

SUPERCHARGERS

These are all rebuilt Superchargers and we can supply as a complete package or as parts needed to build up your own kit. Our workshop is able to undertake fitting complete system to you're 'A'-Series car, and Quotations are available on request. Superchargers fitted by us carry a 3 months parts and labour guarantee against faulty workmanship.

ty	Part No	Description	Cost Each	Basic Kit
Ly	Tartito	Description	Cost Lacii	Dasic IXII
	CPP 017	RELIEF VALVE PIPE	£150.00	1
	PCP 016	WATER BEND PIPE	£20.00	_
	CNM 007	INDUCTION MANIFOLD	£250.00	1
	CDS 046	FAN DISTANCE PIECE	£25.00	1
	CPP 067 / 1	OUTLET PIPE	£55.00	1
	CPP 057	CARBURETTOR PIPE	£75.00	1
	S75 –19	SUPERCHARGER C75B	£850.00	1
	CDS 081	DISTANCE PIECE	£35.00	1
	CNM 001	EXHAUST MANIFOLD (steel)	£75.00	
	SHL41	SILICONE HOSE	£7.50	1
	CPU 084	3V CRANK PULLEY	£120.00	1
	CPU 047	2V DRIVE PULLEY	£85.00	1
	CPL 021	MOUNTING PLATE	£68.50	1
	SPZ 940	V BELTS	£14.50	2
	G - 600 - 3	BRAIDE OIL HOSE	£35.00	1
	G-321-03P	BSP FEMALE SWIVEL FITTING	£7.50	1
	G-32103SMP	SWIVEL FEM ST BSP 600	£7.50	1
	2-T	1/8" T" FEMALE PIECE	£7.50	1
	2-HN-2RT	1/8" BSP MALE/ MALE TAPERED FITTING	£5.00	1
		0 –12 PSI PRESURE GAUGE	£145.00	
	YDB 001	1/8" X 1/4" BSP REDUCING UNION	£7.50	2
	CSV 010	1/4" DISTRIBTOR BUSH	£9.50	1
	43 / 45D4	NEW DISTRIBUTOR ALL SET UP	£185.00	
		NEW SU H4 1 1.2" CARB	£265.00	



Shorrock Supercharger Austin Healey Mk11 Sprite Set up

Qty	Part No	Description	Cost Each	Basic Kit
1	CPP 0105	RELIEF VALVE PIPE	£165.00	1
2	PCP 016	WATER BEND PIPE	£20.00	
1	CNM 014	INDUCTION MANIFOLD	£265.00	1
1	CDS 046	FAN DISTANCE PIECE	£25.00	1
1	CPP 067 / 1	OUTLET PIPE	£55.00	1
1	CPP 013 / 1	CARBURETTOR PIPE	£85.00	1
1	S75 –19	SUPERCHARGER C75B	£850.00	1
1	CDS 081	DISTANCE PIECE	£35.00	1
1	SHL41	SILICONE HOSE	£7.50	1
1	CPU 084	3V CRANK PULLEY	£120.00	1
1	CPU 047	2V DRIVE PULLEY	£85.00	1
1	CPL 048	MOUNTING PLATE	£68.50	1
2	SPZ 940	V BELTS	£14.50	2
2	G - 600 - 3	BRAIDE OIL HOSE	£35.00	1
2	G-321-03P	BSP FEMALE SWIVEL FITTING	£7.50	1
2	G-32103SMP	SWIVEL FEM ST BSP 600	£7.50	2
1	2-T	1/8" T" FEMALE PIECE	£7.50	1
2	2-HN-2RT	1/8" BSP MALE/ MALE TAPERED FITTING	£5.00	2
1		0 –12 PSI PRESURE GAUGE	£145.00	
1	YDB 001	1/8" X 1/4" BSP REDUCING UNION	£7.50	
1	CSV 010	1/4" DISTRIBTOR BUSH	£9.50	1
1	43 / 45D4	NEW DISTRIBUTOR ALL SET UP	£185.00	
1		NEW SU H4 1 1.2" CARB	£265.00	

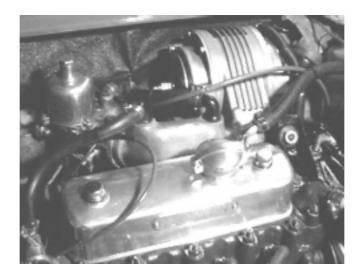
THE ABOVE BASIC KIT IS OFFERED AT £1520.00





Shorrock Supercharger Mini & Mini Cooper Set up

Qty	Part No	Description	Cost Each	Basic Kit
1	CPP 0113 / 1	CARBURETTOR PIPE	£95.00	1
1	CPP 0108 / 1	RELIEF VALVE & REAR MOUNT PLATE	£175.00	1
l	CPP 0107	OUTLET PIPE	£56.00	1
l	S75 - 19	SUPERCHARGER C75B	£850.00	1
	CDS 081	DISTANCE PIECE ON TIMING COVER	£35.00	1
	CNM 0015	INDUCTION MANIFOLD	£300.00	
	CDS 046	FAN DISTANCE PIECE	£25.00	1
	CDS 073	A & B REAR DISTANCE PIECES	£4.50	2
	SHL41	SILICONE HOSE	£7.50	1
	CPU 084	3V CRANK PULLEY	£120.00	1
	CPU 046	2V DRIVE PULLEY	£85.00	1
	CPU JP	JOCKY WHEEL	£95.00	1
	CPL 045	MOUNTING PLATE	£75.00	1
	CPL 046	JOCKY WHEEL MOUNTING PLATE	£15.00	1
	SPZ 1112	V BELTS	£16.50	2
	G - 600 - 3	BRAIDE OIL HOSE	£35.00	1
	G-321-03P	BSP FEMALE SWIVEL FITTING	£7.50	1
	G-32103SMP	SWIVEL FEM ST BSP 600	£7.50	1
	2-T	1/8" T" FEMALE PIECE	£7.50	1
	2-HN-2RT	1/8" BSP MALE/ MALE TAPERED FITTING	£5.00	1
		0 –12 PSI PRESURE GAUGE	£145.00	
	YDB 001	1/8" X 1/4" BSP REDUCING UNION	£7.50	1
	CSV 011	1/4" DISTRIBTOR BUSH	£9.50	1
	CSV012	5/16" DISTRIBTOR BUSH	£10.50	
	43 / 45D4	NEW DISTRIBUTOR ALL SET UP	£185.00	
		NEW SU H4 1 1.2" CARB	£265.00	





Shorrock Supercharger Ford 105E/9 Set up

Qty	Part No	Description	Cost Each	Basic Kit
1	CPP 083	RELIEF VALVE PIPE	£48.00	1
1	CNM 012	INDUCTION MANIFOLD with out Relief valve	£120.00	1
1	CNM 012/1	INDUCTION MANIFOLD with built in Relief valve	£165.00	
1	CDS	FAN DISTANCE PIECE	£25.00	1
1	CPP 067	OUTLET PIPE	£55.00	1
1	CPP 0105	MINIFOLD INLET PIPE	£35.00	
1	CPP 073/1	CARBURETTOR PIPE	£65.00	1
1	S75 –19	SUPERCHARGER C75B	£850.00	1
1	SHL41	SILICONE HOSE	£7.50	1
1	CPU	3V CRANK PULLEY	£120.00	1
l	CPU 047	2V DRIVE PULLEY	£85.00	1
1	CPL	MOUNTING PLATE	£72.00	1
2	G - 600 - 3	BRAIDE OIL HOSE	£35.00	1
2	G-321-03P	BSP FEMALE SWIVEL FITTING	£7.50	1
2	G-32103SMP	SWIVEL FEM ST BSP 600	£7.50	1
1	2-T	1/8" T" FEMALE PIECE	£7.50	1
2	2-HN-2RT	1/8" BSP MALE/ MALE TAPERED FITTING	£5.00	1
1		0 –12 PSI PRESURE GAUGE	£145.00	
1	YDB 001	1/8" X 1/4" BSP REDUCING UNION	£7.50	
1	CSV009	1/4" DISTRIBTOR BUSH	£9.50	1
1	CSV006	5/16" DISTRIBTOR BUSH	£10.50	
1	43 / 45D4	NEW DISTRIBUTOR ALL SET UP	£185.00	
		NEW SU H4 1 1.2" CARB	£265.00	

