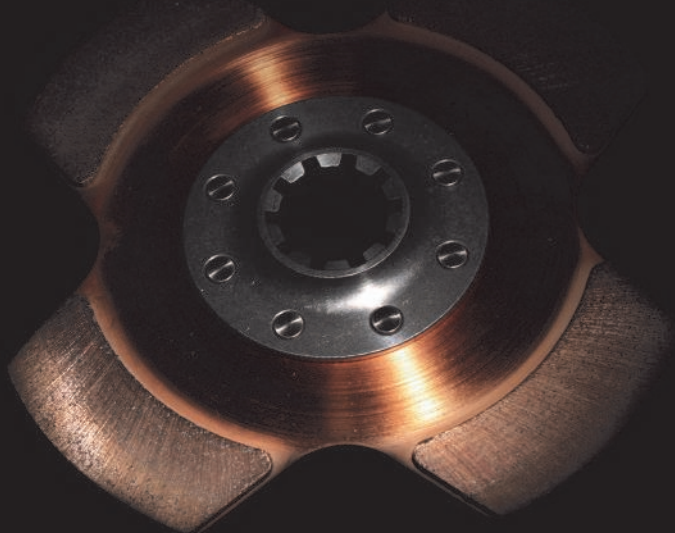


# COMPETITION SUPPLIES

PRODUCT CATALOGUE

ISSUE 2



## Welcome

Welcome to the latest issue of our product catalogue. It provides an overview of our stocked ranges but we are continually expanding our offering so if you can't find what you require please contact us as we may well be able to help.

2015 saw us move to a much larger premises, again at the famous Silverstone race circuit, which has allowed us to both increase stock levels & offer a much larger retail area.

We have extensive experience of the use and installation of the products we offer so if you require advise or would like to discuss your installation then also please contact us. For current pricing please refer our website or contact us for a quotation or current price list.

## Shipping

We ship U.K. & worldwide via courier. We use a next working day courier for our U.K. deliveries and can offer express or economy services for international deliveries. Postal delivery is also available for low value, low weight items.

## Payment

We accept payment by MasterCard & Visa credit & debit cards, we also accept payment via PayPal\* & electronic transfer\*\* to our bank account.  
*\*Invoices settled by PayPal may be subject to a surcharge to cover their fees.*



## Bank Details

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Account Name: Competition Supplies Ltd  
Account NO.: 71221360  
Sort Code: 30-15-53  
SWIFTBIC: LOYDGB21052  
IBAN: GB03 LOYD 3015 5371 2213 60

\*\* Please Kindly Note: The sender is responsible for all fees, both sender and beneficiary, the net amount received in our account should be the full value of the invoice or invoices being settled.

## VAT and Overseas Customers

We can invoice net of VAT for goods being delivered to customers located outside the EU or VAT registered businesses outside the U.K. and within the EU who supply a valid VAT number.

## Catalogue Content

We have taken care to ensure the contents of this catalogue are correct however we reserve the right to alter product detail or specification without notice. The contents of this catalogue including images are protected by copyright and may not be reproduced without permission.

## Terms & Conditions

Standard Terms & Conditions apply to all sales, a copy of which is available on request.

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Monday- Friday : 8:30am to 6:00pm  
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Sundays & Bank Holidays: Closed

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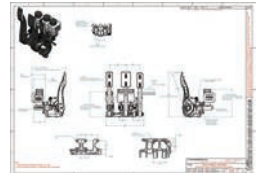
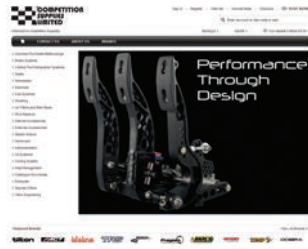
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## Unit 17, Silverstone Circuit

Our base at Silverstone Circuit is convenient for our many local customers as well as those visiting for testing and racing. Our new larger display area shows a selection of our offering, and with our Aladdin's Cave stores covering over 3000 sq/ft and stacked to the rafters with essential components we are rapidly becoming the go to source for hard to find parts.

## www.competitionsupplies.com

Our website offers more comprehensive information of our range of products including in some cases a copy of the manufacturer instructions & installation drawings.



## Who are we?

**Bruce Chambers:** Bruce started early in motorsport helping his father with his Formula Atlantic and Sports 2000 race cars with further mechanical expertise being gained over the next 30 years from spells at an MG specialist, Mothercare and some other well known motorsport equipment suppliers. Bruce built his first race car, an MGB Roadster, in the mid 90's and has recently completed the rare Elva Courier in which he is pictured.



**Sean Kukula:** A keen rally fan from an early age Sean started competing on road events in the 1980's and progressed to co-driving in the Middle East Rally Championship. More recently Sean has tried his hand behind the steering wheel and was lucky enough to be offered a drive at the Silverstone Classic meeting in this beautiful ex-Sebring Aston Martin DB Mk3. Sean has been supplying motorsport parts for over 25 years.



## James Newbould

James also comes from a rallying background having started navigating for his father on road rallies at the tender age of 14. Many years of road events & enduro rallies led James to build himself a Vauxhall Corsa for stage rallying in which he has successfully completed the Mull Rally and Wales Rally GB National. James has over 10 years experience of supplying motorsport components.

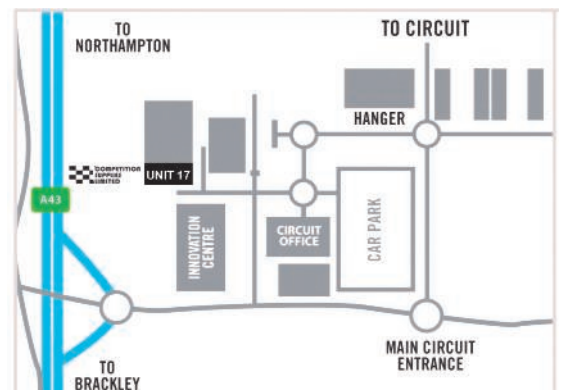


## How To Find Us

By Road:  
From the M1 exit at J15A and head south on the A43.  
From M40 North exit at J11 & take the A422 to Brackley then the A43 North. From M40 south exit at J10 & head north on the A43.

By Rail:  
Milton Keynes & Northampton railway stations are approximately 20 minutes away & we are happy to organise a taxi on your behalf.

By Air:  
Birmingham, Luton & East Midlands, 1 hour.  
Heathrow, 1.5 hours.  
Gatwick & Stanstead, 2 hours.

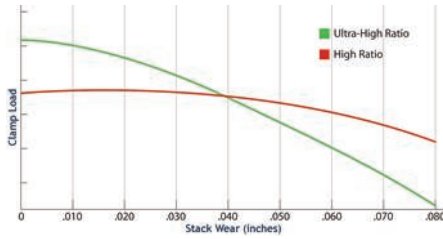


## Carbon/Carbon Clutches

Offering many advantages over other friction materials, they are by far the lightest of the clutch types. They have a much greater tolerance of high temperatures and have the smoothest engagement characteristics. The high initial purchase price is offset by their durability and their smooth engagement can often help improve the life of gearboxes and other drive line components. Their characteristics also make them ideal for high-powered road cars.

### Pressure Plate Options

As standard, Tilton 4.5" and 5.5" carbon clutches feature a High Ratio pressure plate that offers high clamp load over a wide wear range. As illustrated in the graphs below, the clamp load (torque capacity) of the High Ratio pressure plate is relatively flat until .030" (.76mm) of wear. Ultra-High Ratio pressure plates, which are standard on 7.25" and optional on 5.5" carbon clutches, provide 20% more clamp load and diaphragm spring travel (modulation) than High Ratio pressure plates.



### High Ratio Pressure Plate

- Standard pressure plate ratio for 4.5"/5.5" clutches
- Short release travel for quick engagement and gear changes
- Flat clamp load curve for longest wear range

### Ultra High Ratio Pressure Plate

- Optional pressure plate ratio for 5.5" clutches.
- Standard pressure plate ratio for 7.25" clutches.
- 20% more release travel than High Ratio for improved modulation
- 20% more clamp load than High Ratio for higher peak torque capacity
- Clamp load drops more quickly with wear than High Ratio

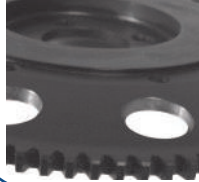
## Pressure Plate Options

As standard, Tilton 4.5" and 5.5" carbon clutches feature a High Ratio pressure plate that offers high clamp load over a wide wear range. As illustrated in the graphs below, the clamp load (torque capacity) of the High Ratio pressure plate is relatively flat until .030" (.76mm) of wear. Ultra-High Ratio pressure plates, which are standard on 7.25" and optional on 5.5" carbon clutches, provide 20% more clamp load and diaphragm spring travel (modulation) than High Ratio pressure plates.

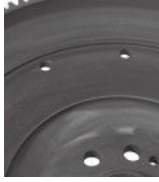
### Flywheel Fitment

All Tilton carbon clutches are available for both conventional step flywheel fitment or pot flywheel fitment. If pot flywheel fitment is required the "S" suffix in the part number should be substituted for a "P".

#### Step Type



#### Pot Type



### Shimming For Wear

As the carbon stack wears full clamp is maintained by installing replacement main pressure plates of increasing thickness to compensate for the stack wear. This ensures both consistent clamp and long life.



# tilton

It was Tilton Engineering who in the mid-80's invented the carbon/carbon racing clutch, and patented the drive system. It was the first carbon/carbon clutch ever to win a Formula One Grand Prix (Ayrton Senna's Lotus-Honda at the 1987 US Grand Prix in Detroit). Since then, Tilton carbon/carbon clutches have been continually refined to be the best carbon clutches on the market. They have seen multiple victories in races worldwide, from the 24 Hours of Le Mans to the Baja 1000. Utilising the experience Tilton has gained over the ensuing years, the clutches have evolved and been developed to ensure their quality remains unsurpassed. Each is built using the finest materials, the latest in manufacturing processes and is held to strict quality control standards. As part of their build process Tilton carbon/carbon clutches are rigorously tested and documented before being delivered to the customer, they offer a unique combination of extremely low inertia, high torque capacity, high heat capacity and smooth engagement characteristics. These features mean they are used in circuit race, endurance, off-road and high-performance street applications. The carbon matrix plates (driven & floater) do not warp from heat, providing consistent gear changes and minimising heat-related clutch failures. The smooth engagement characteristics of the carbon plates provide good drivability and reduce "shock" to other driveline components. Through the use of additional pressure plates (shims) and periodic rebuilds, Tilton carbon/carbon clutches offer long life and reliable performance.



Typical Applications  
Circuit Racing  
Single Seaters  
Sports Prototypes  
Endurance Racing

### 4 1/2" (114mm) Carbon/Carbon Clutches

	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (in-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
2 PLATE	460/626	800/352	1.2 kg	11.4/.0033	6512HSG-S
3 PLATE	690/938	800/352	1.5 kg	12.3/.0036	6513HSG-S
4 PLATE	920/1251	800/352	1.8 kg	13.0/.0038	6514HSG-S

Typical Applications  
Circuit Racing  
Single Seaters  
Sports Prototypes & GTs

### 5 1/2" (140mm) Carbon/Carbon Clutches

	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (in-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
1 PLATE	High	250/340	830/375	1.4 kg	14.6/.0043	6551HSG-S
	Ultra-High	300/408	830/375	1.4 kg	14.6/.0043	6551USG-S
2 PLATE	High	500/680	830/375	1.7 kg	17.8/.0052	6552HSG-S
	Ultra-High	600/816	830/375	1.7 kg	17.8/.0052	6552USG-S
3 PLATE	High	750/1020	830/375	2.0 kg	22.0/.0065	6553HSG-S
	Ultra-High	900/1224	830/375	2.0 kg	22.0/.0065	6553USG-S
4 PLATE	High	1000/1360	830/375	2.3 kg	25.3/.0074	6554HSG-S
	Ultra-High	1200/1632	830/375	2.3 kg	25.3/.0074	6554USG-S

Typical Applications  
Rally Cross  
Circuit Racing  
Endurance Racing  
Off Road  
Rally Raid  
Extreme Street/Strip

### Spring Options

Three diaphragm spring rate options offer a range of torque capacities and release loads to allow us to optimise the clutch for the application.



Pressure Plate  
The two options of pressure plate ratio offer varying torque capacities and engagement characteristics.



### 7 1/4" (184mm) Carbon/Carbon Clutches

	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (in-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
2 PLATE	Grey	Ultra-High	820/1115	680/299	2.8 kg	49.7/.0146	6572USG-S
	Double Grey	Ultra-High	910/1238	760/334	2.8 kg	49.7/.0146	6572USGG-S
	Triple Grey	Ultra-High	990/1346	800/352	2.8 kg	49.7/.0146	6572USGGG-S
3 PLATE	Grey	Ultra-High	1230/1673	680/299	3.4 kg	59.3/.0175	6573USG-S
	Double Grey	Ultra-High	1365/1856	760/334	3.4 kg	59.3/.0175	6573USGG-S
	Triple Grey	Ultra-High	1485/2020	800/352	3.4 kg	59.3/.0175	6573USGGG-S
4 PLATE	Grey	Ultra-High	1640/2230	680/299	4.0 kg	69.4/.0200	6574USG-S
	Double Grey	Ultra-High	1820/2475	760/334	4.0 kg	69.4/.0200	6574USGG-S
	Triple Grey	Ultra-High	1980/2693	800/352	4.0 kg	69.4/.0200	6574USGGG-S



### Clutch Servicing

We have the tooling, expertise and parts to service these clutches at our Silverstone premises.



## Tilton Metallic Clutches Sintered Race

Sintered clutches utilise thin (2.54mm) driven plates with a sintered metallic friction material. They offer low inertia, low wear rates and are resistant to fairly high temperatures. Widely used for circuit racing where budget or regulations preclude the use of carbon they are available in 5 1/2" (140mm) and 7 1/4" (184mm) diameters and with 1, 2, 3 or 4 plates.

### Metallic Rally

Incorporating thicker (5.99 to 7.97mm depending on clutch diameter) driven plates, these clutches offer greater heat capacity and smoother engagement than a typical sintered clutch which makes these units ideal for rally applications and any other application where the smoother engagement is of benefit during starts. They are ideal for competition cars used on classic tours or any other application which requires occasional road use.

### Selecting The Correct Tilton Metallic Clutch

There are many considerations when choosing a clutch. The variety of clutches available is quite large, with a wide range of diameters, friction materials and number of plates. The general rule in selecting a competition clutch for highest performance is to choose the smallest clutch diameter allowed by regulations, determine how many discs it takes to meet your engine's torque capacity, and add one additional plate for heat capacity and durability reasons. If you would like our assistance with the selection then please contact us with details of your application for our recommendation, otherwise the following factors should be considered when selecting the right clutch.

### Torque Capacity:

The amount of engine torque that the clutch can hold before slipping. Torque capacity of a clutch is dependant on the number of driven plates used, the diameter of the clutch and the clamp load that the diaphragm spring places on the driven plates. Tilton OT-Series clutches are rated by dynamic torque capacity. Some clutch manufacturers rate their clutches by breakaway torque capacity. Dynamic torque capacity takes torque spikes from engine firing into consideration, better representing the conditions under which clutches operate. Generally, a Tilton OT-Series clutch does not slip until the torque is 30% above that rated, making the rating rather conservative.

### Heat Capacity:

Heat capacity refers to the amount of heat the clutch can withstand before damage or failure occurs. Heat is generated every time the clutch is engaged. The heat generated during engagement is mostly absorbed by the clutch's pressure plate, floater plates and discs. Some heat is also absorbed by the flywheel. The more mass a clutch has, the more heat/temperature it can absorb. The same is true with clutches as with brakes and tyres, higher temperatures do more damage! A clutch with an extra disc or thicker rally type discs will have better heat capacity due to the increased mass, exposing the clutch to lower overall temperatures, we also offer heavy duty high mass main pressure plates for applications requiring increased heat capacity.

### Standard Options – 7 1/4" (184mm) Sintered Metallic Clutches

	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
1 Plate	White	High	200/272	400/180	2.3 kg	44.1/.0130	66-001HW
	White	Ultra-High	240/326	400/180	2.3 kg	44.1/.0130	66-001UW
	Buff	High	240/326	480/211	2.3 kg	44.1/.0130	66-001HBF
	Buff	Ultra-High	285/388	480/211	2.3 kg	44.1/.0130	66-001UBF
	Orange	High	280/381	560/247	2.3 kg	44.1/.0130	66-001HORA
	Orange	Ultra-High	335/456	560/247	2.3 kg	44.1/.0130	66-001UORA
	Grey	High	340/462	680/299	2.3 kg	44.1/.0130	66-001HG
	Grey	Ultra-High	410/558	680/299	2.3 kg	44.1/.0130	66-001UG
	Dbl. Grey	High	380/517	760/334	2.3 kg	44.1/.0130	66-001HGG
	Dbl. Grey	Ultra-High	455/619	760/334	2.3 kg	44.1/.0130	66-001UGG

	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number	
2 Plate	White	High	400/544	400/180	3.4 kg	66.3/.0195	66-002HW	
	White	Ultra-High	480/652	400/180	3.4 kg	66.3/.0195	66-002UW	
	Buff	High	480/652	480/211	3.4 kg	66.3/.0195	66-002HBF	
	Buff	Ultra-High	570/775	480/211	3.4 kg	66.3/.0195	66-002UBF	
	Orange	High	560/762	560/247	3.4 kg	66.3/.0195	66-002HORA	
	Orange	Ultra-High	670/911	560/247	3.4 kg	66.3/.0195	66-002UORA	
	Grey	High	680/925	680/299	3.4 kg	66.3/.0195	66-002HG	
	Grey	Ultra-High	820/1115	680/299	3.4 kg	66.3/.0195	66-002UG	
		Dbl. Grey	High	760/1034	760/334	3.4 kg	66.3/.0195	66-002HGG
		Dbl. Grey	Ultra-High	910/1238	760/334	3.4 kg	66.3/.0195	66-002UGG

	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number	
3 Plate	White	High	590/803	400/180	4.5 kg	87.6/.0258	66-003HW	
	White	Ultra-High	701/954	394/180	4.5 kg	87.6/.0258	66-003UW	
	Buff	High	720/979	480/211	4.5 kg	87.6/.0258	66-003HBF	
	Buff	Ultra-High	855/1163	480/211	4.5 kg	87.6/.0258	66-003UBF	
	Orange	High	840/1142	560/247	4.5 kg	87.6/.0258	66-003HORA	
	Orange	Ultra-High	1005/1367	560/247	4.5 kg	87.6/.0258	66-003UORA	
	Grey	High	1020/1387	680/299	4.5 kg	87.6/.0258	66-003HG	
	Grey	Ultra-High	1230/1673	680/299	4.5 kg	87.6/.0258	66-003UG	
		Dbl. Grey	High	1140/1550	760/334	4.5 kg	87.6/.0258	66-003HGG
		Dbl. Grey	Ultra-High	1365/1856	760/334	4.5 kg	87.6/.0258	66-003UGG

	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number	
4 Plate	White	High	800/1088	400/180	5.9 Kg	115.9/.0340	66-504HW	
	Buff	High	960/1304	480/211	5.9 Kg	115.9/.0340	66-504HBF	
	Orange	High	1120/1523	560/247	5.9 Kg	115.9/.0340	66-504HORA	
	Grey	High	1360/1850	680/299	5.9 Kg	115.9/.0340	66-504HG	
		Dbl. Grey	High	1520/2067	760/334	5.9 Kg	115.9/.0340	66-504HGG
		Trip. Grey	High	1660/2257	800/352	5.9 Kg	115.9/.0340	66-504HGGG

Competition Supplies are one of the world's largest stockists and distributors of Tilton products. We offer unrivalled availability, product knowledge and service. We can configure and optimise the products to suit your requirements and offer a full spares and rebuild service for the range.



### 7 1/4" (184mm) Sintered Race Clutches

Still the most common size of competition clutch in use in club motorsport its exceptional wear characteristics find it also used in many endurance applications. Tilton's version is extremely light and durable and offers the longest wear range available. Its scalloped open design allows the units to run cooler and more reliably than the A-Ring designs of other manufacturers. The ability to run a smaller 44mm fulcrum release bearing if required allows for much smoother engagement. Available in 1, 2, 3, or 4 plate configurations we also offer a range of diaphragm spring and pressure plate options to allow us to optimise the clutch for the application.

### Pressure Plate Options

#### High Ratio Pressure Plate

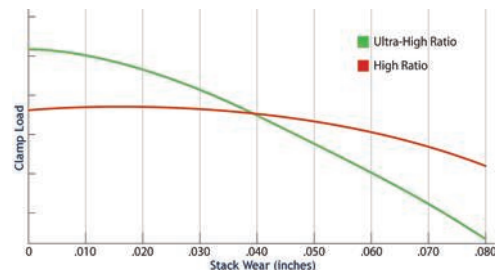
Our standard pressure plate ratio for 7 1/4" (184mm) metallic clutches, offering short travel to release for quick engagement and gear changes. Flat clamp load curve means that consistent clamp is maintained throughout the available wear range.

#### Ultra High Ratio Pressure Plate

Optional pressure plate ratio for 7 1/4" (184mm) metallic clutches, offering 20% more release travel than the high ratio for improved modulation and feel on engagement and 20% more clamp load than the high ratio for higher peak torque capacity. However the clamp load curve is steeper than the high ratio meaning that clamp reduces more quickly over the wear range of the clutch.

#### Lightweight & High Mass Pressure Plates

We also stock lightweight pressure plates for applications where the lowest possible moment of inertia is required and heavy duty high mass versions for applications where increased heat capacity is required. We are happy to build your clutch with either of these options please contact us for details.



### Notes

<sup>1</sup> The quoted torque capacity does not mean that the clutch will be suitable for all or any applications with that torque output. Torque spikes during the combustion cycle and required heat capacity means that in most applications additional plates are required to increase the heat capacity in order to achieve acceptable clutch life.

<sup>2</sup> Values listed are typical for release bearings of the optimum contact diameter (38mm for 5 1/2" and 44mm for 7 1/4"). Larger contact diameters will increase release load.

<sup>3</sup> Weight and M.O.I. includes driven plate(s).



### Clutch Servicing

We have the tooling, expertise and parts to service these clutches at our Silverstone premises.

## 5 1/2" (140mm) Sintered Race Clutches



Very popular at many levels of the sport due to the lower moment of inertia they offer over the larger diameter units. Used extensively throughout club racing, F3 and GT's. Lightweight, cool running and durable, they benefit from longer diaphragm spring fingers than competitor's products giving more feel on engagement but remain directly interchangeable with them. Available in 1, 2, 3 and 4 plate configurations for either conventional step type flywheel mounting or the pot type mounting commonly used on Porsche applications. We can also offer a heavy duty version with increased mass and heat capacity particularly suited to endurance and severe duty applications. Please refer the following pages for driven plates.

## 7 1/4" (184mm) Rally Clutches

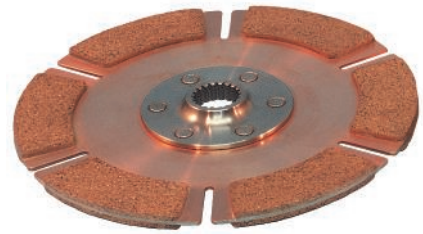
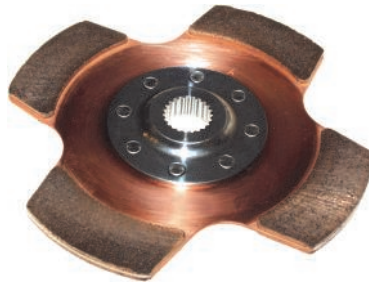


Incorporating higher mass main pressure plates and thicker cerametallic driven plates these clutches offer greater heat capacity and smoother engagement than an equivalent sintered clutch. Widely used in rally applications they are also used extensively in historic and club race applications where the ability to easily manoeuvre around the paddock is beneficial. When combined with a well designed release mechanism these units can offer exceptional engagement characteristics disproving the myth that metallic race clutches have to "feel like a switch". These are the only metallic competition clutches that should be considered where there is the possibility of an element of road use.

We offer two versions of driven plates for these clutches our traditional 6 pad full disc plates and our new 8 rivet hub, 4 pad segmented driven plates. For details please refer the following pages.



	Flywheel Fitment	Version	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
1 Plate	Step	Standard	150/205	375/167	1.9 kg	19.5/.0057	67-001HW
	Step	Standard	200/270	510/225	1.9 kg	19.5/.0057	67-001HORA
	Step	Standard	250/340	850/375	1.9 kg	19.5/.0057	67-001HG
2 Plate	Step	Standard	300/410	375/167	2.6 kg	29.8/.0087	67-002HW
	Step	Standard	400/540	510/225	2.6 kg	29.8/.0087	67-002HORA
	Step	Standard	500/680	850/375	2.6 kg	29.8/.0087	67-002HG
3 Plate	Step	Standard	450/610	375/167	3.3 kg	40.1/.0118	67-003HW
	Pot	Standard	450/610	375/167	3.3 kg	40.1/.0118	67-013HW
	Step	Standard	600/815	510/225	3.3 kg	40.1/.0118	67-003HORA
	Pot	Standard	600/815	510/225	3.3 kg	40.1/.0118	67-013HORA
	Step	Standard	750/1020	850/375	3.3 kg	40.1/.0118	67-003HG
	Pot	Standard	750/1020	850/375	3.3 kg	40.1/.0118	67-013HG
4 Plate	Step	Standard	750/1020	850/375	3.5 kg	42.4/.0125	67-503HG
	Pot	Heavy Duty	750/1020	850/375	3.5 kg	42.4/.0125	67-513HG
	Step	Standard	600/815	375/167	4.0 kg	50.4/.0148	67-004HW
	Pot	Standard	600/815	375/167	4.0 kg	50.4/.0148	67-014HW
	Step	Standard	800/1085	510/225	4.0 kg	50.4/.0148	67-004HORA
	Pot	Standard	800/1085	510/225	4.0 kg	50.4/.0148	67-014HORA
4 Plate	Step	Standard	1000/1360	850/375	4.0 kg	50.4/.0148	67-004HG
	Pot	Standard	1000/1360	850/375	4.0 kg	50.4/.0148	67-014HG
	Step	Heavy Duty	1000/1360	850/375	4.2 kg	52.7/.0154	67-504HG
	Pot	Heavy Duty	1000/1360	850/375	4.2 kg	52.7/.0154	67-514HG

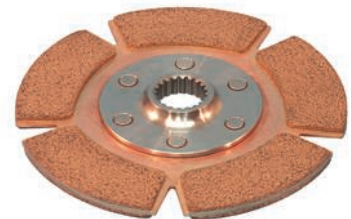


	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
1 Plate	White	High	200/272	400/180	2.5 kg	52.4/.0154	66-301HW
	White	Ultra-High	240/326	400/180	2.5 kg	52.4/.0154	66-301UW
	Buff	High	240/326	480/211	2.5 kg	52.4/.0154	66-301HBF
	Buff	Ultra-High	285/388	480/211	2.5 kg	52.4/.0154	66-301UBF
	Orange	High	280/381	560/247	2.5 kg	52.4/.0154	66-301HORA
	Orange	Ultra-High	335/456	560/247	2.5 kg	52.4/.0154	66-301UORA
	Grey	High	340/462	680/299	2.5 kg	52.4/.0154	66-301HG
	Grey	Ultra-High	410/558	680/299	2.5 kg	52.4/.0154	66-301UG
1 Plate	Dbl. Grey	High	380/517	760/334	2.5 kg	52.4/.0154	66-301HGG
	Dbl. Grey	Ultra-High	455/619	760/334	2.5 kg	52.4/.0154	66-301UGG

	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
2 Plate	White	High	400/544	400/180	3.7 kg	76.3/.0225	66-302HW
	White	Ultra-High	480/652	400/180	3.7 kg	76.3/.0225	66-302UW
	Buff	High	480/652	480/211	3.7 kg	76.3/.0225	66-302HBF
	Buff	Ultra-High	570/775	480/211	3.7 kg	76.3/.0225	66-302UBF
	Orange	High	560/762	560/247	3.7 kg	76.3/.0225	66-302HORA
	Orange	Ultra-High	670/911	560/247	3.7 kg	76.3/.0225	66-302UORA
	Grey	High	680/925	680/299	3.7 kg	76.3/.0225	66-302HG
	Grey	Ultra-High	820/1115	680/299	3.7 kg	76.3/.0225	66-302UG
	Dbl. Grey	High	760/1034	760/334	3.7 kg	76.3/.0225	66-302HGG
	Dbl. Grey	Ultra-High	910/1238	760/334	3.7 kg	76.3/.0225	66-302UGG

## 5 1/2" (140mm) Rally Clutches

Incorporating higher mass main pressure plates and using thicker driven plates these clutches offer greater heat capacity and smoother engagement than an equivalent sintered clutch. Widely used in rally applications they are also used extensively in endurance applications where clean getaways from pit stops are beneficial. The longer diaphragm spring fingers allow a small 38mm contact diameter release bearing to be used giving increased travel and feel on engagement providing exceptional engagement characteristics for a clutch of this type. Driven plates are not included please see listings on the following page for more information.



	Flywheel Fitment	Version	Torque Capacity <sup>1</sup> (lb-ft/Nm)	Release Load <sup>2</sup> (lb/daN)	Weight <sup>3</sup>	M.O.I. <sup>3</sup> (In-in <sup>2</sup> /kg-m <sup>2</sup> )	Part Number
2 Plate	Step	Standard	300/410	375/167	2.7 kg	32.2/.0095	67-302HW
	Step	Standard	400/540	510/225	2.7 kg	32.2/.0095	67-302HORA
	Step	Standard	500/680	850/375	2.7 kg	32.2/.0095	67-302HG





## Clutch Driven Plate Part Numbering

### Sintered Driven Plates

Tilton's sintered metallic clutch driven plates are renowned for their durability, torque capacity and heat capacity. The quick engagement characteristics of these discs make them ideal for race applications. Our sintered driven plates will also fit most other manufacturers sintered competitions clutches of equivalent diameter so make an ideal upgrade replacement part.

Tilton 7 1/4" (184mm) and 5 1/2" (140mm) sintered driven plates are 0.104" (2.64mm) thick when new.

Minimum permitted thickness in a triple plate clutch is 0.094" (2.39mm).  
Minimum permitted thickness in a twin plate clutch is 0.089" (2.26mm).  
Minimum permitted thickness in a single plate clutch is 0.074" (1.88mm).

### Sintered Disc Options

#### Full Disc Metallic Clutch Discs, 6 Rivet Hub

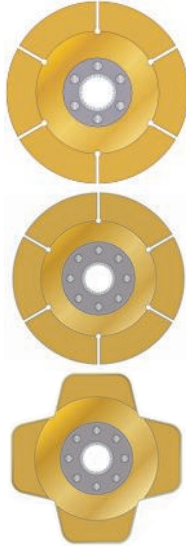
Our standard disc configuration which is suitable for most applications. Six friction pads provide maximum surface area for low wear rate and high heat capacity whilst the large radius key hole slots resist cracking. Available for 5 1/2" (140mm) and 7 1/4" (184mm) clutches.

#### Full Disc Metallic Clutch Discs, 8 Rivet Hub

Similar to our 6 rivet full circle discs but the hub is attached to the disc by 8 rivets on a larger P.C.D. for additional strength in the most demanding applications. Available for 7 1/4" (184mm) clutches only.

#### Segmented 4-Paddle Metallic Clutch Discs, 6/8 Rivet Hubs

Offering lower inertia than the full circle discs but with a slightly higher wear rate. The smooth radius between the friction segments lowers the core plate stress caused by misalignment between the engine and gearbox and/or engine harmonics, minimising core plate cracking. 5 1/2" (140mm) plates have a 6 rivet hub whilst 7 1/4" (184mm) plates feature an 8 rivet hub.



### Cerametallic Driven Plates

Tilton's cerametallic driven plates use a unique blend of ceramic and metallic materials being thicker than sintered metallic discs, they provide higher heat capacity through their increased mass. In addition, the engagement characteristics of cerametallic clutches are generally smoother than the equivalent sintered metallic clutch.

Tilton 7 1/4" (184mm) cerametallic driven plates are 0.283" (7.19mm) thick when new.

Minimum permitted thickness in a twin plate clutch is 0.268" (6.81mm).  
Minimum permitted thickness in a single plate clutch is 0.253" (6.43mm).

Tilton 5 1/2" (140mm) cerametallic driven plates are 0.236" (5.99mm) when new. Minimum permitted thickness in a twin plate clutch is 0.221" (5.61mm).

Minimum permitted thickness in a single plate clutch is 0.206" (5.23mm).

### Cerametallic Disc Options

#### Segmented 4-Paddle Cerametallic Clutch Discs, 8 Rivet Hub

Our premium 4 pad segmented driven plate for 7 1/4" (184mm) clutches. Featuring a stronger core plate and larger 8 rivet hub they are our most robust rally specification driven plate. The segmented 4 paddle design provides a generous radius between each section making these discs highly resistant to cracking and extremely durable. They are now available in all popular spline sizes although there are few of the less common spline types remain only available in 6 rivet hubs for which we offer the full disc type plates below.

#### Full Disc Cerametallic Clutch Discs, 6 Rivet Hub

These 6 rivet hub discs are available for both 7 1/4" (184mm) and 5 1/2" (140mm) clutches with 6 rivet hubs Proven durable and smooth engaging, they are available with an extensive range of hub spline options, please refer the table right for details.

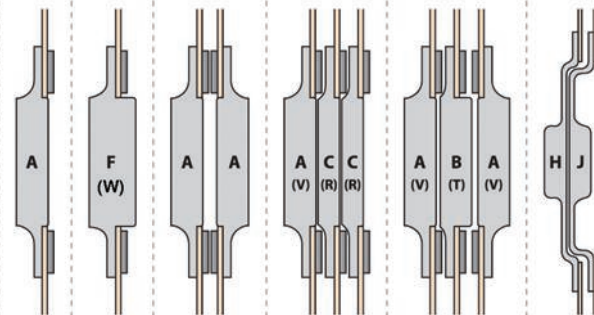


### Organic Driven Plates

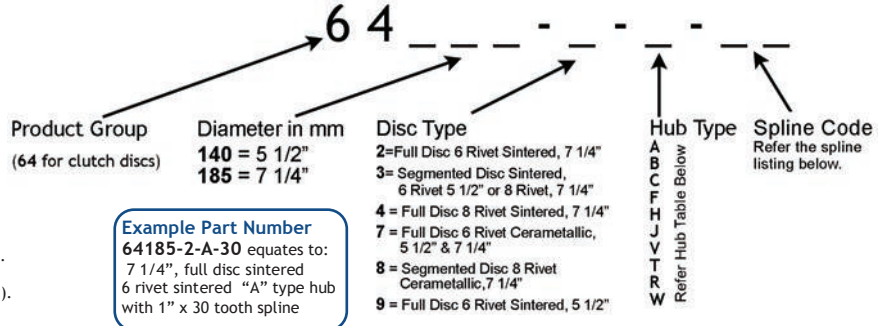
These organic driven plates are available for 7 1/4" (184mm) clutches and can be used in Tilton rally spec. clutches. They offer smoother engagement for applications seeing some road use although this is at the expense of both torque capacity and wear rate. Please contact us to discuss your application and their suitability.

### Hub Selection

Firstly it is important to select the spline which matches that of the input shaft of the gearbox, our range of splines are listed in the table however in some instances there are several splines of similar dimension if you would like assistance in selecting the correct spline for your application then please contact us. In most splines we offer a selection of hub configurations both in terms of spline length and position and also 6 and 8 rivet versions. All 5 1/2" (140mm) driven plates use a 6 rivet hub whilst for 7 1/4" (184mm) clutches we have both 6 and 8 rivet options. 8 Rivet hubs increase the strength of the installation somewhat and some disc types are now only available in 8 rivet.



- A=Solid, 6 rivet, outer (.375" thick)
- B=Solid, 6 rivet, inner (.375" thick)
- C=Solid, 6 rivet, thin inner (.250" thick)
- F=Solid, 6 rivet, outer (.550" thick)
- H=Nested, outer (crank bolt clearance)
- J=Nested, inner (crank bolt clearance)
- R=Solid, 8 rivet, thin inner (.250" thick)
- T=Solid, 8 rivet, inner (.375" thick)
- V=Solid, 8 rivet, outer (.375" thick)
- W=Solid, 8 rivet, outer (.550" thick)



**Example Part Number**  
64185-2-A-30 equates to:  
7 1/4", full disc sintered  
6 rivet sintered "A" type hub  
with 1" x 30 tooth spline

Clutch Splines					
Spline	Dia. "	Dia. mm	No of Teeth	Spline Code	Application
7/8" x 6	0.875"	22.2mm	6	01	Fiat, Ferrari, Maserati
1" x 6	1.000"	25.4mm	6	02	Ferrari, Maserati
7/8" x 10	0.875"	22.2mm	10	03	MG Midget, Hillman Imp
1" x 10	1.000"	25.4mm	10	04	Alfa, MGA, Bedford CF ZF 4 speed
1 1/16" x 10	1.062"	27.0mm	10	05	Ford Toploader
1 1/8" x 10	1.125"	28.6mm	10	06	Aston Martin, Chevy, Hewland, Jaguar
1 1/4" x 10	1.250"	31.8mm	10	07	Aston Martin, Triumph, ZF, Ferrari
1 3/8" x 10	1.375"	34.9mm	10	08	Ford Heavy Duty, Ferrari
17mm x 10	0.669"	17mm	10	09	Renault
29mm x 10	1.142"	29mm	10	10	BMW, Jaguar, Getrag, GT40
18.7mm x 14	0.736"	18.7mm	14	11	Opel, Suzuki, Vauxhall
25mm x 14	0.984"	25mm	14	12	Ford, Opel, Saab, Talbot, Vauxhall
29mm x 14	1.142"	29mm	14	13	
30.8mm x 14	1.213"	30.8mm	14	14	Toyota
20mm x 17	0.787"	20mm	17	16	Fiat, Ford, MG/Rover
21mm x 18	0.827"	21mm	18	17	Citroen, Mini, MG/Rover, Peugeot
25/32" x 18	0.781"	19.8mm	18	18	Nissan, Skoda
1 3/16" x 18	1.188"	30.2mm	18	19	Mopar Hemi
13/16" x 19	0.812"	20.6mm	19	20	Honda
7/8" x 19 x30°	0.875"	22.2mm	19	21	Alfa Romeo
27/32" x 19	0.844"	21.4mm	19	22	Toyota
17.3mm x 20	0.681"	17.3mm	20	23	Renault R5, R12
17.5mm x 20	0.689"	17.5mm	20	24	Autobianchi, Fiat
7/8" x 20	0.875"	22.2mm	20	25	Ford, Hewland
29/32" x 21	0.906"	23.0mm	21	26	Renault, Toyota
24mm x 21	0.945"	24mm	21	27	Alfa Romeo, Ferrari, Peugeot, Renault
29mm x 21	1.142"	29mm	21	28	Toyota
1" x 22	1.000"	25.4mm	22	29	Mazda, Volvo
1" x 23 x 30°	1.000"	25.4mm	23	30	Ford, MG, Porsche, Mitsubishi
1" x 23 x 45°	1.000"	25.4mm	23	31	Chrysler, Mopar
13/16" x 24	0.812"	20.6mm	24	32	VW, Vauxhall
1" x 24	1.000"	25.4mm	24	33	Nissan, Honda
28mm x 45	1.102"	28mm	45	34	Jensen Healey
1 5/32" x 26	1.156"	29.4mm	26	36	Chevy Fine Spline
7/8" x 21	0.875"	22.2mm	21	37	Honda
26mm x 24	1.024"	26mm	24	38	Honda Civic
7/8" x 28	0.875"	22.2mm	28	39	Audi, Seat, Skoda, VW
24 x 23 x 25°	0.945"	24mm	23	41	Audi
15/16" x 22	0.938"	23.8mm	22	42	Mazda
1" x 6 (Ferrari)	1.000"	25.4mm	6	45	Ferrari
1 1/4" x 29	1.250"	31.8mm	29	46	Nascar 2009 on
15/16 x 24	0.938"	24.8mm	24	47	Subaru
27/32 x 20	0.844"	22.3mm	20	49	Volvo
29.4mm x 22	1.157"	29.4mm	22	51	BMW
35mm x 10	1.378"	35mm	10	52	BMW
35mm x 26	1.378"	35mm	26	55	BMW
1" x 24	1.000"	25.4mm	24	57	Honda/Nissan

### Tech Tip

When changing driven plates use a straight edge and feeler gauges to check that the pressure plates are true, over 0.004" (0.1mm) of warp and they should be replaced as well, otherwise you may damage your new driven plates!



Telephone: 01327 857991 email: sales@competitionsupplies.com



## Clutch To Flywheel Bolt Kits

We stock a range of clutch to flywheel mounting hardware. For through hole flywheels we supply AN hardware and for threaded flywheels we supply ARP 12 point bolts with Schnorr safety washers.



		Part Number			
Clutch Size/Type	No. of Plates	Through Holes	5/16" Threaded	M8 Threaded	
Sintered	5 1/2" (140mm)	1 Plate	97001T	97001U	97001M
		2 Plate	97002T	97002U	97002M
		3 Plate	97003T	97003U	97003M
		4 Plate	97004T	97004U	97004M
Rally		1 Plate	97301T	97301U	97301M
		2 Plate	97302T	97302U	97302M
Carbon		1 Plate	957001T	957001U	957001M
		2 Plate	957002T	957002U	957002M
		3 Plate	957003T	957003U	957003M
		4 Plate	957004T	957004U	957004M
Sintered	7 1/4" (184mm)	1 Plate	96001T	96001U	96001M
		2 Plate	96002T	96002U	96002M
		3 Plate	96003T	96003U	96003M
		4 Plate	96004T	96004U	96004M
Rally		1 Plate	96301T	96301U	96301M
		2 Plate	96302T	96302U	96302M
Carbon		1 Plate	955001T	955001U	955001M
		2 Plate	955002T	955002U	955002M
		3 Plate	955003T	955003U	955003M

## Flywheel Bolts

ARP Pro Series 200,000 PSI rated flywheel to crank mounting bolts are forged from aerospace alloy and heat-treated prior to thread rolling and machining. Available to suit various applications, popular items are listed below, many others available on request.



Flywheel Bolts				
Application	Thread	U.H.L.	Socket Size	Part No.
BMC A-Series	3/8"-24 UNF	0.900"	9/16"	206-2802
Chevy/Ford /MG	7/16"-20 UNF	1.00"	3/4"	200-2802
Chevy/Ford /MG	7/16"-20 UNF	1.00"	1/2"	330-2801
Chevy LS	M11 x 1.5	0.880"	1/2"	330-2902
Ford Pinto	M10 x 1.0	1.150"	5/8"	151-2801
Mitsubishi 4G63	M12 x 1.25	0.825	3/4"	107-2801
Rover K Series	M10 x 1.0	0.826"	12mm	206-2803
Vauxhall 2.0L	M10 x 1.25	0.985"	3/4"	209-2801

## Splined Clutch Aligning Tools



A splined aligning tool is essential for installing multi-plate clutches. Whilst an old input shaft serves the purpose admirably, we offer a range of splined tools in the more common splines sizes for those that don't have one.

Aligning Tools	
Spline	Part No.
1 1/8"x10	CAT-06
7/8"x20	CAT-25
1"x23	CAT-30
1 5/32"x26	CAT-36
1 1/4"x29	CAT-46

## Metallic Clutch Rebuild Service

We offer a full rebuild service for Tilton Metallic competition clutches from our Silverstone base. We have the expertise, jigs and tooling to allow us to fully refurbish your clutch. Inspection and estimates are free. A cleaning charge may however be levied on units returned in a dirty as removed condition.



# Tilton



## Tilton Clutch and Button Flywheel Assemblies

These assemblies include a Tilton clutch together with a steel button flywheel and high grade clutch to flywheel mounting hardware. We offer versions for the early type Chevy 2-piece rear main crank pattern, the late Chevy single piece rear main, Chevy LS and the small block Ford V8. If you require a flex plate incorporating the starter ring gear they are available separately, please refer page 8 for details.

Tilton Clutch and Button Flywheel Assemblies						
		Chevy Early Type		Chevy LS Type	Ford Small Block	
Clutch Size	No. of Plates	Part No. 1 1/8" x 10 Spline	Part No. 1 5/32" x 26 Spline	Part No. 1 5/32" x 26 Spline	Part No. 1 1/16" x 10 Spline	Part No. 1 5/32" x 26 Spline
7 1/4" 184mm	2 Plate	56-140	56-141	56-141LS	56-282-05	56-282
	3 Plate	56-101	56-102	56-102LS	56-281-05	56-281
5 1/2" 140mm	2 Plate	57-140	57-141	-	57-282-05	57-282
	3 Plate	57-101	57-102	-	57-281-05	57-281

Please Note: For Chevy late type (1-piece rear main) please add "L" suffix to the "Chevy Early Type" part number above.

## Tilton Sport Sintered Clutch Kits

Tilton Sport sintered race clutch kits are supplied complete with driven plates. Available in only the most popular splines the kit price offers unmatched value for a product offering this level of quality and performance.

- One Piece Aluminium Cover.
- High Strength Steel Pressure Plates.
- Forged Thrust Buttons.
- Optimised Pressure Plate Geometry.
- Assembled complete with driven plates.



Sportsman 5 1/2" Sintered Clutch Kits including Driven Plates						
Clutch Size	No. of Plates	Torque Capacity <sup>1</sup> (lb-ft/Nm)	No Drive Plates	Part No. 1 5/32" x 26 Spline	Part No. 1" x 23 Spline	Part No. 1 1/4" x 29 Spline
5 1/2" 140mm	2 Plate	500/680	67-902HG	16115	16113	16116
	3 Plate	750/1020	67-903HG	16112	16114	16117

## Replacement Pressure Plates Tilton Metallic Clutches

The main and intermediate pressure plates serve as the main heat reservoir in metallic competition clutches. To maximise performance their mass is kept to the minimum and over repeated heat cycles, particularly if over heated, they will together with the driven plates distort. The clutch will continue to function well with moderate levels of distortion up to 0.008" (0.2mm) although the travel to release may increase somewhat. However if replacing driven plates then 0.004" (0.1mm) of warp should be considered an absolute maximum otherwise the new flat driven plates will not make full contact with the pressure plates and reduced torque capacity, accelerated wear, damage and/or premature failure will result. Distortion can also cause the clearance to the thrust buttons in the clutch cover legs to be reduced, this should be at least 0.010" (0.25mm).



Pressure Plates for 5 1/2" Clutches		
Clutch Type	Pressure Plate Type	Part No.
Sintered Race	High Ratio	67-118HR
	Intermediate Plate	67-119
Ceramic Rally	High Ratio	67-118HR-R
	Intermediate Plate	67-119-R

Pressure Plates for 7 1/4" (184mm) Metallic Clutches				
Clutch Type	Pressure Plate Type	Depth	Pivot Ø	Part Number
		mm	mm	
Sintered Race	High Ratio	13.6	155.6	66-118HR
	High Ratio, High Mass	13.6	155.6	66-158HR
	Ultra High Ratio	13.6	149.2	66-118UHR
	Ultra High Ratio, High Mass	13.6	149.2	66-158UHR
Ceramic Rally	High Ratio	11.5	155.6	66-118HR-R
	Ultra High Ratio	11.5	149.2	66-118UHR-R
All Types	Intermediate Plate	4.5	N/A	66-119

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)



## Hydraulic Release Bearings

Tilton hydraulic release mechanisms are available with selectable length pistons and a range of different bearing types, this allows us to optimise the assembly to suit the application. The piston range allows a 22.5mm variation in height in 1.25mm increments, the selectable height pistons can be installed in the 1000/3000/4000/5000/6000 and 8000 HRB's and the achievable heights are listed in the tables. Radius nose bearings are offered with 38, 44 and 52mm contact diameters and we offer a flat face bearing for O.E. type applications.

