)	V170 (40-166)	G461 (40-133)	G461 (40-133)	VS451-488
1961-65	CI5T, from Engine No. CI5T-1320	V210 (40-337)	V170 (40-166)	G461 (40-133)	G461 (40-133)	VS451-488
1961-65 1961-66	CI5S CI5SS80, Sportsman...	V210 (40-337)	V170 (40-166)	G461 (40-133)	G461 (40-133)	VS451-488
1959-64	Sunbeam Scooter	¶	V190 (76-60)	G503 (76-15)	G503 (76-15)	††
1967	B25, Starfire, C25 Barracuda From Engine No. C25-101	V255 (68-0661)	V256 (68-0662)	G539PB (40-931)	G539PB (40-932)	VS451-647
1968-70	B25 Starfire	V255 (68-0661)	V256N (70-7777)	G539PB (40-931)	G539PB (40-932)	VS451-647

¶ No longer stocked.

†† No longer available.

Genuine part numbers shown in brackets for reference only. Do not quote these when ordering.

350 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1950-53 1954-59	B31, B32 ... B31 ...	V42 (65-111)	V43 (65-1110)	G457 (65-1513)	G458 (65-1514)	VS451-345
1960-63	B40, 350 Star ...	V211 (41-22)	V212 (41-23)	G510 (41-17)	G510 (41-17)	VS451-531
1962-65	B40SS90 ...	V223 (41-24)	V212 (41-23)	G510 (41-17)	G510 (41-17)	VS451-488

441 c.c.

1965-66	Victor Scrambler, Enduro (Round barrel) ...	V223 (41-0024)	V212 (41-0023)	G510PB (41-0632)	G510PB (41-0633)	VS451-488
1967-69	Victor (Square barrel) ...	V268 (41-788)	V269 (41-789)	G510PB (41-632)	G510PB (41-633)	VS451-488

500 c.c.

1946-49 1946-49	B33, B34 ... M33 ...	V97 (65-1239)	V98 (65-1240)	†	G431 (65-1242)	VS451-345
1950-53 1954-59 1950-58	B33, B34 ... B33 ... M33 ...	V97 (65-1239)	V98 (65-1240)	G459 (65-1515)	G460 (65-1516)	VS451-345
1939-58	M20 ...	V19 (66-236)	V20 (66-236)	G432 (66-140)	G433 (66-139)	††
All Years	Gold Star DBD ...	V243 (65-647)	V244 (65-2512)	G537PB	G538PB	VS451-488

† No longer stocked.

†† No longer available.

500 c.c. TWIN

1947-50	A7 ...	V117 (67-29)	V118 (67-30)	G478 (67-31)	G478 (67-31)	VS451-454
1951-55	A7 ...	V15 (67-394)	V16 (67-395)	G478 (67-31)	G478 (67-31)	VS451-454

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

500 c.c. TWIN continued.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1956-62	A7, from Engine No. CA7-5001	V15 (67-740)	V16 (67-741)	G478 (67-31)	G478 (67-31)	VS451-454
1949-50	A7, Star Twin	V121 (67-189)	¶	G478 (67-31)	G478 (67-31)	VS451-454
1951-55 1956-62	A7, Star Twin Shooting Star from Engine No. CA755-4025	V15 (67-740)	V16 (67-532)	G478 (67-31)	G478 (67-31)	VS451-454
1954-55	Shooting Star, to Engine No. CA7SS-4024					
1962-63	A50, Star Twin	V224 (68-0168)	V225 (68-0169)	G516 (68-0159)	G516 (68-0159)	VS451-531A
1964-65	A50, Star Twin, Cyclone ...					
1966	A50, Royal Star, Wasp ...	V255 (68-0661)	V256 (68-0662)	G516 (68-0159)	G516 (68-0167)	VS451-531A
1967	A50 Wasp	V255 (68-661)	V256 (68-662)	G516PB (68-809)	G516PB (68-809)	—
1967-69	A50 Royal Star	V255 (68-661)	V256 (68-662)	G516PB (68-809)	G516PB (68-809)	VS451-641

¶ No longer stocked.

600 c.c.

1939-59	M21	¶	V20 (66-236)	G432 (66-140)	G433 (66-139)	††
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¶ No longer stocked.

†† No longer available.

650 c.c. TWIN

1949-55	A10	V17 (67-323)	V18 (67-324)	G478 (67-31)	G478 (67-31)	VS451-454
1956-62	A10, from Engine No. DA10-651	V17 (67-742)	V18 (67-743)	G478 (67-31)	G478 (67-31)	VS451-454
1956-59	A10, Super Rocket, from Engine No. CA10R-6001 ...	V127 (67-968)	V128 (67-967)	G478 (67-31)	G478 (67-31)	VS451-463
1960-63	A10 Super Rocket, from Engine No. DA10R-101 ...	V215 (67-1551)	V128 (67-967)	G478 (67-31)	G478 (67-31)	VS451-463
1962-63	A65, Star Twin	V226 (68-0156)	V254 (68-0663)	G516 (68-0159)	G516 (68-0159)	VS451-531A
1964-65	A65, Star Twin, Rocket, Lightning	V226 (68-0156)	V254 (68-0663)	G516 (68-0159)	G516 (68-0167)	VS451-531A
1966	A65, Lightning, Hornet, Thunderbolt, Spitfire Mk II	V253 (68-665)	V254 (68-0663)	G516 (68-0159)	G516 (68-0167)	VS451-531A
1967-69	A65, Lightning, Hornet, Thunderbolt, Spitfire Mk II	V253 (68-665)	V254 (68-0663)	G516PB (68-809)	G516PB (68-809)	VS451-641

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

Heinkel

174 c.c. and 200 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1956-66	Tourist Scooter and Cabin-Car	V220 (321-1143)	V221 (321-1140)	G2449	G2449	††

†† No longer available.

Honda

50 c.c.

1968-69	CI00	V237	V238	G529 (Alloy Head)	G530 (Alloy Head)	VS451-591
	CI10, CI14	V237	V238			††
	P50	V260	V260			VS451-632
1969	C50 SS50	V261	V262	—	—	VS451-631

†† No longer available.

90 c.c.

	C200 O.H.V. 200 O.H.C. Not including Sports	V246	V247	G531	G532	VS451-606
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125 c.c. TWIN

	C92	V235	V236	G533	G534	VS451-605A
	CB92	V235	V248	G533	—	—

160 c.c. and 175 c.c.

	CB160	—	V250	G533	G534	††
	CD175A	—	—	G533	—	VS451-634

†† No longer available.

250 c.c. and 305 c.c.

	C72, CB72	—	V234	G535	G536	Sports SV451-593
	C77, CB77	—	—	G535	G536	

Genuine part numbers shown in brackets for reference only. Do not quote these when ordering.

Isetta

It is recommended that valves and valve guides should be replaced at the same time with this particular engine.

300 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
All Years	300, Standard and Plus ...	V199 (026-501)	V200 (026-510)	G508PB (21-506)	G508PB (21-516)	††

†† No longer available.

J.A.P.

350 c.c. and 500 c.c.

All Years	Speedway Engine, 4 Stud only ...	V230 (18947)	V231 (21871)	G447 or G447PB (Bronze)	G448PB	††
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†† No longer available.

Matchless

250 c.c.

1958-60	G2 ...	V87 (042032)	††	G487 (042068)	G488 (042069)	—
1960-61 1961-63	G2CS G2, G2S ...	V87 (042032)	V192 (042868)	G487 (042068)	G517 (042869)	††
1962-66	G2CSR ...	V197 (044002)	V192 (042868)	G487 (042068)	G517 (042869)	—

†† No longer available.

