

Stage 1 Increase	Modified `gas flowed' cylinder head (Type A), exchange SAH special tailpipe/silencer assembly	528 543/544
10-15 BHP	Total cost of above conversion inclusive of labor charges	522
	As above but in kit form for fitting yourself or by local garage.	522K
Stage II	Modified 'gas flowed' cylinder head (Type C), exchange	530
Increase	SAH large bore single tailpipe/silencer assembly	543
22 BHP	Special SAH extractor exhaust manifold	536
	Total cost of above conversion inclusive of labor charges	523
	As above but in kit form for fitting yourself or by local garage.	523K
Stage III	Modified 'gas flowed' cylinder head (Type C), exchange	530
-	SAH large bore single tailpipe/silencer assembly	543
Increase	Special SAH extractor exhaust manifold	536
35-40 BHP	Stage I SAH high-lift camshaft, exchange	531
	SAH competition valve springs	535
	2 x 45 DCOE Weber carburettors	519
	2 X SAH Weber inlet manifold	520
	Weber throttle linkage kit for above	521
	Total cost of above conversion inclusive of labor charges	524
Stage TV	As above but in kit form for fitting yourself or by local garage. This degree of tune gives maximum possible power output for road	524K
Stage IV Increase 42+ BHP	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration.	
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange	530
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly	
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange	530 543
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold	530 543 536
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs	530 543 536 531
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete	530 543 536 531 535 206 567
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete Laystall complete engine balancing	530 543 536 531 535 206 567 403
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete Laystall complete engine balancing Lightened flywheel, exchange	530 543 536 531 535 206 567 403 585
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete Laystall complete engine balancing Lightened flywheel, exchange 'New Glacier' recticular aluminum con rod bearings	530 543 536 531 535 206 567 403 585 577
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete Laystall complete engine balancing Lightened flywheel, exchange 'New Glacier' recticular aluminum con rod bearings New VP main bearings	530 543 536 531 535 206 567 403 585 577 579
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete Laystall complete engine balancing Lightened flywheel, exchange 'New Glacier' recticular aluminum con rod bearings New VP main bearings 2 x 45 DCOE Weber carburettors	530 543 536 531 535 206 567 403 585 577 579 519
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete Laystall complete engine balancing Lightened flywheel, exchange 'New Glacier' recticular aluminum con rod bearings New VP main bearings	530 543 536 531 535 206 567 403 585 577 579
Increase	This degree of tune gives maximum possible power output for road or track, with high level of sustained engine reliability (by reason of the engine balancing and oil cooler kit) coupled with improved acceleration. Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold SAH 26 high-lift camshaft, exchange SAH competition valve springs 4 X NGK type B77HC spark plugs Oil cooler kit, complete Laystall complete engine balancing Lightened flywheel, exchange 'New Glacier' recticular aluminum con rod bearings New VP main bearings 2 x 45 DCOE Weber carburettors 2 X SAH Weber inlet manifold	530 543 536 531 535 206 567 403 585 577 579 519 520

**NOTE** The BHP increase figures quoted above represent the <u>nett</u> brake horsepower improvement at the rear wheels compared with those figures achieved on a standard unmodified TR4A.

# **135** $\frac{\text{TR}2/3/4}{\text{BHP ENGINE}}$

Your own engine fully modified and rebuilt to develop approx 135/140 BHP (gross) with either SU (H6) or Stromberg (175 CD) carburettors, using the following modifications:

SAH Modified Cylinder Head (Type A), exchange And matched Inlet Manifold	528
Competition Valve Springs	534
High Lift Camshaft - SAH 26, exchange	531
New, latest type Crankshaft (NOT exchange/reground)	581
New 2.2 litre pistons and liners (or 1991 cc to special order)	545
New 'Special Glacier' recticular aluminum bearings	577
New Timing Chain and Tensioner	
Lighten flywheel	585
Competition Clutch Centre Plate	588
New Clutch Pressure Plate, exchange	587
Fully balanced Laystall engine assembly	403
4 branch Extractor Exhaust Manifold	536
Lucas Sports Coil	536
4 NGK B7HC Spark Plugs	020
Oil Cooler Installation kit	1304
Oil Cooler Radiator	570
All new gaskets, etc, throughout, and engine assembly painted in grey Resistant finish.	<sup>,</sup> heat

### Complete Engine Ready for Fitting

NOTE: A new diaphragm type assembly can be fitted if required for a small extra charge.

