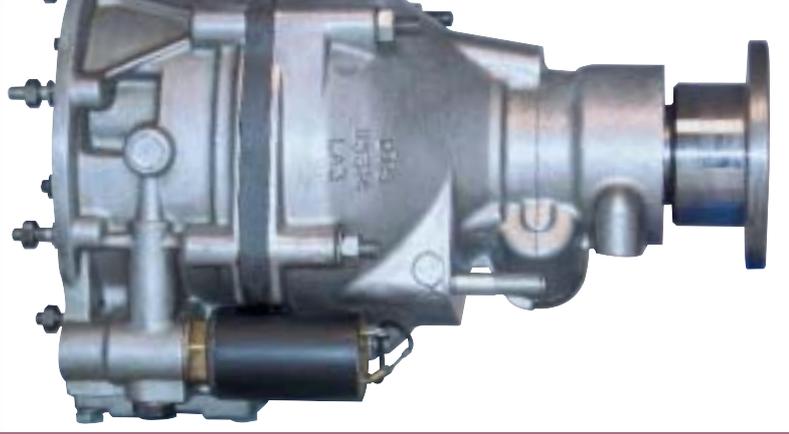


# 46 Performance & TUNING

5 Speed Gearbox Conversion | 01



J-Type Overdrive |



Up-rated Laygear | 02



J-Type Overdrive Bracket & Fitting Kit | 04



Close Ratio Gear Set | 03

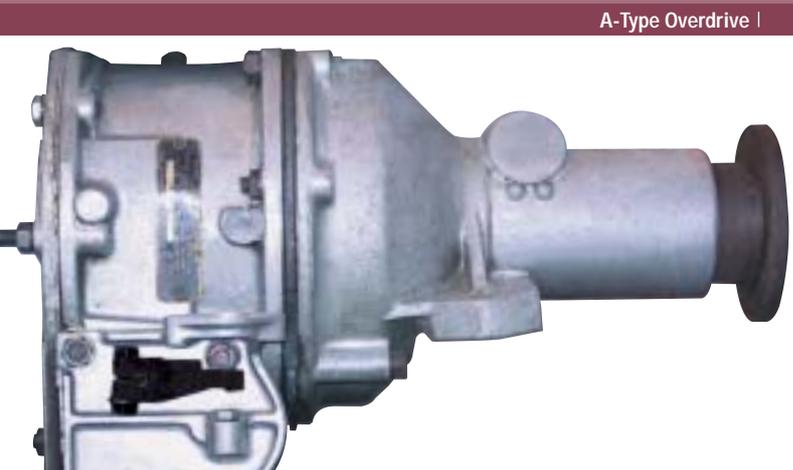


Limited Slip Differential | 05



A-Type Overdrive |

Alloy Diff Cover | 06



## 5 Speed Gearbox Conversions

Our precision engineered 5 speed gearbox conversion kits include everything you need, including a gearbox unit, to convert your classic to 5 speed. Designed to replace existing units without any body work modifications. For full specifications please contact your local Moss branch.

5 Speed Gearbox Conversion;

(01) TR5 & TR6 A Type Chassis	TGK120A
TR6 J Type Chassis	TGK120J

## Upated Laygears

Since its introduction in 1961, the achilles' heel of the 4 speed synchromesh gearbox - as fitted to TR4/6, Dolomite Sprints and the Big Triumph saloons, was the laygear and layshaft. Failure of the bearing(s) causes destruction of the layshaft and the bore(s) of the laygear, the resulting debris often destroys many other expensive components.

During the mid-1980's, with racing TR's in particular suffering repeated gearbox failures, due to the additional power being transmitted, many reconditioners modified laygears to take an extra bearing, which cured the fault, but they assumed there would always be a reclaimable laygear to salvage - not always the case!

The solution is to produce laygears with the maximum bearing configuration in the first place, to extend the life of the gearbox almost indefinitely and, cope with just about any amount of power. Moss uprated laygears come with bearings pre-fitted, ready to install, with no modifications needed. For full details please contact your local Moss branch.

Upated Laygear;

16 Teeth	128107UR
(02) 17 Teeth	UKC662UR

## Close Ratio Gear Set

Suitable for all Triumph gearboxes with needle roller constant pinion bearings, including 2000 but not Stag or Sprint. Now uses a 1" x 23 spline input shaft to allow use of a wider range of clutches. It includes 3rd and 4th gear pairs and an adaptor enabling fitment to the 'big nose' or imperial 'spigoted' mainshaft. Suits lower axle ratio e.g. 4.1:1. The extra high 1st gear (part no. STR550) is not included in the kit as it needs at least a 4.3:1 rear axle ratio to make it usable.

Note: Earlier version close ratio gear sets, purchased before 1999 used a 10 spline input shaft and should use clutch plates TT2702 for uprated use, or TT2704 for sprint or race use. Cannot be used in Stags or Sprints.

(03) Close Ratio Gear Set	TT2210
Constant Pinion Gear	TT2210A
Spigot Bearing Sleeve	145008X
Countershaft Gear	STR548
3rd Gear (39 Teeth)	STR549
Countershaft Constant Gear	STR552
Extra High 1st Gear (31 Teeth)	STR550

(Note: Before ordering please refer to the Clutch System in the Restoration section of this catalogue reference interchangeability of Laycock and Borg & Beck units, and, early versions of our close ratio gear sets).

## Upated Overdrive Units

### A Type Overdrive Upating.

See Restoration section for full details and Overdrive Conversions. This is only supplied as a kit to YOUR donor overdrive unit, and built into it. The unit must be or have been properly rebuilt, as necessary, at the same

## Upated Overdrive Units cont...

time, to remove the chance of worn internal components failing. These components might well have survived many more miles under normal use and standard pressure, but they certainly won't under uprated conditions.

To permit the modifications the donor unit must be of the type which has a large welch plug visible in its base, adjacent to the drain plug. This provides a final pressure outlet for the accumulator which does not have the pressure bleed-off ports which are part of the standard two piece accumulator piston assembly, and which are there to provide the cushioned drive. Cushioning of the drive is not a significant factor on a competition overdrive.

Due to the much more positive engagement this modification should not be considered for road TR's. The kit includes: Relined and uprated cone clutch, a modified uni-directional clutch, a larger accumulator piston, uprated operating valve, and replacement accumulator springs.

A Type Overdrive Upating Kit	TGK107
------------------------------	--------

### J Type Overdrive Upating.

See Restoration section for full details.

This is only supplied as a kit. It requires modifications to the clutch, to which a grippier lining is bonded, the dashpot assembly and the whole pressure relief valve assembly. An old clutch sliding member is required in exchange for the relined unit supplied.

J Type Overdrive Upating Kit	TGK108
------------------------------	--------

### Overdrive Conversion Bracket Kits.

This bracket kit allows J type overdrive to fit to A type chassis, TR2 to TR4A, without modification. Comes complete with mounting.

(04) Bracket & Fitting Kit	211361X
----------------------------	---------

This bracket kit allows a saloon A type overdrive casing to fit the TR mounting, 104086, minor rear casing alterations are required.

Bracket & Fitting Kit	104086ADP
-----------------------	-----------

## Quaife Limited Slip Differentials

Limited slip differentials allow maximum drive to the wheels giving more grip under hard acceleration and cornering.

### Quaife Limited Slip Differential;

(05) TR5, TR250, TR6	TT2220
Limited Slip Differential Conversion	TGK120

(Includes fitting LSD to customers own axle, new seals, and any other parts fitted as required).

## Alloy & Magnesium Finned Differential Covers

For full details of the rear axle and differential units please refer to the restoration section.

### Rear Axle Finned Cover;

(06) Alloy	149826X
Magnesium	149826MX

## And there's More...

As well as supplying limited slip differentials, we also supply from stock complete rear axles, brand new crown wheel and pinions, drive shafts etc... Not to mention overdrive conversions. See specific sections in the Restoration section of this catalogue, or contact your local Moss branch.



# 48 Performance & TUNING

Interrupter Fuel Pump | 01



Solid State Pump | 02



Fuel Tank | 05



Pressure Regulator | 03



Filter & Regulator | 04



## High Capacity Fuel Pumps Filters & Fuel Regulator

The standard fuel pump may not be able to maintain adequate fuel pressure at higher engine speeds. The range of Facet high pressure electric fuel pumps however, suit all modified applications, the position in the car where the pump is mounted will determine which model is used.

The cylindrical interrupter pumps can be fitted to the front or rear of the car and can pull fuel up to 18 inches from the bottom of the fuel tank. The cuboid solid state pumps must be mounted close to the tank and below the fuel level, the installation instructions must be adhered to. They can pull fuel up to 12" from the bottom of the fuel tank and the filter union must be fitted to the suction side of the pump.

Both types of pump are supplied in negative earth only, they come complete with mounting bobbins and unions, you will have to re-plumb the fuel system around the new pump using a combination of standard pipes and hoses. Fine-tuning of the fuel pressure can be easily achieved by installing a pressure regulator, we can supply either a simple regulator or a filter regulator with a replaceable filter. We have the road competition version with 1/4" & 5/16" connections and the larger competition version with all 5/16 connections.