### 1000 Series Hydraulic Release Bearings



The 1000 series HRB incorporate the SAAB 9000 type 3 bolt mounting pattern and is interchangeable with SAAB part no. 8781189 and 8781387 as well as AP Racing CP3859/CP6859 slave cylinders. This mounting detail also makes these units suitable for use with Sadev and various other proprietary bellhousings and transmissions which include provision to mount release bearings of this type. The 1000 series HRB can be supplied in a range of installed heights and with a number of bearing options to suit the specific application.

1000 Series HRB		
Bearing Contact Ø	Height	Part Number
38mm	47.5 - 70.4mm	61-13XX
44mm	47.5 - 70.4mm	61-12XX
52mm	51.8mm	61-1000
Flat 45-66mm	46.5mm	61-1100

### 9000 Series Hydraulic Release Bearings



Originally designed for Mitsubishi Evo installations. This compact unit has a smaller effective piston area than other models in the range allowing it to generate sufficient stroke with a 5/8" bore master cylinder to release a Tilton 7 1/4" clutch. Offering 15mm of piston travel in a unit with a set up height of just 49.5mm the 9000 series is ideal in applications where space is limited and those retaining a small bore O.E. clutch master cylinder. **Please Note:** The 9000 series can accept a maximum input shaft diameter of 29.85mm.

9000 Series HRB		
Bearing Contact Ø	Height	Part Number
44mm	49.5mm	61-9002
44mm	51.3mm	61-9012

### 700 Series Hydraulic Release Bearings for Honda Installations



The 700 series HRB is Tilton's lightest and most compact hydraulic release bearing assembly. Originally designed for Honda B & K series installations it simply slides over the O.E. guide tube and is held in place by a rubber seal on the bore I.D. It's compact dimensions also make it ideal for many other applications where space is limited.

700 Series HRB		
Bearing Contact Ø	Height	Part Number
38mm	43.2mm	61-778
44mm	41.7mm	61-772
44mm	43.2mm	61-777

### 3000 Series Hydraulic Release Bearings



A versatile unit originally designed to mount in Hewland transaxles but also commonly used in many BMW and other RWD installations. They are mounted using three M6 or 1/4" bolts on a 3" PCD, they can be adapted to numerous custom applications with little or no modification. Installed height can be adjusted through selective length pistons. Kit includes male/male adaptor unions to AN-3. Please see opposite for our adaptors that allow direct fitment to BMW transmissions.

3000 Series HRB		
Bearing Contact Ø	Height	Part Number
38mm	70.4mm - 94.5mm	61-33XX
44mm	70.4mm - 94.5mm	61-32XX
52mm	76.2mm	61-3000
Flat 43-77mm	69.6mm	61-3100

### 4000 Series Hydraulic Release Bearings



Designed for mounting in Tilton bellhousings, these cost effective and versatile units can be readily adapted for numerous custom applications. Supplied with male/male adaptor unions to AN-3.

4000 Series HRB		
Bearing Contact Ø	Height	Part Number
38mm	65.3-89.4mm	61-43XX
44mm	65.3-89.4mm	61-42XX
52mm	71.0mm	61-4000
Flat 45-66mm	64.5mm	61-4100

### 5000 Series Hydraulic Release Bearings



With the same technical details as the 4000 series HRB but with the legs trimmed down for installations with limited space and Tilton 52 Series UTGC packages.

5000 Series HRB		
Bearing Contact Ø	Height	Part Number
38mm	47.5 - 70.4mm	61-53XX
44mm	47.5 - 70.4mm	61-52XX
52mm	53.4mm	61-5000
Flat 45-66mm	46.7mm	61-5100

### Tilton Hydraulic Release Bearing Subaru Installations

From the Tilton 700 Series family these release mechanisms are application specific unit and are designed for use in Subaru WRX/STI installations. The internal bore of the unit is matched to the O.E. guide tube and it simply slides on being retained by an internal rubber seal. Supplied complete with a hose kit and 44mm contact bearing for use with Tilton 7 1/4" clutches.



Subaru WRX HRB		
Bearing Contact Ø	Height	Part Number
44mm	56.4mm	61-732
44mm	57.2mm	61-742

### 8000 Series Hydraulic Release Bearings



The 8000 series is of an ultra compact design making it ideal where space is limited. The hydraulic release bearing is mounted with two M6/1/4" bolts and a range of installed heights & bearing contact types can be achieved, please contact us or visit our website for more information.

8000 Series HRB		
Bearing Contact Ø	Height	Part Number
38mm	46.2-70.4mm	61-83XX
44mm	46.2-70.4mm	61-82XX
52mm	52.0mm	61-8000
Flat 45-66mm	46.5mm	61-8100

### 6000 Series Hydraulic Release Bearing Kits



The 6000 series is an updated version of the 600 series with improved fluid connections and reduced cost. The body is internally threaded and the application specific kits are supplied complete with a corresponding threaded sleeve with internal O-ring retainer to press fit on the original transmission guide tube. Included hardware incorporates an anti-rotation pin and leak free, swivelling feed and bleed hoses which allow the transmission to be removed without the bellhousing. The threaded collar systems allows the assembly height to be adjusted to achieve the required clearance. The universal assemblies are supplied with a threaded sleeve pilot bored to 1.00" which can then be final machined to be a press fit on the O.E. guide tube and can be supplied with any combination of piston and bearing to achieve the required contact type and installed height.

6000 Series HRB		
Application	Bearing Contact Ø	Part Number
Ford Treme/Toploader	42-66mm	60-6102
Ford T5	42-66mm	60-6104
GM Treme/Saginaw	42-66mm	60-6101
Universal	42-66mm	60-6100
Universal	38mm	60-6330
Universal	44mm	60-6230
Universal	52mm	60-6000

### Tilton 6000 Custom Mounts

Dedicated mounts for the Tilton 6000 series HRB which replace the O.E. transmission nose and incorporate the threaded mount to allow the direct fitment of 6000 series HRB assemblies.



6000 Series Mounts		
Application	Part Number	
Borg Warner T5	61-615	
T10 & Super T10	61-614	
Ford Top Loader	61-618	
Borg Warner T56	62-899	
GM Treme TKO 500/600	62-693	

### Tilton 6000 Series Mounting Sleeve

A 40mm long stainless steel sleeve machined with the correct buttress thread to accept the Tilton 6000 Series HRB. The 1.0" bore part can be further machined to suit the specific applications guide tube, the larger two are pro machined to be a correct fit on popular U.S. transmission guide tubes and incorporate an O-Ring to aid retention.



6000 Series Sleeves	
Internal Ø	Part No.
1.0"	61-627
1.376"	61-628
1.436"	61-629



## Clutch Release Bearings Inner Race Rotates

These inner race rotates bearings fit both press fit and the circlip fit Tilton cup type HRB pistons. For engine speeds of over 10K RPM we recommend the high speed version. The short insert version has an effective length 1.25mm shorter than the standard version and is used for increased clearance.



- 38mm Contact Standard:** 62-008
- High Speed:** 62-008HS
- Short Insert:** 62-0085
- 44mm Contact Standard:** 62-031
- High Speed:** 62-031HS
- 50mm Contact Standard:** 62-009

## Mustang Mechanical Bearing

Billet steel bearing carrier with a 44mm contact diameter bearing to allow Tilton 7 1/4" metallic clutches to be used with the standard fork.



62-063

## BMW Mechanical Bearings



Billet steel bearing carrier with a 44mm contact diameter bearing to allow Tilton 7 1/4" clutches to be used with 5 speed manual gearboxes.

BMW Mechanical Bearing			
Clutch	Single Plate	Twin Plate	Triple Plate
Sintered	62-020	62-020	62-021
Cera.	62-020	62-021	-
Carbon	62-020	62-021	-

## Ford Type 9 Mechanical Bearing

An aluminium carrier and bearing that fits the O.E. fork in a Ford Type 9 gearbox and gives the correct clearance for two plate rally clutches. For Tilton 7 1/4" installations use the 44mm bearing.



- 44mm Bearing:** 62-994-1
- 52mm Bearing:** 62-994-2

## Ford Type 9 HRB Mount

This mount replaces the front cover of the Ford type 9 "Pinto" 5 speed gearbox & allows the fitment of a Tilton 8000 series HRB.



62-999K

## VW Pattern HRB Mount

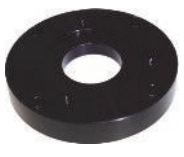
Mount to allow the fitment of the Tilton 8000 series HRB to the VW 02M 6 Speed transmission.



62-901

## HRB Mounts Suit BMW Transmissions

Billet aluminium mount which bolts in place of the O.E. bearing guide tube and allows the fitment of the Tilton 1000 series HRB in the BMW E36 ZF S5D 5 Speed gearboxes.



To Suit E36: 62-988

These mounts bolt in place of the O.E. bearing guide tube and have been produced to allow fitment of the Tilton 3000 series HRB in BMW manual transmission gearboxes.



- To Suit E36 5 speed:** 62-991
- To Suit E46/E92 6 Speed:** 62-992

## Clutch Release Bearings Outer Race Rotates

High quality clutch release bearings with a 40mm I.D. and rotating outer race/ Available with either a 52mm radiused contact diameter suitable for many straight finger O.E. diameter clutches and some manufacturers 7 1/4" clutches or with a 44mm radiused contact diameter optimised for Tilton 7 1/4" competition clutches.



- 52mm Fulcrum:** 62-002
- 44mm Fulcrum:** 62-002-5

## Flat Faced Bearings

Outer Race rotates bearing with a flat 43 - 77mm Ø contact face for use on O.E. clutches with curled finger diaphragm springs or flat release plates. This bearing is retained on the carrier with an O-ring and was used on older model Tilton HRB assemblies which had a piston with the corresponding O-ring groove.



62-616

Flat face bearing with a flat 43mm - 77mm contact diameter for use on O.E. clutches with curled finger diaphragm springs of flat release plates. This bearing is a press fit type with a 50.8mm i.d. and is used on current generation Tilton HRB assemblies.



62-618

## Porsche Pattern Mount



This mount allows the Tilton 8000 series HRB to fitted to the Porsche G50 gearbox. Available in 0.200" and 0.285" thicknesses.

- 0.200" 62-880**
- 0.285" 62-882**

## Mitsubishi Evo HRB Mount



This mount allows the Tilton 9000 series HRB to fitted to the Mitsubishi Lancer Evo gearbox.

62-9900

## Mondeo Pattern HRB Mount

Provision for the low cost Mondeo HRB is provided in various after market bell housings. Unfortunately this unit rarely allows the optimum installed height and contact type to be achieved, this mount allows any configuration of the Tilton 1000 series HRB to be fitted to rectify this.



62-987

## Hewland Gearbox HRB Mounts



Billet aluminium mounts to allow the easy fitment of the Tilton 1000 series HRB in Hewland classic transmissions. We have so far produced mounts for the FT200, LG 500/600 and MK7/8/9 gearboxes, although the latter can only be used with casing types which have the three M7 tapped holes around the input shaft oil seal.

- FT200:** 62-990
- LG-500/600:** 62-986
- Mk7/8/9:** 62-985

## Flow Control Valve

The Tilton flow control valve is designed to reduce shock loads to the driveline by allowing the clutch to slip slightly during engagement whilst maintaining quick gear changes. Includes three orifice sizes (.021", .028" & .040") allowing clutch engagement to be tuned.



90-5000

## HRB Feed & Bleed Hose Kit



Feed & bleed hose kit for use with Tilton HRBs. Comprises a 2.3m length of hose with -3 female crimped hose ends, a re-usable -3 female hose end, remote bleed fitting & full instructions.

HKHRB

All aluminium Pro Series remote bleed fitting comprising AN-3 male to M10x1 female bulkhead fitting, lock nut and M10 bleed screw.

RBFB

Plated steel remote bleeder comprising 3/8" UNF bulkhead fitting with a lock nut and 1/4" bleed screw.

RBZ

## Viper T56 to 8000 Series Mount



Allows the Tilton 8000 series HRB to be mounted at the correct installed height to the T56 in the Dodge Viper Competition Coupe replacing the now obsolete Tilton original.

62-877

## Tremec TR6060 Mount



Allows the Tilton 8000 series HRB to be mounted to the Tremec TR6060 gearbox found on the Corvette C6, Dodge Viper SRT-10 & Mustang Shelby GT500 '07 on models.

62-877

## Borg Warner T56 Mount



Allows the Tilton 8000 series HRB to be mounted to the Borg Warner T56 gearbox found on the Corvette C5, Dodge Viper 92-07 and Mustang Cobra 03-04 models.

62-874

## Pull Type Clutch Slave Cylinder



This handy pull type clutch slave cylinder is made from billet aluminium for high strength and plated with a tough anti-corrosion finish. The unit has ample stroke to ensure clean release when used with the recommended 3/4" (19mm) bore clutch master cylinder. These units are particularly useful when converting a cable type clutch to hydraulic release.

260-1333

## HRB Seal Kits



Replacement seal kits for Tilton HRB's. To ensure correct installation they are best fitted with the tool below or we offer a F.O.C. fitting service.

- All except 9000 Series:** 62-905
- 9000 Series only:** 62-9980

## Seal Installation Tool

Replacement fluid seals must be fitted with care to prevent the inner part of the fluid seal being displaced during installation, these factory tools facilitate the correct installation and ensure trouble free service.



**Tool 3000/4000/8000 Series HRBs:** 96-002

**Tool 600/1500 Series HRBs:** 96-003

**Tool 5000 Series HRBs:** 96-004

## Piston For Saab Type HRB

A replacement piston for use in Saab & Titan type HRB's which facilitates the use of the Tilton 38/44mm contact diameter self centring clutch release bearings.



62-908

## Seal Kit For Saab HRB

An O.E. quality hydraulic seal kit for the Saab type HRBs and other assemblies that utilise the same piston and seal dimensions such as the Titan unit.



62-908RK

## Saab Pattern HRB Mounts

Aluminium mount to adapt Tilton 8000 series HRBs to the two popular Saab HRB mounting patterns as used by AP Racing, Sadev, Quaife and others.



- CP3759 Pattern:** 62-998
- CP3859 Pattern:** 62-997

## Girlinging Clutch Slave Cylinders



L/H R/H

Aluminium clutch slave cylinders from Girling as fitted to various vehicles from the 1960's on. The cylinders have a 7/8" bore and are available in right and left handed versions. A non-handed version is also available where the inlet and bleed are interchangeable and are positioned on opposite sides;

- R/H Mount:** 74066213
- L/H Mount:** 64068897



- Non-handed :** 3010205
- Seal Kit 7/8" Bore :** SP2606

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)

## Ultra Low Ground Clearance Components

These packages are for use with 5 1/2" (140mm) clutches and are available for small block Ford, Chevy and Chevy LS engines. They utilise a rear mount starter and provide the optimum solution for front engine GT or similar applications providing over 50mm of extra ground clearance when compared with O.E. type bellhousings allowing maximum flexibility for drive train positioning. The clutch/flywheel combinations available provide the lowest possible moment of inertia whilst the rear mounted starter provides improved exhaust manifold clearance, better weight distribution and less heat management issues. A complete range of components are available allowing us to tailor a complete package comprising flywheel, clutch, starter motor, bellhousing and release mechanism complete with high quality hardware.

### Bellhousings

These rigid aluminium bellhousings are blueprinted for parallelism and concentricity. Their resistance to flexing allows maximum power to be transferred to the wheels and minimises wear to driveline components.

**Chevy Bellhousing:** 52-601  
**Ford Bellhousing:** 54-602



### 102 Tooth Flywheels

Billet steel 102-tooth, 220mm diameter flywheels providing light weight, low inertia, precision balance and durability.

**Chevy Flywheel:** 51-651  
**Chevy LS Flywheel:** 51-659  
**Ford Small Block V8:** 51-653



### Hydraulic Release Bearing

This release bearing assembly mounts to the bellhousing so it is not disturbed when the gearbox is removed. Self adjusting for clutch wear it features a highly reliable mono-seal design which enables the piston and bearing to be removed/replaced without bleeding the system. The 38mm contact bearing allows excellent modulation and minimises pedal effort.



### Starter Motor

3.0hp severe duty high torque starter, the industry standard for performance and reliability.  
**54-41062**

### Ultimate Ground Clearance Package

These rear-mount starter packages offer excellent performance and value. Designed for both circuit and short track applications these packages include a bellhousing, ultra light, 102 tooth, small diameter billet steel flywheel, 5 1/2" clutch, hydraulic release bearing, severe duty starter motor and all related hardware. Clutches are supplied as standard with 1 5/32" x 26 spline driven plates, other splines are available on request.



Tilton UTGC Packages		
Application	2 Plate Clutch	3 Plate Clutch
Chevy	52-31120	52-31130
Chevy LS	52-33120	52-33130
Ford	52-32120	52-32130

### Button Flywheels and Flexplates

#### Chevy Early Flexplate

A top quality unit from Tilton with a 153 tooth ring gear. Ultra-light and durable it is suitable for pre '86 2 piece main seal engines.

#### Chevy late Flexplate

Our Chevy late type flexplates have a 153 tooth ring gear and are .035" thicker than standard units for extra strength. Suitable for 1 piece rear main seal type engines.

#### Ford Flexplates

Our Ford flexplates have 157 tooth ring gears. The internal balance version is an ultra-light unit, whilst the 28oz external balance is .035" thicker than standard for extra strength.



### Button Flywheels

These units supply the flywheel friction surface when a flex plate is being used, they are neutral balance and are available for 5 1/2" and 7 1/4" step type fitment clutches.

Button Flywheels and Flexplates				
Application	Button Suit 7 1/4"	Button Suit 5 1/2"	Flex Plate (Int. Balance)	Flex Plate (Ext. Balance)
Chevy Early	19003	19002	26830	-
Chevy Late	19011	19010	399174	26831
Ford	19008	19007	509322	529618

## O.E. Diameter Driveline Components

For use on Ford and Chevrolet V8 engines with 7 1/4" clutches these components can be combined to form a matched package comprising flywheel, clutch, starter motor, bellhousing and release mechanism. Ideal for installations where the regulations require that a standard diameter flywheel and standard starter location is maintained. The bellhousings accept all gearboxes using Chevrolet type T10 / Super T10 mounting pattern. Ford bellhousings are of the 6 bolt type and all flywheels have the Chevy 153 Tooth ring gear diameter and must be used with an appropriate associated starter.

### Bellhousings

One piece, lightweight and rigid. They are precision manufactured to ensure parallelism and concentricity.

Weight: Magnesium from 3.65KG Aluminium from 5.7KG

Tilton O.E. Diameter Bellhousings		
Application	Magnesium Bellhousing	Aluminium Bellhousing
Chevy	53-501	53-601
Ford	53-502C	61-602



### Flywheels

Billet steel 153 tooth (12.875") flywheels to accept 7 1/4" (184mm) clutches, offering low inertia, precision balance and reliability.

**Chevy Flywheel 153 tooth:** 51-021-1  
**Ford Flywheel 153 tooth:** 54-1212



### Hydraulic Release Bearing

This release bearing assembly mounts to the bellhousing allowing gearbox removal without disturbing the release mechanism. Self-adjusting for clutch wear, it features a positive stop to prevent the risk of over stroking the clutch and causing damage to the diaphragm spring.

**61-1612**

### Starter Motor

3.0hp severe duty high torque starter, the industry standard for performance and reliability.

**Chevy suit 153 tooth:** 54-40001  
**Ford suit 153 tooth:** 54-40083



### Ford V8 Bell Housing 157 Tooth Flywheel

A rigid lightweight aluminium bell housing to fit 6 bolt S.B. Ford V8 engines. This accepts O.E Diameter 157 tooth flywheels and O.E pattern starters. The bellhousing is dual drilled and accepts both Chevrolet T10 type mounting pattern as well as Ford Top Loader transmissions.

**Ford Bellhousing suit 157 tooth:** 110302



### Competition Flywheels

We offer both Tilton and APS brand flywheels (for applications unavailable from Tilton). Both manufacturers CNC machine the flywheels from Chrome Moly steel with integrally cut ring gears for the ultimate in strength and low inertia offering the competitor or engine builder the optimum in precision balance, high strength and low inertia. Designed for use with Tilton sintered metallic, cerametallic and carbon/carbon clutches. More applications are available on request.

**tilton**



Steel Competition Flywheels					
Application	Clutch Fitment	No. of Teeth	Make	Part No.	
BMW E36/ E46 - S52/S54	7 1/4"		Tilton	51-3568	
BMW E36/ E46 - S52/S54	7 1/4"		APS	51-1092	
BMW E36/ E46 - S52/S54	5 1/2"		APS	51-1093	
BMW E92- S65	7 1/4"		APS	51-1263	
BMW E92- S65	5 1/2"		APS	51-1733	
Chevy V8 2-pc rear main seal	7 1/4"	153	Tilton	51-6200	
Chevy V8 2-pc rear main seal	7 1/4"	104	Tilton	51-052-1(1)	
Chevy V8 LS1/2/3/6/7	7 1/4"	168	Tilton	51-4452	
Ford SB V8	7 1/4"	157	APS	51-1202	
Ford SB V8	7 1/4"	104	APS	51-121(2)	
Ford Cosworth YB	7 1/4"		APS	51-0641	
Honda Civic K20/K24	7 1/4"	120	Tilton	51-1180	
Honda S2000 F20	7 1/4"	110	APS	51-0844	
Honda S2000 F20	5 1/2"	110	APS	51-1326	
MG Rover K Series	7 1/4"		APS	51-0774	
MG B Series (3 Synchro)	7 1/4"		APS	50-1169	
Mitsubishi Evo 7-9	7 1/4"	175	Tilton	51-4334	
Mitsubishi Evo 10	7 1/4"	215	APS	51-4335	
Porsche 993/996/997	5 1/2"	132	Tilton	51-4011(3)	
Porsche 993/996/997	7 1/4"	132	Tilton	51-4008(3)	
Rover V8	7 1/4"		APS	51-0847	
Subaru WRX/STI	7 1/4"	124	Tilton	51-4122	
Toyota GT86/Subaru BRZ	7 1/4"		APS	51-2113	
VW Golf GTI Mk5/6 02M	7 1/4"		APS	51-1799	
VW Golf GTI Mk5/6 02M	7 1/4"		APS	51-1264(4)	
VW Golf GTI Mk3/4 02A/02J	7 1/4"		APS	51-0986	
VW Golf GTI VR6 02A/02J	7 1/4"		APS	51-0985	

### Notes

- (1) Small diameter ring gear requires starter 54-40005.
- (2) Small diameter ring gear requires starter 54-10035.
- (3) Requires pot style clutch.
- (4) 5kg centralised mass version for VW Racing series.



ACT is a leading performance O.E. diameter clutch and flywheel manufacturer with an extensive range of products for European, Japanese and American vehicles. Their range includes performance clutch kits and flywheels for both fast road and full race applications with over 700 clutch kits and 40 performance flywheels. For over 18 years, ACT has focused on quality, service and performance to deliver a superior product.

## XACT Flywheels

ACT offer two versions of flywheel, both are machined from a single chrome-moly forging and have integral cut ring gears which are induction hardened for maximum gear life. They offer excellent heat capacity because they maintain adequate material behind the friction surface and dynamic balancing combined with tight tolerances for fit, concentricity and parallelism ensure an exact fit to the crank and smooth operation even at extremely high RPM. All XACT flywheels comply with the US SFI 1.1 safety specifications so can be used in confidence for competition applications.

### Streetlite Flywheels



These popular performance flywheels are both lighter and stronger than the O.E. flywheels they replace and offer better driveability and durability. Perfectly balanced for optimum performance they are ideal for fast road applications.

### Prolite Flywheels



The Prolite version provides the lowest moment of inertia. The outer section is lightened to reduce weight and inertia without compromising strength, these flywheels offer a better throttle response thanks to their lower inertia making them ideal for race and rally applications.

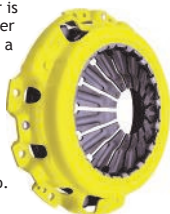
## Clutch Covers

ACT clutch covers are offered in several versions allowing the clutch to be optimised for the application. Effective diaphragm spring designs allows increased clamp load to be generated without needing to use double-diaphragm spring covers with their associated high release loads. All covers are balanced for smooth operation at high RPM and are fully compliant with the US SFI safety standard for motorsport use.

### Heavy Duty Cover (-HD)

The heavy duty cover is the most popular cover from ACT. It has only a moderate increase in release load but offers between 20-50% increased clamp for greater torque capacity.

-HD suffix to Part No. in table right.



### Xtreme Cover (-XT)

The extreme cover has a heavier feel to it than the heavy duty cover, but offers an increase in clamp load of between 50-120% making it ideal for high torque output applications.

-XT suffix to Part No. in table right.



## Driven Plates

ACT driven plates are available with either organic or cerametallic 4 or 6 pad friction surfaces. Sprung centre or rigid hubs versions are also available. The sprung centre hubs are better for a smoother engaging clutch and also reduce clutch and transmission noise whilst rigid plates have lower inertia, crisper engagement and increased heat capacity but can be noisier in some applications and have higher spline wear.

### Sprung Centred Organic (-SS)

Premium friction material for increased friction and heat tolerance and a higher burst strength due to steel-backed linings.

These plates allow quicker gear changes and engagement with increased strength and reliability.

-SS suffix to Part No. in table right.



### Rigid Organic (-SD)

Minimum weight for quicker gear changes and reduced synchro load. Ultra-high burst strength with fast, smooth and precise engagement.

Race proven performance with street manageability although increased gear noise and spline wear may be experienced.

-SD suffix to Part No. in table right.



### Sprung Centred Cerametallic (-G4, -G6)

Cerametallic friction material offers increased torque and heat capacity when compared to organic materials whilst sprung hubs reduce driveline shock and spline wear and are quieter in use.

Choose 6 pads for better heat capacity and better engagement, choose 4 pads for lowest inertia.

4 Pads:-G4 suffix to Part No. in table.

6 Pads:-G6 suffix to Part No. in table.



### Rigid Cerametallic (-R4, -R6)

Improved durability because of stronger hub components, but the rigid hub may cause increased gear noise and spline wear to be experienced. Choose 6 pads for better heat capacity and better engagement, choose 4 pads for lowest inertia.

4 Pads:-R4 suffix to Part No. in table right.

6 Pads:-R6 suffix to Part No. in table right.



Application	Year	Flywheels		Pressure Plate	Driven Plate
		Streetlite	Prolite		
Audi TT FWD 1.8T, 5 Speed	99-06	600270	600275	VW010-HD	3000701-SS 6228215-G6
BMW M3 E36 3.0L 6 Cyl	95-96	600260	600265	BO13-HD	3000801-SS 6240502-G6
BMW M3 E36 3.2L 6 Cyl	96-99	600260	600265	BO11-HD	3000801-SS 6240502-G6
BMW M3 E46 3.2L 6 Cyl	01-06	600260	600265	BO14-HD	3000805-SS 6240529-G6
Mini Cooper S	02-05	600315	-	BO12-HD	3000802-SS 6214122-G6
Chevrolet V8 (10 1/2") 153 Tooth, 10 Spline	55-	600460	600455	GM012-HD	3000902-SS 6266302-G6
Chevrolet V8 (10 1/2") 153 Tooth, 26 Spline	55-	600460	600455	GM012-HD	3000903-SS 6266320-G6
Chevrolet V8 (11") 168 Tooth, 10 Spline	66-	600470	600465	GM013-HD	3000904-SS 6280302-G6
Chevrolet V8 (11") 168 Tooth, 26 Spline	66-	600470	600465	GM013-HD	3000905-SS 6280320-G6
Chevrolet LS1-LS7	97-10	-	600585	GM015-HD	3000909-SS 6280320-G6
Chrysler/Dodge V8 Classics 318-440 C.I., 4 Speed	66-85	-	-	D018-HD	3001532-SS 6266332-G6
Ford SB V8 260, 289 & 302 C.I. (10.0") 1 1/16" x 10 Spline	64-82	-	-	F019-HD	3001506-SS 6250319-SS
Honda Civic VTEC (220mm) B-Series	94-00	600110	600105	H025-HD H025-XT	3000105-SS 6220110-G6
Honda Civic VTEC (220mm) K-Series	01-10	600295	600125	H024-HD H024-XT	3000108-SS 6214510-G6
Honda S2000, 2.0L, 2.2L	00-09	600355	600350	H021-HD	3000106-SS 6212210-G6
Lotus Elise / Exige, 1.8L	05-09	-	-	T022-HD T022-XT	300606-SS 6212103-G6
Mazda MX5, 1.6L (200mm) For upgrade use flywheel	89-93	-	-	MZ014-HD MZ014-XT	4200105-G4 4200005-R6
Mazda MX5, 1.8L (225mm)	94-05	600290	600255	MZ012-HD MZ012-XT	3000203-SS 6224205-G6
Mazda RX7, (236mm) (exc. Flywheel Counterweight)	93-99	600145	600140	MZ011-HD MZ011-XT	3000206-SS 6240508-G6
Mazda RX8, (240mm) (exc. Flywheel Counterweight)	03-10	600145	600140	MZ010-HD	3000204-SS 6240208-G6
Mitsubishi Evo I, II, III	93-95	600160	-	MB010-HD MB010-XT	3000303-SS 6224704-G6
Mitsubishi Evo IV-IX	96-06	600205	600210	MB018-HD MB018-XT	3000305-SS 6240608-G6
Mitsubishi Evo X	08-10	600550	600555	MB018-HD	3000305-SS 6240608-G6
Nissan 200SX SR20DET 5 Speed	89-98	600225	600230	N015-HD N015-XT	3000405-SS 6240306-G6
Nissan 350Z VQ35 (250mm)	03-06	600215	600220	N021-HD N021-XT	3000409-SS 6250306-G6
Nissan 350Z/370Z VQ35HR (250mm)	06-10	600590	-	N024-HD	3000409-SS 6250306-G6
Nissan Skyline R32/R33	90-98	-	-	N013-HD	3000405-SS 6240306-G6
Porsche 911 (964/993)	91-98	-	-	PO11-HD PO11-XT	3001301-SD 6240031-R6
Porsche 911 (996) 3.6L	02-04	-	-	PO12-HD	3001302-SD 6240008-1-R6
Subaru Impreza WRX EJ20 (230mm)	93-05	600175	600170	SB018-HD	3000502-SS 6228518-G6
Subaru Impreza WRX STI EJ20 (240mm)	02-05	600235	600240	SB019-HD	3000503-SS 6240618-G6
Subaru Impreza WRX STI EJ25 (230mm)	06-07	600480	600475	SB014-HD	3000502-SS 6228218-G6
Toyota GT86	13-	600705	600700	SB017-HD	3000504-SS 6224218-1-G6
Volkswagen Corrado G60	90-91	600270	600275	VW010-HD	3000701-SS 6228215-G6
Volkswagen Golf/beetle 1.8T 5 Speed (228mm)	99-05	600270	600275	VW010-HD	3000701-SS 6228215-G6

# tilton

## 600 Series Pedal Assemblies

Tilton 600-Series pedal assemblies offer the best value in the market for pedal assemblies of their type.

Incorporating technology from the benchmark setting 900 Series, the latest generation of 600 Series pedal assemblies have been engineered to provide excellent performance at a competitive price. Incorporated features include ramps to prevent balance bar "tipping", high-strength 7/16" balance bars, adjustable foot pads and oil-impregnated bronze bushings at pedal pivots. As with all Tilton pedal assemblies, ergonomic principles have been applied to reduce driver fatigue and provide exceptional feedback.

600-Series are available as floor mount, overhung or firewall mount configurations. They are designed for use with flange mounted master cylinders such as Tilton 73/74/75/76-Series master cylinders.

## 600 Series Floor Mounted Assemblies



These floor mounted pedal assemblies provide an easy and cost effective solution for car preparation. The pedal assembly accepts any of the Tilton flange mount master cylinders and requires only 4 bolts to mount the assembly to the car. Four optional pedal pad positions allow the installed height and pedal ratio to be adjusted to suit the application and the three pedal version includes a throttle pedal profiled to allow the easy fitment of the Tilton remote brake bias adjuster cable with a mounting provision to allow the fitment of either the optional 72-791 mechanical throttle linkage or the 72-792 fly by wire assembly detailed opposite.

**Pedal Assembly, Brake, Clutch & Throttle: 72-603**  
**Pedal Assembly, Brake & Clutch Only: 72-604**

## 600 Series Overhung Pedal Assembly



This pedal assembly positions the master cylinders inside the cockpit isolating the fluid from the engine heat, whilst the swing type pedals allow comfortable and efficient driver leg movement. Adjustable length pedal arms allow effective pedal ratios from 5.0:1 to 6.2:1 to be achieved.

The wide pad on the brake pedal and adjustable offset allows lateral position to be set to suit driver preference. Designed to be combined with the stand alone throttle pedal detailed right when required.

**Overhung Pedal Assembly: 72-608**

## 600 Series Reverse Cylinder 2 Pedal Floor Mount Assemblies

Two pedal versions of the latest reverse cylinder pedal assembly for applications requiring brake and clutch or brake and throttle pedals only. With the throttle pedal version the cable can be actuated either by the included rod or by the use of the optional throttle linkage which is available separately for either fly by wire or conventional cable throttles.

**Brake & Throttle : 72-618**  
**Brake & Clutch : 72-617**

## 76 Series Inlet Adaptor Kit

Designed for use with the 76 series master cylinders when installed into the 2 or 3 pedal reverse cylinder pedal assembly. This kit provides a neat plumbing solution for the inlet lines. Supplied with 7/16-20 banjo bolts, extended neck banjo adaptors and 4 hose ends.

**2 Pedal CSP72-618BIA**  
**3 Pedal CSP72-616BIA**

## Reverse Mount Throttle Linkages

Throttle linkages for use with Tilton 2 or 3 pedal reverse floor mount assemblies. The linkage pivots on a sealed ball bearing minimising friction and maintaining consistent smooth control. Versions are available for use with either conventional throttle cable or electronic throttle position sensor.

**Mechanical Linkage : 72-793**  
**Drive By Wire Linkage: 72-794**  
**Throttle Position Sensor: 72-792-S90**

## 600 Series Firewall Mounted Assembly



For bulkhead mounting this pedal assembly positions the master cylinders within the engine compartment. Adjustable length pedal arms allow effective pedal ratios from 5.0:1 to 6.2:1 to be achieved. The wide pedal pad on the brake pedal and adjustable offset allows lateral position to be set to suit driver preference. Designed to be combined with the stand alone throttle pedal detailed right when required.

**Firewall Mount Pedal Assembly: 72-607**

## 600 Series Reverse Cylinder 3 Pedal Floor Mount Assembly

The newest pedal assembly from Tilton. This reverse cylinder, floor mounted 3 pedal assembly is ideal for installations where space restrictions prevent the use of a conventional floor mount assembly. The master cylinders are mounted under the drivers feet and covered with a false floor to provide a heel rest. The rigid, forged aluminium pedals ensure excellent feel and incorporate Tilton's unique adjustable pedal pad system allowing a wide range of pedal heights and spacing to be achieved. The lightweight cast aluminium chassis is designed to accept the Tilton 76 Series master cylinders which are not included and should be ordered separately. The throttle cable can be actuated either by the included rod or by the use of the optional throttle linkage which is available separately for either fly by wire or conventional cable throttles.

**72-616**



## Reverse Mount False Floor Kit

Lightweight aluminium false floor for use with the 72-616 & 72-617 reverse cylinder pedal assemblies. The kit comprises a CNC formed aluminium cover with high grip heel pad, billet aluminium support pedestal and low profile aluminium mounting hardware. Available in natural or black anodised finish.

**Natural: 72-616F**  
**Black Anodised: 72-616FBK**

## Throttle Pedal Assembly

A stand alone throttle pedal suitable for use with Tilton overhung and firewall mount pedal assemblies. The pedal has a CNC machined billet aluminium mount and forged aluminium pedal with variable length pedal pad facility. Integral pedal height and travel stops allow optimum positioning of the pedal pad relative to the brake. The mount has the facility to accept the 72-791/792 mechanical and fly by wire throttle linkages which should be ordered separately if required.

**Throttle Pedal: 72-615**  
**Mechanical Linkage: 72-791**  
**Fly By Wire Linkage: 72-792**  
**90° Sensor: 72-792-S90**  
**120° Sensor: 72-792-S120**

## Adjustable Ratio Pedal Arm

The new pedal pad design from Tilton Engineering means that the pedal pad can be adjusted vertically and horizontally to suit the drivers preference. By moving the pedal pad vertically you will generate different pedal ratios. This facility is only found on the aluminium pedal arm versions.

## Pedal Pads

Tilton pedal boxes are supplied with narrow pedal pads for clutch and throttle and a wide pedal pad for the brake, if alternate pedal pad combinations are required both pad types can be ordered separately.



# tilton 900 Series Pedal Assemblies

Tilton 900-Series pedal assemblies feature the latest in pivot-mount master cylinder technology to enable maximum performance to be achieved from your braking system. Engineered to reduce friction within the balance bar/master cylinder system and reduce pedal flex the 900-Series pedal assemblies provide exceptional feedback and repeatable braking, inspiring driver confidence and producing faster lap times. Produced using the highest quality materials available and the latest manufacturing processes. Needle bearings and/or sealed ball bearings are utilised at all pivots for reduced friction and precise action. The chassis and pedals are machined from billet aluminium and are fully optimised for strength, stiffness and weight savings using Finite Element Analysis (FEA). The included balance bar features adjustable ratios and needle bearings that ride on hard-ground surfaces at all pivots. 900-Series are available in floor mount, overhung and firewall mount configurations, and are designed for use with Tilton 77-Series pivot-mount master cylinders.

## 900 Series 2 Pedal Firewall Mounted Assembly

Ideal for any application that requires a firewall mounted pedal assembly. Designed for use with the 77 series rear-pivoting master cylinders. This pedal assembly features billet aluminium pedals and chassis with all pivots being on needle roller bearings.

## 77 Series Master Cylinders

The ultimate in competition master cylinders the 77 Series is the lightest, shortest and most compact automotive racing master cylinder available. Its floating design eliminates side loads on the piston and allows the use of a fixed pivot balance bar for more consistent brake bias distribution.



77 Series		
Bore Size (mm)	Bare Cylinder	Rebuild Kit
5/8" (15.88)	77-625	77-625RK
7/10" (17.78)	77-700	77-700RK
3/4" (19.05)	77-750	77-750RK
13/16" (20.64)	77-812	77-812RK
7/8" (22.23)	77-875	77-875RK
15/16" (23.81)	77-937	77-937RK
1" (25.40)	77-1000	77-1000RK

## Fly By Wire Throttle Mount

A throttle linkage with mounting provision for our 0-5V throttle position sensor to provide a fly by wire throttle option on the Tilton 3 pedal floor mount pedal assemblies and 72-615 throttle pedal.

Sensor not included.  
TPS Linkage & Mount  
72-792



## Throttle Position Sensor

Contactless throttle position sensor providing accuracy and long life. Absolute analogue output, no loss of position on power down, the 90° & 120° measuring ranges are optimised for the Tilton sensor mount and throttle pedals. Dual outputs provide a redundant output for safety whilst the rugged housing and shaft design is sealed to IP68 ideal for extreme motorsport environments.

Specification:  
Dual channel contactless throttle position sensor.  
Operating Angle : 90 or 120 Degrees.  
Output: 0.5 -4.5V analogue.  
Connection: 50cm Fly Lead with 4 wire core.  
90° Sensor 72-792-S90  
120° Sensor 72-792-S120



## Throttle Linkage

Throttle linkage for use with Tilton 3 pedal floor mount assemblies. The linkage pivots on a sealed ball bearing minimising friction and maintaining consistent smooth control. Multiple options allow a range of ratios and pull directions to be achieved.

72-791  
Swivel Nipple to allow the easy connection of throttle cables to the linkage.

Single Cable: SWIVEL

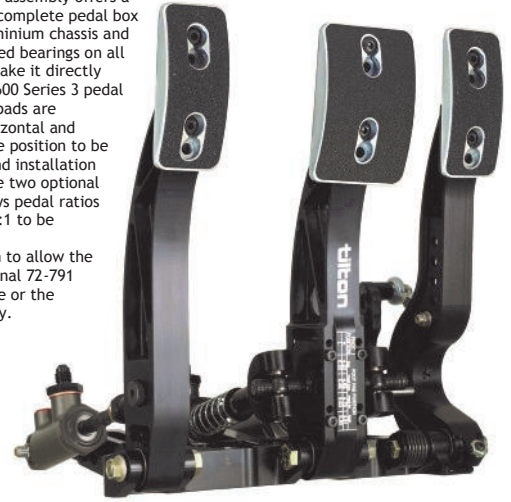
Twin Cable: 72-799



## 900 Series 3 Pedal Floor Mounted Assembly

The 900 series floor mount assembly offers a lightweight, efficient and complete pedal box solution. With a billet aluminium chassis and pedals it incorporates sealed bearings on all pivots and its mountings make it directly interchangeable with the 600 Series 3 pedal assembly. All three pedal pads are adjustable in both the horizontal and vertical planes to allow the position to be optimised for the driver and installation and this combined with the two optional balance bar positions allows pedal ratios of between 4.52:1 and 5.8:1 to be achieved.

It has a mounting provision to allow the fitment of either the optional 72-791 mechanical throttle linkage or the 72-792 fly by wire assembly.  
72-903



## Adjustable Height Balance Bar

All Tilton 900-Series pedal assemblies feature adjustable height balance bars to allow the effective pedal ratio to be varied.



## Please Note:

Master cylinders are shown for illustrative purposes only, they are not included with the pedal boxes and should be ordered separately.

## Inlet Adaptors 77 Series Master Cylinders

Aluminium banjo adaptor kit with a 9/16" bolt and AN-4 tail for use with 77-Series master cylinders.  
BIA77

Male/male aluminium master cylinder port adaptor to AN-4 for use with 77-Series master cylinders.  
495110BL



## 900 Series Fixed Pivot Balance Bar

This balance bar for use with 77 series cylinders has the centre balance bar pivot fixed to the pedal, while the master cylinders "float" to follow balance bar clevises as adjusted. The result is less wasted travel and more consistent bias. Balance bar freedom is restricted to a single horizontal plane, resulting in less wasted motion. All balance bar pivots ride on needle bearings to reduce friction and extend service life. Brake bias repeatability is dramatically increased over conventional balance bar/master cylinder installations.

72-280



## 600 Series Brake Balance Bars

The Tilton range of balance bars can be used when adapting O.E. style pedals or when designing a new pedal box. The clevis's accept the industry standard 5/16" UNF push rod. Can be made cockpit adjustable with the addition of a remote adjuster cable. Available in 3/8 UNF or 7/16 UNF threads.

3/8" Balance Bar 72-250

7/16" Balance Bar 72-260



## Replacement Pedal Pads

Replacement pedal pad with grip tape to suit Tilton forged aluminium pedal arms.

Wide 72-6034

Narrow 72-6035



## 900 Series 2 Pedal Overhung Mount Assembly

900-series overhung pedal assemblies feature hanging pedals and locate the master cylinder inside the car's cockpit, keeping master cylinders away from engine heat. Designed for use with 77-series rear-pivoting master cylinders. This pedal assembly features billet aluminium pedals and chassis.  
72-902



## Brake Bias Adjuster Cables

The billet model features a durable aluminium knob with non-slip rubber surface and a radial double-detent providing positive and distinct bias adjustment  
Billet Adjuster 72-408



The standard model features a plastic knob with a twin detent balls for positive bias adjustment.

Standard, Red Knob 72-509

Standard, Yellow Knob 72-508



## 90 Degree Balance Bar Adjuster

90 Degree balance bar adjuster for use when a cable coming straight off the balance bar would interfere with either the throttle or clutch pedal this neatly engineered component allows a bias adjuster cable to be fitted in even the tightest installations

3/8"-24 72-560

7/16"-20 72-561



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**Flange Mount Master Cylinders**

Tilton offer a range of fixed mounting master cylinders, all versions have industry standard flange mounts with two vertically aligned mounting holes on 2 1/4" (57mm) centres and 5/16" UNF threaded pushrods.

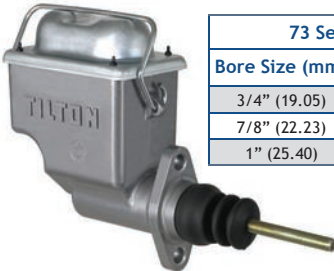
**Tilton 76-Series Master Cylinders**



Featuring dual AN3 outlet port options with the vertical outlet allowing for an ultra compact installation, the second outlet can be blanked off with the plug included or used for a pressure sensor or brake light switch if required. The 7/16" UNF female fluid inlet makes it directly interchangeable with other popular competition master cylinders.

76 Series		
Bore Size (mm)	Bare Cylinder	Rebuild Kit
5/8" (15.88)	76-625	75-625RK
7/10" (17.78)	76-700	75-700RK
3/4" (19.05)	76-750	75-750RK
13/16" (20.64)	76-812	75-812RK
7/8" (22.23)	76-875	75-875RK
1" (25.40)	76-1000	75-1000RK

**73 Series Master Cylinders**



73 Series	
Bore Size (mm)	Part No.
3/4" (19.05)	73-750
7/8" (22.23)	73-875
1" (25.40)	73-1000

A low cost master cylinder with a 295ml integral reservoir and secure leak proof cap with integral bellows. 1/8"-27 NPT outlet port.

**Clubman Master Cylinders**



Lightweight aluminium master cylinders to the Girling non-integral pattern. Flange mounted with the two mounting holes vertically positioned on 2 1/4" centres. The push rod is threaded 5/16" UNF whilst the inlet port has a 7/16" UNF thread and the outlet port a 3/8" UNF thread.

Clubman Cylinders	
Bore Size (mm)	Part No.
1/2" (12.70)	70-500
5/8" (15.88)	70-625
7/10" (17.78)	70-700
3/4" (19.05)	70-750

**Large Bore Cylinders - Girling Pattern**



U.K. Manufactured high quality aluminium master cylinders to the Girling non-integral pattern in larger bore sizes no longer available from Girling. Flange mounted with the two mounting holes vertically positioned on 2 1/4" centres. The push rod is threaded 5/16" UNF whilst the inlet port has a 7/16" UNF thread and the outlet port a 3/8" UNF thread.

13/16" (20.64mm) Bore: 000800  
7/8" (22.23mm) Bore: 000400

**Tilton 75-Series Master Cylinders**



The compact 75 series master cylinder still provides 28mm of effective stroke. Kits are supplied complete with two reservoirs of 118ml and 200ml capacity, remote reservoir mounting brackets and all necessary adaptors, fittings and feed hose.

Bore Size (mm)	75 Series		
	Bare Cylinder	Cylinder Kit	Rebuild Kit
5/8" (15.88)	75-625	75-625U	75-625RK
7/10" (17.78)	75-700	75-700U	75-700RK
3/4" (19.05)	75-750	75-750U	75-750RK
13/16" (20.64)	75-812	75-812U	75-812RK
7/8" (22.23)	75-875	75-875U	75-875RK
1" (25.40)	75-1000	75-1000U	75-1000RK
1 1/8" (28.58)	75-1125	75-1125U	75-1125RK

**Tilton 74-Series Master Cylinders**

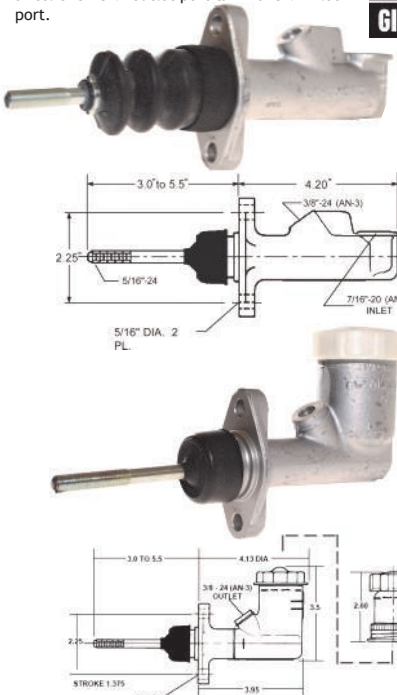


The 74 series master cylinders provide 28mm of effective stroke. Kits are supplied complete with two reservoirs of 118ml and 200ml capacity, remote reservoir mounting brackets and all necessary adaptors, fittings and feed hose.