### 140/145 BHP ENGINE

517

NOTE: 45 DCOE Weber Carburettor conversion kit can be fitted to these Engines to achieve a further 8-10 BHP, for an additional charge, Comprising of part numbers 519, 520 and 521, which must be Added to basic part number 517 to assess total price.

> Labour charges for fitting these engines, if required, including Final tuning and road testing at our works - subject to additional Cost of any standard replacement parts which may be required.

Price on application.

We carry out all overhauling (including body repairs, rebuilding and respraying) Fitting of any of our accessories, conversions, tuning, etc. Contact our Service Department for quotations and advice.

## TR2/3/4 ENGINE ACCESSORIES

MODIFIED CYLINDER HEADS	SAH modified cylinder heads are supplied on an exchange basis subject to the original head being in reclaimable condition, ie, not cracked. Where it is necessary to fit valve inserts these will be charged for additional to the exchange price. All heads are supplied bare, ie, less all valves, springs and studs unless otherwise stated. When ordering please quote model, year, and type of carburetion used.	
TYPE A:	Modified 'gas flowed' cylinder head with enlarged and polished inlet/ exhaust porting; modified, polished and balanced combustion chambers, etc, for improved efficiency with performance. Valve guides are replaced as necessary - exchange Deposit in lieu of old unit	528 892
<u>TYPE C</u> :	Specially modified TR3A/4/4A cylinder head. Recommended for use Where maximum performance is required. Compression ration of 9.5 : 1. Inlet valves enlarged for improved breathing at top end - essential for maximum performance. Supplied with 4 special large SAH inlet valves - exchange Deposit in lieu of old unit	530 892
NOTE:	<ol> <li>Due to age and condition, etc, we recommend that wherever possible we modify your own cylinder head</li> <li>Types A &amp; C heads can be supplied complete with valves, springs, studs, etc - price on application</li> </ol>	
STEEL GASKETS	Special steel head gaskets recommended for use with above heads 86 mm.	011
SHIM PACKING	Shim packing pieces for fitting under rocker pedestals when using above heads, each – 4 required	301
LARGE VALVES	Spare SAH large inlet valves as used in our Type C modified head. Each. Also standard valves available ex stock	530/1
ENGINE GASKETS	Decarbonised gasket set – 83 mm – 1991 cc models Decarbonised gasket set – 86 mm – 2.2 litre	GEG 178 A GEG 178
	Engine set of gaskets (bottom end) - TR2/3/4	GEG 248
CRANK_ SHAFT	New `cross drilled' crankshaft for fitment to all TR engines. Recommended for use on all modified engines.	581
	Service exchange reground crankshafts (no warranty) complete with new main bearings, con rod bearings and thrust washers (subject to condition of old unit being acceptable) A deposit is required in lieu of the old crankshaft	582 903
BEARINGS	Competition type Glacier recticular tin con rod bearings, recommended for use with all TR engines for better bearing life, per set - std size Standard Vandervell con rod bearings - per set Vandervell main bearings, standard size - per set Up to + .060" also available on all of the above	577 578 579