With safety in mind, we also supply a inertia fuel cut off switch, so that in the event of an accident, fuel delivery is cut-off.

## Interrupter Fuel Pump Kit

These pumps can be mounted at the front or rear of the car. Unless stated, pumps are negative earth.

- |      |  |          |
|------|--|----------|
|      | For Road Use   | TMG2930K |
|      | (18gal/per Hr flow rate 4.0 psi up to 150bhp).   |          |
| (01) | For Road Use (Positive Earth)  | TMG2930P |
|      | (18gal/per Hr flow rate 4.0 psi up to 150bhp).   |          |
|      | For Fast Road Use  | MGS2930K |
|      | (25gal/per Hr flow rate 5.0 psi up to 180bhp).   |          |
|      | For Competition Use  | TT2930   |
|      | (38gal/per Hr flow rate 6.5-7.0 psi 190+bhp).  |          |
|      | (Competition pumps require extra unions, please state size and connector type required). |          |

## Solid State Fuel Pump Kit

Pumps must be mounted close to the tank and below the fuel level. Unless stated pumps are negative earth.

- |      |  |          |
|------|--|----------|
| (02) | For Road Use                                       | TMG2931K |
|      | (18gal/per Hr flow rate 4.0-5.5 psi up to 150bhp). |          |
|      | For Fast Road/Competition                          | MGS2931  |
|      | (25gal/per Hr flow rate 6.0-7.0 psi up to 180bhp). |          |

## Fuel Pressure Regulator/Filter & Inertia Cut-off Switch

We recommend you fit an in-line auxiliary for precise fuel flow. With safety in mind, we also supply a Inertia fuel cut off switch, so that in the event of an accident, fuel delivery is cut-off.

- Pressure Regulator;**
- |      |                                |        |
|------|--------------------------------|--------|
|      | 1/4" Unions (Road/Competition) | TT2925 |
| (03) | 5/16" Unions (Competition)     | TT2926 |

- Filter/Regulator 5/16" Unions;**
- |      |                         |         |
|------|-------------------------|---------|
| (04) | 67mm (Road/Competition) | TT2927  |
|      | 85mm (Competition)      | TT2928  |
|      | Fuel Inertia Switch     | C41220A |

## Fuel Pump & Filter Unions

### Fuel Pump Unions.

For use with high capacity fuel pumps; check size of pump thread and pipe size used on the car. JIC are for use with Aeroquip pipe sets.

Thread Size;	Straight		90 Degree	
	1/8" NPT	1/4" NPT	1/8" NPT	1/4" NPT
1/4" 6mm Pipe	FPA903B	N/A	N/A	N/A
5/16" 8mm Pipe	MOC1604	N/A	MOC1841	FPA902A*
3/8" 10mm Pipe	FPA904	N/A	N/A	FPA902B*
-6 JIC Aeroquip	Special	MOC0726	Special	MOC0725

(\*These unions are supplied in pairs).

### Fuel Filter Unions:

- |                                      |         |
|--------------------------------------|---------|
| Filter/Union And Outlet Union (Pair) | TT2932A |
| (1/8"NPT with 1/4" fuel pipes).      |         |



K&N Filter | 07



K&N Cleaning Kit | 09



K&N Sports Air Filters | 08



26mm Ram Pipe | 10

## K&N Sports Filters

### K&N Sports Filters - Standard Depth Unless Stated;

TR250-6 Stromberg 175CDSE	KN56-1620
TR5-6 Pi	KNRU2710
(Tapered filter for end air manifold. This filter replaces the air cleaner assembly and flexible tubing).	
TR5-6 Pi Filter Fitted To Manifold	KNR0990
(3 elements required per car. Filters fit directly into the 3 inlet manifolds).	

### K&N Replacement Elements.

Designed to replace the standard air filter element in the original air box, giving improved air flow but keeping the original look.

TR5 & TR6 Pi	KNE9108
--------------	---------

### Models With Twin SU HS6 Carburettors;

(07) Standard Depth 1.75"	KN56-1400A
Deep 3.25"	KN56-9098
(See also anodised ram pipes and stub stacks).	
Stud Kit	KN56STUDKIT

### K&N Engine Crankcase Filters;

Crankcase Filter: 0.05" Internal Inlet	KN62-1330
--	-----------

## K&N For Weber Carbs

These K&N filters are designed to fit Weber DCOE. We suggest that ram pipes are fitted to aid air flow.

Filter Size	Depth	Part No.
180mm x 120mm*	45mm	KN56-1270
180mm x 120mm	45mm	KN56-9106
(08) 180mm x 120mm	63mm	KN56-9104
180mm x 120mm	83mm	KN56-9265
228mm x 135mm	63mm	KN56-9110
228mm x 135mm	45mm	KN56-9115
190mm x 160mm	51mm	KN56-9332
190mm x 160mm	54mm	KN56-9233
(*Not suitable for ram pipes).		

## Fuel Pump Blanking Plate

If you are replacing your block mounted mechanical fuel pump with a high pressure electric unit, then you will need this blanking plate.

Blanking Plate	147876
Plate To Block Gasket	138791

## Aluminium Fuel Tanks

For full details of fuel system please refer to the Restoration section.

- (05) Aluminium Fuel Tank (Aftermarket) 312359X  
(This replacement aluminium fuel tank is suitable for all fuel injected TR5's & TR6's).
- Aluminium Fuel Tank (Use Bosch Pi Pump) GAC6110X

## Fuel Additive

UK TR's were designed to run a high-octane fuel, so to eliminate the possible need to adjust, i.e: retard ignition an octane booster may also be required. We stock a lead substitute, endorsed by the Federation of Historic Vehicle Clubs, that enables unleaded fuel to be safely used in engines designed for leaded fuel.

- (06) Superblend Fuel Additive 500ml GAC806



## K&N Sports Air Filters

K&N air filters are renowned as being one of the most efficient air filtration systems available. Their reinforced cotton weave is impregnated with a specially formulated oil to retain airborne particles. Offering much improved air-flow over standard paper elements, they are essential for fast road and competition applications. K&N performance filters are designed to be used with either stub stacks or ram pipes.

K&N sports filters, which are sold individually, are available for models equipped with SU's or Weber\* carburettors. For twin SU carb's you will need to order 2 filters.

\*Note; Weber fitment, please check for clearance before ordering.

## K&N Service Items

- (09) K&N Re-Charge Cleaning Kit 001-130  
(Kit includes: 12froz cleaning solution and 6.5 oz filter oil).
- Filter Lubricating Oil;**
- Aerosol 400ml KN99-0516
- Bottle 250cc KN99-0533
- Sachet 57cc KN99-11312
- Cleaning Fluid Solution 1 litre KN99-0621

## Ram Pipes For K&N Filters

### Only Available For Twin Choke Carburettor Applications.

Ram pipes, sometimes known as stub stacks, are essential to improve air flow into the carburettor. They feature full radiused mouths that help reduce turbulence at the mouth of the carburettor, allowing a much smoother air flow. Ram pipes produce a measurable improvement in performance. The length of the ram pipe slightly changes the engine speed at which power is developed - the shorter the pipe, the higher the speed. These ram pipes can be used on their own, or with a K&N sports air filter, providing there is sufficient clearance from the end of the ram pipe to the case. All ram pipes are sold individually. If unsure as to fitment please contact your local Moss branch.

<b>For 40 DCOE/DHLA Carburettors;</b>	
16mm Long	KNSS1640
(10) 26mm Long	KNSS2640
39mm Long	KNSS3940
<b>For 45 DCOE/DHLA Carburettors;</b>	
16mm Long	KNSS1645
26mm Long	KNSS2645
39mm Long	KNSS3945

# 50 Performance & TUNING

RamAir Filter Assembly | 01

Fuel Pipe Kits | 04



RamAir Air Sock | 02

Treatment | 03



## RamAir Performance Filters

The RamAir multiple layer foam construction ensures efficient filtering properties with minimal air restriction. The polymer coating filters up to 8 times more particles than standard paper filters. Re-treat with polymer compound every 20,000 miles.

### RamAir Filter Assemblies;

- For HS4 SU's RS2202402
- (01) For Weber 45DCOE RS2237402

### RamAir Air Socks.

For Weber 45 Single Trumpet;

- (02) 88mm Diameter x 115mm Long CS101

For Weber 40/45;

- 188mm Diameter x 70mm Deep CS102
- Cleaning Fluid Solution 1 litre FCPRC3
- (03) Polymer Replacement (Bottle) FTDRP6

## Fuel Pipe Kits

These non-rust, copper like, pipe kits Include supply and return pipes only. They do not include rubber connections for the supply pipes to the injectors. For full details and listings for the fuel supply system please refer to the restoration section of this catalogue.

### Fuel Pipe Kits;

- (04) TR5 & Early TR6 To CP50000 HFFK6
- Late TR6 From CP50001 To CR6701 HFFK7



05 |

## Grose-Jets

### For Precision Fuel Flow.

If you have converted to SU carburettors and would like the float chambers to benefit from the latest type needle valves, then here is the answer. Grose-Jets, with their modern technology don't stick open like the old needle and valve units.