Bore Size (mm)	74 Series		
	Bare Cylinder	Cylinder Kit	Rebuild Kit
5/8" (15.88)	74-625	74-625U	74-625RK
7/10" (17.78)	74-700	74-700U	74-700RK
3/4" (19.05)	74-750	74-750U	74-750RK
13/16" (20.64)	74-812	74-812U	74-812RK
7/8" (22.23)	74-875	74-875U	74-875RK
1" (25.40)	74-1000	74-1000U	74-1000RK
1 1/8" (28.58)	74-1125	74-1125U	74-1125RK

**Girling Master Cylinders**

Lightweight aluminium master cylinders with a 5/16" UNF push rod. Available with separate or integral fluid reservoirs and in a range of bore sizes. 3/8" UNF outlet port & 7/16" UNF inlet port.



Girling Master Cylinders			
Bore Size (mm)	Integral Reservoir	Non-Integral Reservoir	Rebuild Kit
5/8" (15.88)	64068016	64067651	000625
7/10" (17.78)	64068325	64067884	000700
3/4" (19.05)	64067623	64067620	000750

**Tilton Master Cylinder Accessories**

Spares and accessories for use with Tilton master cylinders and as supplied in the 74 & 75 Series kits



Master Cylinder Accessories		
Description	Item	Part No.
Remote Mount	1	74-212
Remote Inlet	2	74-200
Reservoir Cap	3	74-207
Reservoir Clamp	4	74-208
AN3 Male/Male	5	73-815-3L
AN3 Male/3/16" Female	6	TE2089-188L
Reservoir Hose	7	72-214
Reservoir 4.0 oz	8	74-202
Reservoir 6.8 oz	9	74-203
Reservoir 10.7 oz	10	74-204
Pushrod Std. 73,75 & 76 Series	11	75-030
Pushrod Std. 74 Series	11	74-400
Pushrod Long (152mm)	11	75-031

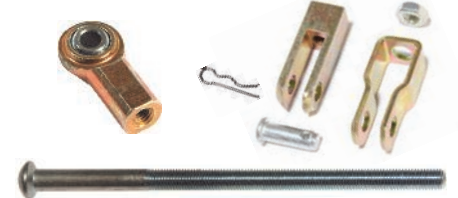
**Tilton 3-Chamber Fluid Reservoirs**



Produced from fiberglass reinforced nylon & incorporating three separate internal reservoirs of differing capacities, front brakes 289ml, rear brakes 186ml, clutch 118ml, in a single compact package. The gasket-sealed removable top allows for easy cleaning and incorporates screens to prevent foreign objects (nut, bolts) from falling into the reservoir when the caps are removed. The caps feature a leak-proof baffle/breather design. W:185mm H:155mm D:89mm Mounting Hole Centres:70mm

AN4 Outlets: 72-577  
7.5mm Push-on Outlets: 72-576

**Push Rod & Clevises**



Accessories for use with 5/16 UNF master cylinder pushrods.

Female Rod End Bearing: CF5  
Machined Clevis: 64671286  
Pressed Clevis: 373201  
Clevis Pin: 000089  
R-Clip: BR7  
Lock Nut: SJNR5  
Long (152mm) Girling Push Rod: 000082

**Fluid Level Warning Switch**

Float type fluid level warning light switch. Supplied complete with seals and lock nut allowing it to be easily incorporated into most reservoirs by drilling an appropriate hole in the filler cap. RD3649



Telephone: 01327 857991 email: sales@competitionsupplies.com

Telephone: 01327 857991

COMPETITION SUPPLIES LTD

**Brake Proportioning Valves**

A lightweight compact brake proportioning valve, available with either or knob or lever type adjustment. Lever type allows 7 immediate and distinct changes in braking balance whilst the Knob type is infinitely adjustable with its range. These can be supplied with either -3 JIC (3/8 UNF) or M10 x 1mm fluid ports.



Fluid Ports	Lever Type	Knob Type
M10 X 1.0mm	90-1003	90-2003
-3 JIC (3/8 UNF)	90-1000	90-2000
Rebuild Kit (All Types)	90-1100	

**Girling Reservoirs**

A range of genuine Girling brake fluid reservoirs, threaded outlets are 7/16" UNF and the direct mount reservoir is designed specifically for use with the Girling non-integral master cylinders.



Girling Reservoirs & Accessories		
Description	Item	Part No.
Large Reservoir	1	64046158
Small Reservoir	2	64047341
Historic Reservoir	3	000032
Small Direct Mount	4	000087
Reservoir Extension	5	64475476
Reservoir Cap - Small	6	74470144
Reservoir Cap - Large	7	64474602

**Twin Outlet Fluid Reservoir**

An O.E. style fluid reservoir with twin swivelling push-on outlets and a fluid level warning light switch integral in the cap. For safety an internal divider provides an independent fluid compartment for each outlet.



Twin Outlet Reservoir 000191

**Master Cylinder Inlet Components**

This 7.5mm I.D. low pressure brake fluid feed hose is suitable for use with all push-on fitting reservoirs, adaptors and master cylinders.

RH7.5

Aluminium -4 JIC adapter and female hose ends for use with push-on hose above.

- 7/16" Male/Male: 481504BL
- Straight Hose End: 200104BL
- 45" Hose End: 204504BL
- 90" Hose End: 209004BL

**Push-On Inlet Adaptors**

Inlet adaptors for use with Tilton 76 Series and Girling remote type master cylinders or any other master cylinder with a 7/16"-20 UNF threaded inlet port.

7/16"-20 to 7mm Hose Tail CPCIA

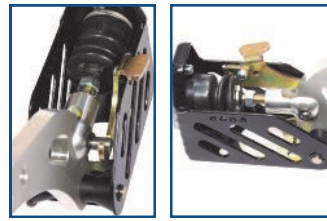
7/16"-20 Banjo assembly with 7mm hose tail CPCBIA



**Hydraulic Handbrakes**

A range of hydraulic handbrakes all supplied with Girling style 5/8" bore master cylinder with 7/16" UNF inlet and 3/8" UNF outlet port. We offer three versions; horizontal lever, short vertical lever and long vertical lever. All versions incorporate a simple and effective quick release locking mechanism allowing line pressure to be retained thereby providing a park brake facility.

- Horizontal Handle: 3080C
- Short Vertical Handle: 3090CS
- Long Vertical Handle: 3090CL



**Electronic Line Lock**

This useful device allows the driver to hold brake line pressure by pressing the button once whilst the brakes are applied and then pressing again to release. Essential for good starts on sloping grids, this solenoid activated line lock features a stainless steel valve assembly and a fully enclosed moulded electrical coil. Supplied complete with warning light, switch and fitting instructions.

ALL48016



**Manual Line Lock**

A inexpensive manual alternative to the roll control. When fitted to the appropriate brake line it allows pressure to be applied then held in line providing a hydraulic park brake facility. Female 1/8BSP ports

- Line Lock HPBV2-02
- 1/8 BSP to -3 Male/Male 741-3-3P



**Brake Balance Gauge Set**

Achieve accurate brake balance settings using this brake balance gauge panel incorporating a pair of mechanical 38mm diameter, 0-1500 psi gauges which display the brake pressure being generated in the front and rear lines. The panel is a carbon effect moulded plastic panel and the 1/8-27" NPT female inlet incorporates a remote bleed fitting.

44128



**Brake Line Pressure Test Kit**

A pair of analogue brake pressure gauges with 3/8-24 UNF threads to allow direct fitting to the brake caliper bleed screw port in order to show exact brake bias by confirming line pressures being developed front and rear. Supplied complete with silver storage case.

44149



**1500 P.S.I. Brake Pressure Gauge**

0-1500 P.S.I. brake pressure gauge with 1/8-27 NPT rear port. We also stock the necessary tee pieces, bleed screws and associated fittings which can be combined with these gauges to create a pressure testing kit for any caliper type.

80218



**Brake Professional Brake Bleed Bottles**



These German manufactured brake bleed bottles are the best we have seen. They have a 1.3L capacity and incorporate an integral one way check valve to allow simple single person bleeding. The hose is non hardening transparent silicone allowing you to see clearly when the fluid is air bubble free. The integral lanyard and hook allow them to be easily suspended from a raised vehicle. The leak free stopper prevents spillage whilst the pouring neck allows used fluid to be easily and cleanly disposed of. The container itself is solid, leak-proof and very strong so easily able to withstand the rigours of workshop or paddock use. We offer two versions of the bottle a single hose or twin hose version, the twin hose being ideal for multi piston calipers allowing inner and outer bleed screws to be opened simultaneously. The optional hand pump is used to easily remove excess fluid from the reservoir if over filled or after new pads have been fitted.

- Single Hose Bottle: BBB-SH
- Twin Hose Bottle: BBB-TH
- Hand Pump: BBB-HP



**RBF 660 Brake Fluid**

Non-silicone, 100% synthetic, racing brake fluid with a dry boiling point in excess of 325°C. Specially designed to resist extreme temperature generated by racing carbon and ceramic brakes it's also suitable for use in cast iron disc applications where extreme temperatures are being developed. Maintains very low compressibility at high temperatures and provides excellent lubricity extending seal life making it also ideal for clutch use. Substantially exceeds all DOT 3, 4 and 5.1 specifications (except DOT 5.1 viscosity at -40°C).

RBF660 500ml: 101666



**RBF 600 Brake Fluid**

DOT 4 rated non-silicone, 100% synthetic racing brake fluid offering a dry boiling point in excess of 310°C. Designed to resist to extreme temperature generated by competition brake systems it combines low compressibility with good lubricity protecting seals and also making it ideal for clutch use. Exceeds all DOT 3, 4 and 5.1 specifications (except for DOT 5.1 viscosity at -40°C).

RBF 600 500ml: 100948



**DOT Brake Fluids**

100% synthetic polyglycol brake fluids for all types of hydraulic brake and clutch systems. Mixable with DOT 3, DOT 4 and DOT 5.1 non-silicone products. DOT3 and 4 fluid has a dry boiling point 245°C, DOT 5.1 has a dry boiling point of 270°C

- DOT 3 & 4 500ml: 102718
- DOT 5.1 500ml: 100950



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**Hose Assembly**

Wrap the hose tightly in tape & cut with a 32 tpi hacksaw blade. Remove tape, de-burr the hose liner & trim any loose ends of the braid.

Push the socket onto the hose with the thread nearest the cut end. Push the nipple of the fitting into the hose to ensure the liner is still round. Remove the fitting & spread the braid away from the liner for a few mm. Insert olive between liner & braid & push against a solid surface to ensure fully home & sitting squarely. Insert the fitting into a vice, oil the threads & push the hose onto the fitting. Start threading the socket onto the fitting by hand before using a spanner to tighten until the gap between socket & fitting hex is .023" - .046".



**Stainless Braided PTFE Brake Hose**

Compatible with all brake & clutch fluids, this lightweight & flexible hose resists expansion under pressure giving a firm, consistent brake pedal. The stainless steel covering offers excellent abrasion resistance making it also ideal for pressure gauge lines. -3 is normally used for brake lines & clutch feed lines with -4 used on clutch feed lines requiring greater fluid movement or for a gravity supply between a fluid reservoir & a master cylinder.



- 3 Hose Uncoated: 600003
- 3 Hose Clear Coated: H707-03-CL
- 3 Hose Black Coated: H707-03-BLK
- 4 Hose Uncoated: 600004
- 4 Hose Clear Coated: H707-04-CL



Steel Banjo Fittings		To Suit Bolt 3/8"/10mm	To Suit Bolt 7/16"
Version	To Suit Hose		
Short Straight	-3	600303	6003034
Long Straight	-3	601703	6017034
20° Up	-3	602203	-
20° Side	-3	601903	-
45° Up	-3	602503	-
70° Up	-3	601603	-
90° Up	-3	601503	-
Double Short	-3	5095-03Z	-
Double Long	-3	601303	-
90° Double	-3	602603	-
Short Straight	-4	600341	600304
Long Straight	-4	6017043	-
20° Long	-4	-	602204

Banjo Adapters			
Thread	Bore	3/8" / 10mm	7/16"
AN-3 (3/8"x24)		650103	650113
AN-4 (7/16"x20)		650104	650114

**Banjo Bolts**

Short banjos generally have thicker heads so require long bolts, whilst extended neck banjos have thinner heads and require short bolts. Double bolts allow two banjo fittings or adaptors to be connected to a single fluid port and require 3 washers to seal.



Thread	Steel Banjo Bolts		Double	
	Short	Long	Short	Long
3/8 x 24	997503	977503	997513	977513
M10 X 1.0	997517	977517	997519	977519
M10 X 1.25	997515	977515	997518	977518
7/16 x 20	997504	977504	-	-

Type	Sealing Washers	
	3/8"	7/16"
Copper	44516	44518
Aluminium	999201	999202

Straight Female Hose Ends			
Thread	Material	Hose	Part No.
3/8 x 24	Steel	-3	600103
7/16 x 20	Steel	-3	600143
1/8 BSP	Steel	-3	6001034
BSP SMITHS	Steel	-3	6001034SM
1/8 NPT	Steel	-3	4031-03
M10 x 1	Steel	-3	452-31P
M10 x 1.25	Steel	-3	452-32P
3/8 x 24	Steel	-4	600114
7/16 x 20	Steel	-4	600104
7/16 x 20	Aluminium	-4	690104



Female Bulkhead Fitting Hose Ends		Convex Seat	Concave Seat
Thread	Type	Hose	Part No.
3/8 x 24	Grooved	-3	640503
M10 x 1	Grooved	-3	640603V
M10 x 1.25	Grooved	-3	-
7/16 x 20	Grooved	-4	640504
3/8 x 24	Threaded	-3	756-03P
M10 x 1.25	Threaded	-3	750-03-31P
M10 x 1.25	Threaded	-3	750-03-32P
7/16 x 20	Threaded	-4	640504
Lock Nut			2K8686

JIC Male/Male Adapters		
Thread "A"	Thread "B"	Part No.
-3	-3	961503
-3	-4	501902
-4	-4	961504



JIC Bulkhead Adaptors			
Thread	Straight	45°	90°
(-3) 3/8 x 24	583203	583703	583303
(-4) 7/16 x 20	583204	583704	583304

Bulkhead Tee Adaptors		
Thread	Type 1	Type 2
(-3) 3/8 x 24	583403	580403
(-4) 7/16 x 20	583404	580404

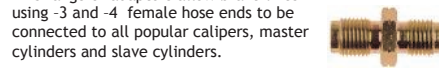


JIC/NPT Adaptors				
JIC (AN) Thread	NPT Thread	Part No.	Part No.	Part No.
(-3) 3/8 x 24	1/8 NPT	581603	582303	582203
(-4) 7/16 x 20	1/8 NPT	581604	582304	582204

**Steel Brake Adaptors**

This range of adaptors allow brake lines using -3 and -4 female hose ends to be connected to all popular calipers, master cylinders and slave cylinders.

Steel Brake Adaptors			
JIC (AN) Thread	THREAD B	"B" SEAT	PART NO.
(-3) 3/8 x 24	3/8 x 24	Concave	581531
(-3) 3/8 x 24	1/8 BSP	Concave	741-3-3P
(-3) 3/8 x 24	M10 x 1	Convex	305-3-31P
(-3) 3/8 x 24	M10 x 1	Concave	306-3-31P
(-3) 3/8 x 24	M10 x 1.25	Convex	305-3-32P
(-3) 3/8 x 24	M12x 1	Dual Seat	306-3-M121P



90° Female Hose Ends			Swept Tube	Forged Fixed	Forged Swivel
Thread	Material	Hose	Part No.	Part No.	Part No.
3/8 x 24	Steel	-3	609103	609103	609003
1/8 BSP	Steel	-3	6091034	-	-
7/16 x 20	Steel	-4	609104	608904	609004
7/16 x 20	Alu.	-4	609134	-	690904



45° Female Hose Ends			Swept Tube	Forged Fixed	Forged Swivel
Thread	Material	Hose	Part No.	Part No.	Part No.
3/8 x 24	Steel	-3	604603	604403	604503
1/8 BSP	Steel	-3	6046034	-	-
7/16 x 20	Steel	-4	604604	F604604	604504
7/16 x 20	Alu.	-4	604634	-	690453



Straight Male			Convex Seat	Concave Seat
Thread	Material	Hose	Part No.	Part No.
3/8 x 24	Steel	-3	640003	640103
1/8 BSP	Steel	-3	632303	-
M10 x 1	Steel	-3	640303	640303
M10 x 1.25	Steel	-3	641303	640403
7/16 x 20	S/Steel	-4	640004	-



Male Bulkhead			Convex Seat	Concave Seat
Thread	Material	Hose	Part No.	Part No.
3/8 x 24	Steel	-3	640203	-
M10 x 1	Steel	-3	641503	640803
7/16 x 20	Steel	-4	640204	-

**Bulkhead With Integral Bleed Nipple**  
3/8 x 24 Steel -3 641803

**3 & 4 WAY FITTINGS**

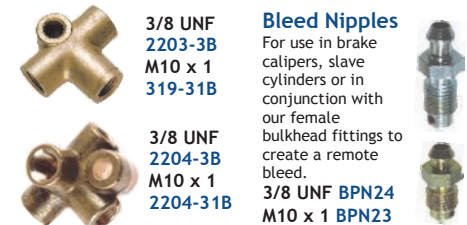
Direct fit to -3 Hose. Direct fit to -3 hose, -3 Male on Tee. -3 Male Tee.



Direct fit to -3 hose with mounting lug. Direct fit to -3 hose, -3 Male on Tee with mounting lug. -3 Male Tee with mounting lug.



Bleed Nipples	
Thread	Part No.
3/8 UNF 2203-3B	319-31B
3/8 UNF 2204-3B	M10 x 1 2204-31B
3/8 UNF BPN24	M10 x 1 BPN23

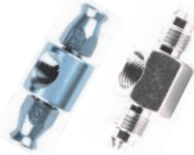




**Switch Adaptors**

In line brake light switch adaptors with an 1/8 NPT female port.

-3 Male: **599903**  
Direct to -3 Hose: **ED20**



**Brake Light Switches**

Hydraulic brake light switches available with a selection of threads.

1/8 NPT: **BLS8-3**  
3/8 UNF: **BLS7-3**  
M10x1: **BLS13**



**Banjo Bolt Brake Light Switches**

Banjo bolts incorporating a hydraulic brake light switch.

M10x1 **BS997517**  
3/8 UNF **BS997503**



**Copper/Nickel Brake Pipe**

3/16" (4.75mm) Copper Nickel brake pipe, strong, easily workable and corrosion resistant.  
**BP1**



**Brake Pipe Tube Nuts**

Plated steel tube nuts for use with 3/16" (4.75mm) brake pipe, requires a flaring tool for assembly.



Brake Tube Nuts		
Part Number		
Type	3/8 UNF	M10x1
Male Short (No Lead)	<b>BPN29</b>	<b>BPN7</b>
Male Long	<b>BPN1</b>	<b>BPN8</b>
Female	<b>BPN5</b>	<b>BPN13</b>

**PVC Hose**



Non-reinforced clear PVC tubing suitable for engine breathers, catch tank drains, radiator overflows, windscreen washers etc.  
Sold by the metre.

PVC Hose	
I.D	Part No.
3mm	<b>TH4</b>
5mm	<b>TH5</b>
6mm	<b>PVC6/8</b>
8mm	<b>PVC8/11</b>
10mm	<b>PVC10/13</b>
12mm	<b>PVC12/15</b>
16mm	<b>PVC16/19</b>
19mm	<b>PVC19/22</b>

**Nylon Hose Joiners**

Ideal for use with breather filters and the hose above to provide a stub outlet for the breather filter to allow it to be connected to the hose.



Nylon Hose Joiners				
Suit Hose I.D.	Straight Joiner	90° Joiner	T Piece	Y-Piece
3mm	<b>PJ1</b>	-	<b>PJ23</b>	<b>PJ34</b>
5mm	<b>PJ3</b>	<b>PJ14</b>	<b>PJ25</b>	<b>PJ36</b>
6mm	<b>PJ4</b>	<b>PJ15</b>	<b>PJ26</b>	<b>PJ37</b>
8mm	<b>PJ5</b>	<b>PJ16</b>	<b>PJ27</b>	<b>PJ38</b>
10mm	<b>PJ6</b>	<b>PJ17</b>	<b>PJ28</b>	<b>PJ39</b>
12mm	<b>PJ7</b>	<b>PJ18</b>	<b>PJ29</b>	<b>PJ40</b>
16mm	<b>PJ9</b>	<b>PJ20</b>	<b>PJ31</b>	-
19mm	<b>PJ11</b>	<b>PJ22</b>	<b>PJ33</b>	-

**Mini Hose Clip**



Nut and bolt fuel pipe clamp which is suitable for low pressure and high pressure injection hoses. These hose clips have a 9mm band.

I.D mm	Part No.
7-9	<b>MC9</b>
8-10	<b>MC10</b>
9-11	<b>MC11</b>
10-12	<b>MC12</b>
11-13	<b>MC13</b>
12-14	<b>MC14</b>
13-15	<b>MC15</b>
14-16	<b>MC16</b>
15-17	<b>MC17</b>
16-18	<b>MC18</b>
18-20	<b>MC20</b>

**Braid Spreader Tool**

For use after the hose is cut to spread the steel braid away from the hose liner to allow easy fitment of the olive.  
Double ended to suit -3 & -4 hose.

**900065**



**Vice Soft Jaws**

These aluminium vice jaws effectively hold aluminium hose fittings during hose assembly to prevent damage to the fitting. Magnetic inserts secure them to the vice.

**900061**



**Replacement Olives & Sockets**

New olives should always be used whenever assembling smooth bore PTFE hoses with re-useable fittings. We also stock replacement sockets as these can become worn and damaged when re-used.



Item	Part Number	
	Suit -3	Suit -4
Brass Olive	<b>699030</b>	<b>699040</b>
Aluminium Olive	<b>699033</b>	<b>699043</b>
Steel Socket	<b>6D3</b>	<b>6D4</b>
Aluminium Socket	<b>6D3D</b>	<b>6D4D</b>

**Aluminium Tube**

Easy to work and lightweight our 3003 aluminium tubing has a 0.035" wall thickness and is suitable for fuel, water and nitrous. Simply flare with a 37° flaring tool and install an AN Nut & Sleeve to make an AN/JIC specification female connector.



Lightweight Aluminium Tube			
Size	Tubing	Nut	Sleeve
-3	<b>890003</b>	<b>481803</b>	<b>481903</b>
-4	<b>890004</b>	<b>481804</b>	<b>481904</b>
-6	<b>890006</b>	<b>481806</b>	<b>481906</b>
-8	<b>890008</b>	<b>481808</b>	<b>481908</b>
-10	<b>890010</b>	<b>481810</b>	<b>481910</b>
37° Flaring Tool 3/16"-5/8"			<b>900500</b>

**Steel AN Tube Nuts & Sleeves**

A stronger option than the aluminium version above our AN specification steel tube nuts and sleeves are similarly used with imperial specification tube to form female AN 37° connections on rigid tube.



Steel Tube Nuts & Sleeves			
Size	Suit Tube O.D.	Nut	Sleeve
-3	3/16"	<b>581803</b>	<b>581903</b>
-4	1/4"	<b>581804</b>	<b>581904</b>
-6	3/8"	<b>581806</b>	<b>581906</b>

**Double Ear O-Clips**

Lightweight steel band clamps ideal for push-on applications that may be subjected to elevated pressures or temperatures. By the simple squeeze of the pliers you can add an extra measure of security to any push-on hose assembly.



O-Clips	
Size Range	Part No.
11-13mm	<b>OC-13</b>
13-15mm	<b>OC-15</b>
14-17mm	<b>OC-17</b>
15-18mm	<b>OC-18</b>
17-20mm	<b>OC-20</b>
18-21mm	<b>OC-21</b>
20-23mm	<b>OC-23</b>
22-25mm	<b>OC-25</b>
23-27mm	<b>OC-27</b>
Pliers	<b>OCTOOL</b>

**Quick Disconnect Fittings**



Bayonet style quick disconnect fittings, the -3 & -4 sizes are titanium bodied with EPDM seals making them ideal for brake and clutch use whilst the larger sizes are aluminium bodied with Viton seals making them suitable for fuel and oil applications.

Quick Disconnect Fittings			
Thread	Material	Seal	Part No.
AN-3 (3/8" x24)	Titanium	EPDM	<b>RLQRB03</b>
AN-4 (7/16" x20)	Titanium	EPDM	<b>RLQRB04</b>
AN-6 (9/16" x18)	Aluminium	Viton	<b>RLQRB06</b>
AN-8 (3/4" x16)	Aluminium	Viton	<b>RLQRB08</b>
AN-10 (7/8" x16)	Aluminium	Viton	<b>RLQRB10</b>

**Thermo Fire Sleeve**



Our Firesleeve is a high temperature insulating sleeving constructed from thick-wall glass fibre and coated with high temperature silicone. This very flexible sleeving is designed to protect wires, cables and hoses from high ambient temperatures and will withstand continuous operating temperatures between -40°C - +250°C. Supplied per 10cm.  
10mm I.D. Suit -3 & -4 hose: **FS10**  
20mm I.D. Suit -6 & -8 hose: **FS20**  
25mm I.D. Suit -10 & -12 hose: **FS25**

**Rubber Lined Metal P-Clip**



Zinc plated mild steel P-Clips with an EPDM rubber liner. These clips have a 1/2" wide band and are drilled for a 1/4"(6mm) retaining screw.  
Supplied as a pack of 10.

**Black Nylon P-Clip**



Black Nylon P-Clips. These clips have a 1/2" wide band and are drilled for a 1/4"(6mm) retaining screw.  
Supplied as a pack of 10.

P-Clips		
I.D.	Rubber Lined Part No.	Nylon Part No.
4-5mm	<b>A980045</b>	<b>P980050B</b>
6mm	<b>A980060</b>	<b>P980060B</b>
8mm	<b>A980080</b>	<b>P980080B</b>
9mm	<b>A980090</b>	
10mm	<b>A980100</b>	<b>P980100B</b>
11mm	<b>A980110</b>	<b>P980110B</b>
12mm	<b>A980120</b>	-
13mm	<b>A980130</b>	<b>P980130B</b>
14mm	<b>A980140</b>	-
15mm	<b>A980150</b>	-
16mm	<b>A980160</b>	<b>P980160B</b>
18mm	<b>A980180</b>	-
19mm	<b>A980190</b>	<b>P980190B</b>
20mm	<b>A980200</b>	<b>P980200B</b>
21mm	<b>A980210</b>	-
22mm	<b>A980220</b>	<b>P980220B</b>
23mm	<b>A980230</b>	-
24mm	<b>A980240</b>	-
25mm	<b>A980250</b>	<b>P980250B</b>
27mm	<b>A980270</b>	-
28mm	-	<b>P980280B</b>
29mm	<b>A980290</b>	-
30mm	<b>A980300</b>	<b>P980300B</b>

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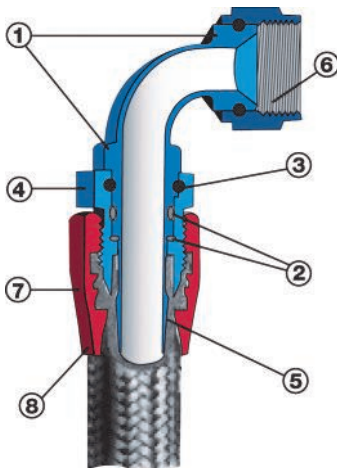
**Please Note:**  
The hose on this page is not recommended for fuel lines passing through the cockpit for this application we recommend our smooth bore PTFE hose and associated fittings detailed opposite.

**Re-useable Aluminium Hose Fittings**

Lightweight and re-usable, these precision engineered hose ends feature UNF/JIC threads/seats. 45° & 90° fittings are available with either swept tube bodies for the ultimate in flow performance or forged for strength and improved clearance. The angled fittings feature 360° swivel ends for easy post assembly alignment and are available in black or red and blue, all popular options are also available in a satin silver clear coat finish. Our fittings use the cutter method of hose attachment, the socket draws the hose over the nipple and into the cutter and the seal is formed by the cutter imbedding itself into the end of the hose. Assembly is straight forward and requires only regular hand tools however these fittings can only be used with compatible hose types such as our stainless and fabric over braid premium race hose detailed on this page.

- ① Unique one-piece design eliminates two brazed joints, minimising potential leakage, improving flow and appearance.
- ② Two Viton O-rings form a redundant seal to ensure leak free service for the life of the part and are impervious to fuel, oil and coolant.
- ③ Stainless steel lock wires to prevent galling and provide long service.
- ④ Wider hex section for better spanner engagement during assembly.
- ⑤ Tapered nipple for easy alignment and installation.
- ⑥ J gauge threads for increased strength and durability.
- ⑦ Bright dipped anodising for a high quality finish.
- ⑧ Improved entry angle on the socket aids assembly.

All our aluminium re-useable hose ends are manufactured from aerospace-quality aluminium and are machined to mil-spec tolerances.



**Stainless Premium Race Hose**

Our premium race hose is compatible with our Fragola and similar re-usable fittings. It has a nitrile lining and a partial stainless inner braid and is finished with a tough abrasion resistant stainless steel outer braid. It is compatible with lubricating oils, coolant and most fuels including alcohols. It has a working temperature range of -46 °C to 149 °C



Stainless Braided Premium Race Hose						
Size	I.D.	O.D.	Working Pressure	Burst Pressure	Weight	Part No
-4	0.21"	0.44"	1000psi	6000psi	160g/m	GRH-4
-6	0.34"	0.55"	1000psi	6000psi	200g/m	GRH-6
-8	0.44"	0.64"	1000psi	5000psi	270g/m	GRH-8
-10	0.56"	0.80"	1000psi	5000psi	350g/m	GRH-10
-12	0.69"	0.93"	1000psi	3750psi	420g/m	GRH-12
-16	0.88"	1.16"	750psi	2500psi	550g/m	GRH-16

**Fabric Braided Lightweight Race Hose**

This high performance racing hose is compatible with our Fragola and similar re-usable fittings. It's lightweight construction has a synthetic rubber lining with an inner stainless wire reinforcement with a black braided nylon outer cover. It is resistant to oils, fuels, coolant and alcohols and has a working temperature range of -49 °C to 149 °C.



Fabric Braided Lightweight Race Hose						
Size	I.D.	O.D.	Working Pressure	Burst Pressure	Weight	Part No
-4	0.22"	0.44"	500psi	2000psi	140g/m	G210-4
-6	0.34"	0.56"	500psi	2000psi	160g/m	G210-6
-8	0.44"	0.67"	500psi	2000psi	180g/m	G210-8
-10	0.56"	0.82"	500psi	2000psi	240g/m	G210-10
-12	0.69"	0.96"	350psi	1400psi	320g/m	G210-12
-16	0.88"	1.15"	350psi	1400psi	410g/m	G210-16

Telephone: 01327 857991 email: sales@competitionsupplies.com

**Finishes**



We stock our aluminium hose fittings in black anodised, red and blue anodised and also most items in a satin silver clear coat finish. For red and blue use the part number as shown, for black add the suffix -BL and for clear coat silver add -CL.



Straight Female	
Size	Part No
-4	100104
-6	100106
-8	100108
-10	100110
-12	100112
-16	100116



Banjo Hose End With Bolt		
Hose Size	Bolt Thread	Part No
-6	9/16-18	100006
-8	3/4-16	100008
-10	7/8-14	100010
-12	1 1/16-12	100012
-16	1 5/16-12	100016



30° Swept Tube Female	
Size	Part No
-6	103006
-8	103008
-10	103010
-12	103012
-16	103016



45° Swept Tube Female	
Size	Part No
-6	104506
-8	104508
-10	104510
-12	104512
-16	104516



45° Forged Female	
Size	Part No
-6	104606
-8	104608
-10	104610
-12	104612
-16	104616



60° Swept Tube Female	
Size	Part No
-6	106006
-8	106008
-10	106010
-12	106012
-16	106016



90° Swept Tube Female	
Size	Part No
-6	109006
-8	109008
-10	109010
-12	109012
-16	109016



90° Forged Female	
Size	Part No
-6	109106
-8	109108
-10	109110
-12	109112
-16	109116



120° Swept Tube Female	
Size	Part No
-6	112006
-8	112008
-10	112010
-12	112012
-16	112016



150° Swept Tube Female	
Size	Part No
-6	115006
-8	115008
-10	115010
-12	115012
-16	115016



180° Swept Tube Female	
Size	Part No
-6	118006
-8	118008
-10	118010
-12	118012
-16	118016



**Direct to Hose Fittings**  
 These direct to hose cutter style fittings are for use with our Premium Stainless and Fabric braided race hose detailed opposite and are ideal for installations where there is simply insufficient space to use both an adapter and female hose end. They can both simplify the installation and save space and weight.

NPT Thread Male Hose Ends				
Hose Size	Thread (NPT)	Straight	45 Degree	90 Degree
-6	1/8-27	190162	194562	199062
-6	1/4-18	190106	194506	199006
-6	3/8-18	190166	194566	199066
-8	1/4-18	190107	194507	199007
-8	3/8-18	190108	194508	199008
-8	1/2-14	190168	194588	199088
-10	3/8-18	190111	194511	199011
-10	1/2-14	190110	194510	199010
-12	1/2-14	190113	194513	199013

UNF (AN) Thread Male Hose Ends				
Hose Size	Thread UNF	Straight	45 Degree	90 Degree
-6	9/16-18 (-6)	180106	184506	189006
-8	3/4-16 (-8)	180108	184508	189008
-10	7/8-14 (-10)	180110	184510	189010
-12	1 1/16-12 (-12)	180112	184512	189012
-12	1 5/16-12 (-16)	180122	184514	189014
-16	1 1/16-12 (-12)	180120	-	-
-16	1 5/16-12 (-16)	180116	184516	189016

**In Cockpit Fuel Hose**  
 It is possible for fuel vapour to permeate through the walls of nitrile based hoses therefore they are not considered suitable for use when passing fuel through the cockpit. When routing a fuel line through the cockpit we strongly recommend our smooth bore PTFE hose and associated fittings detailed below.

**Reducer & Expander Hose Ends**

These easy to fit single nipple hose ends allow the use of non-standard hose size/ fitting combination by incorporating oversize or undersize nut threads. These fittings are for use with our Premium Stainless and Fabric braided race hose detailed opposite.

JIC Reducer & Expander Aluminium Hose Ends									
Hose	Nut	Straight	30°	45°	60°	90°	120°	150°	180°
-6	-8	220107	223007	224507	226007	229007	231207	231507	231807
-8	-6	220105	223005	224505	226005	229005	231205	231505	231805
-8	-10	220109	223009	224509	226009	229009	231209	231509	231809
-10	-8	220118	223018	224518	226018	229018	231218	231518	231818
-10	-12	220117	223017	224517	226017	229017	231217	231517	231817
-12	-10	220111	223011	224511	226011	229011	231211	231511	231811
-12	-16	220115	223015	224515	226015	229015	231215	231515	231815
-16	-12	220113	223013	224513	226013	229013	231213	231513	231813

**Push Fit Race Hose**

This high performance push on racing hose is compatible with our aluminium Push Fit series fittings detailed below and are a great alternative to re-usable fittings. This easy to use system can be used for oils, water and air. It has a working temperature range of -40° C to 150° C.



Premium Fit Race Hose						
Size	I.D	O.D	Working Pressure	Burst Pressure	Weight	Part No
-4	0.25"	0.49"	250psi	1000psi	120g/m	FBN0400
-6	0.38"	0.62"	250psi	1000psi	180g/m	FBN0600
-8	0.50"	0.75"	250psi	1000psi	225g/m	FBN0800
-10	0.63"	0.91"	250psi	1000psi	300g/m	FBN1000
-12	0.75"	1.03"	250psi	1000psi	420g/m	FBN1200

**Smooth Bore PTFE Race Hose**

Smooth bore PTFE hose eliminates the permeation issues common with rubber based hoses so is the perfect way to avoid fuel fumes when routing the fuel line through the cockpit. It is also lighter and rated to a higher pressure although it is not as flexible, particularly in the larger sizes.



Smooth Bore PTFE Race Hose						
Size	I.D	O.D	Working Pressure	Min Bend Radius	Weight	Part No
-4	0.19"	0.44"	2000psi	2.0"	120g/m	600004
-6	0.32"	0.55"	1500psi	4.0"	164g/m	600006
-8	0.42"	0.59"	1500psi	5.25"	210g/m	600008
-10	0.50"	0.69"	1500psi	6.5"	295g/m	600010

**Aluminium Hose Fittings For PTFE Hose**

These aluminium hose ends are for use with our smooth bore PTFE hose. They use olive type fittings so are easily assembled using only hand tools. Their "double-swivel" design allows for orientation to be adjusted after assembly.



JIC Push Fit Aluminium Hose Ends						
Hose	Straight	Straight Male	30°	45°	60°	90°
-4	200104	484104	-	204504	-	209004
-6	200106	484106	203006	204506	206006	209006
-8	200108	484108	203008	204508	206008	209008
-10	200110	484110	203010	204510	206010	209010
-12	200112	484112	203012	204512	206012	209012

Hose Ends For Smooth Bore PTFE Hose					
Hose	Straight	30°	45°	60°	90°
-4	680104-BL	-	680454-BL	-	689904-BL
-6	680106-BL	683006-BL	684506-BL	686006-BL	689006-BL
-8	680108-BL	683008-BL	684508-BL	686008-BL	689008-BL
-10	680110-BL	683010-BL	684510-BL	686010-BL	689010-BL



JIC Push Fit Aluminium Hose Ends			
Hose	120°	150°	180°
-4	-	-	-
-6	212006	215006	218006
-8	212008	215008	218008
-10	212010	215010	218010
-12	212012	215012	218012

NPT Male Hose Ends		
Hose	Thread	Part No.
-4	1/8-27	484004
-6	1/4-18	484006
-8	3/8-18	484008
-10	1/2-14	484010
-12	3/4-14	484012

Hose Ends For Smooth Bore PTFE Hose					
Hose	120°	150°	180°	1/8 NPT	1/4 NPT
-6	681206-BL	681506-BL	681806-BL	689962-BL	689906-BL
-8	681208-BL	681508-BL	681808-BL	-	689907-BL
-10	681210-BL	681510-BL	681810-BL	-	-

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### Adapter Fittings

We hold extensive stocks of aluminium adapter fittings, the more common versions are listed here but many others are also available, please contact us when planning your installation and we would be happy to work with you to achieve the most elegant and cost effective solution.

#### Finishes

Our standard finish for adapter fittings is black anodised, but we also hold some stocks of blue and in selected fittings clear (silver) anodised finish.



JIC Bulkhead Fittings			
Size	Straight	45°	90°
-3	483203	483703	483303
-4	483204	483704	483303
-6	483206	483706	483306
-8	483208	483708	483308
-10	483210	483710	483310
-12	483212	483712	483312
-16	483216	483716	483316



JIC Bulkhead T Pieces		
Size	T ①	T ②
-3	480403	483403
-4	480404	483404
-6	480406	483406
-8	480408	483408
-10	480410	483410
-12	480412	483412
-16	480416	483416



JIC Y Pieces		
①	②	Part No.
-4	-4	900604
-6	-6	900606
-6	-4	900607
-8	-8	900608
-8	-6	900609
-10	-10	900610
-10	-8	900611

#### NPT to JIC Male/Male Adaptors

Size	1/8	1/4	3/8	1/2	3/4
-3	481603	481634	481636	-	-
-4	481604	481605	481644	-	-
-6	481662	481606	481666	481668	-
-8	-	481607	481608	481688	481617
-10	-	-	481611	481610	481609
-12	-	-	-	481613	481612
-16	-	-	-	-	481615

#### JIC T Pieces

Size	Male Tee ①	Swivel Tee ②	Swivel Tee ③
-3	482403	498301	498201
-4	482404	498302	498202
-6	482406	498303	498203
-8	482408	498304	498204
-10	482410	498305	498205
-12	482412	498306	498206
-16	482416	498308	498208

#### JIC 90° Adaptors

Size	Male/Male	Female/Female	Female/Male
-3	482103	496303	498101
-4	482104	496304	498102
-6	482106	496306	498103
-8	482108	496308	498104
-10	482110	496310	498105
-12	482112	496312	498106
-16	482116	496316	498108

#### JIC Lock Nuts

Size	Part No
-3	492403
-4	492404
-6	492406
-8	492408
-10	492410
-12	492412
-16	492416



#### NPT to JIC Male/Male 45° Adaptors

Size	1/8	1/4	3/8	1/2	3/4
-3	482303	482334	482336	-	-
-4	482304	482344	482338	-	-
-6	482362	482306	482366	482368	-
-8	-	482307	482308	482388	482317
-10	-	-	482311	482310	482309
-12	-	-	-	482313	482312
-16	-	-	-	-	482315

#### JIC Male/Female Adaptors

Male	Female	Part No
-3	-4	497204
-4	-3	497304
-4	-6	497206
-4	-8	497218
-6	-4	497306
-6	-8	497208
-6	-10	497210
-8	-6	497308
-8	-10	497211
-8	-12	497212
-10	-8	497310
-10	-12	497213
-10	-16	497216
-12	-10	497312
-12	-16	497217



#### JIC to JIC Adaptors

Size A	Size B	Male/Male	Female/Female
-3	-3	481503	496103
-3	-4	491902	-
4	-4	481504	496104
-4	-6	491906	-
-4	-8	491908	-
-4	-10	491913	-
-4	-12	491916	-
-6	-6	481506	496106
-6	-8	491912	496107
-6	-10	491914	-
-6	-12	491918	-
-8	-8	481508	496108
-8	-10	491915	496109
-8	-12	491919	-
-10	-10	481510	496110
-10	-12	491920	-
-10	-16	491922	-
-12	-12	481512	496112
-12	-16	491923	-
-16	-16	481516	496116



#### JIC Flare Plugs

Size	Part No
-3	480603
-4	480604
-6	480606
-8	480608
-10	480610
-12	480612
-16	480616



#### JIC Port Plugs

Size	Part No
-3	481403
-4	481404
-6	481406
-8	481408
-10	481410
-12	481412
-16	481416



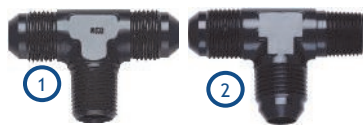
#### JIC Caps

Size	Part No
-3	492903
-4	492904
-6	492906
-8	492908
-10	492910
-12	492912
-16	492916



#### NPT to JIC Male/Male 90° Adaptors

Size	1/8	1/4	3/8	1/2	3/4
-3	482203	482234	482236	-	-
-4	482204	482244	482238	-	-
-6	482262	482206	482266	482268	-
-8	-	482207	482208	482288	482217
-10	-	-	482211	482210	482209
-12	-	-	-	482213	482212
-16	-	-	-	-	482215



#### JIC/NPT T Pieces

Size	T ①	T ②
-3 x 1/8 NPT	482503	482603
-4 x 1/8 NPT	482504	482604
-6 x 1/4 NPT	482506	482606
-8 x 3/8 NPT	482508	482608
-10 x 1/2 NPT	482510	482610



#### JIC One Way Valve

Size	Part No
-6	CVD7-6
-8	CVD7-8



#### NPT Female

Size	Coupler	Tee
1/8	491001	491701
1/4	491002	491702
3/8	491003	491703
1/2	491004	491704



#### NPT Plugs

Size	Int. Plug ①	Hex Plug ②
1/8	493202	493301
1/4	493203	493302
3/8	493204	493303
1/2	493205	493304



#### Fuel Tank Outlet Union Kit

Size	Part No
-6	483106
-8	483108
-10	483110
-12	483112

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**Port Adaptors**

Port adaptors combine a JIC male connection and the specified UNF thread with a high flow radiused internal profile. Sealing is typically achieved via either an O-ring or crush washer. UNF threaded adaptors are supplied complete with a Viton O-ring.



Imperial Port Adaptors		
UNF Thread	JIC Size	Part No
3/8-24	-4	495124
7/16-20	-4	495125
9/16-18	-4	495110
9/16-18	-6	495100
9/16-18	-8	495101
3/4-16	-4	495111
3/4-16	-6	495101
3/4-16	-8	495103
3/4-16	-10	495105
3/4-16	-12	495122
7/8-16	-4	495112
7/8-16	-6	495113
7/8-16	-8	495104
7/8-16	-10	495106
7/8-16	-12	495108
1 1/16-12	-6	495114
1 1/16-12	-8	495115
1 1/16-12	-10	495107
1 1/16-12	-12	495109
1 1/16-12	-16	495120
1 5/16-12	-8	495116
1 5/16-12	-10	495117
1 5/16-12	-12	495118
1 5/16-12	-16	495119



Metric Port Adaptors		
Metric Thread	JIC Size	Part No
M10 x 1.0	-4	460408
M10 x 1.0	-6	491961
M10 x 1.25	-4	460409
M10 x 1.25	-6	460606
M10 x 1.5	-4	460410
M10 x 1.5	-6	460607
M12 x 1.25	-4	460412
M12 x 1.25	-6	491954
M12 x 1.5	-6	491953
M14 x 1.5	-6	460614
M14 x 1.5	-8	460814
M14 x 1.5	-10	461014
M14 x 1.5	-12	461214
M16 x 1.5	-6	460616
M16 x 1.5	-8	460816
M16 x 1.5	-10	461016
M16 x 1.5	-12	461216
M18 x 1.5	-6	460618
M18 x 1.5	-8	460818
M18 x 1.5	-10	461018
M18 x 1.5	-12	461218
M22 x 1.5	-6	460414
M22 x 1.5	-8	460415
M22 x 1.5	-10	460416
M22 x 1.5	-12	460417
M22 x 1.5	-16	460418

**BSP & JIC Threads**

JIC Male threads have a 37° convex seat and in the majority of instances if you find a male thread with a convex seat on a competition car then it will be the JIC type. BSP male threads have a 30° concave seat so are easily distinguished from JIC although on production based cars metric fittings with concave seats are also increasingly common.



**Steel Hose Fittings**

Ideal for use with our general purpose hoses they must be used with an additional means of mechanical retention such as a crimp collar or hose clip. We also stock crimp collars and the facility to assemble hoses to your specification.



Steel BSP & JIC Hose Fittings					
Thread	Hose	Straight	45°	90°	180°
1/2 BSP	1/2"	HEF3-8	HEF43-8	HEF93-8	HEF83-8
5/8 BSP	5/8"	HEF3-10	HEF43-10	HEF93-10	HEF83-10
3/4 BSP	3/4"	HEF3-12	HEF43-12	HEF93-12	-
-6 JIC	5/16"	HEF7-6-5	HEF47-6-5	HEF97-6-5	-
-6 JIC	3/8"	HEF7-6	HEF47-6	HEF97-6	-
-8 JIC	1/2"	HEF7-8	HEF47-8	HEF97-8	-
-10 JIC	1/2"	HEF7-10-8	HEF47-10-8	HEF97-10-8	-
-10 JIC	5/8"	HEF7-10	HEF47-10	HEF97-10	-
-12 JIC	3/4"	HEF7-12	HEF47-12	HEF97-12	-

**Aluminium Hose Finishers**



When using over braided hose with barb type push on fittings these collars with integral worm drive hose clamps provide neat and secure hose retention.

