

SAH

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 As above but in kit form for fitting yourself or by local garage.					
Stage II Increase 22 BHP	Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold	530 543 536				
	Total cost of above conversion inclusive of labor charges As above but in kit form for fitting yourself or by local garage.	523 523K				
Stage III Increase 35-40 BHP	Modified 'gas flowed' cylinder head (Type C), exchange SAH large bore single tailpipe/silencer assembly Special SAH extractor exhaust manifold Stage I SAH high-lift camshaft, exchange SAH competition valve springs 2 x 45 DCOE Weber carburettors 2 X SAH Weber inlet manifold Weber throttle linkage kit for above	530 543 536 531 535 519 520 521				
	Total cost of above conversion inclusive of labor charges As above but in kit form for fitting yourself or by local garage.	524 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.					
	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 Weber throttle linkage kit for above Total cost of above conversion inclusive of labor charges As above but in kit form for fitting yourself or by local garage.	530 543 536 531 535 206 567 403 585 577 579 519 520 521				
	Weber throttle linkage kit for above Total cost of above conversion inclusive of labor charges	521 525				

NOTE

The BHP increase figures quoted above represent the $\underline{\text{nett}}$ brake horsepower improvement at the rear wheels compared with those figures achieved on a standard unmodified TR4A.

TR2/3/4

135 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	528
And matched Inlet Manifold	
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	heat
Resistant finish.	

Complete Engine Ready for Fitting

517

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

140/145 BHP ENGINE

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

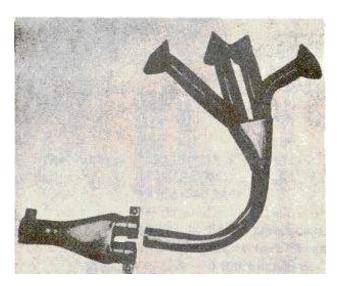
MODIFIED CYLINDER HEADS	SAH modified cylinder heads are supplied on an exchange basis subject to the original head being in reclaimable condition, ie, not cracked. Where it is necessary to fit valve inserts these will be charged for additional to the exchange price. All heads are supplied bare, ie, less 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
TYPE C:	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:	 Due to age and condition, etc, we recommend that wherever possible we modify your own cylinder head Types A & C heads can be supplied complete with valves, springs, studs, etc - price on application 	
STEEL GASKETS	Special steel head gaskets recommended for use with above heads $86\ \mathrm{mm}.$	011
SHIM PACKING	Shim packing pieces for fitting under rocker pedestals when using above heads, each - $4\ \text{required}$	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 $\rm TR2/3/4$ As above but for $\rm TR4A$ 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	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	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

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.

536

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

Special connector pipe between 536 and above system

542 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) 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.

543

544

CARBURETTORS

STROMBERG

New latest design 175 CDS Stromberg carburettors complete with coupling for direct replacement of SU H6 or 175 Stromberg carburettors. Design incorporates better starting device and allows more consistent tuning. Outright purchase only

1024

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

1681

RAM PIPES

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.

rectly to car ke.	buretter	2	A SECTION AND A	This element is easily remov		
		RAM	PIPES	AIR FILTERS		
		Short	Long	each		
		(per	pair)			
នប	HS2 1¼"	400		372		
	HS4 1½"	1743	553	558	DIAPHRAGM	GASKET SET
	HS6 1¾"	584	552	294	each	each
Stromber	rg 125/150CD/S	401	1744	948	764	763
	175CD-2 bolt	584	552	294	766	765
	175CDS-3 bol	Lt		*1350/1350T	1345	1347
	28/36 DCD	1742		2037		2194
Weber	40DCOE)Stone	eguard	as fitted	to 258		564
	45 DCOE)shor	rt ram	pipes.	351		564
	1408	8 each	unit			
NOTES:		llters	are avail	able to suit other o	carburettors -	price on
	application.					
				y be necessary to ch		
	Mixture settings	s. All	air filt	ers have washable w	ire gauze filli	ng.
	1350 - 1¾" dee	ep for	Dolomite/	TR/Saab 20	037 - 1¼" stand	ard
	1350/ - 1¼" dee	ep for	2000/GT6/	Vitesse 23	173 – 1¾" Saab	Stage IV
	A full range of	Weber	and Strom	berg spares are ava:	ilable.	
DAMPER (OIL For all Stro	omberg	carburett	ors - specially des	igned damper oi	l to

DAMPER OIL	For all Stromberg carburettors - specially designed damper oil to give correct resistance, can also be used with SU carburettors, per 3 oz can	1269		
STROMBERG TOOL	Special adjusting tool for use with 1970 on carburettors which have adjustment through top of piston			
	Polished dashpot covers to improve appearance of all cars. For $1\frac{1}{4}$ " carburettors each For $1\frac{1}{4}$ " and $1\frac{3}{4}$ " carburettors each	1740 1741		
FUEL PUMPS	SAH offer the following range of electrical fuel pumps to suit all			

Requirements. Essential for any competition work and desirable
For modified cars to ensure adequate supply at all times.