## TR2/3/4 ENGINE ACCESSORIES

CAMSHAFT	SAH 26 performance camshaft for all TR models, 4 cylinder. This profile has been produced by combining latest design techniques with the vast practical experience of our development staff. Power output is obtained between 2000-5850 rpm allowing the vehicle to be used for fast touring/rally work, but still retaining sufficient flexibility for easy town driving in heavy traffic. Recommended for fitment after firstly installing our extractor exhaust manifold and modified cylinder head - exchange Deposit in lieu of old camshaft (returnable providing camshaft is in regrindable condition)	531 904
TIMING DEGREE PLATE	In order to assist purchasers of our special camshafts to install these correctly with the timing absolutely 'spot on' SAH have introduced a special timing degree plate. There is only one way to set up your camshaft/valve timing, whether it is standard or modified unit, ant that is the right way with a degree plate to take out the guessing. A very worthwhile equipment item that will last a lifetime.	1345
VALVE SPRINGS	Set of standard replacement valve springs (for unmodified engines) Set of competition valve springs, recommended for use with SAH 26 camshaft for TR2/3/4 As above but for TR4A engines only	534 535
CAM FOLLOWERS	Special lightweight cam followers, for improved anti-friction qualities and longer wearing life, particularly under high revving conditions. Recommended for use with the SAH camshafts and reduced valve gear fatigue, each Standard cam followers are also available.	1022
FLYWHEEL	<pre>Special SAH lightweight flywheel, approximately 7 lbs weight reduction Recommended for all modified engines - exchange Deposit in lieu of old unit Note Whenever possible please supply old unit for lightening. If not, State model, year and clutch type when ordering</pre>	585 586
ENGINE BALANCING	Essential for any engine if longer life and a smoother cruising speed is contemplated. Complete engine balancing of crankshaft, con rods, pistons, fan assembly, flywheel and clutch assembly. Dismantled and delivered to our works	403
PISTONS & LINERS	Special 2.2 litre (86 mm) piston/liner conversion kit for TR2/3 engines, fits directly in place of existing 1991 cc pistons and liners. Kit is complete with figure of eight gaskets. 4 each - pistons and liners Spare 2.2 litre (86 mm)piston only. State F, G or H size Spare liner Figure of eight liner gaskets (2)	545 545/1 545/2 545/4
SPARK PLUGS	The following NGK type spark plugs are strongly recommended for combined competition, fast motorway driving and normal traffic conditions Standard engines Mildly tuned engines Outright competition use	B6HS B7HS B77HC

Outright competition use

B77HC

## TR2/3/4 ENGINE ACCESSORIES



#### EXHAUST MANIFOLD

SAH extractor type high efficiency exhaust manifold. Finished in stove enameled silver recommended as the first tuning item for all high port models. Essential for all performance engines and also cheaper than standard unit with a longer life expectancy.

Note: The above is not suitable for TR2 (low port) cylinder heads.

When required to replace standard TR4A manifold onto <u>standard</u> exhaust, 2 adaptor sleeves are required 1743

SILENCERS

SAH special silencer systems designed especially for TR models to give better performance and to reduce the 'TR roar' to an acceptable level by fitting silencer at the rear of the car. Stops continual 'knocking' of exhaust system on chassis. Kit comprises 24" large bore chrome tailpipe, silencer and connector pipe. For TR2/3/4 models 542 Special connector pipe between 536 and above system 1402

As above but for TR4A models, complete system with coupling sleeve up to standard or SAH manifold. (When using with standard exhaust manifold, existing 'Y' section must be cut to fit or alternatively use also following 544 piece) 543 Special 'Y' piece required for use when above 543 system is fitted onto standard TR4A manifold downpipes to eliminate cutting of existing 'Y' section pipe. 544

#### CARBURETTORS

STROMBERGNew latest design 175 CDS Stromberg carburettors complete<br/>with coupling for direct replacement of SU H6 or 175<br/>Stromberg carburettors. Design incorporates better starting<br/>device and allows more consistent tuning. Outright purchase<br/>only1024

Alternative to above replacement standard carburettors supplied as a pair ready to install 1681

536



For the sporting motorist gives increased air-to-fuel ratio and attractive appearance. Available in two designs, long trumpet or short with gauze cover. Bright silver finish. Easily fitted directly to carburetter air intake.







Chrome plated and highly efficient.

The mesh element ensures excellent filtration with maximum performance. This element is easily removed for cleaning and never needs replacing.