Aluminium Hose Finishers				
Size	I.D.	Black	Clear	Red
-3	0.437"	280203	280403	280003
-4	0.505"	280204	280404	280004
-6	0.625"	280206	280406	280006
-8	0.680"	280208	280408	280008
-10	0.827"	280210	280410	280010
-12	0.990"	280212	280412	280012
-16	1.200"	280216	280416	280016
-20	1.480"	280220	280420	280020

**Fuel Tank Breather Valves**

As mandated for motorsport these valves are either fitted to the top of the fuel tank or in-line in the tank breather hose. They allow air in the tank to replace used fuel, air pressure caused by heat expansion out of the tank, but prevents fuel venting from the tank even in the event of a roll.



Tank Breather Valves			
Type	Tank	Breather	Part No.
1	10mm	10mm	RV38
2	7/16-20	5mm	TRV45
3	6mm	6mm	TRL7
3	8mm	8mm	TRL88
4	9/16-18	8mm	TRV67
5	3/4-16	AN-6	TRV86
6	AN-6	AN-6	TRL6

**FIA Tank Breather Valve**

As mandated by FIA regulation Appendix J - 258, under normal conditions these AN-6 in-line valves act like a regular rollover valve, but even when closed a 200 millibar by-pass prevents pressure build up within the tank.



**Hose Pressure Testers**

These neat pressure testers allow the user to test assemblies from -3 through to -16. All that is needed is a compressed air line and a bucket of water



HOSE TESTERS	
Size	Part No
-3	900663
-4	900664
-6	900666
-8	900668
-10	900670
-12	900672
-16	900676
Set of 7	900060

**Aluminium Hose Spanners**

Aluminium spanners for installing AN/JIC aluminium hose ends. Wide jaws and radiused corners help prevent damage to the anodised finish of the hose ends.



Aluminium Hose Spanners	
Size	Part No
-6	11106
-8	11108
-10	11110
-12	11112
-16	11116
Set of 5	11100

**General Purpose Fuel & Oil Hose**

Our general purpose fuel and oil hose is manufactured to SAE100R6 specifications with an elastomer lining, a textile reinforcement and an elastomer outer cover. We also offer it with a durable abrasion resistant stainless over braid.



General Purpose Oil Hose			
I.D.	O.D.	Working Pressure	Part No.
0.50"	0.77"	400psi	100R6-8
0.63"	0.92"	400psi	100R6-10
0.75"	1.03"	400psi	100R6-12



Stainless Braided Oil Hose			
I.D.	O.D.	Working Pressure	Part No.
0.50"	0.83"	400psi	S100R6-8
0.63"	0.95"	400psi	S100R6-10
0.75"	1.15"	400psi	S100R6-12

**Weld On Fittings**



JIC Weld On Adapters			
Size	Ally Male	Ally Female	Steel Male
-3	-	499508	-
-4	497104	499510	597104
-6	497106	499516	597106
-8	497108	499518	597108
-10	497110	499520	597110
-12	497112	499524	597112
-16	497116	499526	597116

NPT Weld-On Fittings		
Size	Ally Female	Steel Female
1/8-27	496701	596701
1/4-18	496702	596702
3/8-18	496703	596703
1/2-14	496704	596704
3/4-14	496706	596706



Imperial Sealing Washers			
Size	Ally Washer	Nylon Washer	Viton O-Ring
-3	999201	-	999108
-4	999202	-	999109
-6	999203	999126	999110
-8	999204	999128	999111
-10	999205	999130	999112
-12	999206	999132	999113
-16	999208	-	999114

Metric Washers	
Size	Aluminium Washer
10mm	999210
12mm	999212
14mm	999214
16mm	999216
18mm	999218
20mm	999220
22mm	999222

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**Prodigy Fuel Pumps**

The Prodigy is the first in-line digital fuel pump equipped with a microprocessor, electronically commutated motor and speed controller for variable flow operation. It is light and compact yet boasts an "overdrive" capability for higher than specified flow rates and speed reduction for continuous street duty. Eight models are available ranging in performance levels, with flow rates of up to 750 litres/hour and operating pressures of up to 125psi. The fuel pump includes high-quality mounting brackets for external installation or it can be mounted within the fuel tank. Standard colour black, other colours available on request.



Prodigy Fuel Pumps			
Overall Length	Flow Rating L/Hr @ 13.5V	Max Pressure	Part Number
154mm	280 @ 3 BAR (43 PSI)	5.8 BAR (85 PSI)	40401
154mm	600 @ 0.7 BAR (10 PSI)	2.4 BAR (35 PSI)	40402
176mm	400 @ 3 Bar (43 PSI)	8.5 BAR (125 PSI)	41401
176mm	530 @ 3 BAR (43 PSI)	6.8 BAR (100 PSI)	41402
176mm	750 @ 1.5 BAR (21 PSI)	5.5 BAR (80 PSI)	41403
176mm	750 @ 1.5 BAR (21 PSI)	2.1 BAR (30 PSI)	41404
176mm	640 @ 3 BAR (43 PSI)	8.5 BAR (125 PSI)	42401
176mm	720 @ 3 BAR (43 PSI)	6.8 BAR (100 PSI)	42402

**Electronic Fuel Pressure Regulator**

The new Fuelab electronic fuel pressure regulator works directly with variable speed Prodigy fuel pumps to reduce heat build-up and vapour lock conditions related to variable fuel demand. Simply set the pressure mechanically like a traditional bypass regulator, then let the electronic regulator's demand based speed control take care of the rest! The Fuelab electronic fuel pressure regulator generates a signal to the Prodigy pump modulating the pumps speed to ensure accurate fuel delivery whilst reducing current draw while at low engine output, thus preventing fuel overheating which can cause premature fuel system failure. With the new Fuelab demand based system, true pump control is finally achievable and easy to install!

**Features:**

- Designed specifically to control Fuelab's Prodigy Fuel Pumps.
- Patented method for demand based flow control, able to detect changes in demand before any change in rail pressure occurs.
- Automatically reduces current draw at low flow demand.
- Monitoring capability to track actual fuel system capacity.
- Combines the fast response of a mechanically regulated system, with the advantage of electronic flow control.
- Independent system, no other connections, control boxes or calibration required.

-6 AN Ports **52901-1**  
-8 AN Ports **52902-1**



**Fuelab In-Tank Power Module**

Fuelab's in-tank pump modules make the use of their digital fuel pumps on in-tank installations easier than ever. Developed for competition yet suitable for road use, these fuel systems can provide fuel for up to 1800HP and are compatible with Petrol, E85, Methanol or Diesel. They can be combined with the Electronic Fuel Pressure Regulator to provide high flow capacity with automatic demand speed control without the need for programming, calibration or additional control boxes and feature auxiliary outlets allowing the optional use of jet pumps to transfer fuel between multiple fuel tanks. The Power Module system provides a cleaner installation by hiding the inlet filter and pump whilst fewer components reduces cost, making it a simple and reliable solution for applications previously considered problematic either because they are hard to sump, have saddle tanks or otherwise do not have enough room or a suitable location for an external pump. Two versions are offered based on the 40401 and 42402 pumps, for performance figures please refer the table above.

40401 based power module (up to 1000bhp) **91901**  
42402 based power module (up to 1800bhp) **92902**



**Power Module Installation Kit**

The Power Module installation kit utilises a unique sealed flange system allowing both simple installation into fabricated steel or aluminium fuel tanks and quick and easy service access. It incorporates an adjustable length pick-up with integral 75 micron stainless mesh inlet filter.

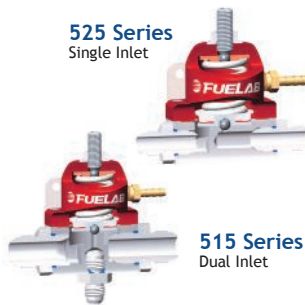


**High Flow Fuel Pressure Regulators**

The 515 Series Fuel Pressure Regulator has an AN -6 return port located on the bottom with two inlet ports making it ideal for Vee configuration engines (one inlet may be blanked if not required). The 525 Series has the return port in-line with the inlet port so is ideal for applications with a single fuel rail. Two return orifice seat sizes and five different pressure range options are available and the 515 series is available with either -6AN or -10 AN inlets. If you would like help in selecting the best configuration for your application the please contact us.

High Flow Fuel Pressure Regulators		
Pressure Range	Single Inlet Port	Dual Inlet Port
0.1-0.22 BAR (1-3 PSID)	52503-1-L-L	51506-1-L-L
0.28-0.82 BAR (4-12 PSID)	52502-1	51504-1
0.7-1.7 BAR (10-25 PSID)	52503-1-S-T	51506-1-S-T
1.7-6.2 BAR (25-90 PSID)	52501-1	51502-1
6.2- 8.6 bar (90-125 PSID)	52503-1-S-T	51506-1-S-G

**525 Series**  
Single Inlet



**515 Series**  
Dual Inlet

**Fuelab Fuel Filters**

Fuelab In-Line Fuel Filters incorporate integral JIC male fittings with machined internal radii for minimal pressure drop. The 818 Series Fuel Filter is compact and includes a 75mm long filter element. The 828 Series Fuel Filter is equipped with a longer 125mm filter element which allows for greater flow capacity and increased filtration. If running before the pump we would recommend either 40 or 75 micron filter if running after the pump the 10 micron would be best suited.



Port Size	818 Series (75mm Element)			828 Series (125mm Element)		
	10 Micron	40 Micron	75 Micron	10 Micron	40 Micron	75 Micron
AN-6	81801	81811	81821	82801	82811	82821
AN-8	81802	81812	81822	82802	82812	82822
AN-10	81803	81813	81823	82803	82813	82823
Element Only	71801	71802	71803	71805	71806	71807

**Mini Fuel Pressure Regulators**

Fuelab Compact Series Fuel Pressure Regulators have all the same features of the 515/525 series but are smaller and half the weight. Several configurations are available, for applications requiring fuel pressure of between 25 and 125 PSID. The 535 Series Fuel Pressure Regulator has dual inlet ports and a -6AN return port located on the bottom whilst the 545 Series has a single inlet port with its return port in-line with the inlet port (not on the bottom) allowing easy installation in extremely tight locations. Width: 51mm. Depth: 38mm. Height: 57mm. Weight: 185gms.

Mini Fuel Pressure Regulators		
Pressure Range	Single Inlet Port	Dual Inlet Port
1.7-6.2 BAR (25-90 PSID)	54501-1	53501-1
6.2- 8.6 bar (90-125 PSID)	54502-1-G	53502-1-G



**Check Valve Fuel Filters**

Fuelab Check Valve Filter assemblies have an integral aerospace style one way poppet valve to allow fuel system pressure to be maintained after engine and pump shut down. This helps prevent vapours building up in the fuel rail during engine cooling and will also help maintain fuel pressure during engine starting. Being integrated with the filter the check valve assembly is protected from contaminants and makes for a more elegant installation than a separate valve and its associated plumbing.



Port Size	848 Series (75mm Element)			858 Series (125mm Element)		
	10 Micron	40 Micron	75 Micron	10 Micron	40 Micron	75 Micron
AN-6	84801	84811	84821	-	-	-
AN-8	84802	84812	84822	85802	85812	85822
AN-10	-	-	-	85803	85813	85823
Element	71801	71802	71803	71805	71806	71807

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COMPETITION SUPPLIES LTD



## Filter King Low Pressure Filter/Regulators

The ubiquitous Filter King combined fuel filter and pressure regulator is available in two sizes and with a range of fluid fittings, there is a model suitable for any carburettor fuel system. The size refers to the diameter of the regulator diaphragm, the larger 85mm unit also has a larger capacity higher flow filter. For engines requiring a high fuel flow at moderate pressures the Hi-Flo version which utilises a free flowing stainless filter element is most appropriate. For competition use an aluminium bowl version should be used however we do also stock glass bowl versions which are available on request.



Filter King Filter/Regulators				
Version	Connections	Gauge Port	Size	Part Number
STD	8mm Tail	No	67mm	FPR005
STD	8mm Tail	Yes	85mm	FPR007
HI-FLO	8mm Tail	Yes	85mm	FPRV8/8
HI-FLO	10mm Tail	Yes	85mm	FPRV8/10
HI-FLO	-6 JIC Male	Yes	85mm	FPRV8/JIC
HI-FLO	1/8 NPT Fem.	Yes	85mm	FPRV8/NPT
Replacement Paper Filter Element			67mm	RA001
Replacement Paper Filter Element			85mm	RA002
Replacement Metal Filter Element			85mm	RA003

## Pro-Fuel Regulator

Cost effective low pressure regulator for carburettor use, adjustable between 1 and 5 psi. Available with a range of fittings.



## Petrol King Regulator

Reliable and accurate low pressure regulator for carburettor applications adjustable between 1 and 5 psi. Available with a range of fittings.



Low Pressure Regulators		
Fitting	Pro-Fuel	Petrol King
6mm Tail	PRO53	FPR008A
8mm Tail	PRO54	FPR008B
10mm Tail	PRO55	FPR008C
-6 JIC Male	PRO71	FPR008D
1/8 NPT Female	PRO50	FPR008F

## NPT Fuel Unions

Fuel unions with NPT threads and push-on tails for use with NPT ported fuel pumps and regulators.



NPT Fuel Unions			
Thread	Tail	Straight	90°
1/8 NPT	6mm	FPA903B	FPA9001
1/8 NPT	8mm	FPA906 (Straight Filter Union)	
1/8 NPT	8mm	FPA903A	FPA9011
1/8 NPT	10mm	FPA903C	FPA9002
1/4 NPT	8mm	FPA904A	FPA9021A
1/4 NPT	10mm	FPA904B	FPA9021B

## NPT to AN (JIC) Adapters

Adapter fittings for use with NPT ported pumps and regulators when using AN (JIC) style hose fittings.



NPT To JIC Pump Fittings			
NPT Thread	AN Thread	Straight	90°
1/8 NPT	-6	481662-BL	482262-BL
1/4 NPT	-6	481606-BL	482206-BL
1/4 NPT	-8	481607-BL	482207-BL
3/8 NPT	-6	481666-BL	482266-BL
3/8 NPT	-8	481608-BL	482208-BL

## Holley "Red" Fuel Pump 365 L/Hr

- Free Flow: 365 ltr/hr.
- Flow @ 4 P.S.I.: 268 ltr/hr.
- Maximum Pressure 7 PSI.
- Externally accessible pressure relief valve (max 7 PSI)
- Regulator generally not required.
- Current Draw: 2 Amps.
- 3/8" NPT Ports.
- Tolerant of contaminated fuels.
- Weighs only 1.3kg.
- NOT compatible with alcohol or methanol fuels.

HL12-801-1

## Holley "Blue" Fuel Pump 400 L/Hr With Regulator

- Free Flow: 400 ltr/hr.
- Flow @ 4 P.S.I.: 333 ltr/hr.
- Maximum Pressure 14 PSI.
- Externally accessible pressure relief valve (max 14 PSI).
- 12-803 Pressure Regulator Included.
- Current Draw: 3 Amps.
- 3/8" NPT Ports.
- Tolerant of contaminated Fuels.
- Weighs only 1.36kg.
- NOT compatible with alcohol or methanol fuels.

HL12-802-1

## Holley Pressure Regulators

Blocking style fuel pressure regulators from Holley, with 3/8" NPT Ports, one inlet and two outlet, one of which can be used for a pressure gauge or be blanked off if not required.

- 4 1/2 to 9 psi: 12-803
- 1 to 4 psi: 12-804
- Diaphragm repair kit: 12-807

High Flow version with 1/2" NPT ports and supplied complete with inlet adapter to AN-8 and two outlet adaptors to AN-6. Alcohol compatible.

- 4 1/2 to 9 psi: 12-704
- Diaphragm repair kit: 12-752



## Holley Fuel Pumps

The Holley range of fuel pumps offers the high flow rates at low pressure required by high powered 6 and 8 cylinder competition engines running on carburettors.



## Holley "Black" Fuel Pump 530 L/hr

- Free Flow: 530 ltr/hr.
- Flow @ 9 P.S.I.: 454 ltr/hr.
- Maximum Pressure 14 PSI.
- Externally accessible pressure relief valve (max 14 PSI).
- Regulator generally required.
- Current draw 4 Amps.
- 3/8" NPT Ports.
- Rotor/Vane pump design is more tolerant of contaminated fuels. Constant Fuel Flow with no Pulsation.
- Weighs only 1.36kg.

HL12-815-1

## Holley Service Spares

The internal components likely to wear with prolonged use are easy to replace and available as spares.



	12-801-1 Red	12-802-1 Blue	12-815-1 Black
Check Valve Kit	12-805	12-806	12-816
Rotor & Vane Kit	12-811	12-811	N/A

## Facet Interrupter Fuel Pumps

The motorsport standard low-pressure fuel pump, rugged, versatile and compact they incorporate an integral cleanable fuel filter and are available in a range of outputs to suit most applications. They can be supplied as a pump only or as a kit with anti-vibration mountings, spare filter, 90 degree unions for push-on hose and earth lead.

	Silver Top Road	Silver Top Comp	Red Top
Pressure	4.0–5.5PSI	6.0–7.0 PSI	6.0–8.0 PSI
Litres/Hr	113	132	151
Fluid Ports	1/8" NPT	1/8" NPT	1/4" NPT
Fittings in Kit	8mm tails	8mm tails	10mm tails
Power Range	Up to 150 BHP	Up to 200 BHP	Over 200 BHP
Pump Only	STS504	STC505	RTW506
Pump Kit	476087-K	480530-K	480532-K

## Facet Solid State Fuel Pumps

A light weight low cost alternative to the interrupter pumps. Suitable for lower output engines, they must also be positioned closer to fuel level height. We offer three versions, all have 1/8 NPT fluid ports and can be supplied either as a pump only or as a kit complete with A.V. mounts, earth strap, 8mm push-on filter union and straight 8mm push on union. These pumps have no internal filter so must be protected by a pre-filter.

	Road	Fast Road	Competition
Pressure	3.0–4.5 PSI	4.5–7.0 PSI	7.0–10.0 PSI
Litres/Hr	113	121	128
Power Range	Up to 130 BHP	Up to 150 BHP	Up to 180 BHP
Pump Only	SS501	SS502	SS503
Pump Kit	40105-K	40106-K	40185-K

## Posi-Flow Fuel Pumps

This range of compact fuel pumps will work on vehicles with either positive or negative earth electrical systems. They have 1/8NPT ports and the kits supplied complete with 1/8 NPT unions to take 8mm I.D. hose.

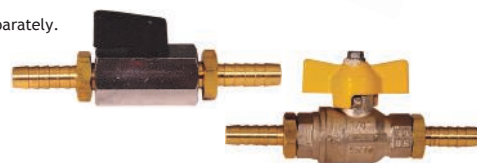
	Road	Fast Road	Competition
Pressure	1.5–4.0 PSI	4.0–6.0 PSI	7.0–10.0 PSI
Litres/Hr	113	121	128
Power Range	Up to 150 BHP	Up to 180 BHP	Up to 200 BHP
Pump Only	60104	60106	60107
Pump Kit	FEP04SV	FEP06SV	-

## Fuel Taps

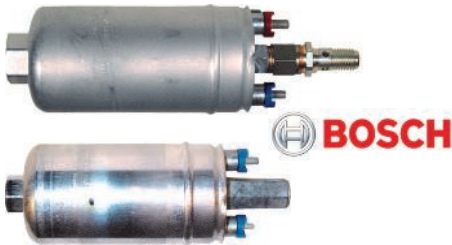
Ball valve type fuel taps with 1/4 BSP female ports, available with either plastic or metal handle.

Please Note: Unions are not included and are supplied separately.

- Plastic Handle Fuel Tap: CFT000
- Metal Handle Fuel Tap: CFT001
- Union 1/4 BSP to 6mm Hose: CFTU6
- Union 1/4 BSP to 8mm Hose: CFTU8
- Union 1/4 BSP to 10mm Hose: CFTU10



**Bosch Fuel Injection Pumps**



With cost effective pricing and renowned Bosch quality these pumps commonly known as the "Bosch 044" and "979" are widely used in motorsport high pressure fuel injection systems, two versions are available to suit different demands.

	Bosch Fuel Pumps	
	"044"	"979"
Flow @ 5 bar	255 l/h	200 l/h
Diameter	60mm	60mm
Overall Length	196mm	168mm
Weight	1030 g	980 g
Operating Voltage	13.8v	13.8v
Current @ 5 bar	14 A	11 A
Inlet	M18x1.5	M14x1.5
Outlet	M12x1.5	M12x1.5
Elec. Connection	+M6/-M5	+M4/-M5
Part Number	0580254044	0580254979

**Bosch Pump Unions**

Adaptor fittings for use with banjo stub outlets as found on Bosch "044" type injection fuel pumps to allow the fitment to push-on or AN/JIC fuel line fittings.

Alloy cap nut and Banjo adaptor to -6 JIC male.

Alloy Cap: **BFU14**

Banjo to AN-6: **99766M12**



Steel cap nut and fitting to 8mm push on hose.

Steel Cap: **BFU201**

Banjo to 8mm: **BFU200**



Aluminium port adaptors for use with Bosch pumps above to allow the fitment of AN hose ends.



JIC	Aluminium Port Adapters		
	M12 X 1.5	M14 X 1.5	M18 X 1.5
-6	491953	460614	460618
-8	460812	460814	460818
-10	461012	461014	461018
Washer	999212	999214	999218

**Canister Fuel Filter**



Aluminium canister type fuel filters supplied complete with adapters to AN -6 or -8 available two sizes.  
 Standard Length: 134mm Diameter: 56mm Weight: 190gms  
 Hi-Capacity Length: 105mm Diameter: 75mm Weight: 300gms

Canister Fuel Filter	
Versions	Part No.
Standard Filter Assy. AN-6	SSF3021AN-6
Standard Filter Assy. AN-8	SSF3021AN-8
Hi-Capacity Filter Assy. AN-6	SSF2012AN-6
Hi-Capacity Filter Assy. AN-8	SSF2012AN-8
Standard Canister	SSF3021
Hi-Capacity Canister	SSF2012

**Spring Mounting Clips**

Spring mounting clips suitable for retaining the filters above and numerous other components. They allow for easy removal and re-fitment and will effectively retain items with a diameter up to 20% greater than their nominal diameter.  
 50mm Ø, Plated Steel: **A270500**  
 63mm Ø, PVC Coated: **A270630PB**  
 75mm Ø, Plated Steel: **A270750**



**Sytec Motorsport Fuel Pump**



A compact high pressure motorsport fuel injection pump with a range of inlet and outlet options.  
 Length: 160mm  
 Diameter: 43mm  
 Weight: 500gms  
 Flow @ 3 BAR: 180 l/h  
 Ports: M10 x 1  
**FP604**



M10x1.0 Adaptors	
Fitting	Part No.
8mm	BFU1
12mm	BFU3
15mm	BFU5
Banjo	BFU9
-6	BFU11
-8	BFU13
Washer	999210

**Sytec Fuel Pump bracket**

A compact fuel pump holder ideal for either Bosch or Walbro / Sytec motorsport pumps. Quick release system for ease of changing fuel pumps. Supplied with a standard sleeve for use with Bosch pumps. A thicker sleeve can be supplied on request.  
 Length: 160mm Diameter: 43mm Weight: 280gms  
 Black: **MPB002BK** Silver: **MPB003S**  
 Thick Sleeve: **MPBA002**



**Bullet Fuel Filters**

A billet aluminium fuel filter with a range of fitting options. The standard unit contains an 8 micron replaceable paper element suitable for carburettor or a fuel injection system main filter. When being used for diesel or as an injection pre-filter we recommend that the high flow 55 micron metal filter element option is utilised. We can custom configure these filters with any combination of the available inlet or outlet options.  
 Length: 96mm  
 Diameter: 53mm  
 Weight: 212gms



Bullet Fuel Filters	
Versions	Part No.
8mm Tails - (8 Micron)	BULLETA1
10mm Tails - (8 Micron)	BULLETA3
12mm Tails - (8 Micron)	BULLETA6
15mm Tails - (8 Micron)	BULLETA9
-6 JIC Male - (8 Micron)	BULLETA1F1
-8JIC Male - (8 Micron)	BULLETA1F2
1/4NPT Fem. (8 Micron)	BULLETA0
1/4NPT Fem. (55 Micron)	BULLETD1
8 Micron Element	BULLA01
55 Micron Element	BULLA02

**Mini Motorsport Fuel Filter**

A high flow, 6 Bar rated billet aluminium miniature fuel filter with a range of fitting options. These filters utilise a 30 micron, triple screen washable metal filter element suitable for carburettor or fuel injection systems. We can custom configure these filters with any combination of the available inlet or outlet options.  
 Length: 77mm  
 Diameter: 34mm  
 Weight: 90gms



Mini Motorsport Fuel Filters	
Versions	Part No.
8mm Tails	SBF002
10mm Tails	SBF003
-6 JIC Male	SBF004
1/8 NPT Female	SBF001
30 Micron Element	SBFA001

**Low Pressure In-Tank Lift Pump**

A low pressure in-tank lift pump is widely used in competition to feed collector/swirl pots. Generally used with a mesh filter for the inlet. 19mm Inlet, 8mm Outlet with 140ltrs/hr flow rate.  
**ITP377**



**High Pressure In-Tank Lift Pump**

Walbro high pressure in tank lift pump ideal when a large fuel supply is required. Generally used with a mesh filter for the inlet. 11mm Inlet, 11mm Outlet with 400ltrs/hr @ 40 P.S.I. flow rate.  
**GST400**



**High Flow Billet Fuel Filters**

A high flow billet aluminium fuel filter with 7/8-14 (AN-10) female ports, we stock adapters from -6 to -12 and hose ends to allow this filter to be used with 8-19mm i.d. hose. There are three element options a 10 micron paper which is ideal for a main filter for carburettor or injection use and a 40 micron and 100 micron stainless version ideal for use as a high flow pre-filter.  
 Length: 148mm Diameter: 50mm Weight: 285gms



High Flow Billet Fuel Filters	
Versions	Part No.
10 Micron Filter Assembly	960002
40 Micron Filter Assembly	960003
100 Micron Filter Assembly	960004
10 Micron Element	960002E
40 Micron Element	960003E
100 Micron Element	960004E

**Compact Fuel Filter**



A compact billet aluminium fuel filter with 9/16-18 (AN-6) female ports and a 10 micron paper element, we stock adapters to various AN and Metric threads and hose ends to allow this filter to be used with 8-12mm i.d. hose.  
 Length: 97mm Diameter: 30mm Weight: 78gms  
 Filter Assembly: **960001**  
 Replacement Element: **960001E**

**Pro-Fuel Filters**

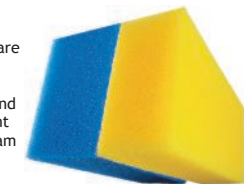
A compact low pressure (max 7 P.S.I.) fuel filter with cleanable nylon mesh element available with a range of hose fittings options.  
 Body Length: 62mm  
 Body Diameter: 28mm  
 Weight: 80gms



Pro-Fuel Filters	
Versions	Part No.
6mm Tails	PRO804
8mm Tails	PRO805
10mm Tails	PRO806
1/8NPT Female	PRO807
Replacement Element (3PK)	PRO896

**Fuel Tank Foam**

Our fuel tank baffle foams are motorsport compliant and being 98% void they only reduce fuel volume by 4% and add only a negligible amount of net weight. Fuel tank foam fulfils multiple functions:



- Explosion Suppressant
- Mitigates fuel spray in the event of fuel tank rupture.
- Baffles tank improving low fuel level fuel pick-up.
- Improves handling by reducing weight transfer.

We offer two types depending on fuel type, supplied per litre.

Yellow (Petrol Only): **FTFY**  
 Blue (Diesel, Water & Methanol): **FTFB**



**Low Pressure Fuel Hose**

Fuel hose for use with push on fittings on low pressure applications such as carburettor systems and injection pump gravity feeds. Recommended for systems running up to 1.4 bar (20 P.S.I.) pressure.



Low Pressure Fuel Hose			
Hose I.D.	Hose O.D.	Finish	Part No.
6mm	10.9mm	Black Cotton	FH012
8mm	12.6mm	Black Cotton	FH013
10mm	14.3mm	Black Cotton	FH014
12mm	18mm	Black Cotton	FH015
15mm	22mm	Black Cotton	FH016

**Plastic In-Tank Fuel Hose**

Flexible convoluted in tank fuel pick-up pipe.

210mm Long: PFH0825  
310mm Long: PFH1225



**Pressure Adaptors and Gauges**

These adaptors are available with a range of connections and all have an 1/8 NPT take-off ideal for mounting gauges, senders or fuel sampling valves.



Pressure Adaptors & Gauges	
Hose Fitting	Part No.
6mm Tail	FGA100A
8mm Tail	FGA100
10mm Tail	FGA100B
-6 Male/Male	495001
-8 Male/Male	495003
-6 Female/Male	495005
-8 Female/Male	495006
Gauge 0-15 P.S.I.	FPG001
Gauge 0-100 P.S.I.	FPG002

**Fuel Sampling Valve**

FIA approved fuel sampling valve, compact and low cost can also be used for fuel drain. Both male (Nipple) section (fitted on car) and female (coupler) section have 1/8 NPT female ports and can be easily used with the adaptors above.

Nipple and Coupler: 50215  
Nipple Only: 50217  
Coupler Only: 50216  
1/8NPT M/M Adapter: 491101



**Carburettor Unions**

For Weber DCOE and DCO/SP carburettors, all tails are for 8mm push-on hose.

Banjo/Bolt Assembly: CUA001  
M12 Banjo bolt: WU004  
90° Banjo: WU001  
Banjo Tee: WU003



Banjo Fibre Seal Thick: WA009  
Banjo Fibre Seal Thin: WA010

**Carburettor Mountings**

Original "MISAB" plate seal suitable for Weber DCOE and Dellorto DHLA applications. The O-Ring is bonded to the aluminium gasket to form an effective and durable seal.

MISAB PLATE CSP001

Nylox plate with O-Rings for sealing between the carburettor and manifold.  
40 DCOE/DHLA CSP002  
45 DCOE/DHLA CSP003  
48 DCOE/DHLA CSP004



Cup and bobbin style mount, prevents failure through fracture.  
CSA005

Thackery double coil washer.  
CSA004



**High Pressure Fuel Hose**

Fuel hose for use with push-on fittings on fuel injection systems in a range of sizes and finishes. Recommended for systems running up to 10 Bar (145 P.S.I.) pressure.



High Pressure Fuel Hose			
Hose I.D.	Hose O.D.	Finish	Part No.
6mm	12mm	Nitrile	IH-000
8mm	13.8mm	Nitrile	IH-001
8mm	14.8mm	Stainless	IHS-600
10mm	16.7mm	Nitrile	IN-002

**Fuel Hose Joiners**

Metal hose joiners, T and Y pieces available in a range of sizes for use with push-on fuel hose.



Suit Hose I.D.	Steel Joiners		
	Straight Joiner	T Piece	Y-Piece
6mm	J0404	MTP001	MYP000
8mm	J0606	MTP002	MYP001
10mm	J0808	MTP003	MYP002

**Stepped Hose Joiners**



Metal hose joiners with unequal size tails to allow hoses of different internal diameters to be joined.

Stepped Joiners	
Size	Part No.
8-6mm	J0604
10-8mm	J0806
12-8mm	J1006
12-10mm	J1008
15-12mm	J1310

**Carburettor Service Kits**

Carburettor service / rebuild kits for Weber and Dellorto carburettors.



Weber 40 DCOE (175 N.V.): SK2201  
Weber 40 DCOE (150 N.V.): SK2201A  
Weber 45 DCOE (175 N.V.): SK2202  
Weber 45 DCOE (200 N.V.): SK2202B  
Weber 45 DCOE (225 N.V.): SK2202C  
Weber 45/48 DCOE (250 N.V.): SK2202D  
Weber DGAV/DGV (200 N.V.): SK2203  
Weber DGAS (250 N.V.): SK2204  
Dellorto DHLA40 (150 N.V.): SK22101  
Dellorto DHLA45 (170 N.V.): SK22511  
Dellorto DHLA48 (225 N.V.): SK22521

**Synchrometer**

A handy tool for helping balance multi-choke or multi-carburettor set ups. Simply push into each choke to get a reading with the aim being to make all readings match. Most commonly used on DCOE / DHLA carburettors but equally suitable for use with multiple SU's etc.

To suit 40/45/48's: SYN001  
To suit 50/55's: SYN002  
90° Adaptor: SYN001A



**Standard Throttle Cables**

Throttle cables with a nylon inner liner to ensure smooth operation

1.3 Metre: TLK001  
3 Metre: TLK002/1  
Solderless Nipple: LMA233/1  
Bulkhead Fitting: TLK003  
Return Spring: TLK010



**Premium Throttle Cables**

Premium throttle cables with a stainless steel inner and easy-pull liner to ensure smooth operation. Supplied complete with aluminium bulkhead fittings x 2 and a solderless nipple.

1 Metre: LMA246/1  
2 Metre: LMA246/2  
3 Metre: LMA246/3

**Fuel Swirl Pots**

These units are used in conjunction with a low pressure lift pump to provide a reservoir of fuel for the high pressure pump. Available with either push-on or AN (JIC) hose fittings.



Fuel Swirl Pots				
Type	Inlet	Outlet	Return	Part No.
Push-on	2 x 8mm	13mm	8mm	SPPO
AN (JIC)	2 x -6	-8	-6	SPJIC

**Fuel Collector Pot**

A cast aluminium collector incorporating a cleanable metal mesh filter and mounting bracket, reduces wear and risk of pump failure by providing a constant clean fuel supply. 145mm high by 75mm diameter. Supplied with a mounting bracket.



Fuel Collector Pot			
Inlet	Outlet	Return	Part No.
10mm	12mm	6mm	CCP001
-6 JIC	12mm	-4 JIC	CCP002

**Aluminium Hose Finishers**

These aluminium finishers have integral worm drive hose clamps and provide an attractive and effective way of retaining hoses, particularly useful for hoses with a stainless over braid which can otherwise fray. Offered in a ranges of sizes and colours.



Hose Finishers	
Hose O.D.	Part No.
9.5-12mm	PRO001
12-15mm	PRO002
15-17mm	PRO003
11.09mm	280003
12.83mm	280004
15.87mm	280006
17.27mm	280010
25.15mm	280012
30.48mm	280016

**Pro-Series DCOE Carburettor Linkage**

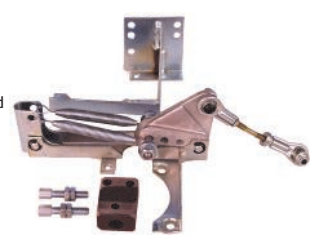
A twin cable linkage kit for Weber DCOE carburettors designed to offer the best in strength, durability and control. The linkage chassis is made from billet aluminium whilst the quadrant pivots are self lubricating phosphor bronze bushes, twin external return springs ensure positive closing whilst rod end bearings in the drop arm ensure smooth operation. The kit is supplied complete with two nylon lined 1m throttle cables and twin cable pedal block.



**STLK100**

**Side Draught Carburettor Linkages**

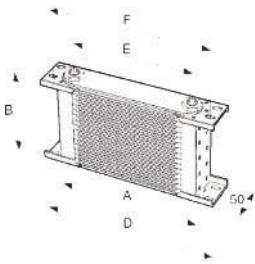
For mounting on top of the carburettors they are available for Weber and Dellorto, single and twin side draft installations, to either pull in line with or across the engine. Kit includes two 3 metre throttle cables and a dual cable pedal mount.



Weber, single/Twin, Pulls Across: TLK1/W  
Dellorto, single/Twin, Pulls Across: TLK1/D  
Weber, Twin, Pulls In-Line: TLK2/W  
Dellorto, Twin, Pulls In-Line: TLK2/D

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)





**Setrab Oil Coolers**

Setrab oil coolers combine the highest levels of performance and quality with great value. Available in 115mm, 235mm and 310mm matrix widths and a in heights from 7 to 72 row, the range of available sizes is comprehensive. All are supplied with M22x1.5 female fluid ports for which we keep a large range of aluminium adaptors to suit all popular BSP and JIC hose fittings.

Setrab Oil Coolers			
Dimensions	115mm Matrix	235mm Matrix	310mm Matrix
"A"	163 mm	283mm	358 mm
"D"	210 mm	330 mm	405mm
"E"	130 mm	242 mm	325 mm
"F"	190 mm	310 mm	385 mm

Rows	"B"	Part Numbers		
7	52mm	50-107-7612	50-607-7612	-
10	76mm	50-110-7612	50-610-7612	50-910-7612
13	99mm	50-113-7612	50-613-7612	50-913-7612
15	115mm	-	-	50-915-7612
16	122mm	50-116-7612	50-616-7612	-
19	146mm	50-119-7612	50-619-7612	50-919-7612
25	193mm	50-125-7612	50-625-7612	50-925-7612
34	264mm	-	50-634-7612	50-934-7612
40	310mm	-	50-640-7612	-
44	342mm	-	50-644-7612	-
50	389mm	50-150-7612	50-650-7612	-
72	562mm	50-172-7612	-	-

**Cooler Adapters**

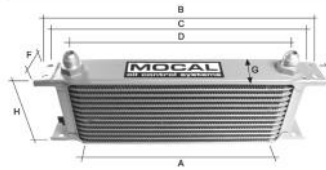
M22x1.5 aluminium port adaptors complete with O-ring seal to allow JIC and BSP hose fittings to be used with Setrab oil coolers.



M22 Port Adaptors Suit Setrab Coolers	
Size	Part Number
-6	22-09475-01
-8	22-09476-01
-10	22-09477-01
-12	22-09478-01
-16	22-09479-01
1/2 BSP	22-07618-01
5/8 BSP	22-07619-01

**Mocal Oil Coolers**

Mocal offer a range of lightweight aluminium coolers which are available in two widths and a range of heights. Fluid ports are available in either JIC, BSP or Metric threads and in a range of sizes.



**Port Options**

- 3/8 BSP Male
- 1/2 BSP Male
- 6 JIC Male
- 8 JIC Male
- 10 JIC Male
- 12 JIC Male
- 16 JIC Male
- M22 x 1.5 Female

Mocal Oil Coolers		
Dimensions	115mm Matrix	235mm Matrix
"A"	115 mm	235mm
"B"	210 mm	330 mm
"D"	128 mm	248mm
"G"	51 mm	51 mm

Rows	"H"	Part Numbers	
7	53mm	OC107	OC507
10	77mm	OC110	OC510
13	100mm	OC113	OC513
16	124mm	OC116	OC516
19	147mm	OC119	OC519
25	194 mm	OC125	OC525
34	265mm	OC134	OC534
44	344 mm	OC144	OC544
50	390 mm	OC150	OC550

**Oil Sandwich Plates**

Sandwich plates fit between the oil filter and cylinder block providing a supply and return for an oil cooler. Available in a range of centre bolt threads which should be selected to match the original oil filter thread. All of the sandwich plates have 1/2" BSP female ports for which we offer adaptors to suit JIC and BSP hose ends. They can also be supplied with an additional 5/8" UNF port for use with an oil temperature or pressure gauge.



Oil Sandwich Plates			
Centre Bolt	Part No		
	No take Off	With Take Off	Thermo-static
3/4" UNF	SP1	TGASP1	OTSP1
5/8" UNF	SP1A	TGASP1A	OTSP1A
	M16	SP1B	TGASP1B
M18	SP1D	TGASP1D	OTSP1D
M20	SP1F	TGASP1F	OTSP1F
M22	SP1G		OTSP1G



**Remote Filter Heads**

Remote filter heads are used where clearance or packaging issues require the oil filter to be mounted remotely from the block. They all accept 3/4" UNF oil filters have 1/2" BSP female ports with the exception of RFH6 which has four 1/2" NPT ports. Several versions are available some with an additional 5/8" UNF port to accommodate a pressure or temperature take off.

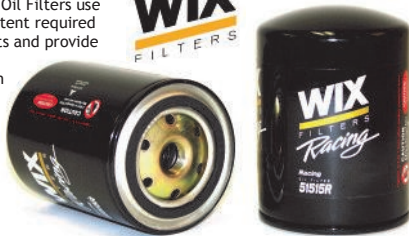


Remote Filter Heads	
Flow	Part No
L to R*	RFH1A
R to L*	RFH1B
L to R	RFH1E
R to L	RFH1F
LH In and Out	RFH3A
RH In and Out	RFH3B
L/H or R/H In/Out	RFH6
* 5/8" UNF Gauge Take Off	



**Wix Competition Oil Filters**

Wix High Efficiency Endurance (HEE) Oil Filters use a fine filter media with the resin content required to trap and hold smaller contaminants and provide high efficiency yet still have a rated flow of 106/ltr/min. The filter design incorporates high burst pressure canister, high temperature nitrile gaskets, zinc chromate baseplate, metal element end caps and spiral centre tubes provides increased element strength and collapse pressure and enhanced flow pattern.



Wix Competition Oil Filters					
Thread Size	Height	O.D.	By Bypass Valve setting	Drain Back Valve	Part No
3/4" UNF	131mm	91mm	8-12 PSID	Yes	51515R
13/16" UNF	131mm	91mm	None	Yes	51060R
13/16" UNF	131mm	91mm	None	No	51061R
13/16" UNF	110mm	91mm	None	No	51069R
1 1/8" UNF	132mm	91mm	None	No	51268R*

\* AP Filter Media giving higher flow rate increased resistance to clogging but will not trap contaminants to as small a size as the HEE filters

**Billet Remote Filter Heads**

These Moroso billet aluminium remote filter heads combine high strength and great aesthetics with high flow rates, their large 1 1/16" (AN-12) fluid ports making them ideal for competition engines requiring high oil flow. They are supplied complete with two screw-in centre adapters allowing them to accept oil filters with either 13/16" UNF or 3/4" UNF threads and with O-ring diameters from 2 5/8" (67mm) to 3 1/4" (82mm) O-ring.

- Two -12AN inlet ports.
- One main -12AN port.
- Two 1/4" NPT auxiliary ports ideal for switches/ senders.
- Supplied complete with one -12AN port plug and two 1/4" NPT port plugs.



Billet Remote Oil Filter Head, Side Ports: 23763

Billet Remote Oil Filter Head, Front Ports: 23764

**Cast Remote Filter Heads**

These cost effective Moroso cast aluminium remote filter heads accept oil filters with 13/16" UNF threads and with 3 1/4" (82mm) O-ring diameters.

- 1/2" NPT ports.
- Additional 1/2" NPT Top Port for switches/ senders.

Cast Remote Oil Filter Head, Flows R to L: 23750

Cast Remote Oil Filter Head, Flows L to R: 23760

Telephone: 01327 857991 email: sales@competitionsupplies.com



**Accusump Oil Accumulators**

Accusumps are oil reservoirs that connect to the engine's oiling system. They collect pressurised oil from the engine and store it, then discharging it should surge cause the oil pressure to drop. They can also be used to deliver oil before starting to eliminate dry start scuffing. They are available in 2Qt (2.25L) and 3Qt (3.4L) capacities and we offer a range of accessories to facilitate their installation and use.

- Precision built from heavy wall aluminium tubing with a PTFE hard coated interior.
- Billet aluminium internal piston and screw in end caps.
- Equipped with a pressure release valve.

Two Quart Accusump , Canister Size 300mm x 108mm: **CAN24-026**

Three Quart Accusump Canister Size 410mm x 108mm: **CAN24-006**

Non-return Valve ½ NPT Ports: **CAN24-280**

Mounting Brackets: **CAN24-200**

Manual Valve: **CAN24-260**

Electric Valve: **CAN24-270**



**Oil Take Off Plates**

Used in conjunction with a remote filter head to relocate the oil filter and available with either side or top 1/2" BSP threaded ports. Available to suit a range of filter threads. The side port version requires just 65mm clearance whilst top port versions will require at least 115mm clearance for the take off plate, adapters and hose ends.



Take-Off Plates		
Centre Bolt Thread	Part No	
	Side Ports	Top Ports
3/4" UNF	TOPO1	TOP1
5/8" UNF	TOPO1A	TOP1A
M16	TOPO1B	TOP1B
M18	TOPO1D	TOP1C
M20	TOPO1F	TOP1D
M22	TOPO1G	TOP1G

**Remote Oilstats**

These oil thermostats are fitted inline between the engine and oil cooler and divert the oil through the cooler only once it reaches 80°C. This reduces warm up time and associated engine wear. Available with a range of port options to ensure simple installation.



Remote Oil Stats	
Ports	Part No
1/2" Push-on Tails	OT/1
5/8" Push-on Tails	OT/2
1/2" BSP Female	OT/2A
1/2" NPT Female	OT/2B
AN - 10 Male	OT/G
AN - 12 Male	OT/H
AN - 16 Male	OT/J

**1/2" BSP Port Adapters**

1/2" BSP aluminium and steel port adapters to allow JIC and BSP hose fittings to be used with filter heads, sandwich plates and take off plates. The sealing O-ring should be ordered separately.



1/2 BSP Male/Male Adaptors		
Size	Ally	Steel
-6	MMAO-8-6	MMSO-8-6
-8	MMAO-8-8	MMSO-8-8
-10	MMAO-8-10	MMSO-8-10
-12	MMAO-8-12	MMSO-8-12
-16	MMAO-8-16	MMSO-8-16
1/2" BSP	MMA3-8-8	MMS3-8-8
5/8" BSP	MMA3-8-10	MMS3-8-10
O-Ring	SR1/2	

**Tilton Oil Circulation Pump**

For use on gearboxes and final drives. Features a lightweight nylon body, 12v diaphragm pump, integral cooling fan and 3/8" NPT ports. Available with either Buna seals for regular gear oils and coolants or Viton which is designed for more corrosive fluids such as fuel and alcohol.

The standard pump is rated at a 2 hour duty cycle with a 15 minute cool down whilst the continuous version can be run for up to 1000 hours non stop.

Weight: 1.6Kg.  
Flow rate: 10L per min at a max temperature of 130°C.

Std Pump (Buna Seals): **40-524**

Std Pump (Viton Seals): **40-525**

Continuous Duty (Buna Seals): **40-527**

**Diff Pump Service Items**

Diaphragm Kit (Buna Seals): **40-902**

Diaphragm Kit (Viton Seals): **40-912**

Check Valve Kit (Buna Seals): **40-934**

Check Valve Kit (Viton Seals): **40-935**

**VDO Electric Oil Pump**



A compact oil pump which is ideal for gearbox or diff cooling systems. 15mm inlet 8mm outlet for push on hose.

Flow rate: 160 l/hr @ 7 PSI.

VDO405040001001

Plug and loom suit VDO pump:  
VDO-LOOM

**Oil Pump Switch**

Oil pump switch incorporating a surface mount switch with an adjustable range of 70° to 120°C. Supplied complete with a harness and relay it is threaded 1/8" NPT. We also stock a wide range adapters to convert to alternate threads.

Pump Controller **EFC1/8NPT**

**Breather Filters**

Compact rubber neck clamp-on filters for catch tank or engine breathers to prevent contamination being drawn in by crank case vacuum. Available to suit a range of stub diameters.

10mm I.D. **PFX101S**

13mm I.D. **PFX102S**

16mm I.D. **PFX103S**

19mm I.D. **PFX105S**

**1/2" NPT Port Adapters**

1/2" NPT aluminium adapters to allow AN (JIC) hose fittings to be used with the 1/2" NPT ported oil system components on these pages.



1/2" NPT to AN Male/Male Adaptors			
AN Size	Str.	45°	90°
-6	481668	482368	482268
-8	481688	482388	482288
-10	481610	482310	482210
-12	481613	482313	482213

**tilton**



**Aluminium Catch Tanks**

Fabricated aluminium catch tanks complete with sight gauge and M8 drain plug, Available with either push-on tails (2L = 1/2" 3L = 5/8") or JIC fittings. Compliance with FIA regulations requires 2L capacity for engines up to 2000cc and 3L for engines over 2000cc.

2L Push-on: **CT2PO**

2L -8 JIC: **CT2JIC**

3L Push-on: **CT3PO**

3L -10 JIC: **CT3JIC**

Polished aluminium catch tanks supplied complete with sight level, drain plug and breather cap. They come in either 1L or 2L capacities and with dual inlets positioned on either the right or left. Supplied with 1/2" push on fittings

1L Catch Tank: **CT3**

2L Catch Tank: **CT2**

**Oil Filter Cutter**

This handy tool allows canister type oil filters to be easily cut open to allow the filter media to be examined for debris and engine issues to be detected before they become catastrophic. Sturdy billet aluminium frame and ball bearing rollers ensure long service life. Suitable for use with filters of between 60 and 125mm diameter.