350 c.c.

1949-51	G3L, G3LS, G3LC ...	V21 (013985)	V22 (013986)	G425 (017019)	G425 (014510)	††
1952-53	G3L, G3LS, G3LC, G3LCS ...	V21 (013985)	V22 (013986)	G425 (017019)	G425 (014510)	††
1954 1955 1955	G3L, G3LS, G3LC, G3LCS ... G3L, G3LS ... G3LC, G3LCS ...	V21 (013985)	V22 (013986)	G425 (017019)	G463 (021185)	††

†† No longer available.

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

350 c.c. continued.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1956-61 1956-63 1956	G3LS ... G3LCT, G3LC ... G3LCS ...	V21 (013985)	V22 (013986)	G425 (017019)	G485 (022208)	††
1960	Light 350, Model G5 ...	V197 (044002)	††	G487 (042068)	G488 (042069)	—
1961-62	Light 350, Model G5 ...	V197 (044002)	V192 (042868)	G487 (042068)	G517 (042869)	††
1962-66 1964-66	G3 ... G3C ...	V208 (026028)	V222 (028105)	G515 (026030)	G506 (024519)	—

†† No longer available.

500 c.c.

1949-51	G80, G80S, G80C ...	V55 (013988)	V56 (013989)	G425 (017019)	G425 (014510)	††
1952-53	G80, G80S, G80C, G80CS ...	V55 (013988)	V56 (013989)	G425 (017019)	G425 (014510)	††
1954-55	G80, G80S, G80C, G80CS ...	V55 (013988)	V56 (013989)	G425 (017019)	G463 (021185)	††
1956-59 1956	G80S ... G80CS ...	V55 (013988)	V56 (013989)	G425 (017019)	G485 (022208)	††
1960-66 1966-67	G80, G80CS ... G85CS ...	V208 (026028)	V209 (026029)	G515 (026030)	G506 (024519)	††

†† No longer available.

500 c.c. TWIN

1949-58	G9, Spring Twin ...	V38 (014163)	V39 (014165)	G452 (014170)	G453 (014171)	VS451-423
1959	G9, Spring Twin ...	V38 (014163)	V39 (014165)	G452 (014170)	G514 (025320)	VS451-423
1960-61	G9 Twin ...	V203 (026040)	V204 (026042)	G513 (026044)	G512 (026045)	VS451-423

600 c.c. 650 c.c. and 750 c.c. TWIN

1955-56	G11 ...	V38 (014163)	V39 (014165)	G452 (014170)	G453 (014171)	VS451-423
1957	G11 ...	V171 (023403)	V39 (014165)	G452 (014170)	G453 (014171)	VS451-423
1958	G11 ...	V171 (023403)	V39 (014165)	G452 (014170)	G453 (014171)	VS451-519
1959	G12 ...	V171 (023403)	V39 (014165)	G452 (014170)	G514 (025320)	VS451-553

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

MATCHLESS—continued

600 c.c. 650 c.c. and 750 c.c. TWIN continued.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1960-66	G12	V205 (026041)	V206 (026043)	G513 (026044)	G512 (026045)	VS451-553
1964-66 1967-68	G15, G15CSR G15, G15CSR	V240 (24330)	V27 (T2204)	G454 (T2011)	G454 (T2011)	VS451-584
1968-69	PII, PIIA	V263 (25501)	V264 (25500)	G454 (T2011)	G454 (T2011)	VS451-584

Norton

Valve Reference V240 is also available with head diameter $\frac{1}{16}$ " oversize for which the Reference is V240/1.

250 c.c.

1959-66	Jubilee Twin	V183 (21457)	V184 (20744)	G498 (20728)	G498 (20728)	VS451-545
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350 c.c. and 400 c.c.

1955-58	Model 50	V140 (L13-142)	V140 (L13-142)	G269PB (D3T-140)	G269PB (D3T-140)	††
1959-63	Model 50	V140 (18737)	V140 (18737)	G479 (20050)	G479 (20050)	††
1964-66	Model 50 Mk2	V208 (026028)	V222 (028105)	G515 (026030)	G506 (024519)	—
1961-65 1964-66	'Navigator' ES400	V183 (21457)	V184 (20744)	G498 (20728)	G498 (20728)	VS451-545

†† No longer available.

500 c.c.

1933-37 1939-45	I6H, S.V. I6H, EX WD	V141 (9120)	V29 (9120)	G394 (3715)	G394 (3715)	††
1946-55	I6H	V143 (A2-141)	†	†	†	††
1935-47 1948-54	I8, ES2 I8, ES2	V37 (A3-142)	V37 (A3-142)	G269 (A3-140)	G269 (A3-140)	††
1955-58	I8, ES2	V37 (A3-142)	V37 (A3-142)	G269PB (D3T-140)	G269PB (D3T-140)	††
1954-58	500 T	V37 (A3-142)	V37 (A3-142)	G269PB (D3T-140)	G269PB (D3T-140)	††
1959-63	ES2	V37 (A3-142)	V37 (A3-142)	G479 (20050)	G479 (20050)	††
1964-66	ES2 Mk2	V208 (026028)	V209 (026029)	G515 (026030)	G506 (024519)	—

† No longer stocked.

†† No longer available.

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

NORTON—continued

500 c.c., 600 c.c. and 650 c.c. TWIN

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1949-59	Dominator, 77, 88, 99 ...	V26 (T2010)	V27 (T2204)	G454 (T2011)	G454 (T2011)	VS451-501
1960-66	88, 99, 650ss, Manxman ...	V195 (17221)	V27 (T2204)	G454 (D12-140)	G454 (D12-140)	VS451-584

600 c.c. and 633 c.c.

1935-58	Model 19, O.H.V. ...	V37 (A3-142)	V37 (A3-142)	G269PB (D3T-140)	G269PB (D3T-140)	††
1933-37	Big 4, S.V. ...	}	V29 (9120)	G394 (8776)	G394 (8776)	††
1939-45	Big 4, SV, EX WD ...					
1947-55	Big 4, S.V. ...	V145 (C7-141)	V52 (C7-141EX)	†	†	††

† No longer stocked.

†† No longer available.

750 c.c. TWIN

1964-66	Atlas ...	V240 (24330)	V27 (T2204)	G454 (T2011)	G454 (T2011)	VS451-584
1968-69	Commando ...	V263 (25501)	V264 (25500)	G454 (T2011)	G454 (T2011)	VS451-584

N. S. U.

250 c.c.

1955-63	Max, Supermax ...	V228	†	Not available	—
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† No longer stocked.

Panther

250 c.c.

1932-60	All Models ...	V103 (R104)	V104 (R104)	G405 (R110)	G405 (R110)	††
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†† No longer available.

350 c.c.

1933-53	30, 70, 80, M75 ...	V103 (R104)	V104 (R104)	G405 (R110)	G405 (R110)	††
1954-63	M75, Alloy Head ...	V105 (R104 Large)	V104 (R104)	G405 (R110)	G405 (R110)	††

†† No longer available.

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

PANTHER—continued

500 c.c., 600 c.c. and 650 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1933-53	All Models	V60 (M107)	V60 (M107)	G406 (M109)	G406 (M109)	††
1954-64	100, 100S	V101 (M107/5)	V101 (M107/5)	G406 (M109)	G406 (M109)	††
1959-66	120, 120S	V101 (M107/5)	V60 (M107)	G406 (MM109)	G406 (M109)	††

†† No longer available.

Royal Enfield

250 c.c.