			RAM PI Short		AIR FILTERS each			
			(per pa	Long ir)	each			
SU		HS2 1¼″	400	,	372			
		HS4 1½"	1743	553	558	DIAPHRAGM	GAS	KET SET
		HS6 1¾″	584	552	294	each	ea	ach
Strombe	rg	125/150CD/S	401 1	744	948	764	76	53
		175CD-2 bol	t 584	552	294	766	76	55
		175CDS-3 bc	lt		*1350/1350T	1345	134	17
		28/36 DCD	1742		2037		219	
Weber		40DCOE)Ston			258		56	
		45 DCOE)sho			351		56	54
NOTE	David		8 each uni					
NOTES:			liters are	e avallable	to sult other	carburettors - p	rice on	
		lication.	ther units	it max be	necessary to a	hange the needle	to corr	reat
						vire gauze fillin		ect
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	1350	) – 1¾″ de	ep for Dol	omite/TR/S	aab 2	037 - 1¼″ standa	ard	
		$0/ - 1\frac{1}{4}$ de				173 - 1¾" Saab S		
			-				-	
	A fu	ill range of	Weber and	l Stromberg	spares are ava	ilable.		
DAMPER	OIL					igned damper oil		
				ice, can al	so be used with	SU carburettors		260
		per 3 oz ca	n				1	L269
STROMBE	RG	Special adi	usting too	l for use	with 1970 on ca	rburettors which	) have	
TOOL	10	adjustment				IDUICCCOIS WHICH		SAH1722
1002		aajabemene	enrough ee	P OI PIDCO				,
		Polished da	shpot cove	ers to impr	ove appearance	of all cars.		
		For 1¼" car		_	each		1	L740
		For $1\frac{1}{2}$ " and	1¾" carbu	irettors	each		1	L741
FUEL PU	MPS					el pumps to suit		
		—				ork and desirabl	.e	
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		Mitsuba				reliable with a	-	
						itted with integ		
				with instr		r easy installat		SAH430
		Bendix	-			ous unit with pr		JAN430
		- CHAIA	Reliabili		amp worth tall	ieas ante wien bi		SAH402
		Twin SU			pump kit is rec	commended for any		
		-				ermost. Kit is s		
						tructions, compl		STN0004

#### ENGINE ACCESSORIES

# **OIL COOLER** KITS

In the interest of reliability SAH recommend and use these oil cooler kits to ensure oil temperature is retained to within safety levels. These are essential when any competition or sustained high speed work is required. The kit is supplied as two components, installation kit of parts including adaptor hoses, fittings and instructions; radiators supplied separately

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Installation kit only:	Std Rad.	
All Triumph models up to 1500cc	572	1301
Vitesse & GT6-RHS	572	1302
TR5-6	570	1303
TR2-4A	570	1304
Vitesse & GT6-LHS	572	1305
2000 & 2.5 range saloons	572	1306
Dolomite, Sprint & TR7	572	1307
Stag V8	572	1307
Saab V4	572	2036
Saab 99, 1700 & 1850	572	2005
Saab 99, 2 litre	572	2172

Special oil cooler radiators with 1/2" BS pinions and twin mounting brackets: 125mm Extra Jorga

<u>OIL STAT</u>	Special oil thermostat for all types of hoses. This unit enables oil radiate temperature of oil reaches a pre-de	or to be bypassed until	ase	571 570 572 1043
STONEGUARDS	Especially useful for UK. Complete Specially designed for individual siz from larger stones. Finished in gal for 1307/2036)	ze radiators for protection		
		65mm Radiators		1444
		95mm Radiators		1445
		125mm Radiators		1446
		Note: Full range of kits for		1440
	most	Note: I dil lange of kits for		
	most	Makes, price on application		
KENLOWE ELECTRIC COOLING FANS	Specially designed to automotive a famous Kenlowe thermostatic cooli complete kit ready for installation. from standard cooling fan. Increas 16% and cuts out fan noise. Fully maintenance. Fully adjustable to s Manual override always available. guarantee.	ng fans are supplied in a Elimination of power loss ed fuel economy by up to automatic – requires no uit car and conditions.		
The second	Specially designed kits for models Herald/Sp Toledo & Spitfire III 2000 & 2		(117/S) (117/S) (127/L) (127/L) (317/L)	1236/1 1236/1 1236/3 1236/3 1236