- (05) Grose-Jet (Each) GAC9201X

## HS6 SU Carburettors

New replacement HS6 carburettors with angled float chambers, supplied with standard jets and no needles. Please refer to Performance Notes at the start of this section headed Carburation for details. For further details please contact your local Moss branch.

- K&N Air Filter (2 Reqd) KN56-9098
  - (06) HS6 SU Carburettors (Pair) TT1256
  - HS6 Conversion Linkage Kit (1 Reqd) TT1261
  - Throttle Rod (1 Reqd) 148496
  - Throttle Rod End Ball Joint (Original) (2 Reqd) TT9941
  - Throttle Rod End Ball Joint (Alt.) (2 Reqd) TT9941Z
  - Throttle Support Bracket (1 Reqd) 218410
  - Bellcrank (1 Reqd) 148960 or 148490
  - Carburettor Mounting Flange (2 Reqd) TKC1338
  - Adaptor Plate Kit (2 Reqd) TT12561
- (This kit adaptor plate kit, TT12561, enables 1 1/2", 1 3/4" and 2" SU carburettors to be rubber mounted to the manifold. Why bother? Engine vibration, especially under hard acceleration will normally be transmitted to the float chambers, severely reducing the ability of the float needle to seat and so causing flooding, possible even blowing fuel backwards into the cockpit. Rubber insulating the carburettors will stop this. The rubber insulators, TKC1338, are also available separately).

## The History And Background Of This Conversion

During the 1980s, particularly, due in no small part to the rising cost of petrol, but mostly to the challenges the Lucas Pi system constantly threw at TR5's and TR6's, whose owners always seemed to be putting their hands in pockets to bale out yet another breakdown, many turned to carburettor conversions. Some fearful of losing performance opted for twin choke set-ups.

A small number toyed with Strombergs and probably regretted the choice. Most chose SU conversions; so popular did this choice become that SU themselves produced a very comprehensive kit, but unfortunately it utilised only 1 1/2" carburettors rather than the 1 3/4" the 2500cc engines needed. This misjudgement was rapidly cashed in on by TR specialists.

All the Pi cars use cable operation, and the official SU linkage finishes at the throttle lever, (see illustration no 16 in the Engine Improvements section in the Restoration part of this catalogue). To connect the cable to the lever is very simple. Also illustrated is bracket 218410, (item. no.19), which fits between the lower inner left and right carburettor fixings. Before fitting this bracket, place it in a vice and make two hacksaw cuts about 1/2" deep, approx. 3/4" apart. Bend this section at 90 degrees to the rest of the bracket. Now drill a 1/4" hole in the bent part and de-burr it. Make one more saw cut to enable the cable to pass through, and you now have your lower cable location. This should be directly underneath the throttle lever, which itself may be adjusted left, or right, as necessary.

Remember to leave a little slack in the cable, which may be fixed using the Pi clevis and split pin. Correctly fitted and adjusted, a std. Set-up should return the kind of fuel economy for which earlier 4 cylinder TR's were famous; 30+ mpg, which definitely makes very happy motoring, and over 300 miles on a TR tank full!

## HS6 SU Carburettor Conversion Kit (U.S.A.)

This kit includes a pair of HS6 carburettors (to fit standard inlet manifold on U.S.A. models), linkage assembly, air filters and fittings.

- SU Conversion Kit TTK1259

## Carburettor Conversion Kits

Increasing the size or number of carburettors on your engine can unleash a lot more power if the right combination is chosen. Depending on your requirements, we have a twin SU HS6 carburettor kit and 2 Weber kits. Please Note; Carburettor components for both kits need to be matched to your engine specification. Please contact us for further details.

# Performance | 51

& TUNING



HS6 SU Carburetors | 06

Ram Pipes | 12



Piper Air Socks | 13



Short Ram Pipe | 09

Long Ram Pipe | 10

Ram Pipes | 11



## Progression Of Needles For HS6 SU Carb's

This table gives you a rough guide to the needle type you may require, but needle choice will depend on range of engine modifications. The range of alternative needles given below should cover most needs and are all available from stock. Note; All models have fixed type as original fitment, biased only for later replacement carburetors. If you are unsure, please contact your local Moss branch.

Needle/Carb;	HS6 Fixed 83mm	HS6 Fixed 86/87mm	HS6 Biased 86/87mm
(07) Weak	AUD1289	AUD1117	N/A
Standard	AUD1328	AUD1362	CUD1101
Slightly Richer	AUD1291	AUD1328	NZX8015
Use With PlusPacB	AUD1290	AUD1362	CUD1104
Richer/Race	AUD1286	AUD1291	CUD1111

Needle Chart ALT9001  
(Gives full range of needles and their dimensions).

## SU Carb Dash Pot Covers

A set of these polished or anodised aluminium dash pot covers are an easy way to smarten and personalise the engine bay of your car.

Dash Pot Covers For HS4/HS6 Carburetors;	
(08) Chrome (Each)	SFR150
Polished (Each)	SFR23
Anodised - Red (Each)	SFR23R
Anodised - Blue (Each)	SFR23B



08

## Period Style Ram Pipes

Not only do they look good... they really do work.

Period Style Ram Pipes For SU Carburetors;	
(09) HS6 Short (Each)	SFR3
(10) HS6 Long (Each)	SFR9

## Piper Ram Pipes

Not only do these ram pipes improve air flow into the carburettor by reducing turbulence - thanks to their full radiused mouths, they also look good. Our ram pipes for single choke carburetors are 50mm deep, they can be used on their own, with the Piper air socks, or with suitable sports air filters, depending on installation providing there is sufficient clearance from the end of the ram pipe to the sports filter case.

Twin choke application ram pipes are 30mm deep, they can be used on their own or with Piper air socks. All ram pipes are sold individually. If unsure as to fitment please contact your local Moss branch.

### Ram Pipes For Single Choke Carburetors.

Can also be used with Piper air socks or suitable sports air filters.

#### For 1" HS6 Carburetors;

Polished (Each)	SFR650
Anodised - Red (Each)	SFR650R
Anodised - Blue (Each)	SFR650B

#### For 1" SU HIF Carburetors;

(11) Polished (Each)	SFR4430
Anodised - Red (Each)	SFR4430R
Anodised - Blue (Each)	SFR4430B

### Ram Pipes For Twin Choke Carburetors - Can Be Used With Piper Air Socks.

#### For 40 DCOE/DHLA Carburetors - Not For Use With Sports Air Filters;

30mm - Silver (Each)	SFRW4030
30mm - Red (Each)	SFRW4030R
30mm - Blue (Each)	SFRW4030B

#### For 45 DCOE/DHLA Carburetors - Not For Use With Sports Air Filters;

30mm - Silver (Each)	SFRW4530
30mm - Red (Each)	SFRW4530R
(12) 30mm - Blue (Each)	SFRW4530B

## Piper Air Socks

These are the only air socks that are designed to fit with our Piper ram pipes. The socks, which are supplied in pairs, are 100mm deep and may be cut-to-length to suit your application. We do not recommend that you have less than 30mm between the ram pipe mouth and the inner face of the sock. Suitable for SU, Stromberg, Dellorto & Weber applications.

(13) Piper Air Socks (Pair)	PXC1050
-----------------------------	---------

# 52 Performance & TUNING

## Carburettor Conversion Kits

Increasing the size or number of carburettors on your engine can unleash a lot more power if the right combination is chosen. Depending on your requirements, we have a twin SU HS6 carburettor kit and 2 Weber kits. Please Note; Carburettor components for both kits need to be matched to your engine specification. Please contact us for further details.

### Weber And Dellorto Carburettors.

These are for producing the maximum power for road or competition use where they can be set up to produce good all round performance with economy or outright power depending on requirements. The parts are all available as separate components. For road type application we recommend the 40's and full race then the 45's are worthwhile.

### Twin Weber 40 DCOE Conversion Kit.

If you want a useable road car that can still show a clean pair of heels, then this is the conversion you need. Our Weber kit consists of two 40 DCOE carburettors, suitable jets, inlet manifold, throttle linkage and fittings. Carburettors can be jetted to your requirements.

TR250/TR5/TR6 - Rod Linkage;  
Twin 40 DCOE (Fast Road) 222-420

### Triple Weber 40 DCOE Conversion Kit.

The improvement in 'mid to top end' breathing is considerable and very noticeable, even on an otherwise standard engine. The jetting may need some adjustment, depending on the customer's own engine specification. Our Weber kit consists of three 40 DCOE carburettors, suitable jets, inlet manifold, throttle linkage and fittings. Carburettors can be jetted to your requirements

TR250/TR5/TR6 - Rod Linkage;  
(01) Triple 40 DCOE (Fast Road) TTK1259

## Weber DCOE And Dellorto DHLA Carburettors And Fittings

Carburettors, manifolds and linkage kits are supplied as separate components to suit individual needs.

### Carburettors.

The carburettors we supply are fitted with the basic jets/chokes that are correct for most applications, although these will still require final tuning on the car for maximum performance/economy on a rolling road.