1935-57	S, S2, Clipper, O.H.V. ...	V47 (21064)	V47 (21064)	G473 (21322)	G473 (21322)	††
1958	250 Clipper	V147 (39156)	V148 (35392)	G464PB (25524)	G504PB (44045)	††
1960-63	"Crusader" (Alloy Head) ...					
1963-66	250 Clipper					
1957-59	Crusader (Cast Iron Head) ...	V147 (39156)	V148 (35392)	G408 (22641)	G473 (21322)	††
1959-63	250 Clipper					
1960-66	Crusader Sports, Super 5, Continental, 250 Trials ... Continental G.T.					
		V193 (44765)	V194 (44766)	G464PB (25524)	G504PB (44045)	VS451-538

†† No longer available.

350 c.c.

1936-47	CO, O.H.V.	V44 (16567)	V45 (16362)	G408 (22641)	G408 (22641)	††
1936-39	G, Bullet					
1946-57	G, G de Luxe, 350 Clipper ...					
1958-59	350 Clipper	¶	V148 (35392)	G408 (22641)	G408 (22641)	††
1948-54	Bullet	V44 (16567)	V148 (35392)	G464PB (25524)	G464PB (25524)	††
1955	Bullet (Exhaust Pipe fits over Cylinder Head Stub) ...					
1955	Bullet (Exhaust Pipe fits inside Cylinder Head)					
1956-59	Bullet	¶	V148 (35392)	G464PB (25524)	G464PB (25524)	††
1960-63	350 Clipper	V193 (44765)	V194 (44766)	G464PB (25524)	G464PB (25524)	VS451-538
1960-62	Bullet					
1963-65	Bullet					
		V193 (44765)	V194 (44766)	G464PB (25524)	G504PB (44045)	VS451-538

¶ No longer stocked.

†† No longer available.

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

500 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1933-49	J, J2, etc.	V44 (16587)	V45 (16362)	G408 (22641)	G408 (22641)	††
1950-54	J2, O.H.V.	†	V45 (16362)	G408 (22641)	G408 (22641)	††
1953-59	Bullet	V155 (38094)	V156 (38095)	G464PB (25524)	G464PB (25524)	††
1959-62	Bullet	V213 (43360)	†	†	†	VS451-538
1949-54 1955-57	500 Twin 500 Twin	†	V158 (32545)	†	†	††
1958-59	500 Twin		V164 (39529)	G472PB (38638)	G472PB (38638)	††
1960-63	Meteor Minor, Sport Twin	V185 (42661)	V186 (43521)	G509PB (42660)	G509PB (42660)	VS451-538A

† No longer stocked.

†† No longer available.

700 c.c. and 750 c.c.

1953	Meteor Twin	V44 (16567)	V148 (35392)	G464PB (25524)	G464PB (25524)	††
1954-55	Meteor Twin	V165 (39528)	V164 (39529)	G472PB (39642)	G472PB (39642)	††
1956-62	Super Meteor except Phase C	V163 (41221)	V164 (39529)	G472PB (39642)	G472PB (39642)	††
1960-63 1958-66 1963-69	Super Meteor, Phase C ... Constellation Interceptor	} V185 (42661)	V186 (43521)	G509PB (42660)	G509PB (42660)	VS451-538A

†† No longer available.

Reliant

750 c.c.

1939-62	"Reliant. 4 cyl."	V218	V219	G234I (1653)	G234I (1653)	VS451-506
1962-70	Reliant Model 3/25	V251 (6003)	V252 (6004)	G526 (6063)	G527 (6062)	VS451-602

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

Sunbeam

500 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
All Years	S7, S8	V61 (89-330)	V62 (89-331)	G480PB (89-307)	G480PB (89-307)	††

†† No longer available.

Special inlet valves for T110, T120 and TR6 with head diameter $\frac{1}{16}$ " oversize are available, Reference V137/1 and V245/1.

Special exhaust valves in nimonic material are also available for the following models. 5T, T100, TR5, 6T, T110, T120 and TR6. Valve References are V14/N, V24/N and V138/N.

150 c.c. and 200 c.c.

1953-59	T15, T20, T20C	V48 (E3146)	V49 (E3147)	G461 (E3208)	G461 (E3208)	VS451-466
1959-66	T20, T20T, from Engine No. 56360	V191 (E3963)	V49 (E3147)	G461 (E3208)	G461 (E3208)	VS451-466
1959-66	T20S, T20SL, T20S/S, T20SH, from Engine No. 45312 ...	V191 (E3963)	V49 (E3147)	G461 (E3208)	G461 (E3208)	VS451-508
1967-68	Bantam Cub, Super Cub ...	V191 (E3963)	V49 (E3147)	G461 (E3208)	G461 (E3208)	VS451-466

250 c.c.

1959-64	'Tigress' Scooter	V189 (76-61)	V190 (76-60)	G503 (76-15)	G503 (76-15)	††
1968-70	TR25W	V255 (E8112)	V267 (E7777)	G539PB (E8225)	G539PB (E8226)	VS451-647

†† No longer available.

350 c.c.

1945-51	3T and T85	V133 (E1751)	V134 (E1752)	†	†	††
1957-65	Twentyone 3TA	V135 (E3738)	V136 (E3739)	G461 (E3208)	G461 (E3208)	VS451-514
1963-65	Tiger 90	V232 (E4640)	V136 (E3739)	G461 (E3208)	G461 (E3208)	VS451-537
1966	3TA	V135 (E3738)	V136 (E3739)	G461 (E3208)	G461 (E3208)	VS451-615
1966-67 1968-69	Tiger 90 Tiger 90	V232 (E4640)	V136 (E3739)	G461PB (E6301)	G461PB (E6301)	VS451-615

† No longer stocked.

†† No longer available.

Genuine part numbers shewn in brackets for reference only. Do not quote these when ordering.

500 c.c.

Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1946-59	5T	VI4 (E1956)	VI4 (E1956)	G420 (E1480)	G424 (E1604)	VS451-279
1946-50	T100	VI4 (E1956)	VI4 (E1956)	G420 (E2899)	G424 (E2900)	VS451-279
1951-59	T100 and TR5	V25 (E2969)	VI4 (E1956)	G420 (E2899)	G424 (E2900)	VS451-279
1959-65	T100A, 5TA and T100S/S ...	VI87 (E4012)	VI88 (E4013)	G461 (E3208)	G461 (E3208)	VS451-537
1966	T100	VI87 (E4012)	VI88 (E4013)	G461PB (E6301)	G461PB (E6301)	VS451-615
1966	5TA	VI87 (E4012)	VI88 (E4013)	G461 (E3208)	G461 (E3208)	VS451-615
1966	T100C, T100S	VI87 (E4012)	VI88 (E4013)	G461PB (E6301)	G461PB (E6301)	VS451-615
1967 1966-67	T100C, T100S T100R, T100T	V265 (E6853)	V266 (E6854)	G461PB (E6301)	G461PB (E6301)	VS451-615
1968	T100C					
1968-69 1970	T100S, T100R T100T, T100T	V265 (E6853)	V266 (E6854)	G461PB (E6301)	G461PB (E6301)	VS451-615





650 c.c.