CLUTCH	Deluxe woven type clutch centre plat Standard exchange pressure plate ass Standard exchange diaphragm clutch o Deluxe clutch centre plate for TR4A	sembly - TR2/3/4 cover for TR4A	587 588 707 709		
	Full competition cover and plate, di Price on application	aphragm type, also available,			
EXCHANGE UNITS	Service exchange axle (TR4A only), e available normally from stock to sui model and chassis number - price on	t all Triumph models. State			
	Overdrive solenoid to suit all model	S	037		
GEARBOX TR/2000	SAH can offer for the enthusiast a c gearbox kit to amend 2/3 <sup>rd</sup> ratios to the over- drive gearing, especially work. Easily fitted to all TR4A and 2000/2 necessary gears only.	obtain better service from recommended for race or rally	STN 0002		
AXLE	SAH offer the following crown wheel requirements. Please check your mod	-			
MULTING AND THE TOP OF	Crown wheel & Pinion <u>Ratio</u> 4.875 4.55 4.3 4.11 3.7	SAH 362 SAH 307 ) SAH 361 Carrier SAH 306 Standard SAH 308			
	2.45				

LIMITED SLIP REAR AXLE Salisbury limited-slip differential axle unit for fitting in the IRS model TR4A axle. For vastly improved road adhesion/cornering power, and the transmission of maximum engine BHP to the actual road wheels. A 'must' for the competition driver. A most desirable 'extra' for the normal road car owner.

SAH 289 )

STR 0226



#### NO MORE

Slipping on wet or icy surfaces.

### NO MORE

3.45

Wheel spinning on gravel.

## NO MORE

Slipping on icy hills.



Complete assembly as supplied.

#### NO MORE

Getting stuck in mud or sand.

## NO MORE

Loss of inside wheel grip when cornering.

## NO MORE

Fear of getting stuck on ice.

# Magnesium Alloy Wheels

WIDE RIM

TOUGH —Immensely strong for Rallying and Racing.

Cast Magnesium For maximum strength with minimum weight. Unique Rim Design For cornering control, Tyre rigidity and balance-weight retention Crescent Section Spokes For optimum strength and elegant appearance. Large Spoke Ducts For increased Brake Cooling.

# MINILITES

Available in sizes to suit every car. Wheels are supplied less nuts and hub caps which are at extra cost. Special longer nuts and spacers are available to suit some cars. Price on application



RIM SECTION —Allows fitting of standard and larger section tyres for most models.

LIGHT —Pounds lighter than standard steel wheels. Reduces unsprung weight and turning inertia. Better Road holding and steering. <u>COSMIC MK II</u> design as illustrated - available as below to suit most cars. Utilises standard nuts or chrome dome type as listed overleaf. Mk III and IV types also available to order.



SUPALITE WHEELS in aluminium, supplied with special nuts and spanner to suit individual cars. Finished in natural silver in four spoke design for maximum appeal.

WOLFRACE finished in polished aluminium for maximum appeal, these wheels are most pleasing. Available in many widths from 5-7" in 13-14-15" dia to suit most cars.



<u>WIRE MAGS</u> also available to order  $\frac{1}{2}$  price on application.

**ALUMINIUM** 

WHEELS

All Triumph mode		The second second second	Rim Width	COSMIC each	SUPERLITE	WOLFRACE each	MINILITE each 10	STEEL each
1850cc(see note)	13" 3.7	5 PCD	5"	1144	.E	000000000000000000000000000000000000000	070	
			5" 5 <del>1</del> "	1145	1362	1645	951	988
			6"_	1146		1647		
2000-2.5	13" 4.5	PCD	5"-	1148				
			517	1149	1364	1646		
			Qui a	1150				
TR2-6	15" 4.5	PCD	51				626/1	786
			6.	1201		1726*		100
Stag	4" 4.5	PCD	6"	1396				

NOTE: First line of wheels is for all models that are not listed separately, ie, Herald, Spitfire, Toledo, except 1300 and 1500 FWD models - for these please contact SAH

Supplied complete with nuts and hub caps as required.

Minilite rims can be obtained in up to 12" wide rims with special inset or outset to suit your application. Wolfrace wheels are available in up to 10" widths. Wire mags also available.