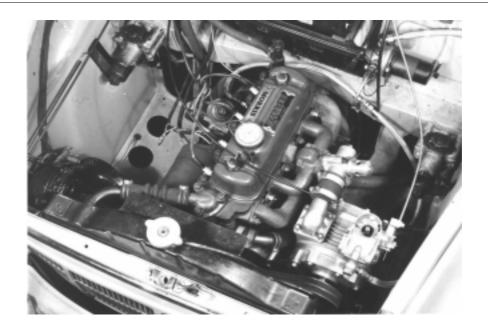






Shorrock Supercharger Austin A40 Set up

Qty	Part No	Description	Cost Each	Basic Kit
1	CPP 017	RELIEF VALVE PIPE	£150.00	1
2	PCP 016	WATER BEND PIPE	£20.00	
1	CDS 046	FAN DISTANCE PIECE	£25.00	1
l	CPP 067 / 1	OUTLET PIPE	£55.00	1
l	CPP 013 / 1	CARBURETTOR PIPE	£75.00	
L	S75 –19	SUPERCHARGER C75B	£850.00	1
ĺ	CDS 081	DISTANCE PIECE	£35.00	1
	CDS 046	FAN DISTANCE PIECE	£25.00	1
1	SHL41	SILICONE HOSE	£7.50	1
1	CPU 084	3V CRANK PULLEY	£120.00	1
1	CPU 047	2V DRIVE PULLEY	£85.00	1
1	CPL 048	MOUNTING PLATE	£68.50	1
2	SPZ 940	V BELTS	£14.50	2
2	G - 600 - 3	BRAIDE OIL HOSE	£35.00	1
2	G-321-03P	BSP FEMALE SWIVEL FITTING	£7.50	1
2	G-32103SMP	SWIVEL FEM ST BSP 600	£7.50	1
1	2-T	1/8" T" FEMALE PIECE	£7.50	1
2	2-HN-2RT	1/8" BSP MALE/ MALE TAPERED FITTING	£5.00	1
1		0 –12 PSI PRESURE GAUGE	£145.00	
1	YDB 001	1/8" X 1/4" BSP REDUCING UNION	£7.50	
1	CSV 010	1/4" DISTRIBTOR BUSH	£9.50	1
	43 / 45D4	NEW DISTRIBUTOR ALL SET UP	£185.00	





Shorrock Supercharger Morris Minor Set up

Qty	Part No	Description	Cost Each	Basic Kit
1	CPP 017	RELIEF VALVE PIPE	£150.00	1
2	PCP 016	WATER BEND PIPE	£20.00	
1	CDS 046	FAN DISTANCE PIECE	£25.00	1
1	CPP 067 / 1	OUTLET PIPE	£55.00	1
1	CPP 013 / 1	CARBURETTOR PIPE	£75.00	
1	S75 –19	SUPERCHARGER C75B	£850.00	1
1	CDS 081	DISTANCE PIECE	£35.00	1
1	CDS 046	FAN DISTANCE PIECE	£25.00	1
1	SHL41	SILICONE HOSE	£7.50	1
1	CPU 084	3V CRANK PULLEY	£120.00	1
1	CPU 047	2V DRIVE PULLEY	£85.00	1
1	CPL 048	MOUNTING PLATE	£68.50	1
2	SPZ 940	V BELTS	£14.50	2
2	G - 600 - 3	BRAIDE OIL HOSE	£35.00	1
2	G-321-03P	BSP FEMALE SWIVEL FITTING	£7.50	1
2	G-32103SMP	SWIVEL FEM ST BSP 600	£7.50	1
1	2-T	1/8" T" FEMALE PIECE	£7.50	1
2	2-HN-2RT	1/8" BSP MALE/ MALE TAPERED FITTING	£5.00	1
1		0 –12 PSI PRESURE GAUGE	£145.00	
1	YDB 001	1/8" X 1/4" BSP REDUCING UNION	£7.50	
1	CSV 010	1/4" DISTRIBTOR BUSH	£9.50	1
1	43 / 45D4	NEW DISTRIBUTOR ALL SET UP	£185.00	

Shorrock Supercharger H4 SU Carburettor & Spark Plugs

Qty	Part No De	scription Cost	Each
1	R.A.	H4S.U. CARB NEEDLE SIZE ROAD USE	£8.50
1	R.F.	H4S.U. CARB NEEDLE COMPETITION USE	£8.50
1	0.100	H4 S.U. CARB MAIN JET	£9.95
4	N3	CHAMPION SPARK PLUGS / EQUIVALENT	£
1	0.90	H4S.U.CARB MAIN JET	£9.95
1	B.G.	H4S.U. CARB NEEDLE SIZE ROAD USE	£8.50
1	BLUE	SU CARB SPRING	£6.50
4	N6Y	CHAMPION SPARK PLUGS / EQUIVALENT	£
1	R.C.	H4S.U. CARB NEEDLE SIZE ROAD USE	£8.50
1	0.100	H4S.U.CARB MAIN JET	£9.95
1	RED	SU CARB SPRING	£6.50
4	N6Y	CHAMPION SPARK PLUGS / EQUIVALENT	£
1	R.G.	H4S.U. CARB NEEDLE COMPETITION USE	£8.50
1	0.100	H4S.U.CARB MAIN JET	£9.95
1	RED	SU CARB SPRING	£6.50
4	N.3	CHAMPION SPARK PLUGS / EQUIVALENT	£
1		SU H4 NEW CARBURETTOR	£265.00



Shorrock Supercharger Hoses

Qty	Hose size	Description	Part No	Required location	Cost Each
1 2MTR	41mm x 51mm 16MM OR 5/8"	SILICONE HOSE HEATER HOSE	SHL41 836-10	OUT LET PIPE INTERCONNECT	£7.50
2M1K 2	3/8" X 3/8"	S/ ELBOW MALE/FEM	830-10 RS231-6335	INLET MANIFOLD WATER INLET MANIFOLD	£0.85 per foot £2.95
2	3/8" A 3/8	MALE INSERT	RS257-7906	WATER INLET MANIFOLD	£1.75
1	1/4" X 12"	COPPER TUBE	CCP 0130		£10.50







Shorrock Supercharger Mounting plates

Qty	Bracket no	Description	Spacer size	Rear spacer	Cost Set
1	CPL 045	5MM FRONT PLATE	1.3/4 INCHES	17MM	£75.00
1	CPL 046	5MM JOCKEY WHEEL PLATE			£15.00
1	CPL 021	5MM FRONT PLATE	1.3/4 INCHES	NONE	£68.50
1	CPL 048	5MM FRONT PLATE	1.3/4 INCHES	NONE	£68.50
1	CPL 047	5MM FRONT PLATE	1.3/4 INCHES	NONE	£68.50
1	CPL 100E	5MM FRONT PLATE			£75.00
1	CPLALB	5MM FRONT PLATE			£75.00
1	CPL 0105E	5MM FRONT PLATE			£72.00
1	CPL 037	5MM FRONT PLATE			£65.00
1	CPK	FRONT MOUNTING BRACKET			£
1	CDS	5MM FRONT PLATE			£95.00