	Dellorto	Weber
40's - Road And Mild Tune Up To PlusPac C	TT295728	TT2934282
(02) 40's - Fast Road For PlusPac C	TT295730	TT2934302
40's - Sprint With Top-End Power Setting	TT295733	TT2934332
45's - Sprint/Race With Basic Jetting	TT2958	TT2935342

### Inlet Manifold And Cable Bracket Kits.

TriumphTune cast aluminium inlet manifolds are designed for maximum all-round power, the design also allows for the carbs to be as near horizontal as possible for improved idling and fuel supply. Supplied complete with sealing plates, studs, thackery washer and nyloc nuts. This is a one piece horizontal casting by TWM, supplied complete with linkage and fittings for rod operated throttles.

TWM Inlet Manifold TWM0089  
(Note: Inlet manifolds are not available for the U.S.A. Carburettor models, TR250 - 6C, before 1972 using the narrow ported head. All later models have the same port design as the UK heads. Early models can be adapted by machining out the ports to suit the manifold, or changing to the later head).

### Cable Bracket Kits For TWM Manifold.

If you require cable throttle operation, then use the following to hold the throttle cable.

(03) For Weber Carburettors TT9915  
For Dellorto Carburettors TWM0089B

## Triple Weber Conversion | 01

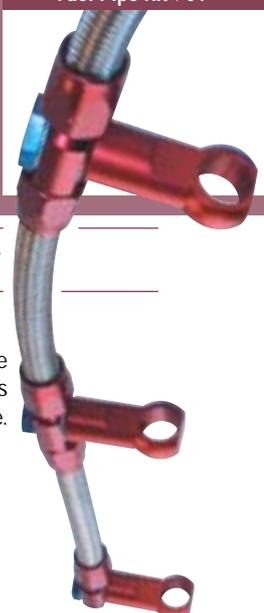


## Weber Carburettor | 02

## Cable Bracket Kit | 03



## Fuel Pipe Kit | 04



## Weber DCOE And Dellorto DHLA Carburettors And Fittings cont...

### Stainless Steel Fuel Pipe Kits.

We supply ready assembled Aeroquip type fuel pipe sets for the triple carburettor cars, these are supplied with the lengths already pre-set for easy installation, supplied with 18" inlet pipe.

(04) Weber TT1255  
Dellorto TT12551

### Replacement Parts;

Sealing Plates (2 Plates & 4 O'Rings) TT2937A  
Competition Mounting Bushes/Cups TT2939  
K&N Air Filters KN56-9265

## 40's Weber And Dellorto Carburettor Jet Settings

Note: The settings given here are a basis from which to work, they may/will need adjustment to suit your application, and this can only be carried with your car on a rolling road.

	Road	Fast Road	Sprint
Choke	28	30	33
Auxiliary Venturi	4.5	4.5	4.5
Main Jet	120	120	125
Emulsion Tube	F16	F16	F16
Air Jet	175	180	185
Idle Jet	50F9	50F9	50F9
Pump	35	35	40
Back Bleed	0	0	0

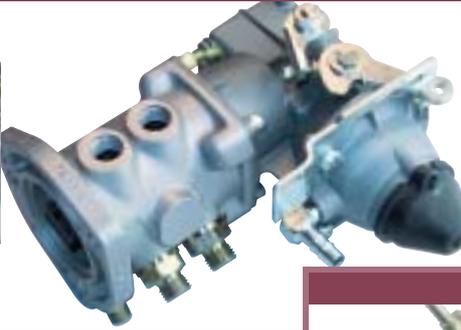
## Uprated Fuel Injection

Note; for full details/listings and illustrations of the entire fuel injection system, including background history and Bosch pump conversions, please refer to the restoration section of this catalogue.

Apart from standard/exchange items, we can also supply uprated metering units and springs for those who wish to retain the Pi system.

If you need any further information please contact your local Moss branch.

Upated Metering Unit | 05



Braided Supply Pipe | 07



Alloy Rocker Covers | 09



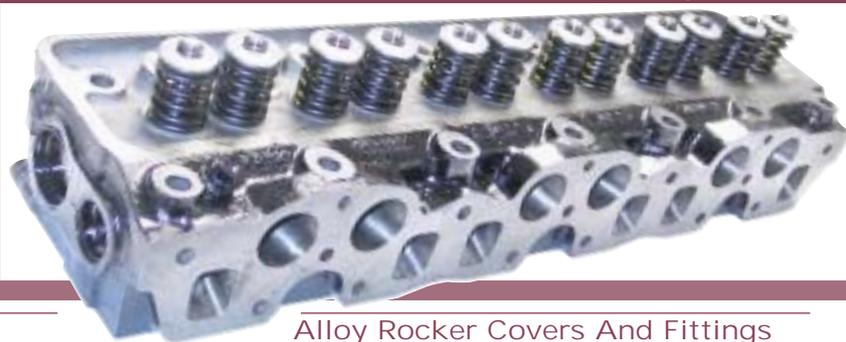
K&N Air Filter | 06



Bosch Fuel Pump | 08



Gas Flowed Cylinder Head | 10



## Upated Fuel Injection cont...

## Alloy Rocker Covers And Fittings

### Upated Metering Unit (Sprint).

Service exchange unit upated for PlusPac C type modifications, especially with late TR6 125bhp originally. This unit is only required where the full potential of the engine's performance is required.

(05) Metering Unit TT12741

### Metering Unit Upated Springs.

Pair of diaphragm springs to improve the late, 1972 on, type metering units for use with the higher performance camshafts. This will allow easier adjustment of the metering unit on a rolling road to obtain optimum fuelling for PlusPac C, or more.

Metering Unit Upated Springs TT1274

### K&N Sports Air Filter.

Designed to replace the standard air filter element in the original air box, giving improved air flow but keeping the original look.

(06) K&N Sports Air Filter KNE9108

### Stainless Steel Injector Pipes.

For improved appearance and added safety, fit a set of our Aeroquip stainless steel injector pipes, ready assembled for easy installation.

Set Of Six Pipes TT1284

### Braided Stainless Steel Fuel Pipes.

Ready assembled braided stainless Pi fuel feed pipes will give you peace of mind, not to mention they look great. Note: PRV = Pressure Relief Valve.

(07) Main Metering Unit Supply Pipe 214890S  
 TR5 Fuel Pump To PRV 215585  
 TR6 Fuel Pump To PRV 215642S  
 PRV Return To Filter 214892S

## Bosch Pi Fuel Pump Conversion

Due to the increased delivery capacity of this pump, compared to the original Lucas, we would advise you to fit our aluminium fuel tank listed here. For full details of fuel system please refer to the Restoration section.

(08) Bosch Fuel Pump Kit TGK125

An alloy rocker cover will not only brighten up your engine bay, but will also help muffle valve noise. Triumph rocker covers, available in 2 styles, are supplied with a chrome filler cap. Note: Always fit a new gasket when replacing your rocker cover, and do not over tighten rocker nuts. For fittings please refer to the restoration section.

Rocker Cover;	Polished	Black
(09) TR5/TR6 Only	GAC6004X	GAC6005X
All 6 Cylinder Triumphs (With TriumphTune logo).	TT1627	TT1220
Rocker Cover Gasket (All)	AJM413	

## Gas Flowed Cylinder Heads

We stock upated cylinder heads that are suitable for unleaded fuel and are ready to fit, either in a Stage II or Stage III specification.

Stage II condition is supplied with gas flowed ports, reshaped chambers, reshaped valves, new springs and guides.

Stage III condition is supplied fully gas flowed for right up to competition use specification as Stage II but with new larger stainless valves, bronze guides and alloy valve caps. If you require a Stage II head with bronze valve guides, please add a B in front of the UL suffix when ordering.

TR5 & TR6 To (e) CP75000;	
Stage II	TT1202UL
Stage III	TT1203BUL
TR6 From (e) CP75000) To (e) CR5000;	
(10) Stage II	TT1212UL
Stage III	TT1213BUL
TR6 From (e) CR5001;	
Stage II	TT1222UL
Stage III	TT1213BUL

### Don't Forget To Fit New Gaskets And Oil Seals.

Whether you are fitting a tubular exhaust manifold or a stage 3 cylinder head, you should always use new gaskets and oils seals where applicable.

### Is Your Engine Standard?

Before you start installing modified engine parts please take a few moments and check to see if your engine unit is standard. If in doubt please call us.

# 54 Performance & TUNING

## Upated Cylinder Head Fasteners

These high grade fasteners will ensure maximum reliability - and safety, when using the engine under high stress conditions. When used with the correct installation procedure, they offer substantial strength and, reduce stretching. Please contact your local Moss branch for details. Our competition head stud kits and nuts are manufactured from high grade materials for greater control of clamping pressure.

- (01) Upated Cylinder Head Stud Kit TT1264
- Upated Cylinder Head Stud Nut (14 Reqd) 103810X
- Upated Cylinder Head Stud Washer (14 Reqd) 508289X

## Tuftrided Crankshafts

Our tuftrided crankshafts are reconditioned/exchange units. For full details and listings of engine components please refer to the Restoration section.