1949-62	6T, Thunderbird	V23 (E2903)	V24 (E2904)	G420 (E2899)	G424 (E2900)	VS451-279
1954-57	T110, TR6	VI37 (E3310)	V24 (E2904)	G420 (E2899)	G424 (E2900)	VS451-279
1958-63	T110, TR6	VI37 (E3310)	VI38 (E3927)	G420 (E2899)	G424 (E2900)	VS451-279
1959-63	T120, Bonneville	VI37 (E3310)	VI38 (E3927)	G420PB (E3827)	G424PB (E3828)	VS451-510
1963-65	6T, Thunderbird, from Eng. No. DU5825	VI37 (E3310)	VI38 (E3927)	G420 (E2899)	G424 (E2900)	VS451-574
1963-65	TR6, from Eng. No. DU5825	VI37 (E3310)	VI38 (E3927)	G420 (E2899)	G424 (E2900)	VS451-510
1963-65	T120, Bonneville, from Eng. No. DU5825	V245 (E4603)	V24 (E2904)	G420PB (E3827)	G424PB (E3828)	VS451-510
1966	T120, Bonneville	V245 (E4603)	V24 (E2904)	G420PB (E3827)	G424PB (E3828)	VS451-574
1966	TR6, 6T	VI37 (E3310)	VI38 (E3927)	G420 (E2899)	G424 (E2900)	VS451-547
1966	TR6 from Engine No. DU44394	V245 (E4603)	V24 (E2904)	G420 (E2899)	G424 (E2900)	VS451-547
1967-70	TR6	V245 (E4603)	V24 (E2904)	G420 (E2899)	G424 (E2900)	VS451-646
1967-70	T120 Bonneville	V245 (E4603)	V24 (E2904)	G420PB (E3827)	G424PB (E3828)	VS451-646

Genuine part numbers shown in brackets for reference only. Do not quote these when ordering.

Velocette



150 c.c. and 200 c.c.


Year	Model	VALVES		VALVE GUIDES		Valve Springs
		Inlet	Exhaust	Inlet	Exhaust	
1949-51	LE, 150 c.c.	V68 (LE-15-2)	V68 (LE-15-2)			VS451-417
1951-66	LE, 200 c.c.					
1964-66	Vogue					
1957-64	Valiant					
		V179 (LE-15-4)	V180 (LE-15-3)			††

 No longer stocked.

†† No longer available.



250 c.c.


1935-48	MOV	V63 (M2-2)	V63 (M2-2)			††
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 No longer stocked.

†† No longer available.

350 c.c.

1935-52	MAC	V63 (M2-2)	V63 (M2-2)			††
1956-60	MAC, Alloy Head	V107 (M2-8)	V106 (M2-11)	G475PB (M3-6)	G477PB (M3-5)	††
1954-63	Viper	V109 (M2-12)	V110 (M2-16)	G475PB (M3-6)	G477PB (M3-5)	††
1966-69	Viper					

 No longer stocked.

†† No longer available.

500 c.c.

1954-66	MSS	V111 (M2-7)	V112 (M2-17)	G475PB (M3-6)	G477PB (M3-5)	††
1954-66	Venom, Endurance	V111 (M2-7)	V112 (M2-17)	G475PB (M3-6)	G477PB (M3-5)	††
1967-69	Venom, Endurance					

†† No longer available.

Vincent

500 c.c.

1935-39	Comet (Hairpin Springs)	V177 (ET-34)	V178 (ET-33)	G493PB (Lower)	G494PB (Lower)	††
1949-55	Meteor and Comet	V177 (ET-34)	V178 (ET-33)	G493PB (Lower)	G494PB (Lower)	VS451-433
1950-55	Grey Flash	V177 (ET-34)	V178 (ET-33)	G493PB (Lower)	G494PB (Lower)	VS451-432

1000 c.c.

1946-55	Black Lightning and Shadow	V177 (ET-34)	V178 (ET-33)	G493PB (Lower)	G494PB (Lower)	VS451-432A
1946-55	Rapide	V177 (ET-34)	V178 (ET-33)	G493PB (Lower)	G494PB (Lower)	VS451-433A

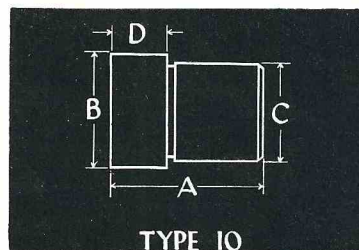
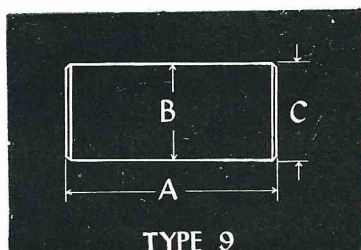
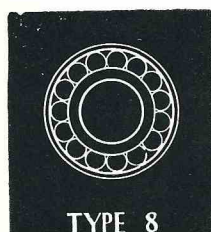
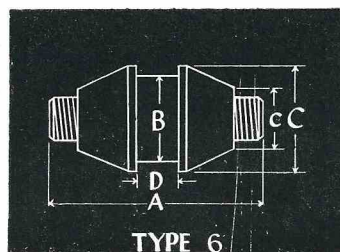
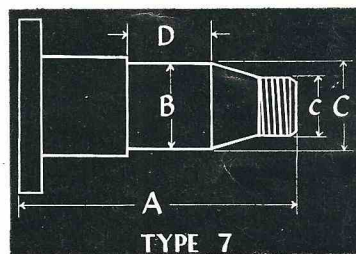
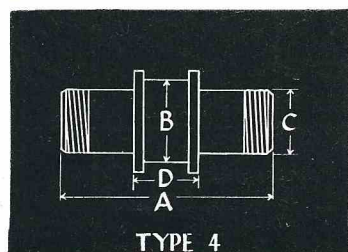
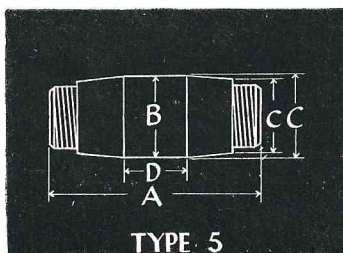
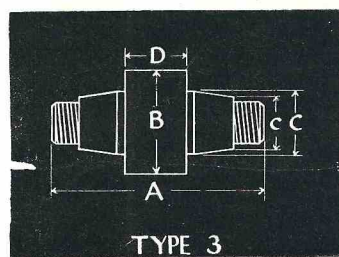
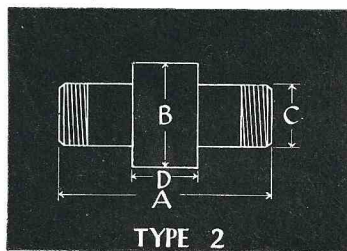
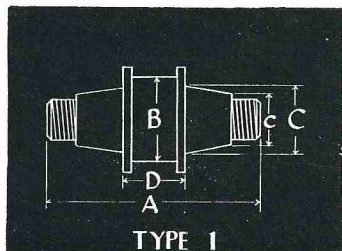
SECTION 3