Shorrock Supercharger Fans

Qty	Type	Part No	Description	Cost Each
1	2	AEA301	TWO BLADED FAN	£15.50
1		2A803	STIFFENER	£4.50
1	1/4"	AEG560	BL DISTANCE PIECE	£5.50

Shorrock Supercharger Thermostat

Qty	Part No	Description	Cost Each
1	AJJ4012	RACING BLANKING KIT	£12.00
1	GTS 102	74C THERMOSTAT	£5.50

Shorrock Supercharger Distributors

Qty	Part No	Description	Cost Each
1	DIS 100 AR	DISTRIBUTOR	
1	DIS 100 AR	DISTRIBUTOR	
1	43 / 45D4	DISTRIBUTOR	£185.00



Shorrock Supercharger Distributors Bushes

Qty	Part No	Description	Cost Each
1	CSV 010	1/4" DIA BUSH	£9.50
1	CSV 012	5/16" DIA BUSH	£10.50
1	CSV 011	1/4" DIA BUSH	£9.50
1	CSV 006	5/16" DIA BUSH	£10.50
1	CSV 009	1/4" DIA BUSH	£9.50



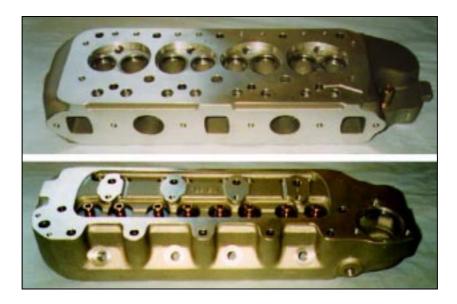




TRIUMPH VITESSE



Alloy Head To Suit Supercharging



NEW ALLOY HEAD WITH 23CC CHAMBER WITH 30% INPROVEMENT IN POWER WITH EXCELLENT COOLING PROPERTIES FOR SUPERCHARGERING. A BOLT ON MOD FOR 1275CC ENGINES. YOU WILL HAVE TO POCKET A BLOCK IF USED ON 850.948, 977, 998 AND 1098CC ENGINES.

Cost £625.00

Shorrock Supercharger Bearing and Seal Kit

Qty	Bearing No	Oil Seal Number	Location	Cost Each
8	16004		VANE CARRIER	£7.50
1	TYPE TWO XLJ2,1/4J		REAR END PLATE	£ POA
1	TYPE ONE 6010		REAR END PLATE	£17.50
2		W13708737R5	FRONT SHAFT SEAL	£8.50
1	N205C3		FRONT END PLATE	£32.00
1	JP/OB		JOCKEY WHEEL	£ POA



N205C3





17



Shorrock Supercharger Nut & Bolts

Qty	Bolt Size	Location St	upercharger	Cost Each
8	1/4 X 1 1/2" BSF	FRONT FACE	C75B	£
8	5/16 X 1 1/2" BSF	REAR FACE	C75B	£
2	1/4 X 2 1/4" BSF	REAR MOUNTING BRACKET	C75B	£
2	5/16 X 3/4" BSF	FRONT MONTING BRACKET	C75B	£
1	1/4 X 2" BSF	FRONT MONTING BRACKET	C75B	£
2	7/16 X 2 1/4" UNF	FRONT DISTANCE PIECE TIMING CO	OVER C75B	£
2 OR 4	5/16 X 3/4" BSF	INLET CARB PIPE	C75B	£
OR 2	5/16 X 2" BSF	INLET CARB PIPE	C75B	£
OR 2	5/16 X 2 1/4" BSF	INLET CARB PIPE	C75B	£
2 OR 4	5/16 X 3/4" BSF	OUTLET PIPE	C75B	£
OR 2	5/16 X 2" BSF	OUTLET PIPE	C75B	£
OR 2	5/16 X 2 1/4" BSF	OUTLET PIPE	C75B	£
1		DRIVE SHAFT NUT	C75B	£
2	1/4 X 2 1/4" BSF	POP OFF VALVE	C75B	£
2	3/8 X 1" BSF	H4 CARB BOLTS	C75B	£

Shorrock Supercharger Jublilee Clips

Q	ety J-Clip Size	Location	Supercharger	Cost Each
2 2	28 = 34 – 57MM	OUTLET INTERCONNECTING PIPE	C75B	£0.90
	5/8"	WATER PIPES	C75B	£0.65

Shorrock Supercharger Withdrawal bolts

Qty	Bolt Size	Location	Supercharger	Cost for set
2	3/16"	ROTOR DRIVE PLATE	C75B & C142B	£5.50



MGA 1500CC SET UP



RILEY 1500 SET UP



Shorrock Supercharger Models

Qty	Casting No	Description	Cost Each
1	C142B	HORSEHOE TYPE	£750.00
1	C75B	HORSEHOE TYPE	£850.00
1	C75S	STRAIGHR TYPE	£950.00
1	C75B	HORSEHOE TYPE WITH LONG NOSE	£1050.00







C75B HORSEHOE TYPE

C75S STRAIGHT TYPE

C75B HORSEHOE TYPE WITH LONG NOSE

THERE ARE THREE TYPES OF CASING USED, TWO OF THE ABOVE LISTED ARE CALLED HORSESHOE TYPE THE THIRD IS CALL A STRAIGH CASING AS THE INLET AND OUT LET ARE AT 9 O CLOCK AND 3 O CLOCK.

Shorrock Supercharger Metering Pins

Qty	Pin No	Description	Cost Each
1	CMP 002A	METERING PIN A = .311 THOU	£16.00
1	CMP 002B	METERING PIN B = $.3105$ THOU	£16.00
1	CMP 002C	METERING PIN $C = .3100 \text{ THOU}$	£16.00
1	CMP 001JP	OVERSIZE METERING PIN	£17.50
1	A MET	ERING PIN A = .304 THOU C75B WITHOUT CO	NNECTION TO ENGINE OIL SUPPLY
1	B MET	ERING PIN A = .306 THOU C75B WITHOUT CO	NNECTION TO ENGINE OIL SUPPLY £18.50









FORD 100E ALBATROSS BOAT SET UP



Shorrock Supercharger Pulleys

Qty	Part No	Description	Cost Each
1	CPU 084	89MM 3V CRANK PULEY	£120.00
1	CPU 047	92MM 2V SUPERCHARGER PULLEY	£85.00
1	CPU 046/1	82MM 2V SUPERCHARGER PULLEY	£85.00
1	CPU 093/S	74MM 2V SUPERCHARGER PULLEY	£85.00
1	CPU JP	55MM JOCKEY WHEEL	£95.00









PART NO CPU 047

PART NO CPU 046

PART NO CPU 093

P/NO CPU 084

PART NO CPU / JP

Shorrock Supercharger Drive Belts

Qty	Part No	Crank Pulley	S/C Pulley	Centres	vehicle	Cost Each
2	SPZ 1120	89MM	92MM	42CM	MINI	£16.50
2	SPZ 1112	89MM	82MM	42CM	MINI	£16.50
2	SPZ 1087	89MM	74MM	42CM	MINI	£16.50
2	SPZ 940	89MM	92MM	33CM OR 13"	SPRITE	£14.50
2	SPZ 922	89MM	82MM	33CM OR 13"	SPRITE	£14.50
2	SPZ	89MM	74MM	33CM OR 13"	SPRITE	£14.50

Shorrock Supercharger C75B Spares

Qty	Part No	Description	Cost Each
1	C75B	FRONT END PLATE	£150.00
1	C75B	ROTOR DRIVE PLATE	£165.00
1	C75B	MAIN CASING	£280.00
1	C75B	ROTOR	£400.00
1	C75B	VANE SHAFT	£220.00
l	C75B	REAR END PLATE	£185.00
1	C754	TRUNNIONS	£55.00
4	C75B	VANES	£65.00
8	C75B	VANE AND BEARING CARRIER	£ POA
1	C75B	VANE NUT	£20.00
1	C75B	LOCKING PLATE	£25.00
1	C75B	RELIEF VALVE	£86.00

The supply of second hand spares is finite so listed items may not always be in stock or available. It is therefore essential when ordering second hand goods that you enquire as to availability.