- Tuftrided Crankshaft:**
- (02) TR5, TR6 To (e) CP50000 Long Backed Crank 307546TR
  - TR6 From (e) CP50001 Short Backed Crank 311322TR
- (Note: Long backed and short backed refer to the depth of the rear oil seal surface. Having removed the flywheel and any spacers, if the end of the crank is flush with the engine back plate, it is a short backed crank. If almost an inch of crankshaft stands proud, a long backed crank is fitted. The appropriate flywheel must be used with each type, i.e: long back cranks use a recessed flywheel, short backs a non recessed flywheel).

## Upated Con Rods & Bolt Kits

Our lightweight, forged steel, con rods are supplied with special uprated bolts. Our competition rod bolt kits are manufactured with higher grade material for greater control of clamping pressure. Specially engineered and produced for the most demanding competition use. Always use Loctite when fitting any connecting rod bolts.

- (03) Upated Forged Steel Con Rod 146454X
- Competition Con Rod Bolt Kit TT1280K

## Front Crankshaft Pulley & Damper

If the engine is to be taken to 6500rpm, a good idea is to change the (damped) front crankshaft pulley for a 2 litre version (part no. 154380) ...but don't forget the fan belt. The grooved portion of the pulley has a slightly smaller diameter which reduces belt speed and the likelihood of the belt throwing or turning inside out.

- (04) Front Pulley & Damper, 3/8" 154380
- Fan Belt 3/8" GCB11088

## Forged Aluminium Pistons

Forged pistons and competition ring sets are obtainable in the following oversizes: +1mm; +2mm. When ordering please quote part number and size required, i.e: 148118X1 for +1mm oversize pistons and RTC2430X1 for +1mm ring sets. Each piston includes rings and gudgeon pin. Unless already fitted, these pistons must be installed as a set.

- (05) Forged Piston Standard Size 148118X
- Competition Ring Set RTC2430X

## Upated Valves & Bronze Valve Guides

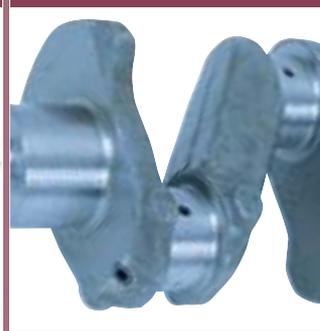
Our slim gas flowed TriumphTune valves, which are manufactured in 21/4N stainless steel, are essential to to maximise the flow of gases through the head. These valves must be fitted with our bronze valve guides that not only improve reliability, but give less friction.

All our valves have 5/16" stem diameter.

**Upated Valves;**

- Inlet Large Diameter 36.58mm TT1714
- Exhaust Large Diameter 31.7mm TT1715
- (06) Bronze Valve Guides (Set Of 12) TT1219

Upated Cylinder Head Stud Kit | 01



Upated Con Rod | 03



## Upated Valve Springs & Alloy Valve Caps

Our uprated valve springs can be used with standard or sports camshafts. Our full race springs are designed for maximum rpm where valve control is required to maintain correct cam profile/contact.

The specification of these valve springs is unique to Moss. The primary spring is uprated and does most of the work and a look at the specifications of various springs in use, see page 91 in the restoration section, will show TT1207 load up the camshaft and rocker gear little different to standard springs. They work in a different way, producing an uprated spring which is compatible with all performance camshafts using standard rocker ratio and valve caps, and are extremely versatile. All these springs must be fitted with our aluminium valve caps.

Our fast road valve springs are specially designed to our own requirements, so they are suitable for all our performance profile camshafts using standard rocker ratio, and our TT1216 alloy valve caps.

The sprint/competition valve springs are similar to our fast road springs, but with stronger outer springs for use with any performance profile up to 9000 rpm with a maximum valve lift of 0.495. Use with our TT1216 alloy valve caps.

**Upated Valve Spring Sets And Caps;**

- (07) Fast Road TT1207
- Sprint/Competition TT1208
- Aluminium Valve Caps (12 Reqd) TT1216

The full race valve springs are similar to our sprint/competition springs, but using a larger spring diameter which allows valve lifts of over 0.495", and still control the top end revs up to 9000rpm.

**Full Race Valve Spring Set (Double) And Caps;**

- Use With Race Prepared Engines TT1708
- Valve Cap - Use Only With Full Race Springs;
- Aluminium Valve Caps (12 Reqd) TT1116

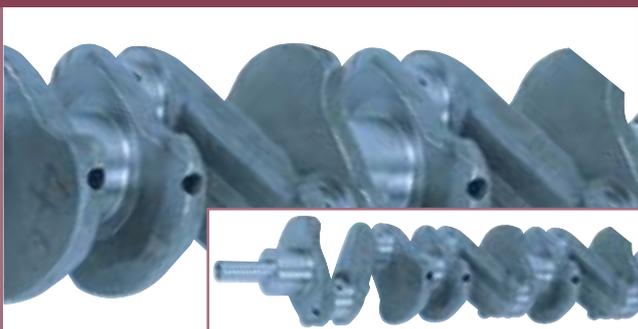
## Lightened Cam Followers

Our specially lightened cam followers allow for high engine revs while reducing the load on the camshaft.

- Cam Follower (12 Reqd) TT1209



Tuftrided Crankshaft | 02



Upgraded Roller Rocker Set | 10



Pistons | 05



Bronze Valve Guides | 06



Valve Springs & Caps | 07



Tuftrided Rocker Shaft | 08



Rocker Spacer Set | 09



## Push Rods

Our strengthened, tubular, TriumphTune push rods suit all high compression heads, and our specially lightened cam followers allow for high engine revs while reducing the load on the camshaft.

Note for U.S.A. models; Check the length of your own standard part and deduct the amount being skimmed from the cylinder head and use nearest length pushrod.

Push Rods - Not U.S.A. (12 Req'd):

All CP Models 8.11"	TT1233
All CR Models 8.25"	TT10433

For those who are experimenting, the following may also be of help:

Tubular Push Rods 7.99"	TT1234
Solid Push Rods 8.3"	148916
Solid Push Rods 8.149"	149513
Solid Push Rods 7.99"	148916

## Upgraded Rocker Shaft & Fittings

Use these components to maximise reliability.

All cars can benefit from a replacement tuftrided rocker shaft, they will resist wear and breakage especially when using high revs. Note: the tuftrided hardened shaft must be thoroughly purged of the salts used in the hardening process, before it is fitted. Before fitting any rocker shaft it is essential to make sure that the end plugs are in position.

The friction and the rocker side loads normally associated with the standard rocker gear can be reduced and the location made more positive, by fitting the three piece steel spacer set instead of the standard shaft springs.

Pedestal shims are for use with standard rockers in conjunction with a higher compression cylinder head, enabling the correct rocker angles to be obtained. They have a nominal thickness of 0.040" and are supplied individually. Use with upgraded pushrods. Please contact your local Moss branch if you require more information.

(08) Tuftrided Rocker Shaft	TT1217
(09) Rocker Spacer Set	TT1218

(These replace the tension springs, on the rocker shaft, allowing the rocker arms to rotate much easier).

Rocker Pedestal Shim	TT1910
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(Use these shims if your cylinder head has been skimmed and the rocker angle needs to be adjusted. Nominal depth of each shim is 0.06").

## Roller Rocker Conversion

Use these components to maximise performance and reliability. Roller rockers are designed to operate the valves with less resistance and more efficiency. The power increase with the use of these rockers is approximately an extra 10bhp. The steel rockers are made with needle roller inserts and have solid spacers ready fitted; the end roller tips are made in high quality steel for long life. The roller rockers are also designed to give a higher lift ratio, 1.65:1 against the standard ratio of 1.5:1. The design is also specially strengthened against deflection at any time in the operating sequence. This conversion must be only be used with full race valve springs and the corresponding valve caps. It goes without saying that upgraded push rods are used with this conversion.

(10) 1.65:1 Roller Rocker Conversion Set	TT1248
Rocker Oil Feed Kit	TT1226
(This kit must be used when fitting roller rockers).	
Kent Camshaft Lubricant 250ml	KEN2
Cam Timing Degree Disc	TT2929
Full Race Valve Springs (Set Of 12)	TT1708
Aluminium Valve Caps (12 Req'd)	TT1116

If you are fitting high lift roller rocker conversion you must fit our rocker oil feed kit, TT1226.

## TR5/6 Roller Rocker Kits

The roller rocker kit replaces the whole existing rocker assembly. Two ratios are available, permitting very fine tuning of the engine and both offer the well known advantages of reduction in power sapping friction to shaft and valve tips, and the ability to withstand the stresses of high engine rpm without breaking. Generally the higher lift cam uses the lower the rocker ratio should be, the standard being 1.5:1. It is vital to check the clearance between valve spring coils as there is a possibility of coil binding when attempting to use a roller rocker kit in association with a high lift cam, and the higher the roller rocker ratio, the greater this becomes. The kit does offer the opportunity to enhance the engine power when fitted inconjunction with a standard or fairly mild cam profile without taking the engine apart. All components are available separately as spare in case of mishaps.