LON77750

**Magnetic Sump/Oil Drain Plug**

A range of top quality magnetic drain plugs to capture ferrous particles and keep the oil in top condition.

Magnetic Drain Plugs	
Thread	Part No.
1/2" x 20 UNF	AP-01
5/8" UNC	AP-17
3/8" NPT	IP-03X
1/2" NPT	IP-04X
M12 x 1.25	AP-03
M12 x 1.5	AP-11
M12 x 1.75	AP-04
M14 x 1.5	AP-02
M18 x 1.5	AP-05



For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)



**Redline Water Wetter**

Unique wetting agent for cooling systems which improves heat transfer and reduces cylinder head temperature by eliminating the build-up of bubbles or vapour barrier that form on hot metal castings reducing the efficiency of temperature transfer to the coolant. It also offers corrosion protection yet has superior heat transfer properties in comparison to glycol based antifreeze often used for this purpose.



355ml: 80204

**CV-2 Grease**

Synthetic high performance, extreme pressure grease containing red moly is suitable for all competition wheel bearings, CV joints and other high speed bearings. It provides excellent high temperature and high load protection combined with excellent water resistance, low temperature flow and a very high drop point.



397g: 80401

**Shockproof Gear Oils**

Redline shockproof oils are a unique range of lubricants which contain a suspension of solid microscopic particles as an extreme pressure agent. The chemistry offers the high temperature protective performance of a heavy viscosity oil whilst maintaining the lower internal friction characteristics of a much lighter oil. This allows greater levels of protection for a given level of frictional power loss or a significant reduction in frictional losses through the use of a lighter viscosity oil with little sacrifice in durability.



**Heavy**

Protection rating: 75W250  
Friction Rating: 75W90  
946ml: 58204

**Lightweight**

Protection rating: 75W140  
Friction Rating: SAE 30  
Engine Oil  
946ml: 58404

**Superlight**

Protection rating: 75W90  
Friction Rating: ATF  
946ml: 58504

**Redline MT Gear Oils**

Many synthetic gear oils are too slippery to allow proper synchro engagement. Redline's MT gear oils have the appropriate coefficient of friction for synchro type manual transmissions to ensure better gear changes whilst offering excellent gear and synchro protection.

Note: MTL and MT-90 are not suitable for use in differentials with hypoid gears.

**MTL**

This 75W80 gear oil is ideal for manual gearboxes which require either 75W or 80W GL-4 gear oils or engine oil. It provides the low temperature gear changes of an ATF yet the high temperature protection of a GL-4 oil whilst providing synchros with sufficient friction to allow fast gear changes.



**MT-90**

Similar in performance to MTL but for manual gearboxes requiring 75W90 or SAE 90 GL-4.



**75W90**

The preferred oil for most differentials both conventional and limited slip. It is suitable for use in a range of gearboxes and differentials however the manual transmissions specific lubricants have better frictional properties for rapid synchronisation in synchro type gear boxes. Exceeds API GL5.



946ml: 57904

**75W140**

A heavier grade GL-5 gear oil for severe duty applications.

946ml: 57914



**75W90NS**

An oil without the friction modifiers usually required by limited slip differentials, this allows gearbox synchronisation to happen more quickly allowing faster gear changes. It can also be used in differentials to attain more lock up where insufficient pre-load allows too much slip.

946ml: 58304

**75W140NS**

A heavier grade Non-Slip oil for severe duty applications

946ml: 57104



**300V Competition Engine Oils**

The severe mechanical demand of competition engines require an engine lubricant that ensures optimum and constant performance. Since its 1971 launch of the 300V range as the first 100% synthetic lubricant ever designed for cars Motul's R&D department

has put its research resources towards continuous development and re-formulation of its 300V products. This constant evolution allows the 300V range to remain at the pinnacle of motorsport performance providing increases in both power and reliability in spite of the challenges of ever more compact power units.

Motul's latest technological evolution is ESTER Core® used exclusively in the 300V range this technology guarantees to obtain maximal performance, over and

beyond existing standards.

ESTER Core® technology guarantees you more:

**Power** - Reduced internal friction.

**Reliability** - High temperature resistance and maintenance of oil pressure.

**Protection** - Optimised polarity for maximal adherence of the oil film.

**Low Lubricant Consumption** - Exclusive formulation of low volatility synthetic base oils.

**6100 Semi-Synthetic**

An innovative range of oils with a reinforced synthetic base stock designed specifically for high output modern petrol and diesel engines. They offer excellent lubrication, reduced friction and high temperature resistance. It can be mixed with synthetic or mineral oils.



5 Litre 10W40: 101493

5 Litre 15W50: 100328

**300V Power R 5W30**

A low viscosity 100% synthetic racing lubricant suitable for use on shorter distance events. It is tolerant of moderate fuel dilution levels and can be used in both normally aspirated and turbocharged engines.



2 Litre: 103128

**300V Power 5W40**

100% synthetic racing lubricant suitable for competition engines operating over a wide range of RPM and temperatures. It is tolerant of moderate fuel dilution levels and is suitable for normally aspirated and turbocharged engines.



2 Litre: 103132

**300V Chrono 10W40**

This 100% synthetic competition engine oil offers reduced frictional losses whilst still giving excellent protection at high temperature and over a wide range of engine speeds.



2 Litre: 103135

**Mineral Classic 20W50**

A premium 20W50 mineral engine oil designed for post 1950 vehicles, its detergent, anti-corrosion and anti-wear properties ensure excellent protection and performance, whilst its high film strength and adhesive properties ensure start up protection even after prolonged lay up.



2 Litre: 102740

**300V Competition 15W50**

The excellent levels of protection at high temperature and rpm have made this our best selling competition engine oil. It offers extremely stable oil pressure and extremely low component wear rates.



2 Litre: 103138

5 Litre: 103920

**300V Le Mans 20W60**

This endurance racing oil gives maximum protection for long distance racing, its heavy base grade means it continues to offer excellent protection and stable oil pressure even after prolonged use. As well as endurance applications this oil also finds favour with those with older designs of engines which often require heavier weight oils.



2 Litre: 103141

**Sport 5W50**

100% synthetic Ester based ultra high performance engine oil. Designed for very high performance tuned petrol and diesel multivalve engines. Its Ester based formulation ensures maximum power and torque output whilst providing outstanding levels of wear protection.



5 Litre 5W50: 102716

**Multi ATF**

A Dexron III high performance 100% synthetic lubricant suitable for most competition power steering applications and automatic transmissions (manual, sequential, electronically controlled etc.) requiring ATF.



1 Litre: 101616

**Motylgear 75W90**

A semi-synthetic, extreme pressure lubricant using a synthetic base stock for excellent high temperature durability, lubricating properties and low friction and wear. 90 grade hot rating provides outstanding oil film, whilst the fluid characteristics at lower temperature allow for quick gear changes even when the gearbox is cold.



1 Litre: 100093

**Gear 300 75W90**

A 100% synthetic lubricant for gearboxes and rear axles. For competition and high performance applications. 0% shear loss and low frictional losses. Standards: API GL-5. MIL-L-2105D



1 Litre: 100118

**Gear 300LS 75W90**

A 100% synthetic lubricant specially developed for high performance and competition transmissions and final drives incorporating integrated limited-slip differentials.



Standards: API GL-5

1 Litre: 102686

**Gear Competition 75W140**

A 100% synthetic extreme pressure heavy duty gear oil, specially formulated for competition gearboxes and limited slip differentials it offers excellent stability at high temperatures and has been proven in extreme applications including 24hr du Mans.



1 Litre: 101161

Telephone: 01327 857991 email: sales@competitionsupplies.com



### Stack LCD Motorsport Display

The Stack LCD Motorsport Display is an extremely capable, modern and flexible driver communication and data acquisition solution. The carbon composite housing is IP65 sealed against water and dust intrusion and will comfortably withstand 20 g of continuous vibration and 50 g of shock. The 7" LCD panel ensures easy visibility under all circumstances with unmatched brightness and an optically bonded lens provides extreme glare suppression and the display layout is fully user configurable. The system will accommodate four programmable data bus channels (2 CAN and 2 serial) in addition to discrete analogue sensors and its integrated 3 Axis Accelerometer. Data collection can occur at up to 1 kHz and the internal memory allows for practically infinite recording time. User definable warnings take advantage of super bright, multicolour LEDs placed around the perimeter of the chassis to alert the driver to critical onscreen information.

#### Display

7.0" TFT LCD panel  
 Display Brightness: 1000 nit.  
 Resolution: 800 x 480.  
 Onboard photo sensor for automatic brightness control.  
 16 User configurable multi-colour LED's.  
 Patented Predictive Lap Timing Display for Driver and Vehicle Development.  
 Display features perfectly rendered virtual analogue needles, value display bands, digital value Indicators for vehicle parameters and configurable full colour text warning messages.  
 20 layers/screens/pages selected from 6 user- configurable templates (screens/instrument cluster designs/layouts).

#### Electrical

Supply Voltage: 8-18VDC.  
 Typical Power Consumption: 800 mA.  
 Mating Connector: Single 37 way Deutsch Autosport AS614-35SN.

#### Inputs/Outputs

12 Configurable user sensor inputs.  
 4 Configurable for Pulse, 0-5V, or resistive (0-526 Ω).  
 8 Configurable for 0-5V.  
 Internal 3-axis accelerometer +/- 6g.  
 Internal battery voltage.  
 1 Dedicated Lap trigger Switch Input.  
 4 Integrated Control Switches.  
 4 Configurable I/O Control Switches.  
 Pro Control Outputs - Drive external outputs for warning lights, relay control, etc.  
 GPS Input (RS-232) - Mapping, Lap timing, etc.

#### Data Logging

Max number of channels: 64\*.  
 Max sample: 1,000 Hz.  
 Max total samples per second: 8,000.  
 Internal Memory: 4GB solid state internal.  
 Supplied with fully featured DataPro Analysis software.  
 Data Security: Pin code prevents data review by unauthorised personnel.

#### Communications

2 Configurable CAN ports - Up to 1 Mb/s (for user electronics package integration).  
 2 Configurable RS232 ports: (GPS, Telemetry, Etc.).  
 1 Ethernet port: (Configuration, Data Exchange, Firmware Upgrades).  
 1 USB port: (Data exchange, configuration. Copy and upload, firmware upgrades).

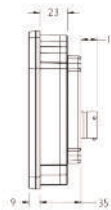
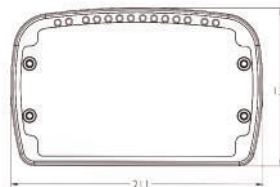
#### Mechanical

Carbon Composite Housing. Weight: 700g.  
 Dimensions - 211mm Wide x 132mm High x 35mm Deep (excluding connector).

#### Environmental

IP65 sealed, Operating temperature range: -7°C to +80°C.  
 Humidity: 0-100% RH.  
 Continuous vibration up to 20g, Shock up to 50g.

**STACK  
STACK  
STACK**



LCD Multi-Function Dash Logger With Software:  
 5Hz GPS Receiver:

ST9918S  
 ST995



#### Digital Input Sensors:

Lap time beacon/receiver Kit:  
 Lap time beacon only:  
 Lap time receiver only:  
 Wheel Speed Sensor:  
 Pulse Amplifier (e.g. Gearbox Sensor Amp.):  
 Boost Sensor 0-3.5 BAR Absolute (1/8 NPT):

ST546  
 ST544  
 ST543  
 ST670  
 ST492  
 ST453



#### Analogue 0-5V Sensors:

Fluid Temp -20 - 150 °C (M6x1):  
 Pressure 10 BAR / 150PSI (1/8 NPT):  
 Pressure 10 BAR / 150PSI (M10x1):  
 Brake Pressure Sensor:  
 'K' Type Thermocouple Interface 0- 200 °C:  
 'K' Type Thermocouple Interface 0- 1100 °C:

ST991  
 ST747-1/8NPTF  
 ST747-M10  
 ST749  
 ST657  
 ST658



### Stack ST700 80mm Dash Display

The ST700 effectively delivers a large amount of information from a tidy single 80mm instrument. Built with Stack's legendary craftsmanship, attention to detail and technology derived from decades of experience, the Stack ST700 provides a comprehensive monitoring solution. Displaying a choice of engine RPM, speed, system voltage, odometer, tripmeter, or acceleration timer (1/4 Mile and 0-60, and user selectable rolling speeds) as standard. Two configurable inputs for either temperature or pressure via optional accessories, an in-built sequential shift light and the ability to enable lap timing gives the driver a remarkable amount of information in even the tightest quarters.

#### Intelligent Alarm System:

Intelligent alarms are provided on all monitored parameters. Alarm levels are adjustable to suit individual requirements.

#### Configurable Inputs:

The ST700 system features two user configurable analogue channels (Requires ST918049 loom). Each channel can be set up for Water Temperature, Oil Temperature, Air Temperature, Axle Temperature, Gearbox Temperature, Oil Pressure, Fuel pressure or Boost pressure. Sensors and the appropriate loom must be ordered separately, choose between standard and solid state sensor options. The solid state sensors are small, lightweight, provide high accuracy and offer exceptionally reliability.

#### Available RPM Ranges:

0-8 KRPM  
 0-4-10.5 KRPM  
 0-10.75 KRPM  
 0-3-13 KRPM  
 0-6-15 KRPM



- 4 pattern Sequential Shift light.
- User configurable analogue channels.
- Peak Value Tell-Tales on all parameters.
- Supplied with mounting bracket, switch kit, separate professional wiring looms and manual included.
- Adjustable White LED back-lighting level.
- Fully sealed against water and dust.
- 1 year competition warranty.
- For all negative earth ignition systems.
- Odometer and Trip Meter.
- Acceleration Timer (1/4 Mile, 0-60, user programmable rolling speeds).

#### Best ever value!

Stack have now included a range of former upgrade options and included them in the price of the standard units, making the ST700 the best value ever.

**Lap & Split Time Memory:** Up to 75 lap and split times can be recorded for subsequent review. This option requires the optional lap timing receiver & the Stack trackside beacon.

**Acceleration timer:** Records standing 1/4 mile/400m time, and acceleration/deceleration time between any chosen speeds.

**Speedometer, Odometer & Tripmeter:** This option provides a street legal speedometer display readout with trip and odometer user selectable to read in Miles or Kilometres.

**Performance Upgrade:** Consists of the Split Time system and the Straight and Corner Speed readout options; providing real time information that allows the driver to evaluate their performance. Requires ST546 Lap Timing system.

#### Options:

Lap time beacon/receiver Kit: ST546  
 Lap time beacon only: ST544  
 Lap time receiver only: ST543  
 Sensor Loom: ST918049  
 Sensor Loom Extension 0.7 Mtr: ST918020  
 Sensor Loom Extension 1.4 Mtr: ST918021  
 Sensor Loom Extension 2.1 Mtr: ST918022

#### Analogue Sensors (C/W Fly Lead):

Fluid Temp 150 °C (1/8 NPT): ST764K  
 Fluid Temp 150 °C (M10x1): ST762K  
 Pressure 0-150PSI (1/8 NPT): ST745K  
 Pressure 0-10 BAR (M10x1): ST744K  
 Pressure 0-30PSI (1/8 NPT): ST742K  
 Pressure 0-2 BAR (M10x1): ST741K

#### Solid State Sensors:

Fluid Temp -20 - +150 °C (M6x1): ST769  
 Pressure 3.5 BAR/50PSI (1/8 NPT): ST740  
 Pressure 150 PSI (1/8 NPT): ST747

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)





**Chronotronic 80mm Tachometer**

Stack's 80mm Chronotronic tachometer is a facsimile of the original Chronometric tachometer. The stepper motor movement used is programmed to simulate the staccato needle movement of the original below 4000rpm above which the steady, smooth and accurate stepper motor provides a clean true reading. The tachometer can be used with all negative earth and magneto systems and features peak RPM memory and white LED back lighting.

ST901096

**ST200 80mm Tachometers**

The ST200 tachometer uses a stepper motor movement to produce an accurate reading of engine revs. The tachometer features a peak RPM memory and Blue LED backlighting. The unit also has a programmable output to drive a remote shift light. This 80mm tachometer comes complete with loom, mounting bracket and programming switch kit.

ST200	0-8K RPM:	ST200-0-8K
ST200	0-10K RPM:	ST200-0-10K
ST200	0-4-10.5K RPM:	ST200-0-4-10.5K
ST200	0-3-13K RPM:	ST200-0-3-13K
ST200	0-6-15K RPM:	ST200-0-6-15K

**ST200C/ST230C 80/125mm Classic Tachometers**

Using the proven stepper motor technology of the ST200 the classic styled ST200C (80mm) and ST230C (125mm) tachometers offer accuracy and reliability combined with a traditional appearance. The 125mm ST230 tachometer can be fitted in either a 80mm or 125mm dash cut out. These tachometers have a peak re-call facility and a shift light driver, but do not have illumination.

ST200C 80mm	0-8K RPM:	ST200C-0-8K
ST200C 80mm	0-10K RPM:	ST200C-0-10K
ST200C 80mm	0-12K RPM:	ST200C-0-12K
ST230C 125mm	0-6K RPM:	ST230C-0-6K
ST230C 125mm	0-8K RPM:	ST230C-0-8K

**Electronic Speedos**

86mm diameter programmable speedometer with simple wiring connections and easy to use push button programming. These speedometers are compatible with most OEM vehicle speed sensors and aftermarket speed pulse generators as well as Stack's own ST668 wheel speed sensor. The instrument includes back-lit odometer and two resettable tripmeter displays. Available with either 0-160MPH/secondary KPH scale or 0-260KPH only scale.

ST3801	0-160 MPH (260km/h):	ST3801
ST3802	0-260 km/h:	ST3802
ST668	Speed Sensor:	ST668

- Fully user programmable.
- LCD odometer with re-settable trip displays.
- Maintenance free through the dial white LED backlighting.
- LED illuminated needle for maximum visibility.
- 80mm visible dial dimension, requires 85mm cut out.
- Can be used with most O.E. electronic speed sensors.
- Universal speed sensor available separately if required.
- 12 months competition warranty.
- Full user manual.



**Pro-Control Stepper Motor Electric Gauges**

Accurate and easy to read, these stepper motor auxiliary gauges are supplied complete with high grade sensor.

**Full-Dial Alarm Warning:** User-configurable minimum and maximum alarms can be set, with one of seven different colours assigned to each. As soon as an alarm level is exceeded, the full dial face changes colour. If the level exceeds the alarm by more than 10%, the dial face flashes rapidly to further alert the driver.

**Pro-Control Driver Feature:** The Pro-Control feature activates low and high outputs whenever the user-defined alarm levels are exceeded. These outputs can be used to switch a relay to activate cooling fans, pumps, lamps, alarms, ignition kill etc.

**Configurable LED Backlight Colour:** With a choice of 7 user-selectable LED backlighting colours for maximum visibility of the gauge, day and night.

Oil Pressure 0-7 BAR:	ST3501	Oil Pressure 0-100 PSI:	ST3502
Fuel Pressure 0-1 BAR:	ST3503	Fuel Pressure 0-15 PSI:	ST3504
Fuel Pressure 0-7 BAR:	ST3505	Fuel Pressure 0-100 PSI:	ST3506
Water Temp. 40-120 °C:	ST3507	Water Temp. 100-260 °F:	ST3508
Oil Temp. 40-140 °C:	ST3509	Oil Temp. 140-280 °F:	ST3510
Boost -1.0 to +2.0 BAR:	ST3511	Boost -30inHg to +30 PSI:	ST3512
Exhaust Gas Temp. 0-1100 °C:	ST3513	Exhaust Gas Temp. 0-2000 °F:	ST3514
Fuel Level Programmable:	ST3515	Battery Voltage 8-18V:	ST3516



**Pro Series Stepper Motor Electric Gauges**

These precision auxiliary instruments combine digital microprocessor accuracy with a high-precision stepper motor needle movement to provide a new level of accuracy and reliability in 52mm gauges. They combine the durability and full sweep readability of mechanical gauges with the easy installation and safe operation of conventional electric gauges. Where applicable, high quality sensors are included except for the fuel level gauge which can be programmed for use with most O.E. sensors or used with our VDO sensors available separately. White dial faces also available to order.

Oil Pressure 0-7 BAR:	ST3301	Oil Pressure 0-100 PSI:	ST3302
Fuel Pressure 0-1 BAR:	ST3303	Fuel Pressure 0-15 PSI:	ST3304
Fuel Pressure 0-7 BAR:	ST3305	Fuel Pressure 0-100 PSI:	ST3306
Water Temp. 40-120 °C:	ST3307	Water Temp. 100-260 °F:	ST3308
Oil Temp. 40-140 °C:	ST3309	Oil Temp. 140-280 °F:	ST3310
Boost -1.0 to +2.0 BAR:	ST3311	Boost -30inHg to +30 PSI:	ST3312
Exhaust Gas Temp. 0-1100 °C:	ST3313	Exhaust Gas Temp. 0-2000 °F:	ST3314
Fuel Level Programmable:	ST3315	Battery Voltage 8-18V:	ST3316



**Electric Gauges**

These electric auxiliary instruments feature advanced 90° air-core movements and simple 3-wire installation. Supplied complete with sensor (wiring not included). White dial faces available to order.

Oil Pressure 0-7 BAR:	ST3201	Oil Pressure 0-100 PSI:	ST3202
Water Temp. 40-120 °C:	ST3207	Water Temp. 100-250 °F:	ST3208
Oil Temp. 60-150 °C:	ST3209	Oil Temp. 140-300 °F:	ST3210
Boost 0 to 2.5 BAR:	ST3211	Boost 0 to +35 PSI:	ST3212
Battery Voltage 8-18V:	ST3216		



**Mechanical Gauges**

This range of gauges have been specially designed for vehicles with no or low powered electrical systems. Easy to read 270° sweep movement. Supplied complete with basic fitting kit, excluding wiring which is needed only if illumination is required.

Oil Pressure 0-7 BAR:	ST3101	Oil Pressure 0-100 PSI:	ST3102
Water Temp. 50-115 °C:	ST3107	Water Temp. 120-240 °F:	ST3108
Boost -1.0 to +2.0 BAR:	ST3111	Boost -30inHg to +30 PSI:	ST3112



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**RACETECH**

**80mm Shift Light Tachometer**

Fast acting 80mm motorsport tachometer with a responsive and smooth stepper motor movement. Switchable to suit 4, 6 or 8 cylinder engines it also has a peak rev recall facility. The three sequential shift lights have user selectable thresholds which can be each independently set.

- 0-3-8KRPM: RTTC-SL8
- 0-4-10KRPM: RTTC-SL10
- 0-5-12KRPM: RTTC-SL120

**80mm Motorsport Tachometer**

Fast acting 80mm motorsport tachometer with a responsive and smooth stepper motor movement. Switchable to suit 4, 6 or 8 cylinder engines it also has a peak rev recall facility.

- 0-3-8KRPM: RTTC8
- 0-4-10KRPM: RTTC10
- 0-5-12KRPM: RTTC12



**Recording Tachometer**

This compact and lightweight memory tachometer records the RPM 10 times/second for up to an hour, these can be split into multiple sessions, allowing subsequent play back. Remotely mounted switch allowing the driver to start/stop recording is also included. Versatile Shift light functionality includes a large red LED on the top right which has dual setting points, being steady at the lower set point and flashing at the higher. The 6 LEDs on the left can be either used as a sequential shift light or set lower to give an indication of pit lane speed. Records RPM & stores up to a full hour, in multiple sessions.

- Easy playback at real time speed, 1/3 speed or double speed.
  - Pause and back-up function on replay.
  - Digital timer indicates when & where on the circuit the RPM was recorded.
  - White LED backlighting & illuminated needle .
  - Digital display shows max RPM.
  - Compatible with most ignition systems, 1 to 12 cylinder.
- 44390

**Digital Tachometer**

This compact digital tachometer measures 89 x 39mm and weighs less than 60g. It is self-powered with a battery life of over 300 hours. It has a peak RPM recall facility and if provided with a 12v feed there is a blue back light which flashes red at user programmable rev threshold.

- 0-10,000 RPM: 44391
- 0-19,000 RPM: 44402



**Peak Recall Tachometer**

This Longacre, large format 114mm diameter stepper motor tachometer has a peak RPM recall facility and an integral user programmable two stage shift light with the ultra bright LED showing steady at the lower set point and flashing at the higher. Led back lighting and illuminated needle ensure excellent low light visibility.

44384



**Brake Pressure Gauges**

A black aluminium panel incorporating two 38mm diameter, 0-1500psi mechanical pressure gauges for connecting to the front and rear brake lines to allow brake bias to be monitored and set.

Gauge inlets are 1/8-27 NPT female ports and incorporate a fluid bleeder. All hoses and fittings required for simple installation are available separately, please contact us with your requirements.

44124



**Stack Wideband Lambda Air/ Fuel Ratio Gauge**

The ultimate tuning aid! Dual digital and radial LED displays provide accurate real-time readout of either air/fuel ratio or lambda (user-selectable). 0-4 Volt analogue output can be connected to a data-logger or to an ECU to provide real-time closed-loop feedback for improved mapping. Supplied complete with wiring harness, weld-in boss, plug and Bosch sensor.

ST3401



**Racetech Mechanical Gauges**

The pressure fitting on our standard range of Racetech mechanical gauges is 1/8 BSP with a "Smiths" type seat. Pressure capillaries are not supplied with Racetech mechanical gauges and should be ordered separately.



The temperature sender on Racetech mechanical temperature gauges has a 3/8 BSP female thread also included is a 3/8 BSP male/male adaptor. Temperature capillaries can be supplied in 7, 9 or 12' lengths.



**Pressure Gauge 0-100 P.S.I.**  
52mm mechanical Fuel/Oil pressure gauge with a 0-100psi range. Backlit with an 1/8 BSP male pressure fitting. (Capillary not included).  
P10BL



**Pressure Gauge 0-160 P.S.I.**  
52mm mechanical Fuel/Oil pressure gauge with a 0-160psi range. Backlit with an 1/8 BSP male pressure fitting. (Capillary not included).  
P16BL



**Boost Gauge -1 to 2.5 BAR**  
Mechanical boost gauge, backlit, 1/8 BSP male pressure fitting. Available with either black or white dial face.  
Black Face: B2.5BL  
White Face: B2.5WL



**Temperature Gauge 0-110 °C**  
52mm mechanical water temperature gauge with a 0-110°C range. Backlit.  
T11BL



**Temperature Gauge 0-140 °C**  
52mm mechanical oil temperature gauge with a 0-140°C range. Backlit.  
T14BL



**Pressure Gauge 0-15 P.S.I.**  
52mm fuel pressure gauge with a 0-15psi range. Backlit with an 1/8 BSP male pressure fitting. (Capillary not included).  
P1.5BL



**Dual Gauge 100 P.S.I. / 140 °C**  
0-140°C temperature and 0-100 P.S.I. pressure range. Backlit with an 1/8 BSP male pressure fitting .  
PT1014BL



**Dual Gauge 100 P.S.I. / 110 °C**  
0-110°C temperature and 0-100 P.S.I. pressure range. Backlit with an 1/8 BSP male pressure fitting .  
PT1011BL



**Dual Gauge 160 P.S.I. / 120 °C**  
0-110°C temperature and 0-160 P.S.I. pressure range. Backlit with an 1/8 BSP male pressure fitting .  
PT1612BL



**Fuel Pressure Gauge 0-15 P.S.I.**  
Ø 67mm, fuel pressure gauge with a 0-15psi range. 1/8 NPT male pressure fitting. (Capillary not included).  
46506



**Oil Pressure Gauge 0-100 P.S.I.**  
Ø 67mm, Oil pressure gauge with a 0-100psi range. 1/8 NPT male pressure fitting. (Capillary not included).  
46511



**Temperature Gauge 100-280 °F**  
Ø 67mm, mechanical water temperature gauge with a 100-280°F range. 3/8 NPT & 1/2 NPT Male Fittings on capillary.  
46516

**APS Air/Fuel Ratio Gauge**

Air/fuel ratio meter with 19 LEDs, seven red lights for lean mixture, 5 orange lights for mid range and 7 green lights for rich mixtures. Engines generally give most power with a lambda of 0.8 - 0.9, the meter will allow the tuner to correctly set the mixture to this level and also ensure that the engine is never running dangerously lean. The meter is suitable for use on all petrol types and any 0-1V lambda sensors. (Sensor not included).  
APS4006



**Weld-on Lambda Boss and Plug**

- Mild Steel Boss: 010.01.0001AA
- Stainless Steel Boss: 010.01.0001AA
- Blanking Plug: 010.01.0002AA
- Copper Gasket: SUM19



**Lambda Sensors**

- Universal lambda sensors suitable for use with the APS Air/Fuel Ratio Gauge. Available as 2 wire unheated or 4 wire heated, if the sensor is being positioned some distance from the cylinder head or fast response from start up is required then the 4 wire is the preferred choice.
- 2 Wire Lambda Sensor: LAM2
  - 4 Wire Lambda Sensor: LAM4



For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)

Smiths classic gauges combine modern internals with traditional styling to produce instrumentation which is accurate and reliable but with an appearance correct for historic competition cars.



### Classic Tachometers

Classic style 80mm tachometers available with 8krpm or 10krpm scales. Configurable to suit 4,6 or 8 cylinder applications.  
**0-8KRPM:** RVC1006-05CB  
**0-10KRPM:** RVC1004-08CB

### MOTORSPORT Tachometers

The motorsport classic tachometer is available in a range of scales and in 80 or 100mm diameters. Configurable for 4,6 or 8 cylinder applications.

MOTORSPORT Classic tachometers		
Size	80mm	100mm
0-8KRPM	RET3-1A32-61	RET3-1A32-50
0-10KRPM	RET3-1A32-62	RET3-1A32-51
0-12KRPM	RET3-1A32-63	RET3-1A32-52



### GT40 Style Classic Tachometers

With a design taken from the original GT40 instrumentation this 100mm Tachometer can be supplied either with or without a red sector in the 6500-7000 range.

**With Red Sector:** RVC2816-04BB  
**No Red Sector:** RVC2816-06BB

### GT40 Style Classic Speedometer

A 100mm electronic speedometer styled to complement the GT40 tachometer (left) it has a 0-200mph scale, easily calibrated by the user to suit the application, it requires an inductive speed sensor available separately.

**SN3327-02BB**

### Programmable Electronic Speedometers

Smiths programmable electronic speedometers are available in a range of scales and in 80 or 100mm diameters. Easily calibrated by the user to suit the application, they require an inductive speed sensor available separately.

Electronic Speedometers		
Range	80mm	100mm
0-140 MPH	SN5234-04CB	SN5372-09CB
0-170 MPH	SN5234-06CB	SN5372-06CB
0-220 KPH	SN5234-05CB	SN5372-10CB
0-270 KPH	SN5234-07CB	SN5372-07CB
Inductive Speed Sensor	EMP34-1KIT	



### Stepper Motor Electronic Auxiliary Gauges

Commissioned by ourselves this range of classically styled 52mm instruments have the appearance of traditional mechanical gauges but incorporate the latest electronic stepper motor technology. These units are perfect for motorsport applications where a logger compatible sender output and avoiding fluids in the cockpit are both beneficial. Rugged high quality sensors are available but not included and should be ordered separately.



Oil Pressure 100 PSI  
PG1310-00CB



Water Temperature  
TG1310-00CB



Oil Temperature  
TG1311-00CB



Oil Pressure  
BP2404-00C



Water Temperature  
BT2240-00C



Oil Temperature  
BT2240-01C



Fuel Pressure 10 PSI  
PG1310-35CB



Pressure 160 PSI  
PG1310-34CB



Fuel Level  
ABF2242-00C



30 Amp: AM1340-03C  
60 Amp: AM1640-03C



Voltmeter  
ABV2220-00C

### Sensors for Stepper Motor Electronic Gauges

High quality rugged senders, the highly accurate pressure senders have a 1/8-27 NPT male thread, 0-5V output and a compact and durable stainless housing. The resistor type temperature senders are brass bodied, lightweight and compact, they also have a 1/8-27 NPT male thread. We also stock an extensive range of adaptors to allow these sensors to be fitted to any application, please refer the page opposite or contact us for more information.



Stepper Motor Electrical Gauge Senders		
Item	Notes	Part No.
Temp	1/8-27 NPT	TT3005-8N
10 PSI Pressure	1/8-27 NPT	PTTR2300-03-8NKI
100 PSI Pressure	1/8-27 NPT	PTTR2300-10-8NKI
160 PSI Pressure	1/8-27 NPT	PTTR2300-16-8NKI

### Sensors for Standard Electronic Gauges

Electrical sender units for use with Smiths standard range electronic gauges detailed left.



Electrical Gauge Senders and Accessories		
Item	Notes	Part No.
Temperature	1/8-27 NPT	TT6811-01
Pressure	1/8-27 NPT	PTR1810-1-10
Inductive Speed	M8x1 Threaded	EMP34-1KIT
Voltage Regulator	Negative Earth	BR1307-00
Voltage Regulator	Positive Earth	BR1307-00
Fuel Level	Side Fitting	TB9013KIT
Fuel level	Top Fitting	TB9011KIT
Ally Weld Flange	Suit Fuel Sensor	WF-027

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## GT40 Style Mechanical Gauges

A range of 52mm black bezel mechanical auxiliary gauges designed to complement the GT40 series speedo and tachometer above.



**Oil Pressure**  
PG1310-09B



**Water Temperature**  
TG1301-30B



**Water Temperature**  
198cm: TG1310-01C078  
304cm: TG1310-01C120



**Oil Temperature**  
198cm: TG1311-01C078  
304cm: TG1311-01C120



**Oil Temperature**  
TG1301-31B

## Smiths Mechanical Temperature Gauges

The temperature sender on Smiths mechanical temperature gauges has a 3/8" BSP female thread also included is a 3/8" BSP to 5/8" UNF Male/Male adaptor. Standard temperature capillaries are 78" long with 120" long versions available on request.

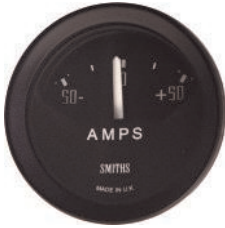


**Oil Pressure**  
PG1310-00C



**Pressure/Temperature**  
GD1301-94C

## GT40 Style Electrical Gauges



**Ammeter**  
AM1640-16B



**Fuel Level**  
ABF2242-15B

## Male/Male Temperature Sender Adaptors



For use with mechanical temperature gauge senders with female 3/8" BSP tube nuts, these adaptors have a 3/8" BSP male thread one end and male thread indicated in the table to the right on the other.



Male/Male Adaptors	
Thread	Part No.
5/8" UNF	MMS9-6-7
1/2" BSP	MMS3-6-8
1/2" NPT	MMS10-6-8
M14 x 1.5	MMS5-6-55
M16 x 1.5	MMS5-6-65
M18 x 1.5	MMS5-6-85

## VDO Fuel Level Gauges

Quality 52mm diameter fuel level gauge with back light from the VDO Vision range suitable for use with the dip tube level senders listed below.

**Black Bezel Gauge:** 301-107  
**Polished Bezel Gauge:** 301-197



## VDO Dip Tube Fuel Level Sensors

Dip tube type fuel level sensors available in a range of lengths, ideal for use in motorsport applications with foam filled fuel tanks. Mounted through the top of the tank they have a standard SAE 5 bolt (M5) fixing on a 54mm P.C.D. We also offer an aluminium weld-on tank mount to suit. Popular lengths are listed below, others available on request.



## Weld-on Flange



Aluminium weld-on tank mount to accept VDO dip tube fuel level senders.  
WF-026

VDO Dip Tube Senders	
Length	Part No.
220mm	224-222
250mm	224-225
280mm	224-228
300mm	224-230
320mm	224-232
340mm	224-234
360mm	224-236
380mm	224-238
400mm	224-240
450mm	224-245
500mm	224-250
550mm	224-255
600mm	224-260

## Oil Pressure T Pieces

Oil pressure T pieces with equivalent Male and Female threads and an 1/8" NPT take off thread on the side.

Oil Pressure T Pieces		
Thread	Version	Part No.
1/8" NPT	Short	LMA010
1/4" NPT	Short	LMA011
1/8" NPT	Long	LMA056
1/8" BSP	Long	LMA057
1/4" NPT	Long	LMA058
3/8" NPT	Long	LMA059
3/8" BSP	Long	LMA060
M10 x 1	Long	LMA050
M10 x 1.5	Long	LMA051
M12 x 1.5	Long	LMA052
M14 x 1.5	Long	LMA053
M16 x 1.5	Long	LMA054
M18 x 1.5	Long	LMA055



## Oil Pressure Capillary Hoses

Nylon capillary hoses with 1/8" BSP female fitting at each end, with either conical or flat Smiths type seat and are suitable for our Smiths and Racetech mechanical pressure gauges.



Oil Pressure Capillary Hoses			
Length	Smiths/Smiths	Conical/Conical	Smiths\Conical
4'	LMA004/4	LMA002/4	LMA003/4
6'	LMA004/6	LMA002/6	LMA003/6
10'	LMA004/10	LMA002/10	LMA003/10
15'	LMA004/15	LMA002/15	LMA003/15

## Stainless Braided Capillary Hoses

For competition applications we strongly recommend the use of stainless steel braided PTFE hose for the pressure capillary. It is extremely durable and offers excellent abrasion resistance. We can assemble hoses to any length with a variety of end fittings or supply hose and re-usable fittings for self assembly.



1/8" BSP Female Hose End (Smiths Seat): 6001034SM  
1/8" BSP Female Hose End (Convex Seat): 6001034  
-3 Stainless braided hose (per/m): 600003

## Oil Pressure Warning Light Switches

Pressure warning light switches with a 1/8-27 NPT thread, fixed rate switches have a single terminal whilst adjustable switches are twin terminal. Adjustment is via a small grub screw.

Fixed 20 PSI: 43080  
15-50 PSI Adjustable: 43000  
Adjustable (preset at 20 PSI): EWS1/C  
Adjustable (preset at 35 PSI): EWS1/D



## Capillary Hose Adaptors

Male/male adaptors to allow the connection of gauge capillaries to T pieces, reducer bushes or for joining two capillaries.

1/8" NPT to 1/8" BSP Smiths Seat: LMA007  
1/8" NPT to 3/8-24 AN 37° Seat (JIC -3): 581603  
1/8" NPT to 1/8" BSP Cone Seat: LMA012  
1/8" BSP to 1/8" BSP Smiths Seat (Both): LMA009

## Mechanical Gauge Pressure Isolator

This isolator has 1/8 BSP conical seat fittings and is placed in-line in the capillary feed of a mechanical pressure gauge and incorporates a floating piston which relays the pressure to the gauge whilst keeping flammable and/or hot fluids out of the cockpit.

RTA700



## Oil Temperature Gauge Adaptors

Cast aluminium temperature gauge adaptors to fit in-line in an oil hose and allow either a mechanical temperature or pressure gauge or electrical sender to be installed. Our standard sender port is 5/8" UNF and can be used with the reducing bushes above to allow senders of alternate threads to be installed. Other sender thread versions available on request.



Oil Temperature Gauge Adaptors	
Ports	Part No.
1/2" Push-on	TGA2A
1/2" BSP	TGA2C
5/8" BSP	TGA2F
AN-10	TGA2I
AN-12	TGA2J



**Aliant Ultralight LiFePO<sub>4</sub> Batteries**

Aliant Ultralight Batteries utilise the latest ultra-safe LiFePO<sub>4</sub> lithium technology combined with a sophisticated integral battery management system incorporated within the battery casing. They offer exceptional cranking capacity for their weight and the battery management system ensures each of the battery cells remains balanced during the charging process ensuring a full charge and maximum performance. They offer a significantly longer life than lead acid batteries with an average life of 1500 discharge/recharge cycles with over 2000 cycles being common if the unit is not discharged beyond 80%. Generally no electrical modifications are required, these batteries require a charge voltage of between 13.6–14.6V and for off car charging we strongly recommend the Aliant dedicated charger detailed right as the battery can be damaged by the desulphation modes used by many conventional lead acid chargers. When using the Aliant battery charger a discharged battery can be fully charged in approximately 30 minutes and the low self discharge rate of only 0.3% per day means that it would take a year for the battery to become fully discharged however to optimise battery life it is good practice to re-charge every 3 months and sooner if there is any additional current draw.



**XR Series**

Where packaging means that smallest possible size is required we offer the XR series. These units use an alternate construction LiFePO<sub>4</sub> cell which provides greater cranking, however this cell construction has a lower reserve capacity so is suitable only for competition vehicles fitted with both an on board charging system (alternator) and mechanical master switches which have zero parasitic drain when not in use.

Specification All Models										
						Nominal Voltage	Optimum Charge Voltage	Maximum Charge Voltage	Terminals	
						13.2v	14.4v	14.6v	M6 Bolt	
Model / Part No.	Length (mm)	Width (mm)	Height Case (mm)	Height Max (mm)	Weight	Nominal Charge Current @ 25 °C	Maximum Charge Current @ 25 °C	Lead/Acid Equivalent Capacity	Odyssey Equivalent	
X2	148	67	78	85	0.9 Kg	6 Amp	10 Amp	8AH	8	
X3	148	67	105	112	1.3 Kg	9 Amp	15 Amp	12Ah	20	
X4	148	67	133	140	1.6 Kg	12 Amp	20 Amp	18Ah	15, 25	
X5R	148	67	133	140	1.6 Kg	10 Amp	20 Amp	20Ah	25	
X7R	148	67	133	140	1.7 kg	10 Amp	20 Amp	30Ah	30	
X6	148	135	133	140	2.5 Kg	18 Amp	30 Amp	24Ah	30, 35	
X8	148	135	133	140	3.2 Kg	24 Amp	40 Amp	35Ah	40	
X10R	296	67	133	140	3.2kg	20 Amp	40 Amp	40Ah	60	
X14R	296	67	133	140	3.4kg	20 Amp	40 Amp	60Ah	60	

- Ultra-Lightweight** - Save up to 9kg in weight.\*
- High Power Density** - Means exceptional cranking current for it's weight.
- Long Life** - On average an Aliant XP battery will deliver 1500 charge discharge cycles giving it an effective life of 5 years.
- Maintenance Free** - Low self discharge rate and sealed design means other than occasional charging no additional maintenance is required.
- No Modification** - As long as your charging system is providing between 13.6–14.6V simply fit the appropriate sized Lithium battery in place of your existing lead acid battery.
- Rapid Charging** - Less than 30 minutes for a full charge when using the CB1210 10 amp battery charger and with only 8% per month self-discharge Aliant batteries offer unprecedented performance.
  - \* Example refers to replacing a Varley or Odyssey 40 @ 12.5kg with an Aliant X8 @ 3.24kg.

**Aliant 10 Amp Lithium Battery Charger**



A rugged 10A battery charger in a durable aluminium housing it is designed specifically for the Aliant Lithium X & XR range of lithium batteries. 7 layer multi-function LED display gives full information on battery condition and charging progress including percentage charge and time remaining till fully charged. With this charger a fully discharged battery can be fully charged in just 30 minutes! **CB1210**



**ODYSSEY THE EXTREME BATTERY**

EnerSys® are the original makers of the U.K.'s most widely used motorsport batteries, their product having been historically marketed under various popular brand names. Built to withstand the extremes of competition their increased vibration resistance allows them to withstand the constant pounding, extreme heat and high vibration that high revving competition engines can generate. They have the performance to start high compression engines using high current draw starters yet remain lightweight and compact. Featuring rugged construction and packed tightly with pure lead plates, the non-spillable AGM design of the ODYSSEY Extreme battery protects against the shock and vibration that can quickly destroy other batteries whilst the pure lead plates mean more power – around twice the overall power and three times the life of conventional lead acid batteries.

- High Power** - Enersys Extreme batteries are constructed using Thin Plate Pure Lead Technology allowing more of the 99.99% pure lead plates to fit in the battery and more lead plates means more power.
- Faster Recharge** - The highest recharge efficiency of any sealed lead battery on the market – capable of 100% recharge in 4-6 hours.
- Mounting Flexibility** - Non-spillable design – can be mounted in any position except inverted.
- Vibration Resistance** - Design protects against high impact shock and mechanical vibration – a common cause of premature battery failure.
- Totally Maintenance Free** - No need to add water, Dry cell design with re-sealable venting system.
- Longer Service Life** - With 3-10 years of service life, ODYSSEY® batteries save time, money & hassle.
- Longer Shelf Life** - Can be stored on open circuit (nothing connected to the terminals) without the need for recharging up to 2 years.



Model	PHCA** (5 Sec)	CCA**	Nominal Capacity 20hr Rate	Length (mm)	Width (mm)	Height (mm)	Weight	Terminals	Part Number
Extreme 8 (PC310)	310	100	8 Ah	138.0	86.0	101.0	2.7 Kg	M4 Bolt	ODY8
Extreme 15 (PC370)	370	156	17 Ah	200.0	77.0	140.0	5.7 Kg	M6 Stud	ODY15
Extreme 18 (PC535)	535	200	14 Ah	170.2	99.1	157.0	5.4 Kg	M6 Stud	ODY18
Extreme 20 (PC545)	545	185	13 Ah	177.8	85.6	131.3	5.7 Kg	M6 Bolt	ODY20
Extreme 22 (PC625)	625	265	18 Ah	170.2	99.1	175.0	6.0 Kg	M6 Stud	ODY22
Extreme 25 (PC680)	680	220	16 Ah	184.7	79.0	169.4	7.0 Kg	M6 Bolt	ODY25
Extreme 30 (PC950)	950	450	34 Ah	250.0	97.0	156.0	9.0 Kg	M6 Stud	ODY30
Extreme 35 (PC925)	925	380	28 Ah	168.6	179.0	128.0	11.8 Kg	M6 Bolt	ODY35
Extreme 40 (PC1110)	1100	500	50 Ah	250.0	97.0	206.0	12.5 Kg	M6 Stud	ODY40

\*Cold Start Performance S.A.E J537 JUNE 82 \*\*Pulse Current

**CTEK Battery Chargers**



The Ctek advanced microprocessor controlled battery chargers are widely considered to be the best available and are backed by a 5 year warranty. We stock the two models best suited for charging the lead acid batteries commonly used on competition applications being ideal for use with ODYSSEY® Extreme™ AGM batteries. Splash proof and dust proof (IP65) both models are easy and safe to use, protect vehicle electronics, are spark-free, reverse polarity protected and short circuit proof.

**CTEK MXS5.0**

5 amp, 8 step charger with automatic temperature compensation built in providing unrivalled performance on lead-acid batteries from 1.2Ah up to 110Ah. Diagnoses battery condition to establish if it can receive and retain charge, patented automatic desulphation step and a special reconditioning step that will revive and restore deeply discharged and stratified batteries. AGM option is perfect for maximising performance and life of Odyssey Extreme batteries. Patented Float/Pulse maintenance mode makes it ideal for long-term maintenance. The entire process of battery testing, charging and maintenance is easily followed on the clear LED display.

**CTEK56-975**



**MXS3.8**

3.8 amp, 7 step charger suitable for charging lead-acid batteries from 1.2Ah up to 85Ah. Diagnoses battery condition to establish if it can receive and retain charge, patented automatic desulphation step and Cold/AGM option is perfect for maximising performance and life of Odyssey Extreme batteries, whilst the Patented Float/Pulse maintenance mode is ideal for long-term maintenance. Battery testing, charging and maintenance is easily followed on the clear LED display.

**CTEK56-972**



Telephone: 01327 857991 email: sales@competitionsupplies.com

**Standard Battery Boxes**

Available in red or carbon effect. Internal dimensions approx. 260 x 180 x 230mm (L x W x H)



**Std Battery Box: BBSTDR**

**Carbon Effect Battery Box: BBSTDC**

**Battery Boxes Suit Odyssey/Red Top**

Lay down battery boxes to suit popular Odyssey and Varley sized batteries, available in red or carbon effect.