DIMENSIONS OF BIG END BEARINGS AND SMALL END BUSHES



CRANK PIN TYPES



		CRANKPINS							OUTER RACE		
Alpha Part No.	Replacing Genuine Part No.	Type	Overall Length "A"	Track Dia. "B"	Shank Dia. "C"	Centre Width "D"	Roller Size	Outside Dia.	Inside Dia.	Width	
AER-Macchi											
AM1	—	2	2.355	1.260	.9865	.792	—		Not Fitted		
AM2	—	4	2.355	1.270	.9865	.908	—		Not Fitted		
AM3	—	4	2.355	1.270	1.1835	.908	—		Not Fitted		
A.J.S. and Matchless											
AMC6	017020	2	2.885	1.204	.878	.950	$\frac{1}{4} \times \frac{1}{4}$ "	2.000	1.704	.937	
AMC8	—	2	3.375	1.515	1.003	1.376	$\frac{1}{4} \times \frac{1}{4}$ "	2.313	1.706	.630/	
AMC7D	—	2	3.375	1.515	1.003	1.275	$\frac{1}{4} \times \frac{1}{4}$ "	2.313	2.017	.360	
AMC7R	015774	2	3.125	1.516	.8785	.950	$\frac{1}{4} \times \frac{1}{4}$ "	2.313	2.017	.630	
AMC12	022313	2	2.970	1.515	1.004	.695	$\frac{1}{4} \times \frac{1}{4}$ "	2.314	2.0165	.937	
AMC12S	—	2	2.850	1.515	1.004	.695	$\frac{1}{4} \times \frac{1}{4}$ "	2.314	2.0155	.685	
AMC13	—	2	2.500	1.0315	.754	.735	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
AMC14	042006	2	2.690	1.204	.752/.754	.695	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
AMC14L	—	2	2.680	1.204	.7525	.695	$\frac{1}{4} \times \frac{1}{4}$ "	2.000	1.7045	.685	
AMC15	—	2	2.035	.874	.692	.735	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
AMC16	—	2	2.475	1.0315	.755	.735	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
AMC17	044020	2	2.687	1.515	.880	.690	$\frac{1}{4} \times \frac{1}{4}$ "	2.312	2.017	.685	
AMC18	041531	9	1.990	1.032	1.032	—	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
AMC19	045020	9	1.790	.875	.875	—	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
AMC20	—	2	2.850	1.515	1.004	.695	$\frac{1}{4} \times \frac{1}{4}$ "	2.314	2.015	.685	
Anzani											
ANZ1	—	2	1.605	.896	$\left\{ \begin{array}{l} .717 \cdot .722 \\ .727 \cdot .732 \\ .722 \cdot .727 \\ .732 \cdot .737 \end{array} \right\}$	.505	$\frac{3}{16} \times \frac{5}{16}$ "		Not Fitted	
Ariel											
AB5	12177-54 (29-2196)	1	2.650	.969	.842/.948	.812	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
A5	1080-29	1	3.010	1.045	.895/1.000	.750	$\frac{1}{4} \times \frac{1}{4}$ "	1.8435	1.547	.625	
A7	1080-37	4	2.900	1.202	1.001	1.000	$\frac{1}{4} \times \frac{1}{4}$ "	1.9375	1.704	.687	
A9	T32	2	1.968	.897	.6885	.503	$\frac{3}{16} \times \frac{5}{16}$ "		Not Fitted		
A10	—	2	1.545	.998	.6905	.514	Not Fitted	1.130	.999	.500	
B.M.W.											
BMW1	—	9	1.960	1.260	1.260	.600	5 × 10 mm.		Not Fitted		
BMW3	—	9	1.960	1.260	1.260	.725	No Rollers		Not Fitted		
BMW4	—	9	1.960	1.260	1.260	.600	5 × 10 mm.		Not Fitted		
B.S.A.											
B5	29-2196	1	2.673	.968	.842/.948	.818	$\frac{1}{4} \times \frac{1}{4}$ "		Not Fitted		
B14	66-545	1	2.980	1.272	1.120/1.130	1.000	$\frac{1}{4} \times \frac{5}{16}$ "	2.126	1.774	.873	
B14GS											
B20	90-254	2	1.630	.770	.750	.270	7 × 7 mm.		Not Fitted		
B20C	—	2	1.715	.885	.750	.380	$\frac{1}{4} \times \frac{3}{8}$ "		Not Fitted		
B20K	90-1340	2	1.845	1.159	.750	.565	$\frac{1}{4} \times \frac{5}{16}$ "		Not Fitted		
B21	40-47	2	2.220	1.372	.941	.770	—	1.503	Shell	.750	
B23	40-159	2	2.195	1.498	1.005	.770	—	1.628	Shell	.750	
B24	—	4	2.195	1.270	1.0045	.770	$\frac{1}{4} \times \frac{1}{4}$ "	1.960	1.270	.750	
B25	—	4	2.195	1.270	1.0045	.770	$\frac{1}{4} \times \frac{1}{4}$ "	2.020	1.270	.750	
B26	41-0586	1	2.540	1.270	1.029/1.131	.770	$\frac{1}{4} \times \frac{1}{4}$ "	2.020	1.270	.750	
B27	70-9734	2	1.845	1.159	.812"	.565	$\frac{1}{4} \times \frac{5}{16}$ "		Not Fitted		

See page 56 for illustrations of crank pin types.

		CRANKPINS						OUTER RACE		
Alpha Part No.	Replacing Genuine Part No.	Type	Overall Length "A"	Track Dia. "B"	Shank Dia. "C"	Centre Width "D"	Roller Size	Outside Dia.	Inside Dia.	Width
Bianchi										
Bianchi 1	—	9	1·355	·577	·577	—	—		Not Fitted	
Bianchi 2	—	9	2·265	1·099	1·099	·863	—		Not Fitted	
Bianchi 3	—	9	1·928	·843	·843	·625	—		Not Fitted	
Capri										
Capri 1	—	9	1·338	·850	·850	·385	—		Not Fitted	
Capri 2	—	9	1·398	·753	·753	·385	—		Not Fitted	
Capri 3	—	9	1·332	·787	·470	—	—		Not Fitted	
Capri 4	—	9	1·383	·788	·788	·472	3 × 9·75 mm.	Hard Rod	Hard Rod	Hard Rod
Capri 5	—	2	1·493	·902	·792	·554	3 × 11·75 mm.	Hard Rod	Hard Rod	Hard Rod
Diana										
Diana 1	—	9	1·725	1·055	1·055	·585	4 × 12 mm.		Not Fitted	
Ducati										
DC2	—	2	2·320	1·105	·905	·755	—		Not Fitted	
DC3	—	2	2·280	1·260	1·163	·790	—		Not Fitted	
DC4	—	9	1·568	·755	·755	—	—		Not Fitted	
DC5/1	—	2	2·410	1·174	·991	·750	3 × 14·25 mm.		Not Fitted	
DC5/2	—	2	2·335	1·180	·986	·750	3 × 14·25 mm.		Not Fitted	
DC1	—	9	1·263	·607	·607	·240	4 × 6 mm.	Hard Rod	Hard Rod	Hard Rod
DC6	—	2	2·520	1·260	1·063	·794	3·50 × ·585 mm.	Hard Rod	Hard Rod	Hard Rod
DC7	—	2	2·870	1·260	1·063	·790	3·5 × ·585 mm.	Hard Rod	Hard Rod	Hard Rod
E.S.O.										
ESO 1	—	3	2·835	1·535	1·100/1·227	·787	$\frac{1}{4}'' \times \frac{1}{2}''$	2·280	2·010	·773
Excelsior										
X1	—	2	3·250	1·125	·878	·695	$\frac{1}{4}'' \times \frac{1}{4}''$	2·2315	Not Fitted	
X2	—	2	2·910	1·437	1·126	1·000	$\frac{1}{4}'' \times \frac{3}{16}''$		1·939	·805
XA	8221	10	1·125	·767	·690	·380	$\frac{3}{16}'' \times \frac{3}{16}''$		Not Fitted	
XB	—	2	1·285	·778	·767	·385	·186 × ·360		Not Fitted	
XT	3024	9	1·487	·717	·717	·550	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
X4	—	2	1·500	·843	·719	·510	$\frac{3}{16}'' \times \frac{3}{16}''$		Not Fitted	
Gilera										
GL1	—	9	2·830	1·127	1·127	·945	—		Not Fitted	
GL2	—	9	2·480	1·127	1·127	·945	—		Not Fitted	
Harley Davidson										
HD1	—	5	3·093	·999	·885/·999	1·375	$\frac{1}{4}'' \times \frac{1}{4}''$ ·270	1·688	1·501	·400/·560
HD2S	—	3	3·812	1·249	·975/1·110	1·650	$\frac{1}{4}'' \times \frac{1}{4}''$ ·550	1·816	1·626	·470/·810
HD2L	—	5	3·812	1·249	1·100/1·249	1·780	$\frac{3}{16}''$ dia.	1·816	1·626	·470/·810

See page 57 for illustrations of crank pin types.