Supercharger Computer Program on CD or disc

We have now a new Excel program that allow you to calculate what size supercharger pulley require to Increase performance. What size drive belts you would require, and the maximum RPM you can run engine and supercharger. Included in this is the ABC of supercharging catalogue, all the fitting instructions listed below, plus photos old press cuttings and lots more.

Cost £25.00

Shorrock Supercharger C75B Copies of Fitting Instructions

Qty	Part No	Description	Cost Each
1	C75B	AUSTIN HEALEY SPRITE MK1 / 2	£8.50
1	C75B	MINI / MINI COOPER	£8.50
1	C75B	MORRIS MINOR	£8.50
1	C75B	A40	£8.50
1	C75B	FORD 105/9	£8.50
1	C75B	FORD	£8.50
1	C754	MG TB/TC	£8.50
4	C75B	TRIUMPH HERALD	£8.50
8	C75B	DISMANTLING & REASSEMBLING	£9.50
1	C75B	PRESS CUTTINGS	£5.50

Supercharger engine fitting projects

We can supply a complete supercharger package of all the parts needed to build up your own engine, or have us fit a standard kit to your car. If we don't have a kit we can prototype your car to fit a supercharger. Our labour costs are very reasonable at £20.00 an hour.

We always have other Supercharger s and kits available that aren't listed within this spares catalogue, so please contact us with your requirements and see if we can help.

We also offer a precision sand casting of magnesium or aluminium alloy service along with full precision machine shop facilities .

BSCS also offer a car or engine collection and delivery service. (Terms available) – 70p per mile Prices do not include UK Vat which must be added as required.



Cure for BMC A-SERIES engine rear crank oil leaks.

OIL LEAKS from the rear main bearing is a common problem with BMC A- series engines as used in Austin A35s, Morris Minors, MG Midgets, A40's, Austin Healey Sprites and Marina/Ital.



On these engines there is no conventional rubber seal, instead there is a throw plate machined as part of the crankshaft and sited close to the block. A scroll cut into the crank extension directs oil that gets past the throw plate back towards the plate into the drain hole. This arrangement can cope with about 90 percent of the oil flow, and a close-fitting mechanical seal at the outer end is designed to cope with the remainder.

When the engine wears, the mechanical seal becomes oval and the leak gets worse and worse.

British Classic Sports Cars of Aberdeen Scotland Tel 01224 868633 Fax 01224 868151 are selling a three-

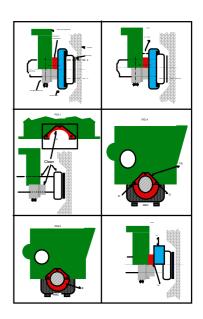
part carrier assembly that bolts to the rear of the engine block and carries a conventional lip seal that runs on the flywheel mounting boss at the end of the crank. This is effective on all but badly worn engines, but do ensure that the breather system is working correctly. These kits fit the 984cc both types of 1098cc,1275cc and the 1300cc.

10cc 1098 engine fitted with the above oil seal kit



Being prepared to fit into an 1962 Ex works Austin Healey Sprite

£68.50 Plus P&P





Shorrock Supercharger Manifolds





SPRITE MK1 OR A40 INLET MANIFOLD NO CNM 007

SPRITE MK2/MG MIDGET INLET MANIFOLD NOCNM 014





FORD 109E INLET MANIFOLD NO CNM 012 $^{\prime}1$

FORD 105E INLET MANIFOLD NO CNM 012

Shorrock Supercharger Outlet Pipe





SPRITE OUTLET PIPE NO CPP 067

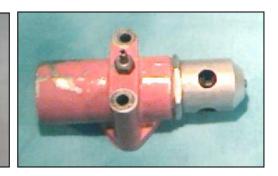
MINI OUTLET PIPE NO CPP 0107



Shorrock Supercharger Relief Valves







MINI RELIEF VALVE CPP 0108/1

SPRITE MK1 RELIEF VALVE CPP 017

SPRITE MK1 1 RELIEF VALVE CPP 0105







RELIEF VALVE CPP 083 FORD CLASSIC MORRIS MINOR SIDE VALVE

Shorrock Supercharger Carburettor Pipes



FORD 105E CARB PIPE FORD CLASSIC



SPRITE MK2 / MIDGET CARB PIPE CPP 013/1



HERALD CARB PIPE NO CPP 0124







FORD CARB PIPE NO CPP 073 CORTINA/ANGLIA/MORRIS MINOR

MINI CARB PIPE NO 0113 LATER TYPE

MINI CARB PIPE NO CPP 0113 EARLY TYPE





MK1 SPRITE / A40 CARB PIPE NO CPP 057

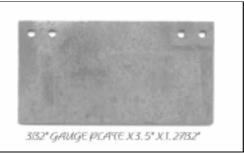
ALLARD SHORROCK FORD CASTING



FORD 105E MANIFOLD INLET PIPE CPP 0105 FORD CORTINA MK1

Shorrock Supercharger Vane

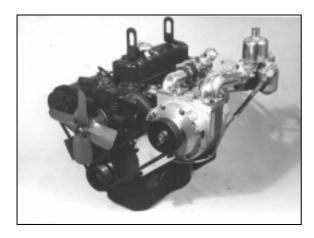




BRONZE VANE CARRIER WITH VANE AND VANE TRUNNION - C75B SUPERCHARGER VANE



Shorrock Supercharger Installations Photos



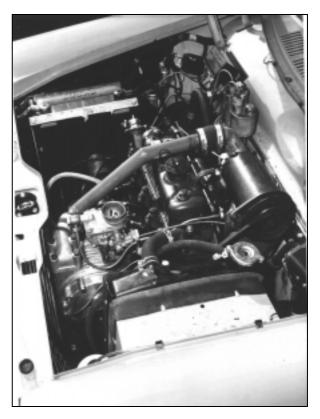
SHORROCK SUPERCHARGER C75B FITTED TO BMC 'A' SERIES ENGINE (Sprite, Minor, A40)