**Suit "30" / PC950 batteries:**

**Red: BBRT30R Carbon Effect: BBRT30CL**

**Suit "40" / PC1100 batteries:**

**Red: BBRT40R Carbon Effect: BBRT40CL**

**Aluminium Battery Brackets**

Simple low cost aluminium battery brackets to allow effective mounting of popular Odyssey and Aliant battery sizes. Can be mounted either lay down or upright.



**Odyssey 25 Bracket: BBODY25**

**Odyssey 30 Bracket: BBODY30**

**Odyssey 40 Bracket: BBODY40**

**Aliant X3/4 Bracket: BBKX3/4**

**Aliant X6/8 Bracket: BBKX6/8**

**Anderson Jack Plugs**

These durable electrical connectors allow the quick and easy connection of an auxiliary power source for starting, electric winches etc. They are genderless and two plugs are required to make a connection, we offer two sizes 50 amp and 175 amp, the 50 amp plug is supplied with contact terminals to accept 16mm<sup>2</sup> cable whilst the 175 amp plug is supplied with contact terminals for 25mm<sup>2</sup> cable. Contact terminals to suit alternate cable sizes are available separately.

**Please Note:** Connectors will only mate with other connectors of the same size and colour.

**50 Amp:** Available in Red or Grey. **175 Amp:** Red only



	50 Amp	175 Amp
Plug	AD50P	AD175P
Handle	AD50H	AD175H
Cap	CAP50R	CAP175R
Cable Boot	SB50-SL	SB175-SL
Terminal 16mm <sup>2</sup>	TC-060	TC-180-16
Terminal 25mm <sup>2</sup>	-	TC-180-25
Terminal 35mm <sup>2</sup>	-	TC-180-35

**Battery Cable Heat Shrink**

Flame resistant heat shrink sleeving with a 12.7mm I.D. and a 2:1 shrink ratio. Ideal for insulating and colour coding battery cable connections.



**Red 700-4699 Black HS12.7BLK Yellow 700-4728**

**Battery Stud Terminal Boot**

Terminal insulating boot suitable for use with our 16 and 25mm<sup>2</sup> battery cable and associated tube terminals.

**Black: BTS2-B Red: BTS2-R**



**Battery Post Terminal Boot**

Terminal insulating boot suitable for use with our 16, 25 & 35mm<sup>2</sup> battery cable and standard automotive battery terminals. Available in red and black and R/H & L/H



**L/H Red: BTC2-R**

**R/H Red: BTC3-R**

**L/H Black: BTC2-B**

**R/H Black: BTC3-B**

**Premium FIA Master Switch**

European manufactured and the best quality switch we have been able to source. These premium FIA battery master switches have silver plated main terminals to ensure trouble free power delivery and an integral high quality relay for switching the two secondary circuits which cut the ignition and direct the alternator output via a resistor (included) to earth to protect the alternator diode pack.



**Premium Master Switch: MW002**

**Standard FIA Master Switch**

A lower cost alternative to our premium switch above our standard FIA battery master switch, provides main battery cut off and two additional circuits, to cut the ignition and to direct the alternator output via a resistor (included) to earth to protect the alternator diode pack.



**Standard Master Switch: BMS003**

**Spare Key: 789**

**Spare Resistor: 789/R**

**Battery Cut Off Switch**

A Battery cut out switch with a 300amp initial and 100 amp continuous capacity. Compliant with MSA and FIA regulations for cars without charging systems, also suitable for use as an anti-theft device and to prevent battery drain during lay-up.



**Cut Off Switch: BMS002**

**Spare Key: 789**

**Lucas Style Cut Off Switch**

Metal battery cut off switch of a type used on many historic race cars this fixed key cut off switch has 10mm stud terminals and is rated at 12V 100amp continuous and 500 amp for 10 seconds.

**Metal Cut Off: GE76**

**Battery Cable Bulkhead Fitting**

This fitting mounted in a bulkhead panel allows the battery current to pass through without the risk of chaffing associated with the use of a cable and grommet. Features 10mm posts suitable for use with our tube terminals.



**ALL76142**

**Battery Cable**

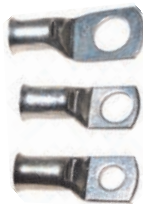
The fine strand conductor specification of our extra flexible battery cable provides the flexibility required to allow an easier and neater installation. Available in a range of specifications and in black or red.

Spec.	Battery Cable		
	16mm <sup>2</sup>	25mm <sup>2</sup>	35mm <sup>2</sup>
Current Rating	110A	170A	240A
Cable O.D.	8.3mm	10.1mm	11.8mm
Conductor O.D.	5.6mm	7.0mm	7.0mm
Part No.	AC42	AC18	AC43

**Battery Cable Tube Terminals**

Battery cable terminals for attaching cable to Odyssey/Aliant batteries (6mm stud), master switches (10mm stud), and starter motors (8mm stud).

Stud Size	16mm <sup>2</sup> Cable	25mm <sup>2</sup> Cable	35mm <sup>2</sup> Cable
6mm	R16-6	R25-6	R35-6
8mm	R16-8	R25-8	R35-8
10mm	R16-10	R25-10	R35-10



**Battery Terminals**

Suit up to 35mm<sup>2</sup> cable to allow connection of cable to standard post type battery terminals.

**Positive Terminal: BT450P**

**Negative Terminal: BT450N**



**XS Battery Isolator**

The new XS isolator from Cartek retains many of the main features of the original version but is 30% smaller in size and 40% lighter than the Cartek GT isolator. Buttons and switches are connected to the isolator via a IP67 sealed connector with 2 meters of cable.



**CK-BX-07**



**XS Isolator Specifications**

**Size:** L = 60mm, W = 45mm

**Weight:** 70g

**Operational Voltage:** 7v - 18v

**Current Consumption:** 40mA (ON); 0mA (OFF)

**Battery Negative Switching Current:**

450A-500A(Cranking) 1500A (Surge)

**Positive Power Switching Current:** 40A

**Battery Negative Terminal:** M8 brass stud

**Kill Signal Current:**

12v 0.25A when ON, switched to chassis/earth OFF

**Electronic Battery Isolator**

Fully electronic with no moving parts and bonded into an aluminium shell making the unit highly resistant to shock, vibration, moisture and dirt. By using the latest MOSFET technology safe, spark-free isolation of the vehicle's battery and engine electronics is achieved in full compliance with FIA and MSA rules. The kit is available with a choice of either red or blue buttons and comprises the isolator, a connection lead, internal and external push button kill switches, safety decals and full installation instructions.



**Cartek Isolator Specifications**

Size	92 x 50mm
Weight	120g
Operational Voltage	8v - 18v
Current Consumption	32mA (ON); 8mA (OFF)
Switching Current Battery -ve	600A
Power Switching Current +ve	30A
Battery -ve Terminal	M8 brass stud
Battery +ve Terminal	M6 brass stud
Positive Power O/P Terminal	M6 brass stud
Part No. Blue Button Kit	CK-BK-06-B
Part No. Red Button Kit	CK-BK-06-R

**Pro Series Pull Cables**

Finish off your quality build with our premium pull cables. Compact lighter yet stronger Tee handles, outer O-ring seal, low friction liner and corrosion resistant stainless inner cable. Supplied complete with lightweight aluminium bulkhead fitting and plated steel solderless nipple.



**2m Red Cable: PPC2R**

**3m Red Cable: PPC3R**

**2m Black Cable: PPC2B**

**3m Black Cable: PPC3B**

**Standard Pull Cables**

These pull cables to allow the remote disconnection of the battery when used in conjunction with red key battery switches. The switch can then be mounted internally and within reach of the driver whilst the cable provides the external remote disconnection required by the regulations. A PTFE inner liner ensures reliable seize free performance.



**1.8m Cable TPK001 3.0m Cable TPK002**

**Cable Accessories**

Cable adjuster for securing the cable outer supplied with 2 lock nuts. **TLK003**

Solderless nipple for securing cable inner. **LMA233/N**



For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)



**Lifeline FIA Approved Rain Light**



Lifeline have updated their FIA approved rain light so it now includes a 4Hz flashing function in addition to the static on mode. The unit is still designed to meet the extreme demands of motorsport. The light now has 11 LEDs on 3 circuits so even if there is a failure on 1 of the LEDs then the unit will continue to work.

Mounting is via 2 central mounted 6mm studs.  
Dimensions: 62 x 100 x 21.5mm  
Weight: 230g

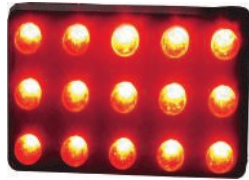
Power Consumption: 700mA @ 12V

Rain light: **421-100-005**

Lucar Switch: **RLSL**

Screw Switch: **RLSS**

**Cartek FIA Approved Rain Light**



The Cartek FIA Approved Rain Light has been specifically designed to meet the latest FIA specifications. The unit measures just 57mm x 90mm, weighs only 153g and draws less than 200mA at 12v. Physically robust to withstand the harsh environment of the race car it is available for either horizontal or vertical mounting and as a steady or flashing light as required by F3 regulations.

Cartek Rain Lights		
Type	Vertical	Horizontal
Steady	CK-LR-15	CK-LR-15H
Flashing	CK-LR-F3	CK-LR-F3H



**Rain Light Switch**



The electronic rain light switch from Cartek will work with any LED rain light and offers 3 modes of operation: Off, on or hazard flashing. The additional flashing mode allows you to warn other drivers that you have a problem such as stalling on the grid, driving with a misfire or driving slowly with a puncture reducing the chances of a rear end collision. The switch is fully sealed and has 3 connections: 12v live, earth and feed to rain light. A 12mm hole is required for mounting.

**CK-LW-03**



**PIAA Super-Light Horn**



PIAA lightweight sport horns feature an integral guard to prevent dirt and water ingress. The twin 115db horns of different frequencies come ready to be installed on to any car. MSA compliant for rallying. **HOZE**

**Compact FIA Rain Light**



These robust yet lightweight LED. rain lights are U.K. manufactured specifically for motorsport use and have FIA and MSA approval for race use. Please note that whilst this unit has FIA approval certain specific series regulations have additional requirements regarding, number of bulbs, brightness, surface area etc. If the series in which you intend to use this item has additional requirements please ensure it's suitability prior to fitment.

**SLC2**

**Clubman Rain Light**



Budget LED rain light for motorsport that meets MSA requirements. The waterproof housing is 52mm diameter and 48mm tall. The mounting base is angled allowing fitment to most bodywork profiles. The unit has integral mounting holes with 62mm centres. The unit comes pre-wired with an inline resistor which offers protection against over voltage.

**CSMRL1**

**Twin Air Horn Kit**



High quality Fiamm air horn kit as required by MSA regulations for rallying. The kit comprises compressor, separate high and low tone air horns, air tubing, "Y" piece, electrical relay and mounting brackets and hardware.

**921981**

**Compact Air horn**



A high db compact air horn assembly by Fiamm. This unit has its dual tone horn mounted directly on the compressor. This horn complies with MSA requirements for rallying and is ideal for installations where space is limited. Supplied complete with relay and mounting hardware.

**921939**

**Push Button Switches**



Engine start or horn switch, 30 amp, metal body with screw terminals. **GE34**



Illuminated 50 amp engine start switch with screw terminals. **GE338R**



30 amp momentary plastic body push button switch with screw terminals. **GE34P**



25 amp stainless steel bodied push button switch screw terminals. **GE339**

**Avanti Map Lights**



The Avanti flexible map light remains the choice of professional rally teams worldwide. The lamp is available in two lengths 12" and 18", with or without an integral push on/off switch and with either a conical bulb shade or a variable aperture iris shade. All versions are manufactured in a non-reflective matt black finish and are supplied complete with a clip and screws for installation.

	Switched		Un-Switched	
Iris	12"	18"	12"	18"
Iris	GE48	GE49	GE42	GE43
Cone	GE45	GE46	GE40	GE41

**Waterproof Connectors**

Waterproof electrical connectors available in 8 and 20 amp current ratings and a range of sizes.



Waterproof Connectors			
Size	Rating	8 Amp	20 Amp
1 Way		LMA860	LMA861
2 Way		LMA862	LMA863
3 Way		LMA864	LMA865
4 Way		LMA866	LMA867
6 Way		LMA870	LMA871

**Miniature Push Button Switches**

Momentary switches suitable for steering wheel mounting commonly used for controlling dash logger and timing system functions. Requires 12mm hole.

Black Switch: **1036296**

Red Switch: **10362807**

Rubber Switch Cover: **1036303**



**APS Ignition/Start Switch**

Heavy Duty 40 Amp ignition switch with momentary start, this high quality switch features silver plated contacts, solid brass mechanism, supplied with 6.3mm lucar terminals.

**APS45490**



**Metal Toggle Switches**



Momentary-On, screw terminals (30A) **GE34M**  
On/Off, lucar terminals (25A) **GE35L**  
On/Off, screw terminals (25A) **GE35S**  
On/Off/On, lucar terminals (25A) **GE36L**  
On/Off/On, screw terminals (25A) **GE36S**

**Toggle Switch Cover**

Safety switch cover for use with our metal toggle switches.



Red: **GE347** Blue: **GE347B**  
Green: **GE347G** Yellow: **GE347Y**

**LED Toggle Switches**

25 amp On/Off toggle switches with LED illuminated stalk.

Switch with Red LED: **GE35LR**

Switch with Amber LED: **GE35LA**

Switch with Green LED: **GE35LG**

Switch with Blue LED: **GE35LB**



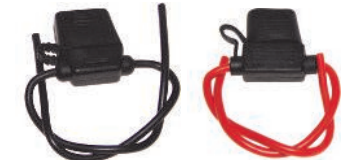
**Blade Fuse Boxes**



Standard blade fuse boxes. Cable connections are made using 6.3mm blade terminals available with either side or base cable entry.

Fuse Boxes		
Type	Side Entry	Base Entry
4 Way	FU23	FU14
6 Way	FU24	FU15
8 Way	FU25	-

**Blade Fuse Holders**



Inline fuse holders to suit standard blade type fuses.

Red Cable 7.5A: **FU32**

Black Cable 20A: **FU29**

Red Cable 30A: **FU11**

**Blade Fuses**



Standard blade fuses, for use with the panel and surface mount fuse boxes.

5 AMP: **FU2-5** 10 AMP: **FU2-10**

15 AMP: **FU2-15** 20 AMP: **FU2-20**

25 AMP: **FU2-25** 30 AMP: **FU2-30**

email: sales@competitionsupplies.com

Telephone: 01327 857991

**Longacre Switch Panels**

Motorsport switch panels incorporating top quality HD 40 Amp ignition switches, HD start buttons fitted to black anodised aluminium or genuine carbon fibre backplate. The panels and supplied pre-wired with high capacity loom and soldered/heat shrunk terminals.



Start/Ign Panel with flip up cover & Pilot Light. **44863**



Start/Ign Panel with flip up cover, Accessory Switch & Pilot Light. **44866**



Start/Ign Panel with flip up cover, Two Accessory Switches & Pilot Lights. **44867**

**Ignition/Start Switch**



Longacre Heavy Duty 40 Amp ignition switch with momentary start, this high quality switch features silver plated contacts and solid brass mechanism. Supplied with simple colour coded harness. **45490**

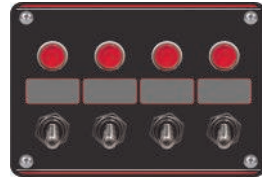


Start/Ign Panel with flip up cover. **44510**



Start/Ign Panel with flip up cover, Two Accessory Switches & Pilot Lights. **44535**

**Genuine Carbon Fibre**



Panel with 4 Accessory Switches & Pilot Lights. **44865**

**Electrical Relays**

Electrical relays for switching or changeover applications supplied complete with removable mounting bracket.



- 12V 30A 4 pin Switching: **RY1**
- 12V 40A 4 pin Switching: **RY11**
- 12V 30/40A 5 pin changeover: **RY14**
- 12V 40A 5 pin changeover: **RY16**

**Micro Relays**

Compact and lightweight 12v 20 AMP rated micro relays for switching or changeover applications

- 4 pin switching: **MRY1**
- 5 pin changeover: **MRY9**



**Micro Relay Holder**

Single relay holder to suit both 4 and 5 pin Micro relays, can be clipped together to make multiple relay block. **MRY100**



**Relay Holder**

Single relay holder which can be clipped together to make multiple relay block. **RB5**



**High Performance Cooling Fans**

This range of European manufactured high output, lightweight cooling fans benefit from sealed bearings, balanced blades and are available with both low profile and high output waterproofed motors. They are rated for continuous use and are available in a range of sizes for mounting either in front (push) or behind the radiator (pull). All housings have four integral 6.5mm mounting holes. The slimline range benefit from a low profile motor allowing easy fitment in space restricted applications whilst the high power units are a little deeper but generate more air flow. We offer a range of compatible accessories to aid installation of these cooling fans.



High Power Electric Cooling Fans									
Blade Dia. (mm)	Type	Max Air Flow m <sup>3</sup> /h	Max Current Draw	Dim "A" Width (mm)	Dim "B" Height (mm)	Dim "C" Depth (mm)	Weight	Part Number	
225	Push	1240	8.7 A	246	246	64	1.6kg	<b>FAN0610HP</b>	
225	Pull	1270	8.8 A	246	246	64	1.6kg	<b>FAN0605HP</b>	
255	Push	1830	10.9 A	269	284.5	66	1.6kg	<b>FAN0212HP</b>	
255	Pull	1960	12.2 A	269	284.5	66	1.6kg	<b>FAN0193HP</b>	
280	Push	1730	8.9 A	294	310	64	1.7kg	<b>FAN0336HP</b>	
280	Pull	1790	9.2 A	294	310	64	1.7kg	<b>FAN0153HP</b>	
305	Push	2130	10.2 A	318.5	336	64	1.8kg	<b>FAN0166HP</b>	
305	Pull	2280	10.9 A	318.5	336	66	1.8kg	<b>FAN0607HP</b>	
330	Push	2300	8.7 A	342	354	67	1.9kg	<b>FAN0430HP</b>	
330	Pull	2390	9.2 A	342	354	67	1.9kg	<b>FAN0429HP</b>	
350	Push	2300	9.1 A	360	371	67	1.9kg	<b>FAN0433HP</b>	
350	Pull	2540	9.6 A	360	371	67	1.9kg	<b>FAN0423HP</b>	
385	Push	3130	9.5 A	400	414	80	2.2kg	<b>FAN0445HP</b>	
385	Pull	3030	9.9 A	400	414	80	2.2kg	<b>FAN0349HP</b>	

**Fan Quick Mount Kit**

This kit comprises four self locking mount straps and pads which allow the fan to be mounted quickly and securely through the radiator core. **FPK01**



**Fan Installation Kit**

A fan installation kit comprising wiring harness with relay and four self locking mount straps and pads which allow the fan to be mounted quickly and securely through the radiator core. **FIK01**



**Rad Core Fan Controllers**

Easy to install fan controllers with a sensor which simply pushes through the radiator core. We offer two versions, a fixed temperature version which switches on at 85° C and an adjustable version with a switching range of 66° C to 115° C. The kit includes the sender, wiring loom and relay.



Adjustable 66-115° C **DER16759**

Fixed 85° C **DER16738**

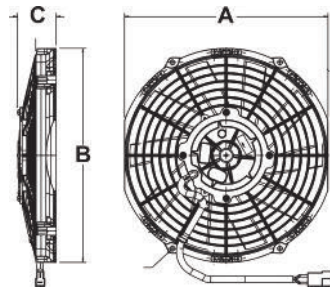
**Electrical Cable**

We stock a modest range of thin wall and general purpose electrical cable in a range of colours and electrical crimp terminals to suit, please refer our website for more details:



Electrical Cable		
Spec	Rating	Part No.
32/0.20 (1.0mm <sup>2</sup> )	16.5A	<b>AC100*</b>
28/030 (2.0mm <sup>2</sup> )	25A	<b>AC101*</b>
65/030 (3.0mm <sup>2</sup> )	27.5A	<b>AC3</b>
65/030 (4.5mm <sup>2</sup> )	35A	<b>AC11</b>

\* Thin wall, high temp cable.



**Budget Switch Panels**

These low cost switch panels come in a variety of options and utilise pre-wired 30 Amp rated switches. Also available with a carbon effect panel.



Budget Ignition/Start Switch Panels		
Accessory	Finish	Part Number
Pilot Light	Plain	<b>GE343</b>
Pilot Light	Carbon	<b>GE343C</b>
1 Switch	Plain	<b>GE344-1</b>
1 Switch	Carbon	<b>GE344-1C</b>
2 Switches	Plain	<b>GE344-2</b>
2 Switches	Carbon	<b>GE344-2C</b>
3 Switches	Plain	<b>GE344-3</b>
3 Switches	Carbon	<b>GE344-3C</b>

Slimline Electric Cooling Fans									
Blade Dia. (mm)	Type	Max Air Flow m <sup>3</sup> /h	Max Current Draw	Dim "A" Width (mm)	Dim "B" Height (mm)	Dim "C" Depth (mm)	Weight	Part Number	
167	Push	450	6.9 A	184.5	184.5	59	1.1kg	<b>FAN0326</b>	
167	Pull	560	7.8 A	184.5	184.5	59	1.1kg	<b>FAN0329</b>	
190	Push	600	5.8 A	202	210	53	1.1kg	<b>FAN0092</b>	
190	Pull	700	5.9 A	202	210	53	1.1kg	<b>FAN0091</b>	
225	Push	1130	7.0 A	246	246	53	1.2kg	<b>FAN0127</b>	
225	Pull	1180	7.6 A	246	246	53	1.2kg	<b>FAN0608</b>	
255	Push	1520	7.1 A	269	284.5	55	1.2kg	<b>FAN0221</b>	
255	Pull	1580	7.3 A	269	284.5	55	1.2kg	<b>FAN0220</b>	
280	Push	1650	7.7 A	294	310	53	1.2kg	<b>FAN0110</b>	
280	Pull	1620	7.9 A	294	310	53	1.2kg	<b>FAN0089</b>	
305	Push	1860	7.2 A	318.5	336	53	1.3kg	<b>FAN0056</b>	
305	Pull	1890	7.1 A	318.5	336	56	1.3kg	<b>FAN0606</b>	

**Cooling Fan Controllers**

Easy to install fan controller available for mounting in-line in the top radiator hose, or in threaded ports. The unique self-sealing version can be mounted directly through the flexible coolant hose wall. They use a maintenance free surface mount sensor to provide adjustable fan control in the range of 70° C to 120° C. Kit includes controller, loom, relay and fittings.



Adjustable Fan Controllers		
Type	Size	Part No.
In-line	25mm	<b>EFC25</b>
In-line	28mm	<b>EFC28</b>
In-line	32mm	<b>EFC32</b>
In-line	35mm	<b>EFC35</b>
In-line	38mm	<b>EFC38</b>
In-line	45mm	<b>EFC45</b>
Threaded	3/8 BSP	<b>EFC3/8BSPE</b>
Threaded	1/8-27 NPT	<b>EFC1/8NPT</b>
Threaded	3/8 BSP	<b>EFC3/8BSP</b>
Threaded	M14x1.5	<b>EFC-M14</b>
Threaded	M22x1.5	<b>EFC-M22</b>
Self Sealing	N/A	<b>EFC-SST</b>



**PMGR Starter Motors**

The PMGR range feature lightweight magnetic field coils and an inline planetary gear reduction system for further weight savings without compromising performance. The Axial model has an internal solenoid making the unit extremely compact in diameter allowing fitment in applications where an external solenoid may foul the chassis or other engine components. We offer a full spares and service facility for these units. Popular applications are listed, many others are available on request as are bespoke installations, please contact us for details.



Calling on over 35 years of experience of rotating electrics WOSP have developed a wide range of high performance starter motors and alternators which offer excellent quality, value for money and an exceptional service and spares backup.

**High Performance Starter Motors**

These lightweight reduction gear starters offer a cost effective and reliable solution to starting high performance engines. All models are based on a Nippon Denso offset gear reduction unit which is then modified to suit each application. Generally smaller and lighter than O.E. units they also offer a significant increase in starting performance, whilst drawing less current often allowing a reduction in battery size for further weight savings. We offer a full spares and rebuild facility for these units. Popular applications are listed below many others are available on request.



Application	PMGR	AXIAL
Aston Martin DB2-6	-	LMS016AX
Coventry Climax	-	LMS022AX
Ford X-flow/BDA/Twin Cam (Replaces 9 tooth inertia)	-	LMS008/9AX
Ford Escort Mk1 X-Flow / Twin Cam with big wing sump	LMS269	-
Ford Duratec RWD to Type 9 or MT75 gearbox	LMS108	-
Ford CVH / Zetec FWD	LMS074	-
Ford Duratec 1.8 Sfi / 2.0 pad mounted	LMS087	-
Ford 2000 SOHC Pinto	LMS281	LMS009AX
Jaguar E-Type 3.8	-	LMS004AX
Lotus Elise S1/S2 K-series engine	LMS126	-
Mazda MX5	LMS041	-
MGA/MGB 3 synchro (Replaces inertia type)	-	LMS002AX
MGB 4 synchro (Replaces pre-engaged type)	LMS144	-
Rover V8	-	LMS055AX
Vauxhall 1.6 / 2.0 Itr 8V / 16V XE	LMS049	-
VW 1.8 / Gti	LMS238	LMS238/AX

Application	Part No.
Aston Martin DB2-6	LMS16
Austin Healey 3000/100-4	LMS005
Caterham K series	LMS018
Ford BDA with ZF gearbox	LMS062
Ford X-flow/BDA/Twin Cam (Replaces 9 tooth inertia type)	LMS008/9
Ford X-flow/BDA/Twin Cam (Replaces 10 tooth inertia type)	LMS008/10
Ford Duratec RWD to Type 9 or MT75 gearbox	LMS108
Ford 2000 SOHC Pinto	LMS009
Formula Ford 2000/Sports 2000 (110 tooth ring gear)	LMS043
Jaguar E-type/MK2 saloon 3.8	LMS004
Lotus Elise/Exige/ZEleven (Toyota ZZ engine)	LMS230
MGA/MGB 3 synchro (Replaces inertia type)	LMS002
MGB 4 synchro (Replaces pre-engaged type)	LMS001
Peugeot 1.6/1.9/2.0 Mi16	LMS469
Porsche 911 1989-97 (G50 gearbox)	CALL
Vauxhall 2.0 Itr XE	LMS086

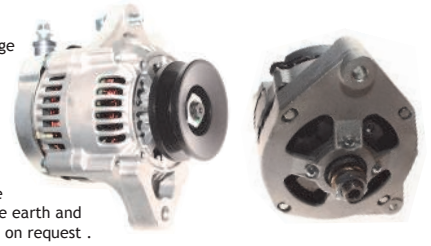
**Dynators**

The WOSP range of dynators have the appearance of a period dynamo but the internals of a 50 amp race alternator. The billet aluminium construction offers a lightweight unit which provides around twice the output of an original dynamo. Dynators are also available in positive earth versions and can also be supplied to suit 6V or 8V electrical systems. Popular applications are listed, many others are available on request.



**Alternators**

WOSP Performance offer a large range of alternators from uprated Lucas standard replacements units to the high output, lightweight Denso range of race alternators. With a huge choice of fitment, pulley and electrical hook up options we can supply a unit to suit almost any application. Popular applications are listed, many others including positive earth and gearbox mounted units are available on request.



Application	Part No.
Lucas C39 type	LMDC39
Lucas C39 type with straight tach drive	LMDC39T
Lucas C40 type (replaces LRD101/LRD107) 144mm long body	LMDC40
Lucas C40 type short 110mm long body	LMDC40S
Lucas C40 type long 155mm body	LMDC40L
Lucas C40 type left hand fitting	LMDC40LH
Lucas C40 type with straight tach drive	LMDC40T
Lucas C40 type with 90° tach drive (tach drive supplied)	LMDC40T90
Lucas C42 type	LMDC42
Lucas C42 type with straight tach drive	LMDC42T
Lucas C42 type with rear drive for power steering	LMDC42RD
Lucas C45 type	LMDC45
Lucas C45 type High Output 65 amp version	LMDC45HO
Lucas C45 type with oval body	LMDC45OB
Lucas C45 type with straight tach drive	LMDC45T
Lucas C45 type early / short body type with straight tach drive	LMDC45TE
Lucas C48 type	LMDC48
Lucas C48 type with rear drive for power steering	LMDC48RD
Magnetti Marelli type	LMDMAR001

Application	Output	Part No.
Lucas ACR replacement L/H (other outputs available)	65A	LMA207
Lucas ACR replacement R/H (other outputs available)	65A	LMA208
Lucas ACR replacement L/H (other outputs available)	80A	LMA653
Lucas ACR replacement R/H (other outputs available)	80A	LMA638
Chevy / Ford V8	80A	LMA004
Ford Duratec (pad mounted)	120A	LMA020
Ford Duratec non ECU governed (pad mounted)	135A	LMA020R
Ford 2000 SOHC Pinto rally with multi groove pulley	95A	LMA222
Rover K-Series lightweight race alternator kit	65A	LMA226
Vauxhall XE	120A	LMB149
2 lug 180° universal lightweight Denso	50A	LMA200
2 lug 180° universal lightweight Denso Single Wire	50A	LMA200SE
2 lug 180° universal lightweight Denso	90A	LMA201
3 lug 180° Super-Duty hairpin wound	180A	LMA227
3 lug 180° universal lightweight Denso	65A	LMA206
4 lug universal Lucas ACR replacement	140A	LMA204
Hewland FT/FG gearbox mounted/driven	50A	LMA212
Hewland LG gearbox mounted/driven (90A also available)	50A	LMA213
Hewland DG/DGB gearbox mounted/driven	90A	LMA214

Telephone: 01327 857991 email: sales@competitionsupplies.com

COMPETITION SUPPLIES LTD



**Tilton Super Starters**

The Tilton 4000 Series severe duty starter motors are the result of over 30 years experience designing and building high performance starter motors. Their powerful 3.0hp motor and gear reduction provides the torque required to start even the most demanding application. Each unit is hand built using top quality components designed and developed to be durable and vibration resistant to maximise reliability. Prior to despatch every starter is dyno tested and serial numbered to ensure quality and traceability.



**Tilton Super Starter Spares and Servicing**



We offer a full rebuild service for the Tilton Super Starter range and stock and supply a large range of service items.

Application	Part No.
Solenoid Standard Duty	54-40001
Solenoid Severe Duty	54-40005
Sprag Clutch Standard Rotation	54-444
Sprag Clutch Reverse Rotation	54-444R
Pinion 9T x 24.9mm Ø Standard Rotation	54-442
Pinion 9T x 29.3mm Ø Standard Rotation	54-043
Pinion 9T x 24.9mm Ø Reverse Rotation	54-042R
Pinion 13T x 33.6mm Ø Reverse Rotation	54SD-042R-13

**APS Starter Motors**



A range of high powered yet economical reduction geared starter motors available with 1.4kw or 2.0kw motor options and to suit Ford V8 157 Tooth flywheel and Chevrolet V8 153 and 168 tooth flywheel applications.

Application	Part No.
Chevy V8 1.4kw 153T/168T ring gear	10001
Chevy V8, 2.0kw 153T/168T ring gear	20001
Ford V8 1.4kw, 157T 0.375" from starter mount face to ring gear	10018
Ford V8 2.0kw, 157T 0.375" from starter mount face to ring gear	20018

**Speed System**

Combines a high performance soft cut rev limiter and an ultra bright, remote mount 10mm LED shift light in a single compact unit.  
OMSY5



**Shift Light Pro**

Highly accurate shift light with an ultra bright, remote mount 10mm LED.  
OMSLP



**Shift Light Sequential**

The remote LED module contains 5 incrementally lighting LEDs. Both the final shift point & the increments between LED lighting are user definable.  
OMSL5



**Rev Limiter Clubman**

Offers a switchable choice between soft and hard cut. Available for both single coil applications and a twin coil version for 4 cyl DIS engines.  
Single coil: OMRLC  
Twin coil: OMRLCT



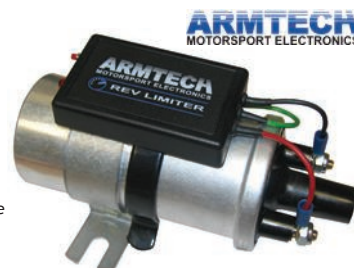
**Rev Limiter & Launch Control**

Similar to the Rev Limiter Clubman but with the addition of an auxiliary rev limit that can be operated via the supplied switch allowing consistent starts to be made. Available for both single coil applications and a twin coil version for 4 cyl DIS engines  
Single coil: OMRLCLC  
Twin coil: OMRLCLCT



**Coil Mounted Rev Limiter**

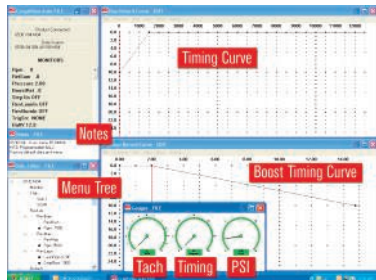
The Armttech rev limiter utilises the Intelligent Misfire System for a smooth, safe limiting action. The nylon coated spring clip and simple 3 wire hook up allows installation in minutes. The rev limit is set by revving the engine to half the desired setting.  
COIL NOT INCLUDED  
15RL01



**MSD IGNITION**

**Programmable 6AL-2**

Utilising the supplied, simple to use, MSD Pro-Data+ software you can now program your own custom ignition timing curve down to 1/10° increments every 100rpm with the option to incorporate stepped or ramped advance/retard points that are adjustable between 0 and 2.5 seconds. For forced induction engines the addition of a 1-5V MAP sensor will allow a timing curve based on boost pressure. The unit incorporates 3 individually set rev limiters of which 2 are controlled by external switches for launch control or burnouts. Supplied with Pro-Data+ software disc, anti-vibration mounts and a wiring harness which includes a tacho signal output. USB to Serial adapter required to connect to computers without a serial port.  
6530



**6AL-2**

All the benefits of the Digital 6AL but featuring a second rev limiter than can be activated by a switch on the steering wheel or clutch pedal to enable consistent starts without the danger of too much wheel spin or the engine bogging down. Each rev limiter can be easily set in 100 rpm increments using the rotary dials on the side of the unit. Supplied with anti-vibration mounts and a wiring harness which includes a tacho signal output.  
6421



**Digital 6AL**

High quality microprocessor controlled ignition system for 4, 6 or 8 cylinder engines that utilises MSD's Multiple Spark Discharge technology. An integrated Soft Touch rev limiter is easily set using two rotary dials set into the top of the unit. Trigger input can be by way of contact breaker points, magnetic pickup or an amplifier distributor. Supplied with anti-vibration mounts and a wiring harness which includes a tacho signal output.  
6425



**PerTronix Flame-Thrower Coils**

Whilst ideal for use with the PerTronix Ignitor ignition modules their 40,000 volt Flame-Thrower ignition coils can benefit virtually any distributor type inductive system. Higher voltage allows larger plug gaps providing increased power and better throttle response whilst the oil filled design provides effective heat control. A range of internal resistances are available in order to optimise the coil for the application.  
3 Ω Coil 4 & 6 Cyl: 40511  
1.5 Ω Coil 8 Cyl: 40011



**MSD Blaster 2 Coils**

A low resistance, high output ignition coil that is suitable for use with the MSD ignition systems detailed above.  
8202



Blaster 2 coil supplied complete with 0.8 Ω ballast resistor for use with contact breakers or other 12V ignition systems.  
8203



**Blaster HV Coil**

The Blaster High Vibration Coil combines a sturdy metal housing and internals completely potted with a premium grade epoxy to completely encase the coil's primary and secondary windings. This protects the coil's internal components from high and low frequency vibrations that are commonly experienced in competition applications.  
8222



**Bosch Coil Bracket**

Steel Coil mounting bracket from Bosch we have these stripped and re-plated to provide the quality of finish required for competition car applications. Suitable for use with all coil types listed here.  
9221081279



**Bosch High Performance Ignition Coils**

We offer two ignition coils from Bosch with dependable quality, reliability and performance. Both are for use in ignition systems using either points or electronic modules with points type dwell. The Bosch "Blue" coil requires a 12v supply and is ideal for 4 and 6 cylinder applications whilst the Bosch "Red" coil is for use with a ballast resistor to provide increased energy whilst cranking and is suitable for up to 8 cylinder applications. Coils are supplied without clamps which are available separately.



- Bosch Blue Coil: 0221 119 027
- Bosch Red Coil: 0221 119 030
- Bosch Resistor: 0227 901 014
- Bosch Coil Clamp: 9221 081 279

**MSD Super Conductor 8.5mm Ignition Leads**

MSD 8.5mm Super Conductor ignition lead combines an extremely low resistance of less than 50 Ω per foot with excellent Electro Magnetic Interference suppression thanks to its spiral wound copper alloy conductor. Available in a range of universal kits to suit 4, 6 or 8 cylinder engines pre-fitted with either a multi angle or 90° spark plug terminal on one end. The leads can then be cut to length before installation of the supplied 90° terminal to the coil/distributor end. We are also able to supply the lead off the roll with a wide range of terminals for those wishing to make their own leads or we can make them to your specification. Please contact us for details.



- 4 Cyl multi angle: 3104
- 4 Cyl 90°: 3114
- 6 Cyl multi angle: 3106
- 6 Cyl 90°: 3116
- 8 Cyl multi angle: 3108
- 8 Cyl 90°: 3118



**PerTronix Ignitor**

For over thirty years, the Ignitor has proven itself in competition applications. The Ignitor replaces contact breakers or O.E. electronic ignitions with a dependable, self-contained and maintenance free electronic ignition system. Easy to install and nearly undetectable being housed entirely within the distributor it is also ideal for triggering our MSD ignition systems above. Available for most distributor types, please contact us with your requirements.



For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)

**Tablet Computerscales**

The future of chassis setups, tablet based systems have a much greater calculating and storage capacity than dedicated scale control box systems. These scales are not an add-on to an existing model, they have been designed exclusively as a tablet based system. The wireless signal goes directly from the pads to the tablet without any bulky re-transmitter boxes and the versatile tablet will be useable with further chassis set-up 'apps' Longacre have under development. The scale sets can be supplied complete with a quality 7" tablet including stylus, screen protector and protective case or without a tablet for those who already have a suitable Android device. The supplied tablet comes pre-loaded with the Computerscales App and is ready for use. For those buying a system without a tablet the app can be downloaded for free, it also has a demo mode with sample data to allow you to try before you buy.



**Pads**

- Batteries: 3 x AA per pad.
- Silver carry case to house electronics & cables.
- CNC Finish pads for ultimate accuracy.
- Low profile pads available in 30 or 38cm options.
- Pad capacity (each): 30cm 500kg, 38cm 680kg.

**Tablet**

- Quality 7" Tablet.
- Bright Sunlight screen mode for easier viewing outdoors.
- Memory: 50 Setups.
- Tablet OS: Android.
- Storage case, screen protector and stylus included.

Tablet Computerscales			
Pad Size	Pad Capacity (each)	Tablet Included	Part Number
300mm	500kg	Yes	M72691
300mm	500kg	No	M72693
380mm	680kg	Yes	M72715
380mm	680kg	No	M72718

**Longacre® COMPUTERSCALES®**  
 Load cells and scale systems from the standards traceable to the American National Institute of Standards and Technology (NIST) and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability. Accuracy is equal to 0.1%.

**Have an Android Device? Save £££**

If you already have a suitable android device then simply download the free app and save by purchasing a scale set less tablet.



**Pad Options:**  
 Available with either 30cm or 38cm pads.



**Longacre Accuset II Scale Set**

A simple to use accurate corner weight scale set. Simply push a single button to show all 4 wheel weights and the cross weight and push a second to see all partial %'s. This scale system also includes a single slot memory allowing a baseline set-up to be saved for easy comparison.

- Heavy Duty Red Hi-Flex Cables with Billet AN Connectors.
- Angled display for clearer viewing.
- Silver carry case to house electronics & cables.
- Satin Finish pads flat to within 0.25mm.
- Set of four 38 x 38cm Low profile pads.
- 680kg per pad capacity.

M72593



**Longacre Wireless Accuset II Scale Set**

A simple to use accurate wireless corner weight scale set. Simply push a single button to show all 4 wheel weights and the cross weight and push a second to see all partial %'s. This scale system also includes a single slot memory allowing a baseline set-up to be saved for easy comparison.

- Wireless Modules | Completely Enclosed within the pads to prevent damage.
- No Fragile antenna or external modules.
- Uses high security wireless protocol.
- Angled display for clearer viewing.
- Baseline setup memory for comparison to current weights.
- Satin Finish pads flat to within 0.25mm.
- 38 x 38cm Low profile pads .
- 680kg per pad capacity.

M72702



**Longacre Single Seater Scale Set**

A simple to use accurate corner weight scale set designed to provide the accuracy needed for precise single seater and sports prototype set ups. Simply push a single button to show all 4 wheel weights and the cross weight and push a second to see all partial %'s. This scale system also includes a single slot memory allowing a baseline set-up to be saved for easy comparison.

- Heavy Duty Yellow Cables with Billet Connectors & Locking Rings.
- Angled display for clearer viewing.
- Silver carry case to house electronics & cables.
- CNC Machined Pads for accurate set ups.
- 500kg per pad capacity.
- 30 x 30cm Low profile pads.

M72591



**Longacre Computer Scale Set**

A simple to use accurate corner weight scale set. Simply push a single button to show all 4 wheel weights and the cross weight and push a second to see all partial %'s. This scale system also includes a single slot memory allowing a baseline set-up to be saved for easy comparison.

- Heavy Duty Red Hi-Flex Cables with billet AN Connectors.
- Angled display for clearer viewing.
- Silver carry case to house electronics & cables.
- Powder Coated Pads.
- 500kg per pad capacity.
- 30 x 30cm Low profile pads.

M72582



email: sales@competitionsupplies.com

Telephone: 01327 857991



**Longacre Scale Pad Levellers**

Aluminium fabricated scale pad levellers suitable for use with either 300 or 380mm scale pads. These levellers allow a quick and accurate setup to be achieved anywhere. Four heavy duty swivel feet on each leveller provide the height adjustment.  
**72900**



**Aluminium Turn Plates**

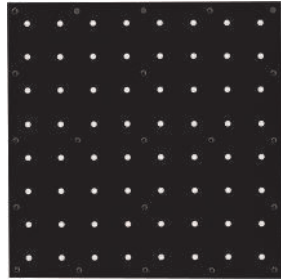
Low Profile 25mm tall aluminium turn plates reading to 0-30° in 0.5° increments. Free floating in two directions to eliminate bind and can be zeroed whilst in use.



**Aluminium Turn Plates (Pair) 79800**

**3D Ball Roller Slider Pads**

These pads are designed exclusively for use under the front wheel scale pads and are supported on ball bearings made from a low friction polymer. They allow the scale pad to move both side to side, front to back and rotate meaning corner weights can be checked whilst the wheels are turned allowing the impact of different caster settings to be assessed. They are supplied complete with two spacers to re-level the rear pads and can be used on any smooth/level floor surface.  
"3D" Ball Roller SideSliders™  
(2 plates & 2 spacers): **72875**



**Bump Steer Gauge**

Longacre's updated bump steer gauge incorporates a new precision wheel plate machined from 10mm thick T6 aluminium Billet for the ultimate in accuracy. Anodised and laser etched.

- New compact billet & tube design frame with increased rigidity for the best accuracy. Bright dip anodised the simplified design uses a single indicator to display the exact amount of bump steer within .001".
  - Simplest and most accurate way to measure critical bump steer.
  - Extended height design allows bump steer to be checked at ride height or on stands.
  - Blank wheel plate simply drill to the required wheel stud patterns.
- 79010**



**Digital Camber/Caster Gauge**

Three leg folding billet aluminium frame with accurate digital level reading to 0.1°. Simply hold the frame against the wheel rim to take your measurements, no additional adapters are required. Two versions are available the smaller for 12 to 17" wheels and the larger for 17 to 22" wheels. Caster function means the caster can be read directly from the display and the digital level has both back light and hold functions and is easily removable allowing it to be used for other purposes. Kit comprises billet aluminium frame, digital level and robust silver storage case.

**12 to 17" Wheels: 78295**  
**17 to 22" Wheels: 78298**



**Billet Stagger Gauge**

Tyre stagger gauge with 10mm thick billet arms, close tolerance square tube design for accurate results with a scale on two sides making it easy to read with tyres on the car or flat on the ground. Measurement range of 158cm to 279cm circumference.  
**50840**



**Ride Height Gauges**

Ride height gauges with dual metric and imperial scales. Can be zeroed to allow for set up platform or scale pad height. Magnetic end holds tape to the steel chassis frame. Available in two lengths and allows ride height to be checked dynamically.  
**Short 61cm: M78320**  
**Long 92cm: M78324**



The Mini ride height gauge, does not have a zeroing facility, or the magnetic end and must be removed to be read but none the less is a simple and effective tool for measuring ride height.  
**Mini Ride Height Gauge: 78318**

**Magnetic Digital Camber/Caster Gauge**

A super accurate yet cost effective digital caster/camber gauge that reads to .1° (1/10°). Supplied complete with updated flush face adapter plate incorporating eight premium "Rare Earth" magnets to ensure secure retention and a padded silver carrying case. Caster function means the caster can be read directly from the display requiring not additional calculation. The digital level is easily removable allowing it to be used for other purposes such as wing angles chassis rake etc. Backlight function allows use in dark areas and a hold feature for hard-to-reach places.  
**78290**



**Quick Lift Jacks**

Available in three different models these durable powder-coated steel quick lift jacks are suitable for a wide range of saloon, GT & formula car applications. All feature a very low closed height and are designed to locate beneath the differential and front or rear chassis members, raising the car to a fixed height in one swift movement. Extra-long, detachable shaped handle provides excellent leverage and nylon roller wheels allow rapid maneuverability.



**Digital Levels**

Simple to use and accurate digital levels reading from 0-90° in 0.1° increments and can be field calibrated to maintain accuracy. The Pro version supplied in a silver storage case, has a caster function, it incorporates a back light and also has a hold feature allowing it to be removed and read when being used in inaccessible places.  
**Standard Model: 78310**  
**Pro Model with case: 78311**



**Chassis Stands**

Robust powder coated steel chassis stands available in a range of sizes. The small and medium chassis stands incorporate a large footprint for stability and flat feet on to prevent damage to floor and work surface whilst the large and XL stands fold down for ease of transport and storage. All chassis stands are supplied as pairs.  
**M7259**



Chassis Stands				
Size	Height	Width	Weight (Per Stand)	Part No
Small	152mm	559mm	1.4Kg	BGR128P
Medium	178mm	762mm	2.4Kg	BGR127P
Large	457mm	533mm	3.6Kg	BGR126P
XL	610mm	787mm	5.2Kg	BGR125P

Quick Lift Jacks					
Version	Closed Height	Lifting Height	Length	Weight	Part No
Short Formula	50mm	210mm	790mm	8.5Kg	BGR152P
Long Formula	50mm	210mm	1190mm	10.5Kg	BGR151P
Saloon/Rally	55mm	360mm	1280mm	11.8Kg	BGR150P

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)



### Ultimate Pro Digital Tyre Pressure Gauge

Our most accurate tyre pressure gauge. 0-100 P.S.I. (0-7 BAR) range in 0.1 P.S.I. (0.01 BAR) increments and accurate to 0.1 PSI (0.1%). Has a memory for all 4 tyre temperatures and when used in conjunction with the optional temperature probe it can also be used as a tyre pyrometer and store 12 temperatures. This gauge also features a temperature compensating option which when used in conjunction with the tyre temperature probe it corrects the pressures to a standard temperature (26.6° C) ensuring correct pressures are achieved on track. Supplied in a robust padded silver storage case.