		CRANKPINS						OUTER RACE		
Alpha Part No.	Replacing Genuine Part No.	Type	Overall Length "A"	Track Dia. "B"	Shank Dia. "C"	Centre Width "D"	Roller Size	Outside Dia.	Inside Dia.	Width
Heinkel										
HKL1	—	9	2-115	.984	.984	.705	6 × 6 mm.		Not Fitted	
HKL2	—	9	2-240	.984	.984	.705	6 × 6 mm.		Not Fitted	
HKL4	—	9	2-115	.984	.984	.705	6 × 6 mm.		Not Fitted	
Honda										
HON1S } HON1L } HON2 } HON3 } HON4 } HON5 } HON6 }	C100130D	9	1-400	.833	.833	—	.097 × .395 mm.		Not Fitted	
	—	9	1-775	1-024	1-024	—	.093 × .340 mm.		Not Fitted	
	—	9	1-292	.733	.733	—	—		Not Fitted	
	—	9	1-535	.910	.910	—	—		Not Fitted	
HON7 (Twin)	—	—	3-980	.945	.909	Centre Dia. 1-027	—		Not Fitted	
HON9 (Twin)	—	—	3-980	.945	.909	Centre Dia. 1-049	—		Not Fitted	
All other Honda Twins are fitted with integral pins and new centre bobweights are fitted when reconditioned.										
Indian										
IND1	43902	5	3-1875	.875	.762/.875	2-500	$\frac{1}{4}'' \times \frac{1}{4}''$	1-564	1-377	.365/.740
IND2	—	5	3-375	1-000	.925/1-000	1-625	$\frac{3}{4}'' \times \frac{5}{16}''$	1-689	1-502	.400/.800
IND3	—	2	1-885	.960	.956	.508	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
J.A.P.										
JAP 3/A	—	5	2-975	.991	.900/.991	.8437	$\frac{1}{4}'' \times \frac{5}{16}''$	1-8025	1-493	.828
JAP 4	—	5	2-900	1-125	1-040/1-125	.6875	$\frac{1}{4}'' \times \frac{1}{2}''$	2-064	1-627	.692
JAP 4S	—	5	2-900	1-125	1-040/1-125	.6875	$\frac{1}{4}'' \times \frac{1}{2}''$	1-926	1-627	.692
Norton										
N3	A2-27	4	2-997	1-045	1-021	1-000	$\frac{1}{4}'' \times \frac{1}{4}''$	2-001	1-546	.750
N5/IS	A10-27	4	2-830	1-326	1-005	1-125	$\frac{1}{4}'' \times \frac{5}{16}''$	2-0625	1-826	.661
N5/IL	A11-27	4	3-200	1-4375	1-1255	1-125	$\frac{1}{4}'' \times \frac{5}{16}''$	2-3145	1-940	.717
N5/M	A11M-27	4	2-690	1-437	1-126	1-000	$\frac{5}{16}'' \times \frac{5}{16}''$	2-3145	2-064	.717
N6	—	4	2-690	1-437	1-126	1-000	$\frac{5}{16}'' \times \frac{5}{16}''$	2-062 (flanged)	2-314	.970
N.S.U.										
NSU1	16 04	9	1-125	.656	.656	—	$\frac{3}{16}'' \times \frac{3}{16}''$		Not Fitted	
NSU2	—	2	1-355	.941	.710	.400	—		Not Fitted	
NSU4	19 04	2	2-090	1-260	1-028	.680	5 × 10 mm.		Not Fitted	
NSU7	081 804 136	2	2-055	1-417	1-107	.797	6 × 12 mm.		Not Fitted	
NSU8	081 804 101	2	1-850	1-067	.950	.482	—		Not Fitted	
NSU9	—	2	1-850	1-002	.950	.562	—		Not Fitted	
NSU10	—	9	1-610	.709	.709				Not Fitted	
Panther										
P2	—	1	3-000	1-056	.856	.695	$\frac{1}{4}'' \times \frac{1}{4}''$	1-876	1-559	.655
P3	—	1	3-0625	1-111	1-006/1-105	.875	$\frac{5}{16}'' \times \frac{5}{16}''$	2-126	1-736	.687
P4	—	4	3-000	1-056	1-002	.837	$\frac{1}{4}'' \times \frac{1}{4}''$	1-876	1-5575	.655
P6	—	4	3-063	1-111	1-1265	1-037	$\frac{5}{16}'' \times \frac{5}{16}''$	2-126	1-7375	.687

See page 57 for illustrations of crank pin types.