SHORROCK SUPERCHARGER C75B FITTED TO FORD CORTINA ENGINE

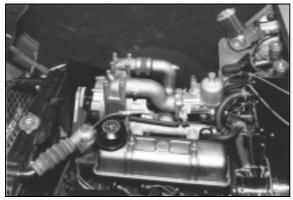


SHORROCK SUPERCHARGER C75B FITTED TO FORD 105E ENGINE



SHORROCK SUPERCHARGER C75B FITTED TO MORRIS 1100 ENGINE

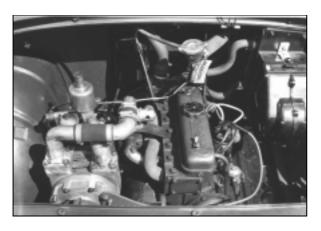




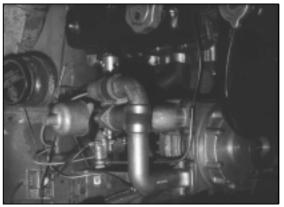
SHORROCK SUPERCHARGER C75B FITTED TO HERALD 1200CC ENGINE



SHORROCK SUPERCHARGER C75B FITTED TO LAND ROVER ENGINE



SHORROCK SUPERCHARGER C75B FITTED TO R8 ENGINE



SHORROCK SUPERCHARGER C75B FITTED TO SIMCA ENGINE



SHORROCK SUPERCHARGER C75B FITTED TO TRIUMPH VITESSE 6



SHORROCK SUPERCHARGER C75B FITTED TO VAUSHALL VX 4/90





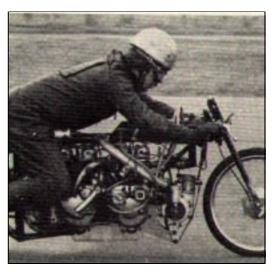
SHORROCK SUPERCHARGER C75B FITTED TO MK11 AUSTIN HEALEY SPRITE



SHORROCK SUPERCHARGER C75B SPRITE MK11 SUPERCHARGER KIT

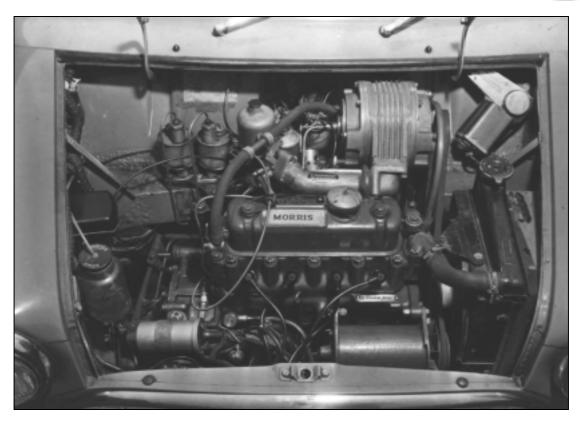


SHORROCK SUPERCHARGER C75B FORD 100E ALBATROSS KIT

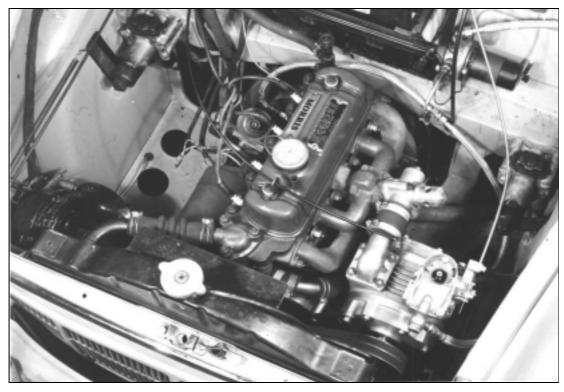


SHORROCK SUPERCHARGER C75B FITTED TO MOTOR BIKE



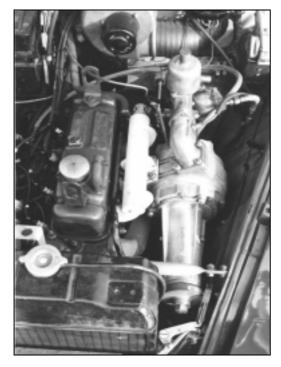


SHORROCK SUPERCHARGER C75B FITTED TO MINI ENGINE.

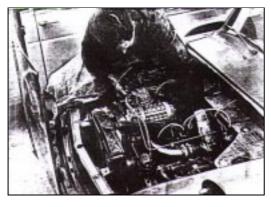


SHORROCK SUPERCHARGER C75B FITTED TO MORRIS MINOR





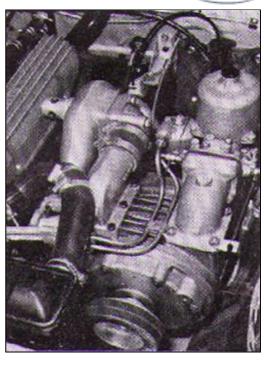
SHORROCK SUPERCHARGER LONG NOSE C75B FITTED TO RILEY 1.5 OR M.G. MAGNET



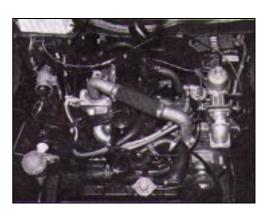
SUPERCHARGER FITTED FORD 100E



SHORROCK SUPERCHARGER C75B FITTED TO MGA 1500 ENGINE



SHORROCK SUPERCHARGER C142B FITTED TO FORD 1500 GT



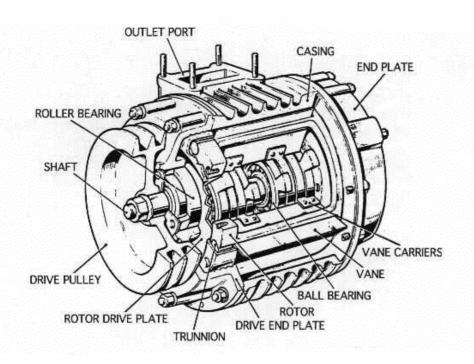
SHORROCK SUPERCHARGER C142B FITTED TO FORD ESCORT 1300

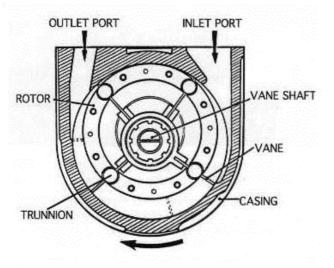


SHORROCK SUPERCHARGER C142B FORD SETUP



Shorrock Supercharger Exploded View C75B and C142B





END VIEW

OILING SYSTEM FOR THE C75B AND 142B

©



S.U. Carburettor

Setting of single H type carburettor.

Carburettor details:-

Type S.U. 1 1/2" H4

• 948cc Needle size RA for road use

• 948cc Needle size RF for competition use

Main Jet .0100

• 998cc Needle size BG for road use

Blue SpringMain Jet .0100

1275cc Needle size RC for road use

1275cc Needle size RG for competition use

Red Spring

As the needle size is determined during engine development, tuning of the carburettor is confined to correct idling setting.

The engine should be run until it has attained its normal temperature, then close the throttle completely by unscrewing the throttle adjusting screw until the face of the screw just clears its stop. Open it by screwing down the screw 1 1/2 turns.

Remove the piston and suction chamber, disconnect the mixture control wire and screw the jet adjusting nut until the jet is flush with the bridge of the carburettor, or 'full up' if this position cannot be obtained. Replace the piston and suction chamber assembly, and check that the piston falls freely on to the bridge of the carburettor (by means of the piston lifting pin.) Turn down the jet adjusting nut two complete turns (12 flats).

Re-start the engine and adjust the throttle adjusting screw to give the desired idling speed, generally 750 - 850 rpm.

Turn the jet adjusting nut until the fastest idling speed is obtained, consistent with even firing. During this adjustment it is necessary to ensure that the jet is pressed upwards and is in contact with its adjusting nut.

As the mixture is adjusted the engine will probably run faster, it may therefore be necessary to unscrew the throttle adjusting screw a little, in order to reduce the speed.