Ultimate Tyre Pressure Gauge (No Temp Probe): **53053**  
 Ultimate Tyre Pressure Gauge c/w Temp Probe : **53050**  
 Temp Probe Only: **50730**



### Professional Digital Tyre Pressure Gauge

Designed with the motorsport technician and paddock use in mind, the Stack Professional Tyre Pressure Gauge delivers superior performance and durability utilizing solid state electronics with signal conditioning circuitry for temperature and calibration compensation for high precision readings (+/-0.25%) and unrivalled reliability.

- Engineered for the demanding conditions of motorsport.
- User Selectable Units (PSI, BAR, MPa).
- Backlit display for night time use.
- Button operated Peak Hold and Zero.
- Calibration Functions.
- Convenient Remote Pressure Bleed.
- Automatic power down after 5 min. of inactivity to conserve battery life.
- Includes Composite Protective Carrying case.

Tyre Pressure Gauge: **5T262163**



### Deluxe Tyre Pressure Gauges

Deluxe tyre pressure gauges come with a large 63mm Glow in the Dark face, 43cm ultra flexible hose and both angle and ball chucks. The Deluxe pressure gauge holds the pressure reading until it is released from the gauge and also has a bleed button for faster pressure setting.

0-15 PSI: **52033**  
 0-30 PSI: **52023**  
 0-40 PSI: **52013**  
 0-60 PSI: **52003**  
 0-4 BAR: **52073**



### Standard Tyre Pressure Gauges

Standard analogue tyre pressure gauges come with a 51mm face, 35cm ultra flexible hose, air bleed button and both angle & ball chucks.

0-30 PSI: **52024**  
 0-60 PSI: **52004**

The standard digital tyre pressure gauge has a 51mm face and large number digital display, switchable between PSI and BAR. Reads in 0.2 PSI increments and accurate to 0.8%.

Digital 0-60 PSI (0-4 BAR): **53006**



### Roll Cage X Bar Gusset

Mild steel reinforcement gusset to suit 38mm roll cage tubing available with or without swaged holes to improve strength and reduce weight.

With Holes **GRP5500**  
 No Holes **GRP5500P**



### Carbon Door Bar Protector

High Quality ,self adhesive, flexible carbon strip for applying to door bars to protect the paintwork from foot scuffs.

355mm x 50mm.  
 Sold each: **RCP**



### Pyramid Navigators Foot Rest

Lightweight folded aluminium navigators footrest.

**GRP4080**



### Longacre Engine Leakdown Tester

Monitor engine wear and easily detect problems with piston rings, valve seats and head gaskets. Includes 14mm spark plug connector and hose. Requires a compressed air source.

**73010**



### Aluminium Door Handle

A lightweight aluminium ,internal pull, door handle with a black anodised finish.

**GRP3790**



### Foot Rest With Sides

Fabricated aluminium navigators footrest with welded sides to ensure rigidity.

**GRP4060**



### Pro Digital Tyre Pressure Gauge

A professional quality digital tyre pressure gauge. User selectable 0-60 PSI or 0-4 BAR range reads in 0.1 PSI/0.01 BAR increments and is accurate to 0.3%. Dual bleed buttons allow fast pressure setting and both ball and swivel chuck options are included as is a robust padded silver storage case.



Pro Digital Tyre Pressure Gauge: **53000**

### Magnum Tyre Pressure Gauges

Magnum tyre pressure gauges come with a luminous 89mm face, 43cm ultra flexible hose, silver carry case and both angle and ball chucks. They hold the pressure reading until it is released and also have dual bleed buttons for faster pressure setting.

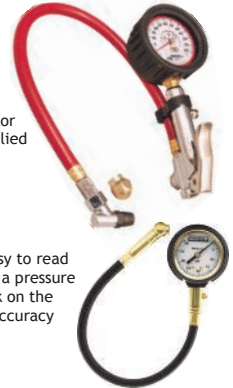
0-30 PSI: **52021**  
 0-40 PSI: **52011**  
 0-60 PSI: **52001**



### Quick Fill Tyre Inflator

Deluxe analogue 0-60 PSI tyre pressure gauge with a 63mm face which incorporates a lever activated quick fill inflator with an air bleed button. Supplied with both angle & ball chucks.

**0-60 PSI Inflator: 52009**



### Clubman Tyre Gauge

Useful 0-40 psi range on an easy to read 50mm Ø dial face. Fitted with a pressure bleed valve and a swivel chuck on the end of a 30cm flexible hose. Accuracy +/- 1%.

**ALL44077**

### Deluxe Tyre Pyrometer

Deluxe tyre pyrometer with accurate, super-fast response electronics, peak temp recall, low battery indicator and auto shut-off. 1000° C range with optional brake/surface probe. Switchable between °C and °F it is supplied complete with curly cord tyre probe and a robust storage case.

**50640**

Brake/surface probe: **50740**



### Standard Tyre Pyrometer

Robust pyrometer with accurate, fast response electronics. 1000° C range with appropriate probe (tyre probe max is 260° C) it is supplied complete with a straight cord fixed tyre probe. Switchable between °C and °F. Also accepts the optional surface probe for brake disc temperatures listed above.

**50635**

### Drivers Foot Plate

Protect the footwell in this high wear area with our lightweight aluminium drivers footplate. 34cm x 35cm.

**GRP4090**



### Drivers Foot Rest

Improve ergonomics and reduce clutch wear with our lightweight folded aluminium drivers footrest.

**GRP4100**



**Premium Tank Tape**

Top quality easy to tear poly coated cloth tape. High tack, clean peel with a water resistant finish.  
50mm x 50m.



Black: AT175BK  
Blue: AT175BL  
Red: AT175R  
White: AT175W

Green: AT175G  
Silver: AT175S  
Yellow: AT175Y

**Tank Tape**

A quality tank tape that is available in popular colours not covered by the premium range.  
50mm x 50m.



Dark blue: GE98B Dark green: GE98G

**Aluminium Foil Tape**

Ideal for sealing bulkheads and retaining wheel weights.  
50mm x 45m.  
AT500



**Translucent PVC Tape**

Commonly used for protecting lights, wishbones and bodywork from stone chip damage.  
50mm x 33m.  
AT27



**Anti-Slip Tape**

Self-adhesive anti-slip tape perfect for use on pedals or in footwells. Sold per metre.  
50mm Wide:  
H3401-50-18.3BLK  
100mm Wide:  
H3401-100-18.3BLK



**FIA Approved Roll Cage Padding**



The Lifeline range of FIA approved roll cage padding is supplied in 600mm lengths that can be easily cut to suit. Supplied with heavy duty adhesive tape.  
32mm: 451-100-004 38/40mm: 451-100-001  
45mm: 451-100-002 50mm: 451-100-003  
60mm: 451-100-005



**Roll Cage Padding**

A medium density fire retardant roll cage padding with offset hole suitable for clubman race and rally applications where FIA spec padding is not mandated. Length: 1 metre approx.  
Black: GE950B  
Red: GE950R  
Blue: GE950BL  
Grey: GE950G  
Yellow: GE950Y



**Window Film**

Clear anti-shatter film for application to glass side and rear windows as per MSA and FIA regulations. 95% UV protection. 86% heat rejection  
400 x 50cm: GE120



**Lockwire Pliers**

The use of lockwire remains one of the best ways to avoid fasteners coming loose. These pliers offer great value for money and feature an end bearing for smoother, faster wire twisting.  
10.75"/273mm overall length. LWP8  
8.25"/210mm overall length. LWP6



**Lockwire**

Stainless steel lockwire supplied in a 454gm centre feed tub and available in four diameters.  
Ø 0.51mm (0.020"): LW020  
Ø 0.63mm (0.025"): LW025  
Ø 0.81mm (0.032"): LW032  
Ø 1.04mm (0.041"): LW041



**Mud Flaps**

Highly flexible and extremely tough, these 4mm thick P.V.C. mud flaps meet MSA/FIA requirements. Just cut to suit the application. Stocked in black and red. Also available in blue, white or yellow.  
2 Pieces 50 x 30cm: GE994



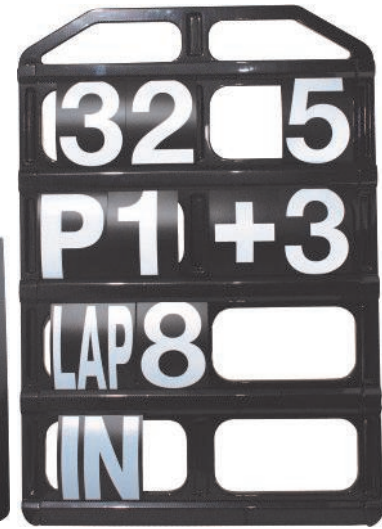
**Mud Flap Brackets**

Universal aluminium mud flap mounting bracket.  
56 x 27 x 27mm.  
GE995



**Lightweight Moulded Pit Boards**

Made from a durable yet lightweight plastic with improved number retention. Available in either a black grain or carbon look finish and as either 3 or 4 row. All boards are supplied complete with a number incorporating easy access number storage compartments.  
3 Row: 59 x 62cm  
4 Row: 92 x 66cm  
3 Row Black: PB3B  
3 Row Carbon Effect: PB3C  
4 Row Black: PB4B  
4 Row Carbon Effect: PB4C  
Carry Case Black: CCPB4B  
Carry Case Carbon Effect: CCPB4C  
Spare number set: PBNW



**Alloy Frame Pit Boards**

Ergonomic aluminium tubular frame 4 row pit boards with a silver anodised finish. They are supplied complete with a 38 piece number set and an optional carry case is available which incorporates individual easy access number storage compartments. The large pit board is supplied with oversize 240mm tall numbers whilst the standard has 178mm tall numbers.  
Standard: 86 x 64cm.  
Large: 120 x 74cm.



Number Colour	Standard				Large			
	White	Yellow	Green	Orange	White	Yellow	Green	Orange
Pit Board Kit	BGR260W	BGR260Y	BGR260G	BGR260O	BGR250W	BGR250Y	BGR250G	BGR250O
Spare Number Set	BGR262	BGR262Y	BGR262G	BGR262O	BGR252	BGR252Y	BGR252G	BGR252O
Carry Case	BGR263				BGR253			

**Multi-Chrono 4 Car Stopwatch**

Ideal for multi-car teams or those wishing to keep an eye on the competition. This watch allows up to 4 cars to be timed simultaneously for up to 99 laps plus up to 9 splits per lap. At the end of the session you can display the fastest, slowest and average lap time for each car. Cars can be timed starting together or separately.  
AIM1



**Fastime 10 Stopwatch**

100 lap memory and a 3 line display that shows session elapsed time, last lap time and current running lap time. Also incorporates a count down timer, clock and calendar.  
F10



**Fastime 4 Stopwatch**

Basic motorsport stopwatch which can be set to record either cumulative split times or lap times that start from zero each time.  
F4

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)



Established in 1982, Lifeline is the leading manufacturer of fire safety equipment and fire safety systems to the motorsport industry. A continuous commitment to research and development ensures that you have the most innovative and cutting edge products available, the same products as used by the majority of world & national championship-winning drivers & constructors.

## zero 360

Lifeline's latest generation of fire suppression system consists of 2 cylinders, one for the engine bay & one for the cockpit area, activated simultaneously by a newly developed intelligent control box that also continually monitors the integrity of the system. The engine cylinder features a dual discharge system that initially knocks the fire out before a secondary discharge of a special coolant fluid cools the area preventing re-ignition. The cockpit area is protected by a second cylinder of extinguishant with the option of having the nozzle either attached to the cylinder or remotely mounted to aid installation. There are two sizes of kit dependant on the area of the cockpit zone. 2kg for cockpits of 1.6–2.3 M<sup>3</sup> or 3kg for cockpits of 2.3–4.0 M<sup>3</sup>. In both types the engine cylinder remains the same size. There is no weight advantage in trying to use the small unit as this unit is ballasted to the same weight as the 3kg unit as required by the FIA.

The Zero 360 systems have been mandated for the WRC in 2016 and are officially recommended for use in all other categories.

### Zero 360 Extinguisher Systems



Lifeline's latest generation of fire suppression system consists of 2 cylinders, one for the engine bay & one for the cockpit area, activated simultaneously by a newly developed intelligent control box that also continually monitors the integrity of the system.

The engine cylinder features a dual discharge system that initially knocks the fire out before a secondary discharge of a special coolant fluid cools the area preventing re-ignition. The cockpit area is protected by a second cylinder of extinguishant with the option of having the nozzle either attached to the cylinder or remotely mounted to aid installation.

There are two sizes of kit dependant on the area of the cockpit zone. 2 Kg for cockpits of 1.6–2.3 M<sup>3</sup> or 3Kg for cockpits of 2.3–4.0 M<sup>3</sup>. In both types the engine remains the same size. There is no weight advantage trying to use the small unit as this unit is ballasted to the same weight as the 3 Kg unit as required by the FIA.

The Zero 360 systems have been mandated for the WRC in 2016 and are officially recommended for use in all other categories.



Cockpit Area	Cockpit Nozzle	Part No.
1.6–2.3 M <sup>3</sup>	Integral	105-001-001
1.6–2.3 M <sup>3</sup>	Remote	105-001-002
2.3–4.0 M <sup>3</sup>	Integral	105-001-003
2.3–4.0 M <sup>3</sup>	Remote	105-001-004

The Zero 360 and Zero ZERO range of extinguishers deliver outstanding performance with a considerable weight saving over the equivalent Zero 2000 AFFF systems. Both systems are suitable for use with diesel or methanol fuels. The Zero ZERO system for single seater and open sports prototype cars is the smallest and lightest FIA approved system for this class of car.

### Zero ZERO Extinguisher Systems

Suitable only for single seater and open sports cars, this system utilises 1.5 Kg of the latest gaseous extinguishant and is the smallest and lightest FIA approved system available for this class of car. Each system is supplied with a fitting kit and instructions. The option of remote discharge has the benefit of leaving a liquid, un-pressurised product. Once the pressure unit is removed the hazardous goods transportation requirements common to many extinguisher products can no longer apply.



#### 0o 1.5 Kg Mechanical System



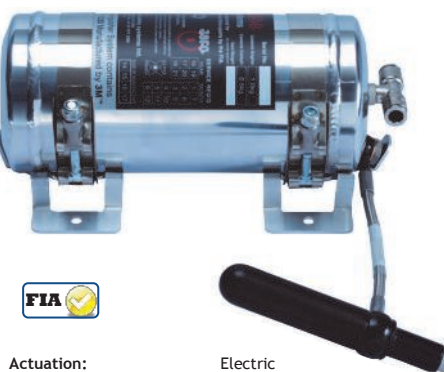
Actuation: Mechanical  
 Size including firing head: (L) 284mm x Ø 100mm  
 Full bottle weight: 2.39 Kg  
 104-150-001

#### 0o 1.5 Kg Electrical System



Actuation: Electric  
 Size including firing head: (L) 254mm x Ø 100mm  
 Full bottle weight: 2.15 Kg  
 104-150-002

#### 0o 1.5 Kg Remote Discharge Electrical System



Actuation: Electric (remote discharge)  
 Size including firing head: (L) 210mm x Ø 100mm(Dia)  
 Full bottle weight: 2.10 Kg  
 104-150-003

### Fire Extinguisher Servicing & Refills

Motorsport regulations require fire extinguisher systems to be serviced every 2 years. We have full factory approved servicing and refill facilities for Lifeline motorsport fire extinguisher systems at our Silverstone premises. In order to be able to service your extinguisher regulations require that:



- The bottle is no more than 10 years old
- The bottle is in good condition
- It is no more than 4 years since it last had a Lifeline approved service. Please contact us for further details & pricing.

### Zero 360 Extinguisher Systems

Superb fire knockdown capability the ability to extinguish fires that are not in the line of sight of the nozzle combined with a weight saving of up to 2 Kg over the equivalent AFFF system make the Zero 360 range the professional's choice. The standard 2.25 Kg kit includes 6 nozzles (4x engine bay 2x cockpit) whilst the 3 Kg kit is supplied with 2 extra nozzles that can be used to cover other high risk areas such as the fuel tank or hydraulic systems.



#### New Lower Priced System!

Now available in the Fire Marshal range with a steel bottle offering the superior fire suppression & compact size of the Z360 system at a lower price point than it's aluminium bottled siblings.



#### 2.25 Kg Steel Bottle Mechanical System



Actuation: Mechanical  
 Size including firing head: (L) 273mm x Ø 125mm  
 Full bottle weight: 3.70 Kg  
 104-225-011

#### 2.25 Kg Aluminium Bottle Mechanical System

Actuation: Mechanical  
 Size including firing head: (L) 273mm x Ø 125mm  
 Full bottle weight: 3.27 Kg  
 104-225-001

#### 2.25 Kg Aluminium Bottle Electrical System



Actuation: Mechanical  
 Size including firing head: (L) 228mm x Ø125mm  
 Full bottle weight: 3.01 Kg  
 104-225-002

#### 3.0 Kg Aluminium Bottle Mechanical System

Actuation: Mechanical  
 Size including firing head: (L) 327mm x Ø 125mm  
 Full bottle weight: 4.14 Kg  
 104-300-002

#### 3.0 Kg Aluminium Bottle Electrical System

Actuation: Mechanical  
 Size including firing head: (L) 283mm x Ø 125mm  
 Full bottle weight: 3.86 Kg  
 104-300-003

### Zero 360 Hand Held Extinguishers

Filled with the highly efficient Zero 360 gaseous extinguishant, these hand held extinguishers offer exceptional performance for their size. All units apart from the 1 Kg unit are FIA approved and can be combined with either the relevant Zero 360 or Zero 2000 plumbed in systems to meet FIA regulations.



Capacity	Max Dimensions	Part No
1 Kg	(L) 341mm X Ø 90mm	203-100-101
2 Kg	(L) 375mm X Ø 108mm	203-100-102
3 Kg	(L) 484mm X Ø 108mm	203-100-103

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COMPETITION SUPPLIES LTD

## MSA Approved Zero 2000 Extinguishers

### Club Fire Marshall 2.25 Ltr



Ideal for the cost conscious competitor, the clubman mechanical kit contains an aluminium bottle filled with 2.25 Litres of Zero 2000 (AFF), mounting frame with 2 over centre securing straps, 3 metres of 6mm tube, T piece, 2 nozzles, 2 pull cables (6ft), decals and fitting instructions.

Actuation: Mechanical Full bottle weight: 3.35 Kg  
Size including firing head: (L) 510mm x Ø 108mm

101-225-001

### Mechanical Fire Marshall 2.25 Ltr



The mechanical Fire Marshall is available with either standard or slimline bottle. Each kit contains an aluminium bottle filled with 2.25 Litres of Zero 2000 (AFF), aluminium mounting cradle with two over centre securing straps, 4 metres of 6mm tube, T piece, bulkhead fitting, two nozzles, two pull cables (1x 1.8m and 1x 3.6m), decals and fitting instructions.

Actuation: Mechanical Full bottle weight: 3.35 Kg

Standard Bottle  
Size including firing head: (L) 300mm x Ø 150mm  
101-225-002

Slimline Bottle  
Size including firing head: (L) 380mm x Ø 125mm  
101-225-003

### Electric Fire Marshall 2.25 Ltr



The electrical Fire Marshall is available with either a standard or slimline bottle. Each kit contains an aluminium bottle filled with 2.25 Litres of Zero 2000 (AFF), aluminium mounting cradle with two over centre securing straps, 4 metres of 6mm tube, T piece, bulkhead fitting, two nozzles, power pack, two plugs with fly leads, two switches, decals and fitting instructions.

Actuation: Electrical Full bottle weight: 3.35 Kg

Standard Bottle  
Size including firing head: (L) 268mm x Ø 150mm  
101-225-004

Slimline Bottle  
Size including firing head: (L) 335mm x Ø 125mm  
101-225-006

### Zero 2000 AFF Hand Held Extinguishers

Hand held extinguishers are supplied complete with mounting brackets & straps. The minimum approved size for motorsport is 1.75 Ltr, although we do stock a 1.0 Ltr version for those requiring a compact unit for track day or road applications. Our standard bottles have a red paint finish, polished bottles are available on request.



Capacity	Max Dimensions	Part No.
1.0 Ltr	(L) 331mm X Ø 90mm	201-100-001
1.75 Ltr	(L) 375mm X Ø 108mm	201-100-002
2.4 Ltr	(L) 440mm X Ø 108mm	201-100-003

## Fire Extinguisher Regulations

Due to the large variation in regulations depending on car type, age, sanctioning body and discipline it is not possible to produce here a comprehensive list of the requirements for every application. However as a guideline, cars competing in the U.K. in MSA club or national events will require a minimum of a 2.25 Ltr Zero 2000 plumbed in system, with rally cars being required to carry an additional 1.75 Ltr Zero 2000 hand held unit. If you then wish to compete in continental Europe even with a UK based series you will often find that you will need to comply with the local rules of the venue which will be generally as per the FIA Yellow book being common with those for FIA international race events i.e. a minimum of a 2.25 Kg Zero 360 or a 4 Ltr Zero 2000 AFF plumbed in system.

Rally cars competing in FIA international events must have a plumbed in system containing at least 3.0kg of extinguishant, meaning a choice of a 3.0 Kg Zero 360 system or a 4 Ltr Zero 2000 AFF system as well as a 2.0kg Zero 360 or 2.4 Ltr Zero 2000 hand held unit. Different extinguishant types may be combined so a Zero 2000 plumbed in system could be used together with a Zero 360 hand held or vice versa, you could also use two 1.75 Ltr Zero 2000 hand helds to meet the 2.4 Ltr FIA requirement. The above are the MINIMUM requirements and specific series my mandate protection in excess of these so please check your regulations.

## Rally Packages

The Lifeline range of rally packages offer a plumbed in system and hand held unit at a lower price than buying the units individually. Packages are available to satisfy both MSA and FIA regulations with a choice of mechanical or electric actuation of the plumbed in system.



MSA/FIA	Plumbed In System	Hand Held	Part No.
MSA	Mechanical 2.25 Ltr Zero 2000	1.75 Ltr Zero 2000	106-225-001
MSA	Electric 2.25 Ltr Zero 2000	1.75 Ltr Zero 2000	106-225-002
FIA	Mechanical 4 Ltr Zero 2000	2.4 Ltr Zero 2000	106-400-001
FIA	Electric 4 Ltr Zero 2000	2.4 Ltr Zero 2000	106-400-002
FIA	Mechanical 2.25 Kg Zero 360	Zero 360 2.0 Kg	105-225-001
FIA	Electric 2.25 Kg Zero 360	2.0 Kg Zero 360	105-225-002
FIA	Mechanical 3.0 Kg Zero 360	2.0 Kg Zero 360	105-300-001
FIA	Electric 3.0 Kg Zero 360	2.0 Kg Zero 360	105-300-002

## Spares & Accessories

To replace damaged items or to supplement the kit contents to facilitate a more elegant installation we stock an extensive range of spare parts and accessories for Lifeline extinguisher systems. Popular items are listed here, much more available on request.

- 6ft Pull cable: 935-100-001
- 12ft Pull cable: 935-100-002
- Black plastic power pack: 941-000-001
- Red die-cast power pack: 941-000-002
- Power pack remote charge systems: 941-000-004
- Din plug and fly lead (standard): 943-101-001
- Plug and fly lead (remote charge): 943-101-005
- Din plug only: 943-101-002
- Brackets and straps: Please Call

## Trigger Switches

Internal/external switch with alloy bezel.

942-100-004

Internal switch with plastic bezel.

942-100-001

External waterproof switch.

942-100-002

Internal switch with flip up cover.

942-100-003



## New Regulations

### FIA Mounting Brackets

From 1st January 2016 all FIA fire extinguisher brackets are required to be of a design that will prevent the cylinder sliding through the clamps in the event of an impact.

Please contact us to purchase the new style brackets to suit your existing system.



## FIA Approved Zero 2000 Extinguishers

### 4 Ltr Mechanical

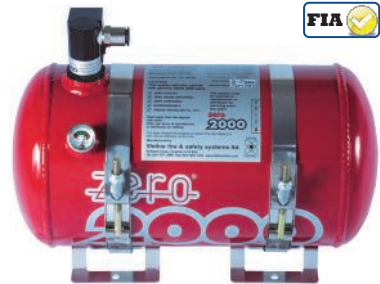


This system is available with a choice of two bottle materials, steel or aluminium. Each kit contains a bottle filled with 4 Litres of Zero 2000 (AFF), aluminium mounting cradle with two FIA specification securing straps, 5 metres of 10mm tube, three T pieces, four nozzles, two pull cables (1x 1.8 and 1x 3.6m), decals and fitting instructions.

Actuation: Mechanical  
Size including firing head: (L) 430mm x Ø 155mm  
Full bottle weight: Steel 6.4 Kg Aluminium 5.1 Kg

Steel Bottle: 102-400-001  
Aluminium Bottle: 102-400-002

### 4 Ltr Electric



Kit contains an aluminium bottle filled with 4 Litres of Zero 2000 (AFF), aluminium mounting cradle with two FIA specification securing straps, 5 metres of 10mm tube, three T pieces, four nozzles, power pack, two plugs with fly leads, two switches, decals and fitting instructions.

Actuation: Electric  
Size including firing head: (L) 311mm x Ø 155mm  
Full bottle weight: 5.1 Kg  
102-400-003



## Extinguisher Tube Fittings - Suit Tube O.D.

Item	6mm	8mm	10mm
Extra Tube (Per M)	951-101-006	951-101-008	951-101-010
In-line Connector	952-406-003	952-408-003	952-410-003
Straight Bulkhead	952-406-002	952-408-002	952-410-002
90 Degree Elbow	952-406-004	952-408-004	952-410-004
90 Degree Bulkhead	952-406-006	952-408-006	952-410-006
T Piece	952-406-001	952-408-001	952-410-001
Y Piece	952-406-005	952-408-005	952-410-005
Zero 2000 Nozzle	955-200-003	-	955-200-004
Zero 360 Nozzle	-	955-300-003	-



For over 20 years ITG have been at the forefront of competition air filter technology with customers from the FIA F1 Championship, WRC, BTCC, Le Mans Series and World Super Bikes to name but a few. **Why foam?** Compared to paper or other filter technologies reticulated polyurethane foam achieves optimum performance in the following key areas: Maximum air flow, filtration efficiency and dust capacity before requiring cleaning or replacement. ITG recommend fitting the tallest element possible but a gap of 13mm average should be left over the top of the filter for air to circulate. If using ram pipes a minimum gap of 19mm (ideally 32mm) should be allowed between the end of the ram pipe and filter.



**Competition Air Filters**

**JC20** Typically used on single filter per carburettor applications. Requires a mounting plate which must be purchased separately.

**JC40** Typically used where a pair of compact carburettors are close together, A-series or B-series on twin SU's for instance. Requires a mounting plate which must be purchased separately.

**JC50** Typically used with twin DCOEs/DHLAs or throttle bodies. Requires a mounting plate which must be purchased separately.

**JC55** Large filter for multiple carburettors/throttle bodies. Requires a mounting plate which must be purchased separately.

**JC100** Large filter for multiple carburettors/throttle bodies. Requires a mounting plate which must be purchased separately.

**Baseplates** A large range of application specific or blank base plates are available for the JC20, JC40 and JC50 range of elements, please contact us for details. Only blank plates are available for the JC55 and JC100 elements

Internal Height	External Height	JC20 (192 x 148mm)		JC40 (379 x 142mm)		JC50 (436 x 148mm)		JC55 (500 x 148mm)		JC100 (608 x 142mm)	
		Standard	Domed	Standard	Domed	Standard	Domed	Standard	Domed	Standard	Domed
25mm	50mm	JC20/25	JC20/25S	JC40/25	JC40/25S	JC50/25	JC50/25S	JC55/25	JC55/25S	JC100/25	JC100/25S
40mm	65mm	JC20/40	JC20/40S	JC40/40	JC40/40S	JC50/40	JC50/40S	JC55/40	JC55/40S	JC100/40	JC100/40S
65mm	90mm	JC20/65	JC20/65S	JC40/65	JC40/65S	JC50/65	JC50/65S	JC55/65	JC55/65S	JC100/65	JC100/65S
100mm	125mm	JC20/100	JC20/100S	JC40/100	JC40/100S	JC50/100	JC50/100S	JC55/100	JC55/100S	JC100/100	JC100/100S

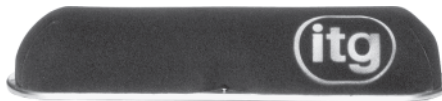
**Megaflow JC10 Filters**

A lightweight competition air filter designed for cars using the Weber DGV/DGAV/DGAS carburettors such as Formula Ford, Sports 2000 and Formula 2 Stock Cars. This filter is supplied with base plate and quick release clips for mounting to the carburettor allowing the filter to be quickly removed to facilitate bodywork removal. Available in two heights allowing extra power/dust capacity where space is not an issue. Overall size 192 x 148mm  
105mm tall: **JC-10**  
155mm tall: **JC-10R**



**Raceair JC70 / 71 Filters**

Originally designed for use on Cosworth DFV and derivative engines, these filters have found favour on many 4 and 8 cylinder applications. These models are designed purely for racing applications and are not recommended for road use. JC70 overall size 503 x 135 x 85mm  
**Element and blank baseplate: JC70**  
**Element only: JC70E**  
JC71 overall size 453 x 135 x 85mm  
**Element and blank baseplate: JC71**  
**Element only: JC71E**



**Carbon Trumpet Tray**

One of the biggest issues normally found with throttle body setups is the fuel injector rail overhanging the ram pipes preventing a normal baseplate and filter to be fitted. ITG's new Carbon Fibre, dished baseplates are available in 30mm and 60mm depths to clear the fuel rail and utilise any of the range of JC50 filter elements.  
**30mm depth: JC50CTT30**  
**60mm depth: JC50CTT60**



**Raceair JC60 Filters**

The JC60 range of universal remote mount air filters are available in three shapes and a large range of sizes. All models feature a spun aluminium neck that is available in a range of diameters from 61-152mm. **Please contact us for more details.**



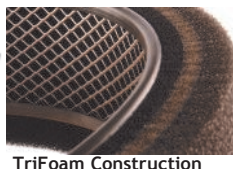
**Ram Pipes**

ITG offer a large range of stub stacks and ram pipes to suit a large range of carburettors and throttle bodies. For those that wish or need to make their own a range of aluminium spinnings with a full radius bell mouth are available. **Please contact us for more details.**



**Profilter Replacement Elements**

For applications where the standard air box is being retained the ITG range of direct replacement air filter elements offer more power, superior dust capacity before a drop in performance and better economy. Constructed using ITG's unique TriFoam system and utilising their expertise in designing air filters for the very top levels of motorsport means that this range of elements are equally suited to competition or road use. **Please contact us for more details.**



**Maxogen Airboxes**

Following years of experience designing induction systems for world championship level rally and touring car teams, ITG now offer a range of purpose designed air boxes containing JC60FC filter foam to form the core of a super efficient air induction system supplying cold, dense air direct to the fuel metering unit. Available in a range of sizes and configurations suitable to suit most applications. **Please contact us for more details.**



**Ram Pipe Socks**

For use where there is insufficient room to fit a regular filter assembly, these socks simply slide over the ram pipe and in the case of the single socks can then be secured with a cable tie. Whilst an inferior solution compared to a proper filter assembly they are certainly preferable to running open ram pipes or gauzes.  
**Single, 60mm I.D. x 125mm: JCS-11**  
**Single, 80mm I.D. x 165mm: JCS-12**  
**Dual, 90mm centres 175 x 120 x 85mm: JCS-21**

**Air Filter Oils & Cleaners**

All foam filters should be oiled prior to use in order to trap the dust as it passes through the filter. ITG offer two types of filter oil:

**Dust Retention Coating**

Suitable for low dust conditions such as circuit racing.  
**20cl aerosol: JDR-1**

**Air Filter Oil**

For more arduous or long life applications such as rallying or road use  
**20cl aerosol: JDR-2**



**Cleaning Kits**

Complete kit to clean and re-oil your filter.  
**50cl cleaner & 20cl JDR-1: CLK-1**  
**50cl cleaner & 20cl JDR-2: CLK-2**

Telephone: 01327 857991 email: sales@competitionsupplies.com

Telephone: 01327 857991

## 600 Series Air Box

The 600 Series sealed air box allows cold, dense air to be channelled from outside of the engine compartment directly to the intake maximising power output. The sealed air box is also quieter than an open system reducing problems complying with the noise limits that are being becoming increasingly stringent at UK circuits. With a depth of just 78mm the air box will allow installation in most applications whilst still being able to accommodate 45mm tall ram pipes. The air box is available in left or right hand fitment and with a choice of 75mm or 100mm inlets. If required the air box can be supplied with a replaceable conical air filter installed and a length of the appropriately sized flexible inlet ducting. Fitment requires a baseplate which must be purchased separately. A range of pre-cut units are available as are blank versions for custom installations.

Air box only: **P/CC60\*\***  
With filter: **P/CC62\*\***  
Baseplate: **Please Call**



**BASEPLATE NOT INCLUDED**

## Rubber Neck Clamp-on Air Filters

Pipercross manufacture a wide range of rubber neck, universal clamp on air filters with neck diameters from 50mm to 146mm. A small selection are shown below, please contact us if a unit is not shown that matches your requirements.



Neck I.D.	MAX O.D.	HEIGHT	PART NO
50mm	100mm	150mm	C0186
60mm	100mm	150mm	PK001F
60mm	150mm	200mm	C0179
70mm	150mm	200mm	C0176
70mm	200mm	200mm	C0177
75mm	100mm	150mm	PK004F
75mm	150mm	200mm	C0182
80mm	150mm	200mm	C0340
85mm	150mm	200mm	C0183
100mm	100mm	150mm	PK009F
100mm	150mm	200mm	C0640
125mm	200mm	200mm	C0190
146mm	200mm	250mm	C0174



The Lifeline range of competition mirrors are constructed using the latest processes from a lightweight, shatter resistant material. Their simple single bolt mounting and unique tension system has undergone extensive testing to ensure a reliable and most importantly stable attachment. All mirrors are available in white or black and with flat or convex lenses.

## MSA Formula Car Mirrors

Reflector size complies with the MSA Blue Book for Formula racing cars competing in the UK. Reflector size: 110 x 52mm.

	Flat	Convex
Black L/H	461-100-001	461-100-005
Black R/H	461-100-002	461-100-006
White L/H	461-100-003	461-100-007
White R/H	461-100-004	461-100-008



## FIA Touring/ GT Car Mirrors

Reflector size complies with the FIA Yellow Book for Saloon, Touring, GT and Sports Cars competing worldwide. Reflector size: 151 x 70mm.

	Flat	Convex
Black L/H	461-103-001	461-103-005
Black R/H	461-103-002	461-103-006
White L/H	461-103-003	461-103-007
White R/H	461-103-004	461-103-008



## FIA Formula Car Mirrors

Reflector size complies with the FIA Yellow Book appendix F3.275:14.3.2 for worldwide competition on formula cars. Reflector size: 151 x 51mm.

	Flat	Convex
Black L/H	461-102-001	461-102-005
Black R/H	461-102-002	461-102-006
White L/H	461-102-003	461-102-007
White R/H	461-102-004	461-102-008



## Centre Mount Sports Car Mirrors

Designed for use on open top Sports Cars but also frequently used as a centrally mounted rear view mirror in Saloon and GT cars. A choice of three stem lengths with a 50mm triangular mounting base. A weld on boss is also available for those wishing to make their own brackets. Reflector size: 201 x 54mm.

Stem Length	Black Flat	White Flat	Black Convex	White Convex
50mm	461-101-001	461-101-002	461-101-003	461-101-004
75mm	461-101-005	461-101-006	461-101-007	461-101-008
100mm	461-101-009	461-101-010	461-101-011	461-101-012



## Wide Angle Rear View Mirror

This wide angle, convex, rear view mirror offers a huge field of vision. Fitted with two 50mm long mounting brackets at 90° to the rear of the mirror incorporating 1/4UNC captive nuts. Available in 355mm and 430mm widths.

355 x 65mm: **ALL76406**  
430 x 65mm: **ALL76407**



## Universal Mounting Brackets

These aluminium universal brackets can be used to mount the wide angle mirrors or many other accessories to a roll cage at a distance of up to 32mm. Supplied singly.  
1.25" / 32mm Tube: **ALL10452**  
1.50" / 38mm Tube: **ALL10453**  
1.75" / 44mm Tube: **ALL10454**



## Longacre Wide Angle Mirrors

Quick and easy to install giving an excellent field of vision the wide angle mirror kits are available in 355 and 430mm reflector lengths and with long or short series brackets to suit either 38mm (1 1/2") or 44mm (1 3/4") roll cage tubing. Mirror also available without brackets for those who prefer to make their own mounts.



Brackets	355mm Mirror	430mm Mirror
No Brackets	22544	22547
Ø:38mm, Length:12-63mm	22535	22531
Ø:38mm, Length:50-140mm	22537	22533
Ø:44mm, Length:12-63mm	22534	22530
Ø:44mm, Length:50-140mm	22536	22532

## Bracket Reducer

Aluminium reducers that allow 44mm (1 3/4") brackets to be used with 41mm (1 5/8") tubing.  
**ALL10445**



## Vitaloni California Mirror

As fitted to many high performance and racing cars during the 70's and 80's. Two bolt mounting on 66mm centres. Maximum reflector size: 125 x 75mm.



## Classic Bullet Mirrors

A classic style aluminium bullet style mirror with an adjustable swivelling reflector. Two bolt fixing on 2"/51mm centres. Available in a choice of finishes: Brushed aluminium (with chrome base), black or chrome plated and a choice of flat or convex reflector. Reflector diameter: 89mm.

	Flat	Convex
Aluminium	LSM2F	LSM2C
Black	LSM2FB	LSM2CB
Chrome	ARM2F	ARM2C



## Stainless Steel Classic Mirrors

Our premium classic bullet mirrors feature an adjustable swivelling reflector. Two bolt fixing on 2"/51mm centres and a polished finish with a choice of flat or convex reflector. Reflector diameter: 90mm.

Flat: **CR1F** Convex: **CR1C**



## Desmo Mirror

A great looking period race mirror with a reflector retaining rim secured by two brass screws and a riveted on mounting. Single bolt fixing with a swivel cup for adjustment (adjustment requires the mounting bolt to be loosened). Brushed aluminium with chrome base and a choice of flat or convex reflector. Reflector diameter: 89mm.

Flat: **RADF** Convex: **RADC**



## Lightweight Dome Mirrors

Single bolt fixing with a swivel cup arrangement for adjustment (adjustment requires the mounting bolt to be loosened). Available in a choice of finishes: Brushed aluminium (with chrome base), black or chrome plated and a choice of flat or convex reflector. Reflector diameter: 89mm.

	Flat	Convex
Aluminium	SB6F	SB6C
Black	SB6FB	SB6CB
Chrome	SB6FC	SB6CC

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)



**Large Adjustable Cockpit Air Vent**

Mounts in a 3 1/4" diameter opening. Can be turned to regulate the degree of ventilation. Retracts inwards to a position almost flush with the mounting surface.  
**CC3251**



**Shallow NACA Ducts**



Compact 2 piece NACA Ducts available in two sizes and in either clear or black.

**Two Piece Air Inlet Scoop**



Air inlet Scoops available in two sizes and in either black or clear plastic.



**NACA Ducts**



**Small NACA Duct**  
Dimensions to outside edge of flange approx. 200 x 100mm. Outlet: 63/51mm O.D.  
**Black IDS-1B Clear IDS-1C**

**Medium NACA Duct**  
Dimensions to outside edge of flange approx. 240 x 120mm. Outlet: 76/63mm O.D.  
**Black IDS-2B Clear IDS-2C**

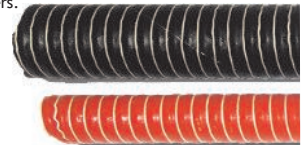
**Round Inlet Duct**

Outside flange Ø198mm. Inside flange Ø155mm. Outlet 1 x 60mm O.D.  
**ID255-80**



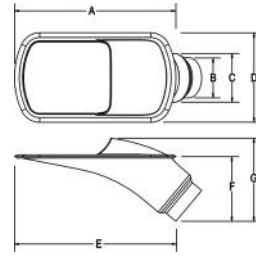
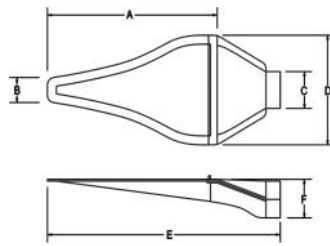
**Flexible Duct Hose**

This highly flexible and versatile hose can be used for all air ducting requirements for engine bay, braking and cockpit. Our ducting is helix wire reinforced and available in 2 versions, the standard construction is in single ply neoprene/glass, whilst our high temperature ducting is a single ply silicone/glass construction. Supplied by the meter in lengths of up to 4 meters.



**Small Adjustable Cockpit Air Vent**

Easily installed adjustable plastic ventilators for use as fresh air intakes or air exhausts. Mounts in a 2" diameter opening. Can be turned to regulate the degree of ventilation. The off position is with the opening pointing down.  
**A-2-100**



**Cockpit Air Vents**

Clear plastic air vents for mounting in cockpit windows to increase air flow. Offered in four sizes:



L:115mm W:60mm D:40mm: **CVAC**  
L:115mm W:50mm D:40mm: **CVBC**  
L:190mm W:50mm D:40mm: **CVCC**  
L:140mm W:85mm D:40mm: **CVDC**

Air Inlet Scoop		
Dim.	Small	Large
"A"	232mm	280mm
"B"	30mm	33mm
"C"	63mm	76mm
"D"	147mm	178mm
"E"	346mm	382mm
"F"	65.5mm	78.5mm
Part No. Black	<b>IN1BLK</b>	<b>IN2BLK</b>
Part No. Clear	<b>IN1C</b>	<b>IN2C</b>

Air Inlet Scoop		
Dim.	Small	Large
"A"	224mm	280mm
"B"	51mm	63mm
"C"	63mm	76mm
"D"	124mm	149mm
"E"	235mm	285mm
"F"	102mm	125mm
"G"	121mm	155mm
Part No. Black	<b>IS1BLK</b>	<b>IS2BLK</b>
Part No. Clear	<b>IS1C</b>	<b>IS2C</b>

**190 x 45mm Inlet Duct**

Dimensions approx. to outside edge of flange with single 51mm O.D. outlet.  
**ID190-45**



**150 x 75mm Inlet Duct**

Dimensions approx. to outside edge of flange Single 63/76mm O.D. stepped outlet.  
**ID150-75**



**152 x 51mm Inlet Duct**

Dimensions approx. to outside edge of flange single 51mm O.D. outlet.  
**ID152-51**



**150 x 75mm Offset Inlet Duct**

Dimensions approx. to outside edge of flange single offset 63/76mm O.D. stepped outlet.  
**ID150-75OS**



**152 x 51mm Offset Inlet Duct**

Dimensions approx. to outside edge of flange single 51mm O.D. offset outlet.  
**ID152-51OS**



**255 x 80mm Inlet Duct**

Dimensions approx. to outside edge of flange single 63/76mm O.D. stepped outlet.  
**ID255-80**



**In-line Blower Fans**

Lightweight, high output in-line blower fans ideal for cockpit ventilation, screen demisting, driver cooling and extra air flow to fluid coolers.



In-Line Blower Fans			
Fan Size	Outlet Size	Air Flow m <sup>3</sup> /min*	Part Number
3"	3"	3.9	<b>13010</b>
4"	3"	4.8	<b>13008</b>
4"	4"	6.8	<b>13009</b>

\*Air flow ratings @ 13.6V with a 3.5 amp draw.

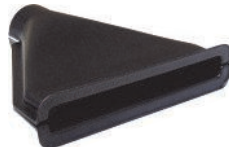
**Oil Cooler Ducts**

Oil cooler ducts with aluminium mounts. To suit 235mm matrix coolers, available in 3 heights to suit 13, 16 and 19 row coolers, single stepped inlet to suit 63/75mm hose.  
**13 ROW: OCD13**  
**16 ROW: OCD16**  
**19 ROW: OCD19**



**225 x 25mm 2-Piece Inlet Duct**

Dimensions approx. to outside edge of flange with single 63mm O.D. outlet.  
**ID225-25**



**16 Row Oil Cooler Duct**

An oil cooler duct which attaches directly to the cooler with through core mounts. Suits 16 row 235mm matrix coolers only and has a single 70mm O.D. duct inlet.  
**OCD16-PK**



**Oil Cooler Duct**

These oil cooler ducts have cut outs which allow them to be placed right up to the cooler giving maximum air flow. Available to fit either 19 or 25 row 235 Matrix coolers. The 19 row has 1 x 70mm inlet where as the 25 row as twin 70mm inlets.  
**19 ROW DUCT: BUT7028**  
**25 ROW DUCT: BUT7029**



**Air Inlets**

Spun aluminium air inlets with 15mm flange and self adhesive mounting. They incorporate a locating step for the screen mesh which is supplied separately. available in either natural finish or black.



Air Inlets		
Size	Inlet	Mesh
51mm	<b>AI51</b>	<b>AI51</b>
63mm	<b>AI63</b>	<b>AI63</b>
76mm	<b>AI76</b>	<b>AI76</b>
89mm	<b>AI89</b>	<b>AI89</b>
102mm	<b>AI102</b>	<b>AI102</b>

**Hi-flow Inlets**

Hi-flow air inlet trumpet complete with mounting kit. Available in 51, 63, 76, 89 and 102mm sizes.  
**HFI**



Air Ducting Hose		
Hose I.D.	Standard	Hi-Temp
25mm	<b>D25BLK</b>	<b>D25RED</b>
32mm	<b>D32BLK</b>	<b>D32RED</b>
38mm	<b>D38BLK</b>	<b>D38RED</b>
44mm	<b>D44BLK</b>	<b>D44RED</b>
51mm	<b>D51BLK</b>	<b>D51RED</b>
57mm	<b>D57BLK</b>	<b>D57RED</b>
60mm	<b>D60BLK</b>	<b>D60RED</b>
65mm	<b>D65BLK</b>	<b>D65RED</b>
70mm	<b>D70BLK</b>	<b>D70RED</b>
76mm	<b>D76BLK</b>	<b>D76RED</b>
83mm	<b>D83BLK</b>	<b>D83RED</b>
90mm	<b>D90BLK</b>	<b>D90RED</b>
102mm	<b>D102BLK</b>	<b>D102RED</b>
114mm	<b>D114BLK</b>	<b>D114RED</b>
127mm	<b>D127BLK</b>	<b>D127RED</b>
152mm	<b>D152BLK</b>	<b>D152RED</b>

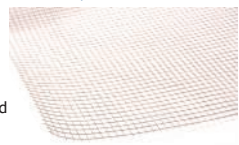
**Duct Joining Sleeves**

Supplied as a pair of 50mm lengths, this adhesive lined heat shrink provides a neat, lightweight and effective method of securing the ducting hose to the duct. Apply heat and the heat shrink will shrink down to a minimum of a 1/3rd its original size.  
**70mm i.d. Sleeve: JS70**  
**90mm i.d. Sleeve: JS90**  
**122mm i.d. Sleeve: JS122**



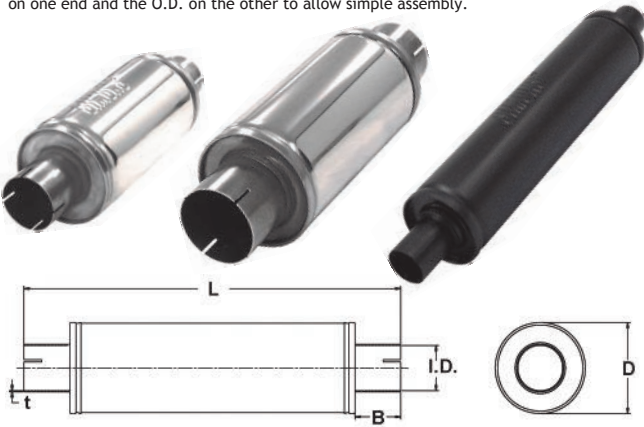
**Welded Stainless Mesh**

Welded stainless steel mesh 6mm sq apertures 21g wire. Supplied per sq/ft.  
**CSMMESH6**



Telephone: 01327 857991 email: sales@competitionsupplies.com





Round Case Silencers							
Model	I.D.	L (mm)	B (mm)	t (mm)	D (mm)	Mild	Stainless
MICRO 45	1.75"	530	65	1.5	80	U404500	U404500R
MIDI 45	1.75"	550	65	1.5	100	U414500	U414500R
MICRO 51	2.00"	530	65	1.5	80	U405120	U405100R
MIDI 51	2.00"	550	65	1.5	100	U415129	U415100R
TURBEX	2.50"	755	65	1.5	100	U446300	U446300R
SLIM	2.50"	550	65	1.5	125	U436337	U436300R
HANDY	2.50"	380	65	1.5	125	U456300	U456300R
TURBEX	3.00"	755	65	1.5	125	U447600	U447600R
TURBONETT	3.00"	380	65	1.5	125	U457600	U457600R

Stepped Reducers		
Diameters	Mild	Stainless
1.50-1.65-1.75"	U074500	U074500R
1.60-1.90-2.00"	U075115	U075100R
2.00-2.25-2.50"	U076320	U076300R
2.50-2.60-3.00"	U077600	U077600R

Decibel Inserts	
To Suit Bore	MILD
2.00"	U935130
2.50"	U936330
3.00"	U937630

### Ally Case Re-packable Silencers



Aluminium cased re-packable silencer from APS with stainless steel ends and internals. Weighing just 1.85kg and available in a selection of bore sizes.