		CRANKPINS						OUTER RACE		
Alpha Part No.	Replacing Genuine Part No.	Type	Overall Length "A"	Track Dia. "B"	Shank Dia. "C"	Centre Width "D"	Roller Size	Outside Dia.	Inside Dia.	Width
Royal Enfield										
RE1N	27293	2	1-250	.725	.660	.343	$\frac{1}{4}'' \times \frac{5}{16}''$		Not Fitted	
RE1W	30553	2	1-390	.725	.660	.515	$\frac{1}{4}'' \times \frac{1}{2}''$		Not Fitted	
RE8	38726	2	2-710	1-125	1-128	.770	Bush	1-815	1-627	.748
	24593									
RE9	19884	2	2-930	1-125	1-128	.770	Bush	1-815	1-627	.748
RE12S	36902	2	2-715	1-0925	.972	.760	$\frac{3}{16}'' \times \frac{1}{2}''$	1-656	1-469	.750
RE12	39489	2	2-720	1-250	.972	.750	Bush	1-815	1-625	.748
RE13	37717	2	2-875	1-249	1-003	1-000	$\frac{3}{16}'' \times \frac{9}{16}''$	1-815	1-6245	.990
	38726									
RE14	—	2	2-900	1-249	1-002	1-000	Bush	1-815	1-6245	.990
Sachs										
SC1	—	4	1-177	.622	.621/.629	.408	.207 × .217	1-263	1-032	.385
SC3	—	4	1-772	.812	.820/.830	.508	$\frac{1}{4}'' \times \frac{5}{16}''$	1-621	1-3125	.500
SC3S	—	4	1-772	.812	.820/.830	.508	$\frac{1}{4}'' \times \frac{5}{16}''$	1-697	1-3125	.500
SC4	—	4	2-005	.812	.820/.830	.585	$\frac{1}{4}'' \times \frac{5}{16}''$	1-697	1-3125	.580
Suzuki										
SUZ1	—	9	1-570	.630	.630	.472	3 × 8 mm.		Not Fitted	
SUZ2	—	9	1-963	.7485	.7485	.624	3-5 × 12 mm		Not Fitted	
SUZ3	—	9	1-924	.7875	.7875	.550	3 × 10 mm.		Not Fitted	
SUZ4	510-1414-1	9	1-930	.787	—	—	—		Not Fitted	
SUZ5	12211-1-000	9	1-960	.748	.748	—	3 mm.		Not Fitted	
SUZ6	T20-1414-1	9	1-930	.790	.798	—	3 mm.		Not Fitted	
SUZ7	K11-1414	9	1-97	.75	.75	—	—		Not Fitted	
SUZ8	1211-06100	9	1-81	.63	.63	—	—		Not Fitted	
Triumph										
T3	E595	1	2-5625	.965	.902/1-002	.742	$\frac{1}{4}'' \times \frac{1}{4}''$	1-714	1-467	.567
T6	E3291	4	1-940	.965	.754	.430	$\frac{1}{4}'' \times \frac{5}{16}''$	1-715	1-4665	.420
T7	E3414	2	1-950	.900	.754	.655	$\frac{3}{16}'' \times \frac{1}{2}''$		Not Fitted	
T8	E3414	2	1-940	.900	.815	.655	$\frac{3}{16}'' \times \frac{3}{8}''$		Not Fitted	
T9	—	9	1-940	.815	.815	.635	4 × 10 mm.	1-441	1-1305	.630
T10	—	2	1-400	.8745	.691	.380	4 × 6 mm.		Not Fitted	
T11	—	2	1-943	1-310	.815	.653	Not Fitted	1-502	1-3105	.630
T12	E6539	2	1-9375	1-811	.8153	.651	3-5 mm.		Not Fitted	
Velocette										
V1	—	4	2-095	.860	.761/.749	.536	$\frac{5}{16}'' \times \frac{5}{16}''$		Not Fitted	
V2	M192	2	2-183	1-250	.761/.755	.812	$\frac{3}{16}'' \times \frac{9}{16}''$	2-000	1-625	.625
V3	K192	2	2-195	1-375	.761/.755	.812	$\frac{3}{16}'' \times \frac{9}{16}''$	2-126	1-751	.625
V4	M192	2	2-247	1-500	.883/.875	.812	$\frac{3}{16}'' \times \frac{9}{16}''$	2-251	1-876	.625
V5	—	2	2-250	1-375	.878/.875	.812	$\frac{3}{16}'' \times \frac{9}{16}''$	2-126	1-751	.625
V6	M192/5	2	2-115	1-500	1-252/1-247	.812	$\frac{3}{16}'' \times \frac{9}{16}''$	2-251	1-8765	.625
V7	—	2	1-350	1-377	1-0015	.408	Bush	1-536	1-377	.400
V8	—	2	1-520	1-124	1-0015	.534	$\frac{1}{16}'' \times \frac{3}{8}''$	1-752	1-4995	.523
V9	—	2	2-115	1-500	1-252/1-247	.812	$\frac{3}{16}'' \times \frac{9}{16}''$	2-251	1-8765	.625

See page 57 for illustrations of crank pin types.

		CRANKPINS						OUTER RACE		
Alpha Part No.	Replacing Genuine Part No.	Type	Overall Length "A"	Track Dia. "B"	Shank Dia. "C"	Centre Width "D"	Roller Size	Outside Dia.	Inside Dia.	Width
Villiers										
VIL1M	—	2	1·100	·766	·627	·375	$\frac{1}{4}'' \times \frac{3}{8}''$		Not Fitted	
VIL1A	—	10	·866	·766	·657	·375	$\frac{3}{16}'' \times \frac{3}{8}''$		Not Fitted	
VIL2	E7493	9	1·475	·656	·656	·375	$\frac{3}{16}'' \times \frac{3}{16}''$		Not Fitted	
VIL3	E5157	2	1·375	·725	·657	·515	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL4	{ E7505 E7116 }	9	1·625	·7985	·7985	·515	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL5	—	2	1·805	·875	·752	·515	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL6	E7534	9	1·487	·717	·717	·515	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL7	E8666	9	1·625	·717	·717	·515	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL8	{ E9024 E7647 }	9	1·205	·538	·538	—	$\frac{3}{16}'' \times \frac{3}{8}''$		Not Fitted	
VIL9	{ E7493 E7268 }	9	1·470	·6565	·6565	—	$\frac{3}{16}'' \times \frac{3}{8}''$		Not Fitted	
VIL10	{ E7578 E6695/1 }	2	1·230	·766	·628	·380	$\frac{3}{16}'' \times \frac{3}{8}''$		Not Fitted	
VIL11	{ E7579 E6378 }	2	1·734	·874	·755	·505	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL12	{ E9691 E8690 }	9	1·865	·799	·799	—	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL13	{ E10451 E8400 }	9	1·795	·799	·799	—	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL14	{ E9540 E7567 }	9	1·980	·874	·874	—	$\frac{1}{4}'' \times \frac{1}{4}''$		Not Fitted	
VIL15	—	9	1·795	·799	·799	—	$\frac{1}{4}'' \times \frac{1}{4}''$		Hard Rod	
VIL16	—	2	2·115	·984	·817	·637	$3·5 \times 12·75$ mm.		Hard Rod	
Vincent										
HRD1	—	2	3·060	1·500	1·001	·970	$\frac{3}{16}'' \times \frac{9}{16}''$	2·125	1·876	·962
Std.*	—	2	3·060	1·577	1·001	·970	$\frac{1}{18}'' \times \frac{3}{16}''$	2·125	1·814	·962
HRD2L	—	2	4·550	1·500	1·001	2·220	$\frac{3}{16}'' \times \frac{9}{16}''$	2·125	1·876	·962
Std.*	—	2	4·550	1·577	1·001	2·220	$\frac{1}{18}'' \times \frac{3}{16}''$	2·125	1·814	·962
HRD2S	—	2	4·550	1·550	1·001	2·475	$\frac{3}{16}'' \times \frac{9}{16}''$	2·125	1·876	·962
Std.*	—	2	4·550	1·557	1·001	2·475	$\frac{1}{18}'' \times \frac{3}{16}''$	2·125	1·814	·962
*The letters "STD" in the table above show the dimensions of the original design of Vincent bearings in each case. The other sizes refer to the special "Alpha" conversion										
Zündapp										
Z1	—	9	1·168	·571	·571	·270	3 × 5 mm.	1·028	·8076	·235
Z2	—	9	1·485	·571	·571	·315	4 × 4 mm.	1·028	·8864	·312
Z3	—	9	1·485	·571	·571	·315	4 × 4 mm.	1·129	·8864	·312
Z4	—	9	1·485	·709	·709	·512	3 × 10 mm.	Hard Rod	Hard Rod	Hard Rod

See page 57 for illustrations of crank pin types.