Now check the mixture strength by lifting the carburettor piston (by means of a lift pin situated on the side of the carburettor body) by approximately 1/32" (.75mm)

lf:-

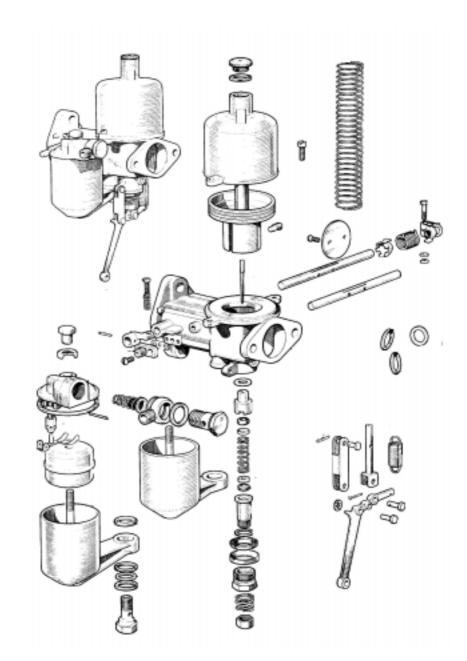
- 1. The engine speed increase and continues to run faster, this indicates that the mixture is too rich.
- 2. The engine speed immediately decrease, this indicates that the mixture is too weak.
- 3. The engine speed momentarily increases very slightly, this indicates that the mixture is correct.

When the mixture is correct the exhaust note should be regular and even. If it is irregular with a splashy type of misfire and colourless exhaust, the mixture is too weak. If there is a regular or rythmical type of misfire. Together with a blackish exhaust, than the mixture is too rich. N.B. It is always best to err on the rich side rather than set the carburettor weak.



Re-connect the choke control wire with approximately 1/16" free movement before it starts to pull on the jet lever.

Fill the carburettor dash pot with clean S.A.E. 20 engine oil.



S.U. H4 1 1/2 inch AUC 818 Carburettor used on Mini or Sprite Shorrock C75B Superchargers



BMC 'A' Series Engine Ignition setting and modification to distributor

- 1. Remove the distributor from the engine.
- 2. Remove the bakelite cap rotor arm and top plate to expose the bob weights.
- 3. Mark the weights so that they can be returned to their respective positions after removal.
- 4. Examination of the weights will show that they are limited in their outward throw by a peg which is cast into the weight itself. This peg fits into a slotted hole, located beneath it when in position. Thus the maximum movement of the weight is controlled by the pegs movement with this slot.
- 5. The peg on the weight which carries the heavy spring must be bushed to further limit the movement. A 1/4" dia bush should be used, the centre hole of which must be a good fit on the peg.
 With the bush in position, lightly pean the head of the peg to hold the bush securely. On later distributors where the limit for the bob weights is in the form of a separate steel peg riveted to the bottom plate of the distributor a 5/16" bush should be used. This peg also anchors the spring.
- 6. Return the modified weight to its position in the distributor. Check that both weights and springs are fitted correctly.
- 7. Re-assemble distributor, check contact points and gap and return to engine.
- 8. Re- check the ignition setting and give 7 10 degrees static advance.





Shorrock Supercharger C75B Installation

Fitting Instructions for Mini and Mini Coopers

Introduction.

The design of the supercharger set for the 850, 977, 998, 1071 or 1275 BMC engine is such that the work may be confidently carried out by any competent garage mechanic or owner driver, and necessitates no modification to the engine or chassis. Fitting is simplified by reading through these instructions before starting work.

The supercharger is mounted on the manifold side of the engine with the ports facing on an angle towards the manifold, and is driven by the pulley belt from the front end of the crankshaft.

Note. These kits are not suitable for left-hand drive Minis.

During the installation care should be taken to retain all nuts and washer removed and to avoid damaging any packing as some of these are used again with the supercharger set.

Basic Specification.

Drain cooling system and disconnect battery.

Remove:- Bonnet

Front Grill Dynamo

Top Radiator Hose Radiator Cowling Fan Blades Radiator

Bottom Radiator Hose Crankshaft Pulley

Air Cleaner Carburettor

Carburettor Flange Studs Choke Control Cable

Disconnect heater pipes and keep them clear of engine compartment.

Fit Crankshaft Pulley and tighten securing bolt

Hydrolastic Pipe.

When the hydrolastic system is fitted, it will be found necessary to reposition the hydrolastic pipe fitted to the bulkhead near the radiator. This must be moved closer to the radiator sufficient to clear the supercharger pulley and belt, and then refitted to bulkhead panel.

Belt Tensioner Pulley

As the supercharger cannot be moved to take up any drive slackness a belt tensioner pulley (Jockey wheel) is to be fitted, so that the drive belts can be tensioned correctly.

Normally the tensioner pulley will be fitted to the front mounting plate but of course will need adjusting before finalising the installation, this is done by slackening the bolts in the slotted hole in the pulley mounting plate. (Note excessive tension on the drive belts should be avoided) Tension similar to that of the fan belt is quite adequate.



Fitting Front Plate.

Remove the two bolts from the timing cover, one located at its highest point and the other one adjacent at approximately 2 O/clock.

Front plate, with distance piece should now be fitted leaving the bolts loose.

Note: At this stage both fan and supercharger drive belts should slip over the crankshaft pulley. Check the fan belt is in good condition.

Replacing Radiator and Fan

Fit bottom hose complete with extension piece to radiator.

It is essential that the head of the bolt which passes through the radiator mounting bracket and is located nearest to the bulkhead be reduced by 1/8" to 3/16".

Replace fan. Fit radiator and connect bottom hose, tighten clips and mounting bolts.

Fitting Engine Tie Bar to Bulkhead

Remove the bolts which passes through the heater pipe location plate nearest to the edge of the bulkhead strengthening rib.

Remove nut and studs nearest to rocker cover from thermostat housing. Locate tie bar on bulkhead rid and fit securing washer and nut but do not tighten at this stage. (screw the adjusting bolt in the required direction to locate engine end of the tie bar.) Tighten bulkhead securing nut.

At this point the front plate can be tightened

Fitting Supercharger

The supercharger complete with pulley, carburettor, and outlet pipe is turned until the carburettor flange is vertical. Place it in the space between engine and bulkhead and move towards front plate.

Locate the Supercharger mounting studs in the front plate and fit washers and nuts. Do not tighten nuts at this stage.

Fit gasket between supercharger outlet pipe and inlet manifold. Fit bolts through supercharger outlet pipe and screw lightly into inlet manifold. Tighten up front plate nuts or bolts. Then tighten supercharger outlet pipe to manifold bolts. Fit belt onto supercharger pulley. Fit and tighten relief valve in outlet pipe, if not already fitted.

Fitting Carburettor and Controls

Fit carburettor to supercharger pipe and secure using gasket and bolts. Connect fuel supply line next. Fit copper or steel braided pipe to carburettor and connect the other end to flexible pipe removed from original carburettor. Fit choke control cable to carburettor, and then connect the throttle cable to the carburettor by locating the outer cable into the location boss fitted to the cable anchor bracket on the flange of the carburettor. By threading the inner cable through this boss and then fastening it to the throttle lever arm. Finally check that the throttle is opening fully.

Throttle Return Spring

Fit one end to the throttle return spring to the throttle cable anchor bracket and the other end to the top lever arm fitted to the carburettor butterfly spindle. This should then be adjusted to give sufficient tension to fully return the butterfly adjustment, screw onto its stop.



Oil Supply to Supercharger

Remove banjo bolt connecting filter pipe to engine and replace with tapped banjo bolt with oil union. (Or fit to oil gauge take off point) With 24" petroflex lay an oil supply to the lubrication connection at rear of supercharger passing round rear of engine to the banjo bolt this should then be secured.