1.55:1 High Lift Roller Rocker Kit	TT1245
1.65:1 High Lift Roller Rocker Kit	TT1246
Roller Rocker Pedestal Kit	TT1247

# 56 Performance & Tuning

## Camshafts Explained

Remember that with a standard capacity engine the power band will be effective higher up the rev range than would be the case with an enlarged capacity unit. All camshaft profiles must use TT valve springs. Be aware that road and race cams mean just that. Road cams will not produce any results whatsoever on the race track - rainy days excepted!

### Road.

This is a good profile for the TR engine giving a wide power band and allowing lots of mid-range torque to be available. When fitted with the PlusPac B conversion the cam will allow the unit to be more free revving, producing the best power for a road car. The camshaft is for either SU or Weber/Dellorto carburettors. The profile will peak out at 5000rpm with a gentle fall off. The best top end power is produced with a Stage III or IV cylinder head.

### Fast Road.

This profile was introduced in 1988 and was designed primarily for use with larger carburettors and the PlusPac B conversion, as these allow the cam profile to work properly. The profile gives good power from 2500rpm right through to 5500rpm which makes it very good for the occasional mild competition car.

### Sprint.

This is a peaky camshaft profile which when used with the PlusPac C kits will give good account of itself. The profile will peak out at 6000rpm especially when used with the long TriumphTune Weber inlets.

### Sprint 88.

This profile was introduced to enable the modified engines to obtain a wider upper power band, for road sprint type use. The camshaft will give slightly more power than the sprint cam but the power band is much wider meaning, in that the camshaft is much more driveable on the road.

### Race.

The full race profile is not suitable for a road car as the power band is from 4200-6500rpm. This is ideal for a full competition engine and must be used with high compression head and a maximum distributor advance of 30 degrees.

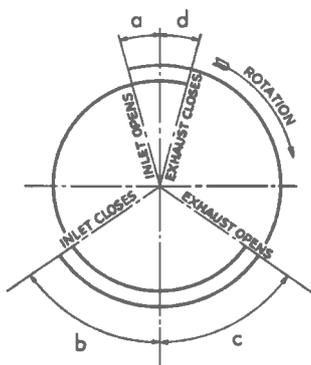
The full competition profiles TT1106 onwards are being continuously developed to suit the availability of steel reciprocating engine parts. With 89-92mm pistons and 8000rpm capability, careful setting up, high build quality, 200bhp is now a reality.

### Installation.

Please follow the detailed instructions supplied with every TriumphTune camshaft. If you require any further assistance please contact your local Moss branch.

### Valve Timing Explained.

- a .....Angle when inlet valve opens, before top dead centre.
- b .....Angle when inlet valve closes, after bottom dead centre.
- c .....Angle when exhaust valve opens, before bottom dead centre.
- d .....Angle when exhaust valve closes, after top dead centre.
- a+b+180° ....The period or duration during which the inlet valve is open.
- c+d+180° ....The period or duration during which the exhaust valve is open.
- a+d .....Valve overlap.



## Performance Camshafts

Camshafts are available as reprofiled/exchange units or new, please state preference when ordering.

To assist in selecting a suitable camshaft we have prepared a table showing their various characteristics, these will change from engine to engine and with other modifications such as carburettor(s), cylinder head, valve gear or valve size.

Care must be taken to ensure that installation is carried out correctly and that components all work together or you will not get the expected power output or reliability. It is essential that the new cam is fitted with new followers as they mate with the lobe that they run on and should never be used on another lobe.

Lightened and tufrided followers wear more slowly and put less load on high lift cam lobes; they are also manufactured with a drainage hole.

Another essential is the special lubricant that must be used with all new cams, part number KEN2, it provides vital lubrication during initial starting and protects your cam from extreme wear in its first minute of use.

Don't forget the cam timing degree disc, TT2929, you will need this to set your cam timing, or, camshaft assembly lubricant.

## Camshaft Lubricant, Sealant & Stud Lock

These few items will make all the difference when re-building your standard and/or modified engine. Especially important is the Kent camshaft build-up lubricant.

- |  |                  |
|--|------------------|
| (01) Cam Timing Degree Disc              | TT2929           |
| (02) Kent Camshaft Lubricant 250ml       | KEN2             |
| (03) Thread Lube 1.69floz Stud Lock 10ml | ARPL99<br>GAC100 |
| (04) Loctite Stud Lock 3ml               | GAC100/3         |
| (05) Wellseal Jointing Compound 100ml    | 600569A          |
| (06) Hylomar Jointing Compound 100gm     | GGC102           |
| (07) Graphogen Engine Building Lube      | GGL9122X         |





### TriumphTune Camshafts

(08)	Part No.	Valve Springs	Inlet Timing	Exhaust Timing	Camshaft Duration	Camshaft Lift	Install* Setting	Inlet Valve Clearance	Exh Valve Clearance	Power Range
Road 83	TT10404N	A	30-56	74-28	266°	0.288"	103°	0.016"	0.016"	2200-5200
Fast Road	TT1204N	A	30-70	70-30	280°	0.270"	108°	0.014"	0.015"	2500-5500
Fast Road 83	TT10405N	A	37-63	74-28	280°	0.288"	103°	0.022"	0.024"	2500-6000
Fast Road 89	TT1204N	A	36-74	58-34	290°	0.293"	106°	0.014"	0.014"	2750-6250
Sprint	TT1205N	A	38-70	70-38	290°	0.274"	105°	0.014"	0.015"	3000-6500
Sprint 90	TT1244N	B	39-71	81-29	290°	0.302"	110°	0.014"	0.015"	3000-7000
Race 83	TT1606N	B	42-68	78-32	290°	0.302"	103°	0.022"	0.024"	3300-6500
Race 86	TT1706N	C	51-79	79-51	320°	0.290"	104°	0.018"	0.022"	3400-7000
Race 95	TT16061N	C	40-80	80-40	324°	0.313"	106°	0.022"	0.024"	3500-7500

IMPORTANT: All TriumphTune camshafts are profiled on new blanks. For fast road profiles, existing camshafts may be reground using the Customers Own Unit (CUT), but this is entirely at the customers risk as we cannot guarantee the depth of the chill hardening on the original Triumph camshaft during the re-profiling process.  
 (Note: The power range and upper rev limit for race camshafts is dependent on individual engine preparation and reciprocating parts).  
 (\*Install settings/full lift; When No.1 Inlet valve is fully open ATDC: After Top Dead Centre).

### Rocker Oil Feed Kit

This stainless steel braided hose supplies much needed oil direct to the rocker assembly and minimises wear and damage. The adaptor fits neatly in-line with the oil pressure switch, and the banjo connects to an existing hole in the rear of the cylinder head. This conversion is essential if you are fitting roller rockers.

(09) Rocker Oil Feed Kit TT1226

### Vernier Cam Gear



For the best possible cam timing this vernier adjustable cam gear is highly recommended, especially for competition use. Fits all models using duplex timing chain.

The Vernier duplex, ie: twin chain, camshaft gear has a boss, which fixes rigidly to the camshaft, onto which is clamped the outer gear ring.

Upon loosening the clamps, the gear may be rotated thereby adjusting the camshaft relative to the gear. Advancing the camshaft timing, that is making the full inlet valve lift occur

### Vernier Cam Gear cont...

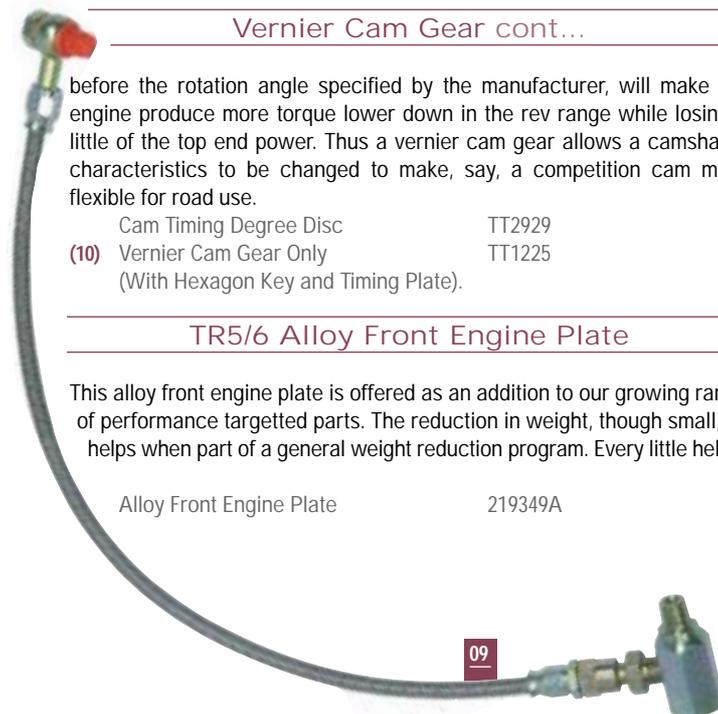
before the rotation angle specified by the manufacturer, will make the engine produce more torque lower down in the rev range while losing a little of the top end power. Thus a vernier cam gear allows a camshaft's characteristics to be changed to make, say, a competition cam more flexible for road use.

Cam Timing Degree Disc TT2929  
 (10) Vernier Cam Gear Only TT1225  
 (With Hexagon Key and Timing Plate).