Mitsuba Solenoid piston type pump. Highly reliable with adequate
Supply to meet all requirements; fitted with integral
Filter and all pipe connections for easy installation.
Complete with instructions SAH430

Bendix Blue-Top electric pump - world famous unit with proven
Reliability SAH402

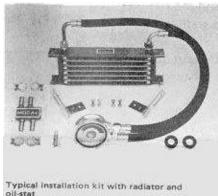
Twin SU

This complete twin pump kit is recommended for any race
Or rally work where safety is uppermost. Kit is supplied
Complete with all fittings and instructions, complete 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



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 $\frac{1}{2}$ " BS pinions and twin mounting brackets:



125mm Extra large	571
95mm Race/rally	570
65mm Standard	572
Note: for hot climates increase	
radiator by one size	

1043

OIL STAT

Special oil thermostat for all types of oil coolers with $\frac{1}{2}$ " dia hoses. This unit enables oil radiator to be bypassed until temperature of oil reaches a pre-determined point. Especially useful for UK. Complete with necessary hose clips.

STONEGUARDS

Specially designed for individual size radiators for protection from larger stones. Finished in galvanized silver (not required for 1307/2036)

65mm Radiators	1444
95mm Radiators	1445
125mm Radiators	1446
Note: Full range of kits for	

most

Makes, price on application

KENLOWE ELECTRIC COOLING FANS



Specially designed to automotive application, these world famous Kenlowe thermostatic cooling fans are supplied in a complete kit ready for installation. Elimination of power loss from standard cooling fan. Increased fuel economy by up to 16% and cuts out fan noise. Fully automatic – requires no maintenance. Fully adjustable to suit car and conditions. Manual override always available. 12 months written quarantee.

Specially designed kits for models as below:

Herald/Spitfire I/II	(117/S)	1236/1
Toledo & 1500/TC, TR2-3A	(117/S)	1236/1
Spitfire III & IV, GT6 & TR4-6	(127/L)	1236/3
2000 & 2.5 range, Stag*	(127/L)	1236/3
Dolomite & Sprint – special kit	(317/L)	1236

DRIVE LINE - TR 4 CYLINDER MODELS

CLUTCH

Deluxe woven type clutch centre plate for spring clutch TR2/3/4	587
Standard exchange pressure plate assembly - TR2/3/4	588
Standard exchange diaphragm clutch cover for TR4A	707
Deluxe clutch centre plate for TR4A - diaphragm type	709

Full competition cover and plate, diaphragm type, also available, Price on application

EXCHANGE UNITS

Service exchange axle (TR4A only), gearbox and overdrive are available normally from stock to suit all Triumph models. State model and chassis number - price on application.

Overdrive solenoid to suit all models

GEARBOX TR/2000

SAH can offer for the enthusiast a competition close ratio gearbox kit to amend $2/3^{\rm rd}$ ratios to obtain better service from the over- drive gearing, especially recommended for race or rally work.

Easily fitted to all TR4A and 2000/2.5 type gearboxes. Kit of STN 0002 necessary gears only.

AXLE

SAH offer the following crown wheel and pinions to suit all requirements. Please check your model range carefully

Crown wheel & Pinion



Ratio _				
4.875	SAH	362		
4.55	SAH	307)	
4.3	SAH	361		Carrier
4.11	SAH	306		Standard
3.7	SAH	308		
3.45	SAH	289)	

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.

STR 0226

037

NO MORE Wheel spin on fast acceleration. NO MORE NO MORE Slipping on wet or icy Getting stuck in mud surfaces. or sand. NO MORE NO MORE Wheel spinning on Loss of inside wheel gravel. grip when cornering. NO MORE NO MORE Slipping on icy hills. Fear of getting stuck Complete assembly as supplied. on ice.

Magnesium Alloy Wheels

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.

WIDE RIM



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

COSMIC MK II

ALUMINIUM WHEELS



(Mk. II design. Machined linish with black enamel inserts

TOUGH —Immensely strong for Rallying and Racing.

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. COSMIC MK II 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.

MINILITES



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.

WIRE MAGS also available to order price on application.



							THE RESERVE OF COMMENT	
All Triumph models up to			Rim Width	COSMIC each	SUPERLITE per 4	WOLFRACE each	MINILITE each 10	STEEL
1850cc(see note) 13 3.75 PCD		5"	1144	The support and the		070		
		5" 5 1 " 6"	1145	1362	1645	951	988	
			6"_	1146		1647		
2000-2,5	13" 4.5	PCD	5"-	1148				
			537	1149	1364	1646		
			Que a	1150				
TR2=6	15" 4.5	PCD	51"				626/1	786
			6"	1201		1726*	000/1	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.