Reassembling Heater Pipes

The pipe at the radiator end of the engine will need to be fitted with the piece of extension hose and copper pipe, and secured by jubilee clips. This is best routed over the front of the supercharger unit well clear of the supercharger pulley and supported by bracket bolted to the supercharger casing nearest to the bulkhead. The other heater pipe from the engine should be connected to the hot spot union on the carburettor pipe nearest to radiator. The other union on the carburettor pipe should finally be connected to the heater pipe which passes through the bulkhead at the rear of the supercharger.

Refitting the Accessories

Replace the following:- Dynamo, Radiator Cowling (the near-side of the cowling will have to be cut away to give clearance for the drive belts)Top Radiator Hose then refill the cooling system and connect battery.

Ignition Setting and Modification to Distributor

It is necessary to limit the advance on most supercharged engines and below is described the method of carrying this out. For full details see notes" Ignition Setting Modification to Distributor" within this booklet.

While it is easier to remove the distributor to carry out this work it can be carried out with the unit in position which can save time.

Disconnect automatic advance tube, remove HT cap, rotor and contact base plate. A peg fitted to the automatic base controls the limit of the weights. This peg also acts as anchor point for a spring. Remove this spring and fit a 1/4" bush to the peg then replace the spring making sure that the spring sits in the notch in the peg. Assemble the contact base check that the points have a gap of .015". Set the ignition advance Cooper S 12° standard Mini 8° - 10° static.

Servicing Instructions

Introduction:- The Shorrock Supercharger is a precision mechansim, which is fully tested of the years. Like any other machine however, it requires running in and should be driven for the first 250 miles. During this period the maximum road speed in top and third gears should not exceed 45 m.p.h. and 25m.p.h. respectively or 3500 rpm maximum. Property treated it will give many thousand of trouble free miles.



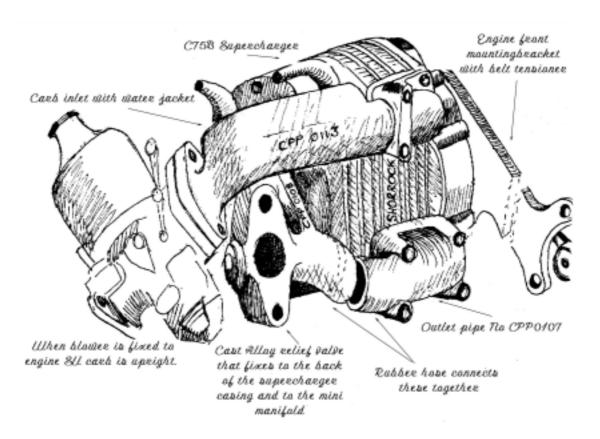
Lubrication

It is essential that the engine oil be kept clean and free from sludge. The supercharger has fitted a "B" pin in its lubricator (as new) this should be satisfactory for the initial running and quite likely permanently. As a guide, there should be a slight amount of smoke from the exhaust on starting up from cold, which should clear after a few minutes running. Should, however, signs of pronounced over oiling arise (for instance clouds of exhaust smoke) then the larger one type "A" should replace the lubricator pin type "B".

After every 5,000 miles the lubricator pin should be removed from the supercharger and the pin wiped with a soft rag. On no account should abrasives be used. To remove and replace the lubricator pin, proceed as follows:

Models with external lubricator body:- Unscrew the plug at the end of the lubricator, when the plug, spring and pin will come out together.

To re-assemble, assemble pin, spring and plug together, then insert spring first and screw plug down firmly.



Installation drawing and photo are available from British Classic Sports Cars at a cost of £ 8.50 a set



Shorrock Supercharger C75B Installation

Fitting Instructions for Austin Healey Sprite

Introduction.

The design of the supercharger set for the 948, 1098 or 1275 BMC engine is such that the work may be confidently carried out by any competent garage mechanic or owner driver, and necessitates no modification to the engine or chassis. Fitting is simplified by reading through these instructions before starting work.

The supercharger is mounted on the manifold side of the engine with the ports facing upwards towards, and is driven by twin "V" pulley belt from the front end of the crankshaft.

During the installation care should be taken to retain all nuts and washer removed and to avoid damaging any packing as some of these are used again with the supercharger set.

Preliminary Instructions.

- Drain cooling system and disconnect battery.
- Disconnect carburettor controls, petrol pipe and vacuum ignition control pipe.
 Remove induction manifold and carburettors complete. Remove radiator, and slacken dynamo belt and remove from crankshaft pulley and fan.

Crankshaft Pulley

You must slacken off all engine-mounting bolts to allow the front of the engine to be raise some 3" to allow access to remove the engine crankshaft pulley. and fit the new 3 grove crankshaft pulley and tighten the securing bolt. Then reinstate the engine mountings.

Fitting Front Plate.

Remove the two bolts from the timing cover, one located at its highest point and the other one adjacent at approximately 2 O/clock.

Front plate, with alloy distance piece should now be fitted using 2 x 2 1/4" UNF bolts. Screw into the existing tapped holes and protrude to the rear of the engine front plate where they are finally locked off by using two nuts and spring washers.

Note: At this stage both fan and supercharger drive belts should slip over the crankshaft pulley. Check the fan belt is in good condition.

Fitting Supercharger

The supercharger can now be positioned. Locate it by the new cast induction manifold, which should be already bolted to the supercharger, to the cylinder head. If care is taken the manifold and supercharger can be fitted as one.

Once the supercharger is in position all nuts, bolts and jubilee clips may now be finally tightened including the locking nuts on the front plate.



Fitting Carburettor and Controls

Fit carburettor to supercharger inlet pipe and secure using gasket and bolts. Connect fuel supply line next. Fit copper or steel braided pipe to carburettor and connect the other end to flexible pipe removed from original carburettor. Fit choke control cable to carburettor, and then connect the throttle cable to the carburettor by locating the outer cable into the location boss fitted to the cable anchor bracket on the flange of the carburettor. By threading the inner cable through this boss and then fastening it to the throttle lever arm. Finally check that the throttle is opening fully.

A separate leaflet is enclosed within this booklet explaining the carburettor set-up and jetting.

Throttle Return Spring

Fit one end to the throttle return spring to the throttle cable anchor bracket and the other end to the top lever arm fitted to the carburettor butterfly spindle. This should then be adjusted to give sufficient tension to fully return the butterfly adjustment, screw onto its stop.

Fan

Refit the fan using the aluminium distance piece to bring the fan clear of the supercharger drive belts. Use 4 longer 7/16" UNF bolts.

Radiator

Replace the radiator and you may have to re-route the bottom hose to miss the drive belts. Also it can happen where you may have to remove some the cowling near the drive belts.

Oil Supply to Supercharger

Remove banjo bolt connecting filter pipe to engine and replace with tapped banjo bolt with oil union. (Or fit to oil gauge take off point) With 24" petroflex lay an oil supply to the lubrication connection at rear of supercharger passing round rear of engine to the banjo bolt this should then be secured.

Ignition Setting and Modification to Distributor

It is necessary to limit the advance on most supercharged engines and below is described the method of carrying this out. For full details see notes" Ignition Setting Modification to Distributor" within this booklet.

While it is easier to remove the distributor to carry out this work it can be carried out with the unit in position which can save time.

Disconnect automatic advance tube, remove HT cap, rotor and contact base plate. A peg fitted to the automatic base controls the limit of the weights. This peg also acts as anchor point for a spring. Remove this spring and fit a 1/4" bush to the peg then replace the spring making sure that the spring sits in the notch in the peg. Assemble the contact base check that the points have a gap of .015". Set the ignition advance Cooper S 12° standard Mini 8° - 10° static.