### TR5/6 Alloy Front Engine Plate

This alloy front engine plate is offered as an addition to our growing range of performance targetted parts. The reduction in weight, though small, all helps when part of a general weight reduction program. Every little helps.

Alloy Front Engine Plate 219349A



# 58 Performance & TUNING

## Stage Tuning

To explain - and simplify, the different stages of engine tuning in this section, we have shown, in each PlusPac category, the parts you will need to start, and follow, the recommended route for tuning: exhaust system/ exhaust manifold - carburetors, U.S.A. specification and air filters - cylinder head - camshaft. ie: The engine must be able to breathe properly before you put more fuel in.

Our PlusPacs are more than a rough guide, they represent many years experience of hands-on tuning and modifying 6 cylinder Triumph sports cars.

There are many other ways to improve engine power and performance, such as; Weber carburetors, lightened flywheels, balanced/tufted crankshafts, matched/balanced sets of con rods, or by fitting oversize pistons to increase engine capacity. But, no matter how far you want to go, our PlusPacs will put you on the right road. If you wish to take things further, please contact your local Moss branch.

Please don't forget, before increasing the power output and speed of any vehicle, you should ensure that your brakes, steering, chassis etc... can cope with the modifications, and, a alloy roll bar is a very sensible investment for all open top sports cars.

### Don't Forget To Fit New Gaskets And Oil Seals.

Whether you are fitting a tubular exhaust manifold or a stage 3 cylinder head, you should always use new gaskets and oils seals where applicable.

### Is Your Engine Standard?

Before you start installing modified engine parts please take a few moments and check to see if your engine unit is standard. It may be that the cylinder head has been skimmed and/or the cylinder block has been bored-out. This is especially important when fitting any modified cylinder head, as the compression ratio has to be matched to the engine specification. If in doubt please call us.

## Tuning Stages For Carburettor Models

These performance PlusPacs, stages, show the recommended modified parts required for all carburettor specification cars.

### PlusPac A

#### Recommended Performance Parts For Carburettor Models.

This is the very first stage to increase the power output of your TR. These components will vastly improve the airflow through the engine. Power will be increased through the standard rev range, with slight gains at peak rev's. See PlusPac D for future carburettor options.

**Power increase approx. +25/35bhp.**

#### Components For PlusPac A;

Extractor Manifold	TT1200
GT Exhaust System	Spec As Reqd
HS6 SU Carburetors (Pair)	TT1256
K&N Air Filters (2 Reqd)	KN56-9098
Carburettor Needles (2 Reqd)	CUD1104

#### Be Aware.

If your head has been skimmed by more than 0.100", to increase the compression ratio, then you will need to fit rocker pedestal shims, TT1910, and, alternative push rods, see page 55.

### PlusPac B

#### Recommended Performance Parts For Carburettor Models.

This is the 2nd stage to increase engine power. The gas flowed, stage 2, head will give a very worthwhile improvement in torque and, the road 83 camshaft will extend the power from mid to peak revs. See PlusPac C for future camshaft options and PlusPac D for future cylinder head options.

**Power increase approx. +30/40bhp.**

#### Components For PlusPac B - As Well As PlusPac A Parts;

Stage 2 Cylinder Head	Spec As Reqd
Road 83 Camshaft	TT10404N
Lightweight Cam Followers (12 Reqd)	TT1209

#### 2.64 Litre Short Engines.

If you decide that you want to increase the capacity of your TR to 2.64 litres, this is the easy way to do it.

2.64 Litre Short Engine	ENG1250
(Please contact us to discuss camshaft and other tuning options for this engine conversion).	

### PlusPac C

#### Recommended Performance Parts For Carburettor Models.

The 3rd step to improve engine power. Used with PlusPacs A and B, the addition of the fast road 83 camshaft extends the power range in the upper ranges for top-end breathing.

This conversion retains limited tractability for town use. See PlusPac D for future options.

**Power increase approx. +40/45bhp.**

#### Components For PlusPac C (Optional) - As Well As PlusPacs A And B Parts;

Fast Road 83 Camshaft	TT10405N
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#### Are You Considering Fitting Our High Lift Roller Rocker Conversion?

Before fitting the high lift rocker conversion, you will need to verify the profile of your camshaft and valve springs. The higher the lift of the camshaft, the less likely you will need to fit this conversion without further advice. If in doubt, please call your local Moss branch.

*A, B, C or D the choice is yours...*

### PlusPac D

#### Recommended Performance Parts For Carburettor Models.

This stage of tuning requires a change of carburetors to triple 40 DCOE Webers. The choice of camshaft will determine the driveability in town or the open road. This conversion will really extend the power in the upper rev range. See PlusPacs A, B and C for carburettor, cylinder head and cam options.

**Power output approx. 155+bhp - Depending on condition and engine build quality etc...**

#### Components For PlusPac D - As Well As PlusPacs A, B And C Parts;

Extractor Manifold (1 Reqd)	TT1230S
GT Exhaust System (1 Reqd)	Spec As Reqd
Stage 3 Cylinder Head	Spec As Reqd
Weber 40 DCOE Carb. Conversion Kit (1 Reqd)	TTK1259
(Weber kit includes 3 carbs, inlet manifold, throttle cable and linkage, and all fittings).	

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**PlusPac D cont...**

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A further option you may want to consider at this stage is to bore out the cylinder block and fit +0.060" pistons to increase the engine capacity to 2.64 litres. Alternatively you can fit one of our 2.64 short engines, ENG1250.

**Don't Forget To Fit New Gaskets And Oil Seals.**

Whether you are fitting a tubular exhaust manifold or a stage 3 cylinder head, you should always use new gaskets and oils seals where applicable.

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**Tuning Stages For Fuel Injection Models**

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The following PlusPacs, stages, show the recommended modified parts required for all fuel injection Pi specification cars.

---

**PlusPac A**

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**Recommended Performance Parts For Fuel Injection Vehicles Only.**

This is the very first stage to increase the power output of your fuel injected TR, these components will allow the engine to breath freely. Power will be increased through the standard rev range, with slight gains at peak rev's.

**Power increase approx. +15bhp.**

**Components For PlusPac A;**

Extractor Manifold	TT1200
GT Exhaust System	Spec As Reqd
K&N Air Filters	KNE9108

**Fast Road TR's To Full Race Spec.**

We are continually developing new performance products for the TR, from fast road to full race specification, so it is always worth a phone call to check what's available and what's new.

---

**PlusPac B**

---

**Recommended Performance Parts For Fuel Injection Vehicles Only.**

This is the 2nd stage to increase Pi engine power. You have a choice of gas flowed cylinder heads, Stage 2 or Stage 3, either will spread the power throughout the rev range.

**Power increase approx. +20bhp.**

**Components For PlusPac B - As Well As PlusPac A Parts;**

Stage 2 Cylinder Head	Spec As Reqd
Stage 3 Cylinder Head	Spec As Reqd

**Don't Forget.**

Whether you want your classic TR to be a very fast and safe road car, or a full race specification machine, we stock everything you will need.

Our performance and tuning parts inventory covers every aspect of modification, from bronze valve guides and alloy valve caps to roller rocker shaft conversions and alloy flywheels, from sports exhausts to full race systems, from close ratio gear sets to quaife dog clutch gear sets, from uprated springs and quick racks to kevlar brake pads. Please contact us to discuss camshaft and other tuning options for this engine conversion.

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**PlusPac C**

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**Recommended Performance Parts For Fuel Injection Vehicles Only.**

The 3rd step to improve Pi engine engine power. Used with PlusPacs A and B, the change of camshaft profile at this stage will alter the power curve in the upper rev ranges - depending which camshaft you choose to fit.



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**PlusPac C cont...**

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**Pre 1972 Engines Can Use The Sprint Cam.**

Cars from 1972 can use the fast road '83 cam: The camshaft profiles we have selected are in the lower range that will give a wide power band for average use. You can fit a wilder/hotter cam that will produce more power but, in a much narrower band. See PlusPac 'D' for future cam options.

**Power increase approx: With Sprint Cam Pre 1972 165+bhp.  
With Fast Road '83 Cam 1972 On 160bhp.**

**Components For PlusPac C (Optional) - As Well As PlusPacs A & B Parts;**

Sprint Camshaft Pre 1972	TT1205N
Fast Road 83 Camshaft 1972 On	TT10405N
Lightweight Cam Followers (12 Reqd)	TT1209
Distributor Advanced Spring Set	TT1903
Metering Unit Spring Set	TT1274

**Mild Road To Full Race Camshafts.**

Whether you want a mild camshaft, just for that little extra, or you want a full race cam, we stock a full range from 260 to +320 duration.

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**PlusPac D**

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**Recommended Performance Parts For Fuel Injection Vehicles Only.**

This stage of tuning for Pi models is based on our 2.64 litre short engine, roller rocker conversion and a choice of 3 different lift camshafts, that will give you increased low-mid range torque - for fast road or competition use. Please refer to camshaft chart/listings details of camshaft variation.