ALPHA SMALL END BUSHES

Alpha Part No.	Make	Genuine Part No.	Inside Diameter	Outside Diameter	Length
SE1	A.J.S., MATCHLESS ..	017317	.875	1.065	1.065
SE3	ARIEL	—	.812	.918	1.000
SE4	ARIEL	1130-35 (A7-484)	.812	.909	1.125
SE7	ARIEL	1131-37 (ET-1115)	.687	.8125	1.000
SE11	B.S.A.	12186 (65-444)	.625	.692	.781
SE13	B.S.A.	66-492	.750	.815	1.062
SE15	B.S.A.	66-491	.750	.938	1.075
SE24	B.S.A.	90-130	.4687	.562	.625
SE29	DOUGLAS	—	.562	.689	1.125
SE31	DOUGLAS	—	.625	.750	.750
SE32	DOUGLAS	5355	.5905	.672	.625
SE33	EXCELSIOR	—	.492	.6875	.8125
SE36	EXCELSIOR	E-5780	.492	.695	.755
SE39	VINCENT	—	.875	1.005	1.125
SE42	JAP	—	.812	1.003	1.035
SE44	JAP	—	.6875	.877	1.125
SE51	NORTON	A2-159	.875	1.032	1.125
SE54	NORTON	—	.875	1.032	.975
SE63	PANTHER	—	.750	.876	.937
SE64	ROYAL ENFIELD ..	21249	.750	.875	.937
SE65	PANTHER	—	.875	1.066	1.1875
SE66	PANTHER	—	.875	1.005	1.260
SE70	ROYAL ENFIELD ..	19278	.496	.629	.750
SE75	ROYAL ENFIELD ..	22629	.750	.943	.9687
SE84	TRIUMPH	—	.742	.847	1.062
SE85	TRIUMPH	—	.689	.815	.906
SE88	TRIUMPH	—	.742	.875	1.005
SE96	VELOCE	—	.500	.661	1.025
SE97	VELOCE	M29	.625	.825	1.065
SE98	VELOCE	M29/2	.8236	1.000	1.220
SE100	VILLIERS	—	.366	.494	.820
SE103	VILLIERS	E1729/1	.492	.688	.740
SE104	VILLIERS	E1547/1	.492	.688	.937
SE105	TRIUMPH	E1762	.5625	.6875	.750
SE106	TRIUMPH	E1511	.689	.815	1.031
SE107	B.S.A.	67-393	.6875	.816	.945
SE108	B.S.A.	67-210	.6875	.750	.920
SE109	B.S.A./ARIEL	10414-54	.750	.878	.945
SE130	LAMBRETTA	—	.550	.635	.780
SE131	LAMBRETTA	—	.6299	.750	.787
SE132	N.S.U.	16 04 00 003	.395	.515	.600
SE134	B.S.A.	90-1385	.562	.658	.625
SE135	B.S.A.	—	.437	.503	.620
SE137	N.S.U.	091 903 043	.590	.710	.675
SE138	SACHS	—	.472	.555	.745
SE139	NORTON	—	1.000	1.062	.975
SE140	VELOCE	—	.500	.600	.750
SE141	VELOCE	M29/3	.823	1.000	1.315
SE142	B.S.A.	40-63	.685	.755	.868
SE143	A.J.S.	042238	.750	.940	1.000
SE144	JAWA	—	.590	.753	.865
SE145	DIANA	—	.709	.868	.785
SE146	DOUGLAS	{ 18603 020651 }	.590	.672	.715
SE147	DOUGLAS	—	.625	.752	1.115
SE148	DOUGLAS	—	.625	.750	.940
SE149	HARLEY DAVIDSON ..	—	.7935	.8965	.935
SE150	HARLEY DAVIDSON ..	—	.793	.895	1.070
SE151	MOBY SCOOTER ..	—	.6299	.750	.775
SE154	SACHS	—	.590	.750	.670
SE155	SACHS	—	.708	.830	.710
SE156	INDIAN	4391	.625	.750	.875
SE157	GILERA	22007	.5709	.710	.870

Alpha Part No.	Make	Genuine Part No.	Inside Diameter	Outside Diameter	Length
SE159	ARIEL	—	·6004	·708	·750
SE160	Iso	—	·630	·750	·790
SE162	MAICO	—	·7087	·831	·875
SE163	ZUNDAPP	—	·468	·533	·590
SE164	B.M.W.	—	·708	·790	·785
SE165	BRITISH ANZANI ..	—	·615	·722	·740
SE167	N.S.U.	19 04 00 013	·590	·710	·670
SE168	N.S.U.	081 804 026	·708	·830	·865
SE169	VILLIERS	E6192	·366	·495	·620
SE170	VILLIERS	E6696/1	·492	·625	·845
SE171	VILLIERS	D7806	·615	·750	1·180
SE172	VILLIERS	—	·492	·688	·975
SE173	VILLIERS	E7858	·492	·688	·847
SE174	VILLIERS	E1170	·492	·688	1·150
SE175	M.V.	—	·670	·790	·790
SE177	HEINKEL	—	·4724	·550	·510
SE178	HEINKEL	—	·708	·830	·745
SE179	JAMES/FRANCIS BARNETT	041575	·562	·690	·750
SE180	JAMES/FRANCIS BARNETT	041797	·625	·750	·875
SE181	LAMBRETTA	—	·6299	·750	·787
SE182	ZUNDAPP	—	·708	·830	·760
SE183	SCOTT CYCAUTO ..	—	·500	·637	·630
SE184	SCOTT TWIN	—	·625	·825	1·125
SE186	LAMBRETTA	—	·472	·553	·570
SE189	DUCATI	—	·708	·870	·865
SE190	B.M.W... ..	—	·787	·868	·795
SE191	N.S.U.	—	·630	·750	·780
SE192	CAPRI	315H-2-172	·551	·652	·500
SE193	DOUGLAS VESPA ..	—	·590	·672	·715
SE195	JAWA 'MANET' ..	—	·625	·755	·705
SE196	CAPRI	A-29-3	·512	·632	·610
SE197	B.S.A.	40-475	·6875	·816	·872
SE198	JAMES/FRANCIS BARNETT	041519	·562	·751	·750
SE201	VILLIERS	—	·4257	·600	·567
SE202	DUCATI	—	·630	·713	·670
SE204	JAWA	—	·3937	—	·550
SE205	JAWA	—	·5906	·753	·750
SE207	ANZANI	—	·500	·723	·740
SE209	A.M.C.	—	·875	1·005	·935
SE210	BIANCHI	—	·4724	·596	·709
SE212	BULTACO	—	·630	·750	·560
SE213	TRIUMPH	—	·500	·630	·686
SE214	ITOM	—	·427	·595	·588
SE217	DUCATI	002247-290	·472	·555	·550
SE218	VILLIERS	—	·625	·726	·754
SE219	ZUNDAPP	—	·551	·673	·512
SE220	B.S.A./ARIEL	53-0073	·437	·503	·562
SE221	JAWA	—	·551	·672	·530
SE222	VESPA	—	·551	·635	·465
SE223	RALEIGH	—	·551	·675	·590
SE224	RALEIGH	4000423	·551	·675	·667
SE225	SUZUKI	MA.1411.2.B	·472	·671	·477
SE226	SUZUKI	K.10.1411.2	·551	·675	·715
SE227	SUZUKI	T.10.1411.2	·630	·751	·715
SE228	VILLIERS	—	·675	·820	1·062
SE229	N.S.U.	—	·472	·590	·570
SE230	SUZUKI	—	·472	·590	·477
SE231	VESPA	—	·4724	·552	·467
SE232	GREEVES	—	·630	·710	·875

How to get to ALPHA Bearings

Our full address is :

KINGSLEY STREET,
NETHERTON,
NEAR DUDLEY,
WORCESTERSHIRE.

Being 1 mile from the centre of Dudley Town.

FROM REDDITCH, WORCESTER AND BROMSGROVE

Take A448 from Redditch or A38 from Worcester to BROMSGROVE. Leave Bromsgrove by A38 for Birmingham and in approximately 1 mile turn left, A459, for Romsley and Halesowen. Follow sign-posts for Dudley along A459 through Old Hill in to Netherton. (M5 Motorway leads directly to A459).

FROM WOLVERHAMPTON OR BIRMINGHAM

Take main Birmingham to Wolverhampton trunk road, A4123, to Burnt Tree round-about at Tipton. Leave main road for Dudley Town centre. Pass over two sets of traffic lights in Dudley Market Place and fork left at next traffic lights in approximately a quarter of a mile. Continue along dual carriageway, taking right fork at Jennings Service Station. Take second right and immediately sharp left in to Kingsley Street.

See inside front cover for Location Map.

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