Servicing Instructions

Introduction:- The Shorrock Supercharger is a precision mechansim, which is fully tested of the years. Like any other machine however, it requires running in and should be driven for the first 250 miles. During this period the maximum road speed in top and third gears should not exceed 45 m.p.h. and 25m.p.h. respectively or 3500 rpm maximum. Property treated it will give many thousand of trouble free miles.

Lubrication

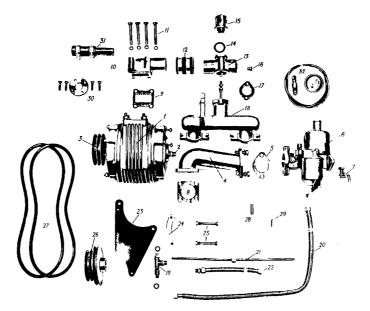
It is essential that the engine oil be kept clean and free from sludge. The supercharger has fitted a "B" pin in its lubricator (as new) this should be satisfactory for the initial running and quite likely permanently. As a guide, there should be a slight amount of smoke from the exhaust on starting up from cold, which should clear after a few minutes running. Should, however, signs of pronounced over oiling arise (for instance clouds of exhaust smoke) then the larger one type "A" should replace the lubricator pin type "B".

After every 5,000 miles the lubricator pin should be removed from the supercharger and the pin wiped with a soft rag. On no account should abrasives be used. To remove and replace the lubricator pin, proceed as follows.

Models with external lubricator body:- Unscrew the plug at the end of the lubricator, when the plug, spring and pin will come out together.

To re-assemble, assemble pin, spring and plug together, then insert spring first and screw plug down firmly.





- 1. C.75 B Supercharger.
- 2. Lubricator.
- 3. Supercharger Pulley.
- Carburettor Pipe (Shorter Pipe for Minor 1000 and A/40)
- 5. Carburettor Gasket.
- 1½ S.U. Carburettor Type H4 32 M.M. Solex for A/35.
- 7. Outer Cable Stop Bracket.
- 8. Inlet Port Gasket.

- 11. Set Bolt and Washer 5/16" B.S.F.
- 12 Rubber Hose and Clips. 13 Relief Valve Pipe.
- 14 Relief Valve Gasket.
- 15. Relief Valve.
- 16 Brass Plug (Boost Gauge Tapping).

- 18. Induction Manifold.
- 19. "T" Piece complete with Union and Washers.
- 20. Oil Supply Pipe 24 long.
- 21 Fuel pipe with Nut and Olives.
- Flexible Pipe with Union (Carourettor Connection not supplied for Minor 1000).
- 23. Front Plate.
- 24. Front Plate Distance Piece.
- 25. UNF Bolts with Nuts and Washers ¼"x 2¼"
- Crankshaft Pulley.
 Belts.
- 28. Spare Metering Pin and Sachet.29. Throttle Return Spring Bracket.
- 30. Fan Distance Piece and Set Bolts.
- Bottom Water Pipe Extension with Hose and Clip. (2 Bends and Hose Supplied for Minor 1000).
- 32. Boost Gauge complete with Nylon Tube and Pipe Connections (OPTIONAL).

WHEN ORDERING SPARES PLEASE QUOTE REFERENCE NUMBER AND DESCRIPTION.

Installation drawing and photo are available from British Classic Sports Cars at a cost of £ 8.50 a set





Supercharger type	Shorrock C75B Vane type	Shorrock C142B Vane type	
Overall length (to end of shaft)	9.0 ins (28.8cm)	10.75 ins (69.1cm)	
Overall casting length	7.0 ins (17.7 cm)	8.0 ins (20.3 cm)	
Overall diameter	7.0 ins (17.7 cm)	8.0 ins (20.3 cm)	
Weight	21.0 lbs (9.5 kls)	30.0 lbs (13.6 kls)	
Suitable for engines up to	1,300 c.c.	2,000 c.c.	
Capacity per revolution	750 c.c.	1,420 c.c.	
Maximum sustained speed	6,000 r.p.m.	4,750 r.p.m.	
Maximum short duration	7,250 r.p.m.	6,500 r.p.m.	
H.P. absorbtion 5.0 p.s.i. At 5000 rpm	4.6 HP	7.4 HP	
Normal operating range volumetric efficiency	83% - 88%	83% - 88%	
Charge compression within supercharger unit	YES	YES	
Lubrication	Pressure feed from engine and flow metered by sliding pin		
Oil consumption	2,000 m	iles per pint	
Supercharger drive shaft	6* taper	6* taper	
Vane and rotor clearance Racing clearances	Vane to end ca Rotor tip to cas	ing 0.004" clearance sting 0.0004" clearance ing 0.004" clearance y 0.002 - 0.004"	
Free air delivery 5.0 p.s.i at 5000 r.p.m	114 CFM	188 CFM	

British Classic Sport Cars

Terms of Business

COMPANY

British Classic Sports Cars The Old Police House Ardoe, Blairs, Aberdeen AB12 5YP Scotland

Tel 01224 868633 Fax 01224 868151 Mobile 0585 947 316 E-Mail sales@bcsc.demon.co.uk

PRICES

All prices on goods sold or delivered within Europe are subject to UK Vat.

Prices are subject to change from time to time, so please check when ordering.

ORDERING / QUOTATIONS

Quotations can be obtained and orders made by fax or E-Mail. Alternatively you may telephone during opening hours or, if you prefer to visit the workshop please make a prior appointment.

The supply of second hand spare is finite so listed items may not always be in stock. It is therefore essential when ordering second hand goods that you enquire as to availability.

PARTS FINDER SERVICE

We offer parts finder service for any classic vehicle. There is a finders fee of £14.95 charged for this service. How this works is will be able to put you in contact with a party sell the part you are looking for if we don't have it.

PAYMENT

Payment is to be made when ordering or requiring parts finder service as follows:-

United Kingdom

Payment may be made by Cash, Cheque, Postal Order, Bank transfer or credit card, Visa or Mastercard. All credit card settlements are subject to 4% charge.

OVERSEAS

Settlement by bank transfer should be for the invoice amount with any bank charges paid by remitter. Travellers cheques are also acceptable payment. Credit Card as listed below. All credit card settlements are subject to 4% charge.

PACKING AND CARRIAGE

Packing and carriage is additional to the given prices. When you know exactly what you want to order we will quote you the cost of carriage. Or we can arrange for deliver where you pay on delivery.

RETURNING NEW / RECONDITIONED GOODS

Any faulty goods or problems with the order will be rectified immediately by exchange or refund. Goods returned for other reason must arrive undamaged and within 7 days of receipt quoting the relevant invoice number. A handling charge of 15% will be imposed.

RETURNING SECOND HAND GOODS

Second hand goods are sold as serviceable units as far as can be know nand are not guaranteed or warranted in any way. Items which are found to be completely unserviceable may be exchanged if there is alternative stock. If no alternative stock is available a refund less 15% handling charge will be made.

RECONDITIONED – EXCHANGE UNITS

Old units MUST be returned with order or otherwise by special arrangement. Overseas customers are requested to mark the custom's declaration:

"OLD UNIT BEING RETURNED FOR REPAIR, NO COMMERCIAL VALUE"

as this avoids problems with importation. Old units must be reconditionable. A surcharge will be applied if units are beyond repair.

SHORTAGES

Before destroying a parcel please ensure that no items have been left in the packing. Any shortages must be reported with 3 working days and confirmed in writing.