**Components For PlusPac D - As Well As PlusPacs A, B & C Parts;**

2.64 Litre Short Engine	ENG1250
Fast Road 83 Camshaft	TT10405N
Fast Road 89 Camshaft	TT12041N
Sprint Camshaft	TT1205N
Lightweight Cam Followers (12 Reqd)	TT1209
High Lift Roller Rocker Kit	TT1248
Push Rods (12 Reqd)	Spec As Reqd

# 60 Books & MANUALS

## Workshop Manuals

### Factory Workshop Manuals.

Reprints of genuine factory workshop manuals packed with essential information for all aspects of vehicle maintenance and repairs.

#### Workshop Manuals;

TR4 & 4A	540322
TR5 Supplement To TR4/4A	545053
(01) TR6	545277SC

### Glovebox Workshop Manual.

Handy, compact version of the genuine manual, a must for the glovebox.

#### Glovebox Manual;

(02) TR5/250/6	545277HBS
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### Haynes Workshop Manual.

Probably the most commonly found workshop manual in any home garage, the Haynes range provide useful information on stripping and rebuilding anything from a master cylinder to a complete differential assembly.

#### Haynes Workshop Manual;

TR5/TR6	MGL6216X
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### Owners Handbooks.

Originally available and supplied when the car was new, these reprints are essential for day-to-day maintenance of your classic.

#### Owners Handbooks;

TR250 USA	545033
TR6 To 1973	545078
(03) TR6 From 1974	545078A
TR6 U.S.A. 1972	545111/73
TR6 U.S.A. 1975	545111/75

### Original Parts Catalogues.

These books, which are reprints of original publications, are an essential source of reference.

#### Parts Catalogues;

(04) TR5	516915
TR250	516914
TR6 1969-73	517785A
TR6 CR/CF	RTC9093A

### Competition Preparation Manual.

These original booklets not only explain what you need to do, they are an absolute must for the collector of Triumph memorabilia. As originally published by; Standard Triumph, Triumph, British Leyland, and, Kas Kastner, who was head of the Standard Triumph Competition Department in the U.S.A.

#### Competition Preparation Manual;

(05) TR250/TR6	MGL6311
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### Carburettor Maintenance.

Haynes Publication.

This carburettor manual covers SU, Stromberg, Weber and Dellorto assemblies, giving an insight into the way they operate, how to maintain and tune them, plus detailed overhaul procedures.

(06) Carburettor Maintenance	MGL0279
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### Tuning SU Carburetors.

This book looks into the basic design of the SU carburettor. It covers many areas including overhaul, tuning mixtures, jet and needle identifications. Hundreds of line illustrations of different types of carbs models as used on Triumph (and MG) models. 187 pages.

(07) Tuning SU Carburetors	MGL0070
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### SU Workshop Manual.

Factory workshop manual for SU carburetors and fuel pumps.

(08) SU Workshop Manual	GAC1044X
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## Workshop Manuals

### Weber Carburetors.

By Par Braden.

Shows you how to select and tune Weber sidedraft and downdraft carburetors. Includes theory of operation and design as well as trouble shooting. 300 pages.

(09) Weber Carburetors	GAC1032X
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### Lucas Fault/Diagnosis Manual.

Lucas Publication.

This service guide presents a logical sequence of tests that may be carried out on starters, generators, regulators, ignition and lighting systems. Written for technicians, this book can be easily understood by the non-professional. 46 pages.

(10) Lucas Manual	GAC1029X
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## Reference Library

### Road And Track Tests Triumph Sports Cars.

By Brooklands Books.

Official reprints of original articles taken from America's most popular motor-ing magazines. With a similar content to the gold portfolios these books offer an interesting insight on the American's opinion of British sports cars.

Triumph Sports Cars;	1953-67	MGL6010X
(11) 1967-74		MGL6011X
1974-82		MGL6014X

### Triumph By Name - Triumph By Nature.

By Bill Piggot.

This book concentrates on what is regarded by many the most successful range of Triumph sports cars, the TR2-TR3B models. Bill Piggot looks in great depth into the development of the TR2 with examples of prototypes and other literature such as publicity and sales material. The book also covers the competition history of the side screen TR's with original photographs of cars in action. 288 pages. Over 400 colour and black and white photographs.

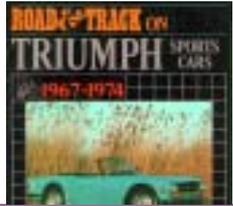
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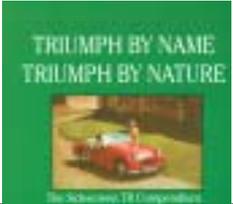
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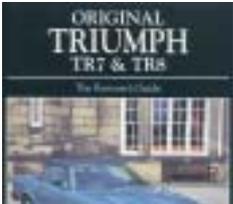
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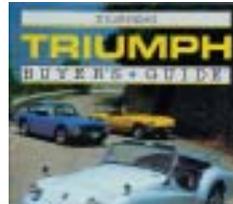
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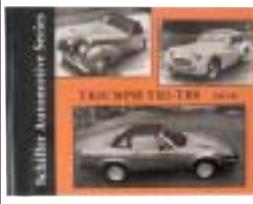
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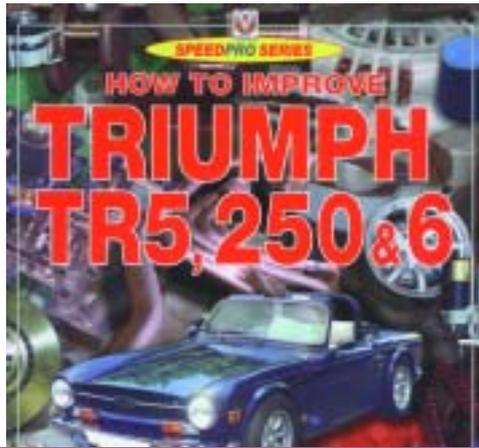
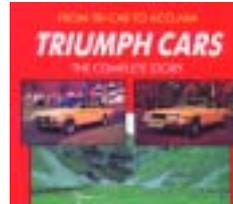
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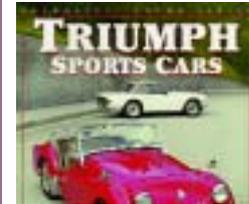
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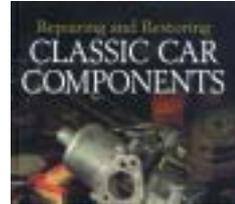
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Reference Library cont...

Reference Library cont...

**Original Triumph TR7 & TR8.**

By Bill Piggot.

Written by Bill Piggot, one of the most respected authors on Triumph sports cars, this book covers the history of the TR7 and TR8 in great detail. Packed with information, and with over 200 colour photographs, this book really is the TR7 and TR8 restorer's guide.

(13) Original Triumph TR7 & TR8 MGL6023

**Gold Portfolio.**

By Brooklands Books.

Contains many examples of motoring press coverage. Similar content to the Brooklands and Road & Track reprints, but contains more in-depth reviews, and many more examples of motoring press coverage.

**Gold Portfolios;**

TR4/5 & TR250 MGL6006X  
(14) TR6 MGL6007X

**Triumph Buyers Guide.**

By Richard Newton.

This book examines all the Triumph variations from Pre-War saloons and sportscars, to the GT6 and Stag. With over 200 mono photographs, this book is a treasure trove of details, specifications and period reviews. 176 pages.

(15) Triumph Buyers Guide MGL0218

**Triumph TR2-TR8 History.**

96 page, hard cover book containing colour and black and white photos, drawings, charts and catalogue facsimiles. Each model is represented in it's historic and developmental aspects.

(16) TR2-8 History 213-035

**Enthusiasts Restoration Manual.**

By Roger Williams.

These how to restore publications are an absolute must have for all TR owners. This book cover every aspect of classic car restoration, from creating a restoration plan to welding techniques, and steering conversions. They also guide you through the hazards of choosing and buying. 192 pages with over 450 illustrations.

(17) How To Restore TR5/TR250/TR6 MGL6026

**Triumph Cars - The Complete Story.**

By Graham Robson & Richard Langworth.

Includes technical specifications, production details, clubs and much more. 352 pages, 510 illustrations.

(18) Triumph Cars GAC1046X

**How To Improve Your TR.**

By Roger Williams - Foreword by Peter Cox of Moss.

Compares, tests, fits and generally asses products from all the major UK parts suppliers. You will know the truth of the reading of this and could possibly save yourself a lot of time, money and hassle.

How To Improve Your TR2/3/4/4A MGL6613  
(19) How To Improve Your TR5/250/6 MGL6614

**Triumph Sports Cars.**

By William Krause.

Triumph sports cars recounts Triumphs colourful history of development, disappointments, success, and the ultimate decline under British Leyland. 96 pages.

(20) Triumph Sports Cars GAC1047X

**Repairing And Restoring Classic Car Components.**

On modern cars, damaged components are regarded as items to be thrown away and replaced. Spares are readily available, and the high cost of labour makes repair uneconomic for commercial garages. But for classic cars the story is quite different. This book expertly written and clearly illustrated, shows the enthusiast how to rescue, repair and restore old components. It will be indispensable to people wanting to keep a restored car on the road as well as those undertaking a full rebuild.

(21) Repairing And Restoring Components MGL0297

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