Diameter: 4".  
Case length: 16"  
Overall Length: 20".

I.D.	Part No.
2.00"	ACES3-200
2.25"	ACES3-225
2.50"	ACES3-250

### Sound Barriers

This small additional silencer can be easily added to an existing system when needed to meet noise regulations. 8" long and 4" diameter.



I.D.	Part Number
2.00"	SBR2.00
2.25"	SBR2.25
2.50"	SBR2.50
2.75"	SBR2.75
3.00"	SBR3.00

### Mikalor Super Clamps

The Mikalor W2 Super clamp is constructed using a 430 stainless steel band and a high tensile zinc plated bolt. High quality, heavy duty clamps able to withstand the rigorous demands of motorsport. Their unique design ensures an even clamping pressure around the entire circumference to ensure the optimum seal.

Suitable for exhaust, coolant hose and turbo/intercooler hose or any other application where the best available clamping performance is required.

Mikalor Clamps	
Size (mm)	Part No.
43-47	780430-047
47-51	780470-051
51-55	780510-055
55-59	780550-059
59-63	780590-063
63-68	780630-068
68-73	780680-073
73-79	780730-079
79-85	780790-085
85-91	780850-091
91-97	780910-097
97-104	780970-104

### Silencer Wadding

1m x 1m sheet of replacement silencer wadding for use in re-packable silencers.

#### WADD3



### Weld-on Lambda Boss & Plug

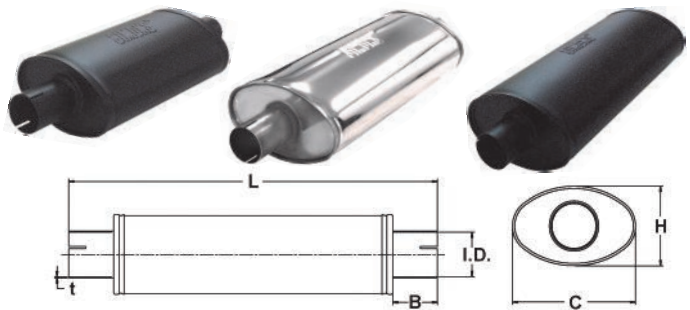
Mild Steel Boss:	010.01.001AA
Stainless Steel Boss:	010.01.002AA
Blanking Plug:	010.01.003AA
Copper Gasket:	SUM19

### Exhaust Clamps

Standard plated mild steel exhaust clamps in a range of sizes.



Size	Part No.
45mm	EX45
51mm	EX51
57mm	EX57
64mm	EX64
70mm	EX70
76mm	EX76



Oval Case Silencers								
Model	I.D.	L (mm)	B (mm)	t (mm)	H (mm)	C (mm)	Mild	Stainless
MEDIUM 45	1.75"	550	65	1.5	100	165	U334500	U334500R
SMALL	2.0"	450	65	1.5	100	165	U355124	U355100R
MEDIUM	2.0"	550	65	1.5	100	165	U335139	U335100R
BIG 51	2.0"	550	65	1.5	115	185	U325100	U325100R
SUPER	2.5"	450	65	1.5	115	185	U316335	U316300R
BIG	2.5"	550	65	1.5	115	185	U326340	U326300R
HEAVY	2.5"	630	65	1.5	140	220	U336300	U336300R
TURBOTIGHT	3.0"	380	65	1.5	140	220	U307600	U307600R
TURBOLIGHT	3.0"	550	65	1.5	140	220	U337600	U337600R
TURBO*	3.0"	630	65	1.5	140	220	U327600	U327600R

\* one central inlet/outlet, one offset inlet/outlet

Straight Exhaust Tube				
I.D./O.D.	50cm Lengths		1m Lengths	
	Mild	Stainless	Mild	Stainless
1.75"	U014550	U014550R	U014500	U014500R
2.00"	U015150	U015150R	U015100	U015100R
2.50"	U016350	U016350R	U016300	U016300R
3.00"	U017650	U017650R	U017600	U017600R

Double Ended Sleeve	
I.D.	Part No.
1.75"	U064500
2.00"	U065120
2.50"	U066320
3.00"	U066720



Exhaust Bends						
I.D./O.D.	30 Degree Bends		45 Degree Bends		60 Degree Bends	
	Mild	Stainless	Mild	Stainless	Mild	Stainless
1.75"	U024530	U024530R	U024545	U024545R	U024560	U024560R
2.00"	U025130	U025130R	U025145	U025145R	U025160	U025160R
2.50"	U026330	U026330R	U026345	U026345R	U026360	U026360R
3.00"	U027630	U027630R	U027645	U027645R	U027660	U027660R



Exhaust Bends						
I.D./O.D.	90 Degree Bends		180 Degree Bends		Over Axle Bends	
	Mild	Stainless	Mild	Stainless	Mild	Stainless
1.75"	U024590	U024590R	U024518	U024518R	U044500	U044500R
2.00"	U025190	U025190R	U025118	U025118R	U045117	U045100R
2.50"	U026390	U026390R	U026318	U026318R	U046321	U046300R
3.00"	U027690	U027690R	U027618	U027618R	U047600	U047600R

### Coated Exhaust Wrap

Our vermiculite coated exhaust wrap offers 50% more thermal protection than a plain fibreglass wrap and has better abrasion resistance. The coating is stable up to 800°C and acts like armour when heat is applied to the fabric causing the heat to travel across the fabric rather than through it, shielding bodywork and components from the heat source.

Natural 2" x 50': 4301 Black 2" x 50': 4306  
Natural 1" x 50': 4302 Black 1" x 50': 4307

### Volcano Exhaust Wrap

Manufactured from crushed lava rock filament fibre this exhaust wrap is a thinner, stronger, more flexible and has a continuous operating temperature rating of 800°C and can withstand up to 1370°C intermittent radiant heat.

Volcano 2" x 50': 4320 Volcano 1" x 50': 4321  
Volcano 2" x 25': 4327 Volcano 1" x 25': 4328  
Volcano 2" x 15': 4325 Volcano 1" x 15': 4326

### Stainless Steel Ties

Stainless steel cable ties with roller ball locking mechanism, ideal for securing exhaust insulation wrap.



Stainless Steel Ties	
Size	Part Number
360 x 4.6mm	SSTR3
520 x 4.6mm	SSTR4

**Silicone Reducing Hoses**

Bore (mm)	Straight Reducer	Reducing 45° Elbow	Reducing 90° Elbow
19-16	SR19-16	-	RE90-19-16
22-16	SR22-16	-	RE90-22-16
22-19	SR22-19	-	RE90-22-19
25-19	SR25-19	RE45-25-19	RE90-25-19
32-19	SR32-19	-	RE90-32-19
32-25	SR32-25	RE45-32-25	RE90-32-25
35-25	SR35-25	-	RE90-35-25
38-32	SR38-32	-	RE90-38-32
38-35	SR38-35	RE45-38-35	RE90-38-35
45-38	SR45-38	-	RE90-45-38
51-45	SR51-45	RE45-50-45	RE90-51-45
57-51	SR57-51	RE45-57-51	RE90-57-51
60-48	SR60-48	-	RE90-60-48
60-50	SR60-50	RE45-60-51	RE90-60-50
63-51	SR63-51	RE45-63-51	RE90-63-51
63-57	SR63-57	RE45-63-57	RE90-63-57
65-60	SR65-60	RE45-65-60	RE90-65-60
70-50	SR70-50	RE45-70-51	RE90-70-50
70-60	SR70-60	RE45-70-60	RE90-70-60
70-63	SR70-63	-	RE90-70-63
76-51	SR76-51	-	RE90-76-51
76-63	SR76-63	RE45-76-63	RE90-76-63
89-76	SR89-76	-	RE90-89-76
102-76	SR102-76	RE45-102-76	RE90-102-76



**Vacuum Tubing**

Extruded silicone tubing ideal for use as vacuum hose, washer tubing, coolant overflow etc.

**Vacuum Tubing**

Bore x Wall (mm)	Part No.
3.0 x 2.0	VT3
4.0 x 2.0	VT4
5.0 x 2.5	VT5
6.0 x 2.5	VT6
7.0 x 2.5	VT7
8.0 x 3.0	VT8
9.0 x 3.0	VT9
10.0 x 3.0	VT10

**Silicone Hoses**

UK manufactured high quality polyester reinforced silicone hoses, suitable for coolant and air with temperatures of up to 180°C. For higher temperature applications we can supply them with Nomex reinforcement, please contact us for details. We stock silicone hose in black with other colours available on request.

**Hose Specifications**

<b>Wall thickness:</b>	
< 13mm I.D.	3.5mm
16-70mm I.D.	4.5mm
> 70mm I.D.	5.0mm
<b>Elbow Leg Lengths:</b>	
< 70mm I.D.	102mm
> 70mm I.D.	152mm



**Equal Bore Silicone Hoses**

Bore (mm)	100cm Length	77mm Coupler	30° Elbow	45° Elbow	60° Elbow	90° Elbow	135° Elbow	180° Elbow	Alloy Joiner
6.5	SHL6.5	-	E30-6.5	E45-6.5	E60-6.5	E90-6.5	E135-6.5	-	-
8	SHL8	-	E30-8	E45-8	E60-8	E90-8	E135-8	-	-
9.5	SHL9	-	E30-9.5	E45-9.5	E60-9.5	E90-9.5	E135-9.5	-	-
11	SHL11	-	E30-11	E45-11	E60-11	E90-11	E135-11	-	-
13	SHL13	-	E30-13	E45-13	E60-13	E90-13	E135-13	-	HI13
16	SHL16	-	E30-16	E45-16	E60-16	E90-16	E135-16	E180-16	HI16
19	SHL19	-	E30-19	E45-19	E60-19	E90-19	E135-19	E180-19	HI19
22	SHL22	-	E30-22	E45-22	E60-22	E90-22	E135-22	E180-22	HI22
25	SHL25	SCH25	E30-25	E45-25	E60-25	E90-25	E135-25	E180-25	HI25
28	SHL28	SCH28	E30-28	E45-28	E60-28	E90-28	E135-28	E180-28	HI28
32	SHL32	SCH32	E30-32	E45-32	E60-32	E90-32	E135-32	E180-32	HI32
35	SHL35	SCH35	E30-35	E45-35	E60-35	E90-35	E135-35	E180-35	HI35
38	SHL38	SCH38	E30-38	E45-38	E60-38	E90-38	E135-38	E180-38	HI38
41	SHL41	SCH41	E30-41	E45-41	E60-41	E90-41	E135-41	E180-41	HI40
45	SHL45	SCH45	E30-45	E45-45	E60-45	E90-45	E135-45	E180-45	HI45
48	SHL48	SCH48	E30-48	E45-48	E60-48	E90-48	E135-48	E180-48	HI48
51	SHL51	SCH51	E30-51	E45-51	E60-51	E90-51	E135-51	E180-51	HI51
54	SHL54	SCH54	E30-54	E45-54	E60-54	E90-54	E135-54	E180-54	HI54
57	SHL57	SCH57	E30-57	E45-57	E60-57	E90-57	E135-57	E180-57	HI57
60	SHL60	SCH60	E30-60	E45-60	E60-60	E90-60	E135-60	E180-60	HI60
63	SHL63	SCH63	E30-63	E45-63	E60-63	E90-63	E135-63	E180-63	HI63
70	SHL70	SCH70	E30-70	E45-70	E60-70	E90-70	E135-70	E180-70	HI70
76	SHL76	SCH76	E30-76	E45-76	E60-76	E90-76	E135-76	E180-76	HI75
80	SHL80	SCH80	E30-80	E45-80	E60-80	E90-80	E135-80	-	HI80
83	SHL83	SCH83	E30-83	-	-	E90-83	-	-	-
89	SHL89	SCH89	E30-89	-	-	E90-89	-	-	HI89
102	SHL102	SCH102	E30-102	-	-	E90-102	-	-	-

**Fluorosilicone Lined Silicone Hoses**

The addition of a fluorosilicone liner makes this range suitable for fuel filler and fuel/oil breather applications.

**Please Note:** These hoses are not suitable for continuous fuel use.



**Fluorosilicone Lined Silicone Hoses (Fuel And Oil Use)**

Bore (mm)	1m Straight	45° Elbow	90° Elbow	135° Elbow	180° Elbow
6.5	FHL6.5	FE45-6.5	FE90-6.5	FE135-6.5	-
8	FHL8	FE45-8	FE90-8	FE135-8	-
9.5	FHL9	FE45-9.5	FE90-9.5	FE135-9.5	-
11	FHL11	FE45-11	FE90-11	FE135-11	-
13	FHL13	FE45-13	FE90-13	FE135-13	-
16	FHL16	FE45-16	FE90-16	FE135-16	FE180-16
19	FHL19	FE45-19	FE90-19	FE135-19	FE180-19
22	FHL22	FE45-22	FE90-22	FE135-22	FE180-22
25	FHL25	FE45-25	FE90-25	FE135-25	FE180-25
28	FHL28	FE45-28	FE90-28	FE135-28	FE180-28
32	FHL32	FE45-32	FE90-32	FE135-32	FE180-32
35	FHL35	FE45-35	FE90-35	FE135-35	FE180-35
38	FHL38	FE45-38	FE90-38	FE135-38	FE180-38
41	FHL41	FE45-41	FE90-41	FE135-41	FE180-41
45	FHL45	FE45-45	FE90-45	FE135-45	FE180-45
48	FHL48	FE45-48	FE90-48	FE135-48	FE180-48
51	FHL51	FE45-51	FE90-51	FE135-51	FE180-51
54	FHL54	FE45-54	FE90-54	FE135-54	FE180-54
57	FHL57	FE45-57	FE90-57	FE135-57	FE180-57
60	FHL60	FE45-60	FE90-60	FE135-60	FE180-60
63	FHL63	FE45-63	FE90-63	FE135-63	FE180-63
70	FHL70	FE45-70	FE90-70	FE135-70	FE180-70
76	FHL76	FE45-76	FE90-76	FE135-76	FE180-76
80	FHL80	FE45-80	FE90-80	FE135-80	-
83	FHL83	-	FE90-83	-	-
89	FHL89	-	FE90-89	-	-
102	FHL102	-	FE90-102	-	-

**Fluorosilicone Lined Silicone Reducing Hoses**

Bore (mm)	Straight Reducer	Reducing 45° Elbow	Reducing 90° Elbow
19-16	FSR-19-16	-	FRE90-19-16
22-16	FSR-22-16	-	FRE90-22-16
25-19	FSR-25-19	FRE45-25-19	FRE90-25-19
32-19	FSR-32-19	-	FRE90-32-19
32-25	FSR-32-25	-	FRE90-32-25
35-25	FSR-35-25	-	FRE90-35-25
38-32	FSR-38-32	-	FRE90-38-32
38-35	FSR-38-35	FRE45-38-35	FRE90-38-35
45-38	FSR-45-38	-	FRE90-45-38
51-45	FSR-51-45	-	FRE90-51-45
57-51	FSR-57-51	FRE45-57-51	FRE90-57-51
60-48	FSR-60-48	-	FRE90-60-48
60-50	FSR-60-50	FRE45-60-51	FRE90-60-50
63-51	FSR-63-51	FRE45-63-51	FRE90-63-51
63-57	FSR-63-57	FRE45-63-57	FRE90-63-57
65-60	FSR-65-60	FRE45-65-60	FRE90-65-60
70-50	FSR-70-50	FRE45-70-51	FRE90-70-50
70-60	FSR-70-60	FRE45-70-60	FRE90-70-60
70-63	FSR-70-63	-	FRE90-70-63
76-51	FSR-76-51	-	FRE90-76-51
76-63	FSR-76-63	FRE45-76-63	FRE90-76-63
89-76	FSR-89-76	-	FRE90-89-76
102-76	FSR-102-76	FRE45-102-76	FRE90-102-76

**Stainless Steel Hose Clamps**

High quality embossed band hose clamps with a stainless steel band and housing. These clamps combine strength and appearance whilst the radiused band edge prevents damage to soft silicone hoses.



**Stainless Hose Clamps**

Size (mm)	Part No. 9mm Band	Part No. 12mm Band
8-12	750080-012	-
10-16	750100-016	-
12-22	750120-022	-
16-27	750160-027	-
20-32	750200-032	760200-032
25-40	750250-040	760250-040
32-50	750320-050	760320-050
40-60	750400-060	760400-060
50-70	750500-070	760500-070
60-80	750600-080	760600-080
70-90	750700-090	760700-090
80-100	750800-100	760800-100
90-110	750900-110	760900-110
100-120	751000-120	761000-120
110-130	751100-130	761100-130
120-140	751200-140	761200-140

**Aluminium Hose Adaptors**

Designed to allow easy fitment of senders or switches in-line to flexible hoses. Also suitable for use as a take off when used in conjunction with one of wide range of available adaptors.



**Aluminium Hose Adaptors**

Size	1/8 NPT Part No.	5/8 UNF Part No.	3/8 BSP Part No.	M10x1 Part No.
25mm	HA25NPT	HA25UNF	HA25BSP	HA25M10
28mm	HA28NPT	HA28UNF	HA28BSP	HA28M10
30mm	HA32NPT	HA32UNF	HA32BSP	HA32M10
32mm	HA35NPT	HA35UNF	HA35BSP	HA35M10
35mm	HA38NPT	HA38UNF	HA38BSP	HA38M10
38mm	HA45NPT	HA45UNF	HA45BSP	HA45M10

**3/8 BSP Hose Take Off Fittings**

Size	Part No.
8mm	HAT8
10mm	HAT10
13mm	HAT13
16mm	HAT16
19mm	HAT19
25mm	HAT25

Billet aluminium hose fittings with a 3/8 BSP male thread for use with the hose adaptors above, available to suit a range of hose sizes.



**Hose Joiner**

Thin wall aluminium hose joiners with a formed bead at both ends. 75mm length, other lengths available on request.



I.D.	Part No.
25mm	SHJ25
28mm	SHJ28
32mm	SHJ32
35mm	SHJ35
38mm	SHJ38
41mm	SHJ41
44mm	SHJ44
50mm	SHJ50
57mm	SHJ57
63mm	SHJ63

**Self Sealing Take Offs**

Revotec self sealing take offs provide an easy way to fit a sensor or make a tee in silicone hoses. Simply punch a hole and the SST screws together and seals on the soft silicone. Available in a range of sizes with both male push-on hose tails and female threaded bosses.

**Self Sealing Take Off Push-On Hose Tail**

Push On	Part No
5mm	SST01
8mm	SST8K
10mm	SST10K
13mm	SST13K
16mm	SST16K
19mm	SST19K
25mm	SST25K

**Self Sealing Take Off Female Threaded**

Threaded	Part No
M5 x 0.8	SSTM5
M10x1	SSTM10
1/8" NPT	SST1/8
1/4" NPT	SST1/4
M12x1.5	SSTM12
M14x1.5	SSTM14
3/8 BSP	SST3/8



Telephone: 01327 857991 email: sales@competitionsupplies.com

**COMPETITION SUPPLIES LTD**

**Aero Flush Filler Caps**

Quality UK manufactured aero style flush fit filler caps. Available in a range of sizes including locking and non-locking models and also versions with integral filler neck funnels.



Aero Flush Fit Filler Caps								
Model	Cap Ø (mm)	Bore (mm)	Flange O.D. (mm)	Mounting Pattern P.C.D. # x mm	Integral Funnel	Funnel Suits Hose I.D.	Lock	Part No.
Aero 200	46	35.5	80	6 on 63.5	No	-	No	OA-ZA-001
Aero 200	46	35.5	80	6 on 63.5	Yes	50mm	No	OA-ZA-005
Aero 200	46	35.5	80	Weld-On, 52 Ø	No	-	No	OA-ZA-010
Aero 300	58.4	44.5	94	6 on 76.2	No	-	No	OB-ZA-001
Aero 300	58.4	44.5	94	6 on 76.2	No	-	Yes	OB-ZA-003
Aero 300	58.4	44.5	94	6 on 76.2	Yes	50/57mm	No	OB-ZA-017
Aero 300	58.4	44.5	94	6 on 76.2	Yes	50/57mm	Yes	OB-ZA-031
Aero 400	76.5	58.0	120	8 on 101.6	No	-	No	OC-ZA-001
Aero 400	76.5	58.0	120	8 on 101.6	No	-	Yes	OC-ZA-003
Aero 400	76.5	58.0	120	8 on 101.6	Yes	50mm	No	OC-ZA-009
Aero 400	76.5	58.0	120	8 on 101.6	Yes	50mm	Yes	OC-ZA-013
Aero 400	76.5	58.0	120	8 on 101.6	Yes	57mm	No	OC-ZA-011
Aero 400	76.5	58.0	120	8 on 101.6	Yes	57mm	Yes	OC-ZA-015
Aero 600	92.0	77.0	126	8 on 107.9	No	-	No	OE-ZA-001
Aero 600	92.0	77.0	126	8 on 107.9	No	-	Yes	OE-ZA-003
Aero 600	92.0	77.0	126	8 on 107.9	Yes	50mm	No	OE-ZA-005
Aero 600	92.0	77.0	126	8 on 107.9	Yes	50mm	Yes	OE-ZA-007
Aero 600	92.0	77.0	126	8 on 107.9	Yes	57mm	No	OE-ZA-006
Aero 600	92.0	77.0	126	8 on 107.9	Yes	57mm	Yes	OE-ZA-008
Aero 500	100	77.0	140	12 on 120.6	No	-	No	OD-ZA-011
Aero 500	100	77.0	140	12 on 120.6	No	-	Yes	OD-ZA-012
Aero 500	100	77.0	140	12 on 120.6	Yes	90mm	No	OD-ZA-009
Aero 500	100	77.0	140	12 on 120.6	Yes	90mm	Yes	OD-ZA-010

**Secondary Cap For External Filler**

FIA scrutineers require a secondary device for quick release fillers which protrude outside the bodywork, this insert which can be sandwiched between a 3 1/2" cap and it's threaded mounting collar allows a secondary locking or non locking cap to be fitted unobtrusively in the filler neck.

Cap Housing: **F30C** Locking Insert: **CA-AA-005**  
Non-Locking Insert: **CA-AA-003**



**Aluminium Radiator Neck**

A high quality aluminium radiator neck machined from billet aluminium. 2 1/8" O.D. and 3/4" deep to accept standard size automotive radiator caps. The overflow port is tapped 1/8"-27 NPT for which we can supply a range of fittings. **34301**



**Small Ø Radiator Neck**

Small diameter weld on aluminium radiator neck. Suits 32mm O.D., 16mm deep rad caps. The 6mm hose tail overflow is supplied loose. **OFN-002**



**Small Ø Radiator Caps**

Small diameter radiator caps to fit the small (32mm O.D. 16mm deep) radiator necks found on motorcycle and various Japanese automotive applications. They include an upper gasket allowing use on open or closed cooling systems. Available in three pressure ratings.  
16 lbs: **30124**  
19-21 lbs: **30125**  
28-32 lbs: **30126**



**Water Header Tank**

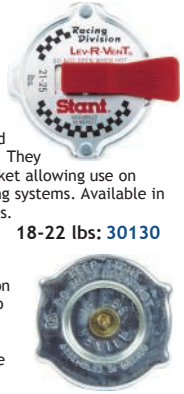
An aluminium coolant header tank with a 12mm outlet and an 1/8 NPT bleed and overflow port for which we stock a wide range of fitting options including hose tails for 6, 8 and 10mm and adaptors for AN-3 to AN-8. Suitable for standard diameter radiator caps.  
**WHTV**



**Standard Ø Radiator Caps**

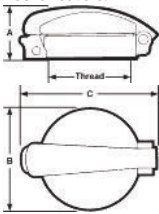
Stant competition radiator caps to suit standard 2 1/8" O.D., 3/4" deep radiator necks. Incorporating a lever to allow pressure to be vented prior to cap removal. They include an upper gasket allowing use on open or closed cooling systems. Available in three pressure ratings.  
16 lbs: **30133** 18-22 lbs: **30130**  
21-25 lbs: **30131**

Non-lever competition rad cap from Stant to suit std 2 1/8" O.D., 3/4" deep radiator necks, 16lbs pressure rating. **30132**



**Classic Filler Caps**

Manufactured from polished aluminium or chrome plated brass our classic filler caps are available in a range of sizes and are suitable for fuel fillers, oil tanks and rocker covers.



Aston and Monza Type Filler Caps						
Thread	Type	Dim "A" (mm)	Dim "B" (mm)	Dim "C" (mm)	Ally Cap Part No.	Chrome Cap Part No.
2" x 18	Monza	28.6	60.3	82.5	MON2X	MONC2
2 1/2" x 16	Monza	31.8	76.2	100	MON25X	MONC25
2 3/4" x 16	Monza	36.5	86	114	MON275X	MONC275
2 1/2" x 16	Aston	38	76	105	AST25	ASTC25
2 3/4" x 16	Aston	46	87	121	AST275	ASTC275
3.93" x 11	Aston	70	122	162	AST35	-

**Flat Top Aston Filler Caps**

A more contemporary take on the traditional Aston style cap these quality U.K. manufactured aluminium filler caps are available in two sizes.

2 1/2" Ally: **OJ-ZA-002**  
2 1/2" Chrome: **OJ-ZA-003**  
2 3/4" Chrome: **OK-ZA-002**



**Cap Mounting Accessories**

Components with the correct male thread to aid the installation of the Aston and Monza filler caps.



Cap Mounting Accessories					
Thread	Chrome Bolt-On Flange	Aluminium Bolt-On Flange	Aluminium Threaded Collar	Brass Threaded Collar	Flange With Funnel
2" x 18 T.P.I.	FLAC2	FLAA2	COLA2	COL2	FLAP2
2 1/2" x 16 T.P.I.	FLAC25	FLAA25	COLA25	COL25	FLAF25
2 3/4" x 16 T.P.I.	FLAC275	FLAA275	COLA275	COL275	FLAF275
3.93" x 11 T.P.I.	FLA35	FLAA35	N/A	N/A	FLAF35

**Aero Cap Mounting Funnel**

Funnels to suit Aero 400 caps with an 8 bolt on 101.6mm P.C.D. mounting pattern.



51mm Outlet: **FL-AE-018**  
57mm Outlet: **FL-AE-021**

**Funnel Inserts**

The Flanged funnels detailed above have provision to allow the fitment of a locking secondary insert or a spring loaded flap to accept unleaded size fuel filler nozzles.



Unleaded Flap: **AA-AA-001**  
Locking Insert: **AA-AC-001**

**Aero Cap Nut Rings**

Captive nut rings for use with Aero Flush-Fit filler Caps.

Captive Nut Rings	
To Suit	Part No.
Aero 200	FR-AB-021
Aero 300	FR-AD-001
Aero 400	FR-AE-001
Aero 600	FR-AF-001
Aero 500	FR-AI-001

**Aluminium Cap and Neck**



Weld on filler cap assemblies with either 30 or 50mm long necks with an internal diameter of 38mm. Caps have an O-Ring for a positive seal and are available as a natural aluminium knurled grip or black anodised with a scalloped grip.

Aluminium Cap and Neck		
Neck Length	Knurled Cap	Scalloped Cap
30mm	OFC-001S	OFC-002S
50mm	OFC-001L	OFC-002L
CAP ONLY	OFC-001	OFC-002

**Small Screw Cap & Neck**

Scalloped aluminium cap with male thread and O-Ring seal. Necks have a 35mm I.D. and are available in aluminium or steel weld-on or in aluminium with a 4 hole bolt on flange.



Item	Part No.
Cap with Ally Weld-On Neck	ALL36160
Cap with Steel Weld-On Neck	ALL36161
Cap with Ally Bolt-On Neck	ALL36163

**Large Screw Cap & Neck**

Scalloped aluminium cap with male thread and O-Ring seal. Necks have a 75mm I.D. and are available in aluminium or steel weld-on.

Item	Part No.
Cap with Ally Weld-On Neck	ALL36170
Cap with Steel Weld-On Neck	ALL36174

**Fuel Filler Hose**

Rubber fuel resistant fuel filler neck hose for connecting the filler neck to the tank. Straights supplied per cm (min 10cm).



Fuel Filler Hose		
Version	51mm	57mm
Straight	NH51	NH57
45° Elbow	NH451	NH457
90° Elbow	NH951	NH957

**Fuel Filler Hose Reducer**

A machined aluminium bore reducer to allow the connection of differing fuel hose diameters.  
57mm - 51mm: **FR57-51**  
57mm - 45mm: **FR57-45**



For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)

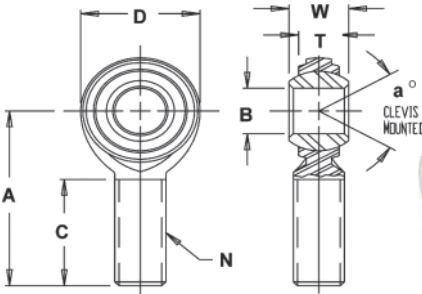




FK Rod Ends' motorsport range of rod ends and sphericals are high quality while being excellent value for money. We keep extensive stocks of their popular motorsport ranges listed below. We can also offer budget mild steel version for low stress applications. Please contact us with your requirements should you not see something listed on the pages which you require.

**High Strength Steel Male Rod Ends With PTFE Liners**

**BALL:** 52100 Steel, Rc 56 min. Hard Chrome Plated.  
**BODY:** Steel Alloy-Heat Treated- Zinc Plated.  
**RACE:** Steel Alloy-Heat Treated- Zinc Plated.  
**LINER:** PTFE Fabric (PTFE), Bonded to race I.D.

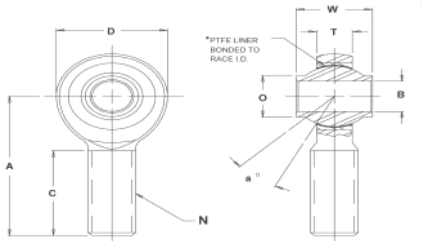


B Dia	W Width	Ball Dia.	A Lgth.	Thread (UNF)	C Lgth.	Maximum Load (Lbs)	Part No. L/H	Part No. R/H
0.190"	0.312"	0.437"	1.250"	10-32	0.720"	2,855	JMXL3T	JMX3T
0.250"	0.375"	0.500"	1.562"	1/4-28	1.000"	5,262	JMXL4T	JMX4T
0.3125"	0.437"	0.625"	1.875"	5/16-24	1.250"	7,640	JMXL5T	JMX5T
0.375"	0.500"	0.719"	1.938"	3/8-24	1.250"	9,550	JMXL6T	JMX6T
0.4375"	0.562"	0.812"	2.125"	7/16-20	1.375"	10,290	JMXL7T	JMX7T
0.500"	0.625"	0.937"	2.438"	1/2-20	1.500"	16,242	JMXL8T	JMX8T
0.625"	0.750"	1.125"	2.625"	5/8-18	1.625"	17,959	JMXL10T	JMX10T
0.750"	0.875"	1.312"	2.875"	3/4-16	1.750"	28,090	JMXL12T	JMX12T
0.875"	0.875"	1.312"	3.375"	7/8-14	1.875"	55,690	JMXL14T	JMX14T

B Dia	W Width	Ball Dia.	A Lgth.	Thread (UNF)	C Lgth.	Maximum Load (Lbs)	Part No. L/H	Part No. R/H
0.250"	0.375"	0.500"	1.875"	5/16-24	1.250"	4,471	RSMXL4T	RSMX4T
0.312"	0.437"	0.625"	1.938"	3/8-24	1.250"	13,012	RSMXL5T	RSMX5T
0.375"	0.500"	0.719"	2.125"	7/16-20	1.375"	17,610	RSMXL6T	RSMX6T
0.4375"	0.562"	0.812"	2.438"	1/2-20	1.500"	23,470	RSMXL7T	RSMX7T
0.500"	0.625"	0.937"	2.625"	5/8-18	1.625"	31,420	RSMXL8T	RSMX8T
0.625"	0.750"	1.125"	2.875"	3/4-16	1.750"	40,560	RSMXL10T	RSMX10T
0.750"	0.875"	1.312"	3.375"	7/8-14	1.875"	55,690	RSMXL12T	RSMX12T

**High Misalignment High Strength Steel Male Rod Ends**

**BALL:** 52100 Steel, Rc 56 min. Hard Chrome Plated.  
**BODY:** Steel Alloy, Heat Treated, Zinc Plated.  
**RACE:** 4340 Steel Alloy, Heat Treated, Zinc Plated.  
**LINER:** PTFE Fabric (PTFE), Bonded to race I.D.

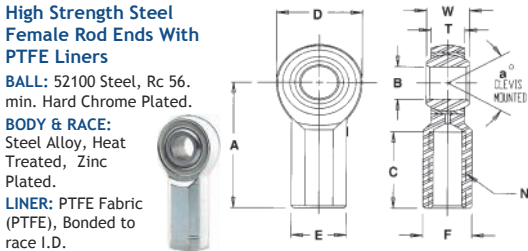


B Dia	W Width	Ball Dia.	A Lgth.	Thread (UNF)	C Lgth.	Maximum Load (Lbs)	Part No. L/H	Part No. R/H
0.375"	0.813"	0.781"	2.125"	3/8-24	1.281"	11,390	HJMXL6T	HJMX6T
0.4375"	0.875"	0.875"	2.438"	7/16-20	1.468"	15,716	HJMXL7T	HJMX7T
0.500"	0.937"	1.000"	2.625"	1/2-20	1.562"	23,703	HJMXL8T	HJMX8T
0.625"	1.200"	1.250"	2.875"	5/8-18	1.687"	28,109	HJMXL10T	HJMX10T
0.750"	1.280"	1.375"	3.375"	3/4-16	2.000"	28,701	HJMXL12T	HJMX12T

B Dia	W Width	Ball Dia.	A Lgth.	Thread (UNF)	C Lgth.	Maximum Load (Lbs)	Part No. L/H	Part No. R/H
0.375"	0.813"	0.781"	2.125"	7/16-20	1.281"	11,789	HRSMXL6T	HRSMX6T
0.4375"	0.875"	0.875"	2.438"	1/2-20	1.468"	17,100	HRSMXL7T	HRSMX7T
0.500"	0.937"	1.000"	2.625"	5/8-18	1.562"	23,703	HRSMXL8T	HRSMX8T
0.625"	1.200"	1.250"	2.875"	3/4-16	1.687"	32,100	HRSMXL10T	HRSMX10T
0.750"	1.280"	1.375"	3.375"	7/8-14	2.000"	38,701	HRSMXL12T	HRSMX12T

**High Strength Steel Female Rod Ends With PTFE Liners**

**BALL:** 52100 Steel, Rc 56 min. Hard Chrome Plated.  
**BODY & RACE:** Steel Alloy, Heat Treated, Zinc Plated.  
**LINER:** PTFE Fabric (PTFE), Bonded to race I.D.



B Dia	W Width	Ball Dia.	A Lgth.	Thread (UNF)	C Lgth.	Maximum Load (Lbs)	Part No. L/H	Part No. R/H
0.190"	0.312"	0.437"	1.062"	10/32	0.500"	3,736	JFXL3T	JFX3T
0.250"	0.375"	0.500"	1.312"	1/4-28	0.687"	6,195	JFXL4T	JFX4T
0.3125"	0.437"	0.625"	1.375"	5/16-24	0.687"	7,640	JFXL5T	JFX5T
0.375"	0.500"	0.719"	1.625"	3/8-24	0.812"	9,550	JFXL6T	JFX6T
0.4375"	0.562"	0.812"	1.812"	7/16-20	0.937"	10,290	JFXL7T	JFX7T
0.500"	0.625"	0.937"	2.125"	1/2-20	1.062"	15,340	JFXL8T	JFX8T
0.625"	0.750"	1.125"	2.500"	5/8-18	1.375"	17,959	JFXL10T	JFX10T
0.750"	0.875"	1.312"	2.875"	3/4-16	1.562"	28,090	JFXL12T	JFX12T

**General Purpose Imperial Rod Ends**

3 piece precision rod end. This rod end has a low carbon steel body and a steel ball with brass race. They are ideal for low stress applications such as throttle and gear linkages and steering column supports.



B Dia	W Width	Ball Dia.	A Lgth.	Thread (UNF)	C Lgth.	Maximum Load (Lbs)	Part No. L/H	Part No. R/H
0.190"	0.312"	0.437"	1.250"	10-32"	0.500	2,100	CML3	CM3
0.250"	0.375"	0.500"	1.562"	1/4-28	1.000	2,225	CML4	CM4
0.313"	0.437"	0.625"	1.875"	5/16-24"	1.250"	3,600	CML5	CM5
0.375"	0.500"	0.719"	1.938"	3/8-24"	1.250"	5,100	CML6	CM6
0.438"	0.562"	0.812"	2.125"	7/16-24	1.375"	6,402	CML7	CM7
0.500"	0.625"	0.937"	2.438"	1/2-20	1.500"	8,386	CML8	CM8
0.625"	0.750"	1.125"	2.625"	5/8-18	1.625"	9,813	CML10	CM10
0.750"	0.875"	1.312"	2.875"	3/4-16	1.750"	14,290	CML12	CM12

B Dia	W Width	Ball Dia.	A Lgth.	Thread (UNF)	C Lgth.	Maximum Load (Lbs)	Part No. L/H	Part No. R/H
0.190"	0.312"	0.437"	1.062"	10-32	0.500"	2,100	CFL3	CF3
0.250"	0.375"	0.500"	1.312"	1/4-28	0.687"	3,250	CFL4	CF4
0.313"	0.437"	0.625"	1.375"	5/16-24	0.687"	3,934	CFL5	CF5
0.375"	0.500"	0.719"	1.625"	3/8-24	0.812"	5,100	CFL6	CF6
0.438"	0.562"	0.812"	1.812"	7/16-24	0.937"	6,420	CFL7	CF7
0.500"	0.625"	0.937"	2.125"	1/2-20	1.062"	9,100	CFL8	CF8
0.625"	0.750"	1.125"	2.500"	5/8-18	1.375"	9,800	CFL10	CF10
0.750"	0.875"	1.312"	2.875"	3/4-16	1.562"	14,250	CFL12	CF12

**Weldable Tube Inserts**

These threaded inserts machined from 4130 chrome moly steel simplify the manufacture of tubular steel suspension components. Available in both left and right hand threads add the suffix L or R to the part number as required.



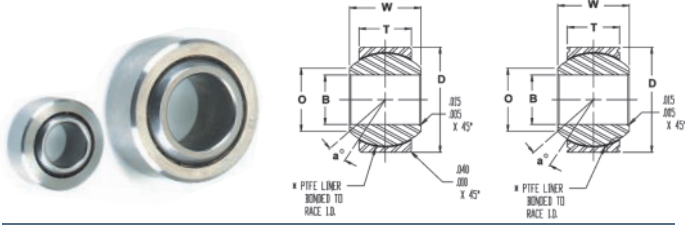
Tube Size x Wall Thickness	10/32 UNF	1/4 UNF	5/16 UNF	3/8 UNF	7/16 UNF	1/2 UNF	5/8 UNF	3/4 UNF
3/8" x 0.58"	1101	-	-	-	-	-	-	-
1/2" x 0.58"	-	1202	1203	-	-	-	-	-
5/8" x .058"	-	-	1303	1304	1305	-	-	-
3/4" x .058"	-	-	-	1403	1404	1405	-	-
3/4" x .065"	-	-	-	1503	1504	1505	-	-
7/8" x .058"	-	-	-	-	1604	1605	1606	-
7/8" x .065"	-	-	-	-	1704	1705	1706	-
7/8" x .083"	-	-	-	-	1804	1805	1806	-
1" x .058"	-	-	-	-	1904	1905	1906	1907
1" x .065"	-	-	-	-	2004	2005	2006	2007
1" x .083"	-	-	-	-	2104	2105	2106	2107
1" x .095"	-	-	-	-	2204	2205	2206	2207
1 1/8" x .058"	-	-	-	-	-	-	2306	2307
1 1/8" x .065"	-	-	-	-	-	-	2406	2407
1 1/8" x .083"	-	-	-	-	-	-	2506	2507 2508
1 1/8" x .095"	-	-	-	-	-	-	2606	2607 2608
1 1/4" x .095"	-	-	-	-	-	-	-	2707 2708
1 1/4" x .120"	-	-	-	-	-	-	-	2807 2808
1 3/8" x .095"	-	-	-	-	-	-	-	2907 2908
1 3/8" x .120"	-	-	-	-	-	-	-	3007 3008

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**Wide Series Imperial Spherical Bearings PTFE Lined**

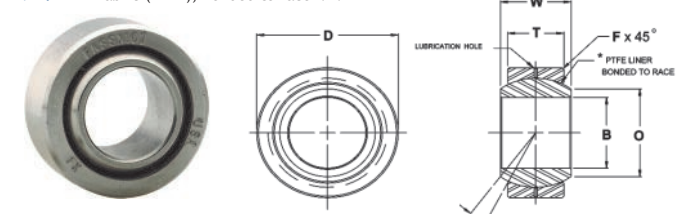
**BALL:** 440C Stainless Steel, Heat Treated. **RACE:** 17-4PH Stainless Steel, Heat Treated.  
**LINER:** PTFE Fabric (PTFE), Bonded to race I.D.



Imperial Spherical Bearings - Wide Series								
B Dia.	D Dia.	W Width	T Width	O Width	Ball Dia.	Load Rating Radial (lbs)	Static Limit Axial (lbs)	Part No.
0.190"	0.625"	0.437"	0.327"	0.301"	0.531"	2,500	1,770	WSSX3T
0.250"	0.625"	0.437"	0.327"	0.301"	0.531"	5,500	1,770	WSSX4T
0.3125"	0.6875"	0.437"	0.317"	0.401"	0.593"	9,400	1,640	WSSX5T
0.375"	0.8125"	0.500"	0.406"	0.466"	0.687"	13,700	2,630	WSSX6T
0.4375"	0.9375"	0.562"	0.442"	0.537"	0.781"	20,700	3,650	WSSX7T
0.500"	1.000"	0.625"	0.505"	0.607"	0.875"	21,400	4,970	WSSX8T
0.5625"	1.125"	0.687"	0.536"	0.721"	1.000"	26,600	5,370	WSSX9T
0.625"	1.1875"	0.750"	0.567"	0.747"	1.062"	29,000	6,130	WSSX10T
0.750"	1.375"	0.875"	0.630"	0.887"	1.255"	37,000	7,730	WSSX12T
0.785"	1.625"	0.875"	0.755"	1.061"	1.375"	65,200	10,800	WSSX14T
1.000"	2.125"	1.375"	1.005"	1.269"	1.875"	104,000	19,300	WSSX16T

**Narrow Series Imperial Spherical Bearings PTFE Lined**

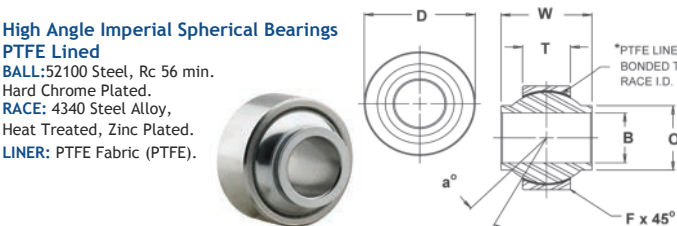
**BALL:** 440C Stainless Steel, Heat Treated. **RACE:** 17-4PH Stainless Steel, Heat Treated.  
**LINER:** PTFE Fabric (PTFE), Bonded to race I.D.



Imperial Spherical Bearings - Narrow Series								
B Dia.	D Dia.	W Width	T Width	O Width	Ball Dia.	Load Rating Radial (lbs)	Static Limit Axial (lbs)	Part No.
0.190"	0.5625"	0.281"	0.218"	0.293"	0.406"	3,975	150	FKSSX3T
0.250"	0.6562"	0.343"	0.250"	0.364"	0.500"	6,040	430	FKSSX4T
0.3125"	0.750"	0.375"	0.281"	0.419"	0.562"	8,750	700	FKSSX5T
0.375"	0.8125"	0.406"	0.312"	0.516"	0.656"	10,540	1,100	FKSSX6T
0.4375"	0.9062"	0.437"	0.343"	0.530"	0.687"	13,200	1,400	FKSSX7T
0.500"	1.000"	0.500"	0.390"	0.600"	0.781"	17,900	2,100	FKSSX8T
0.5625"	1.0937"	0.562"	0.437"	0.671"	0.875"	23,200	3,680	FKSSX9T
0.625"	1.1875"	0.625"	0.500"	0.739"	0.968"	30,500	4,720	FKSSX10T
0.750"	1.4375"	0.750"	0.920"	1.187"	0.968"	30,500	4,720	FKSSX12T
0.875"	1.5625"	0.875"	0.703"	0.980"	1.312"	62,200	9,350	FKSSX14T
1.000"	1.750"	1.000"	0.797"	1.118"	1.500"	82,200	12,160	FKSSX16T

**High Angle Imperial Spherical Bearings PTFE Lined**

**BALL:** 52100 Steel, Rc 56 min. Hard Chrome Plated.  
**RACE:** 4340 Steel Alloy, Heat Treated, Zinc Plated.  
**LINER:** PTFE Fabric (PTFE).



Imperial Spherical Bearings—High Angle								
B Dia.	D Dia.	W Width	T Width	O Width	Ball Dia.	Mis. Angle	Maximum Load (lbs)	Part No.
0.375"	0.906"	0.813"	0.345"	0.512"	0.781"	23°	16,983	HIN6T
0.4375"	1.000"	0.875"	0.345"	0.618"	0.875"	22°	19,032	HIN7T
0.500"	1.125"	0.937"	0.401"	0.730"	1.000"	20°	25,275	HIN8T
0.625"	1.375"	1.200"	0.567"	0.856"	1.250"	20°	44,652	HIN10T
0.750"	1.5625"	1.280"	0.620"	0.970"	1.375"	18°	53,716	HIN12T

**Large O.D. Imperial Spherical Bearings PTFE Lined**

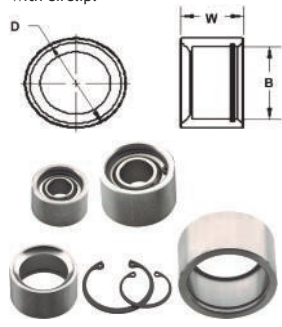
**BALL:** Alloy Steel, Hard Chrome Plated.  
**RACE:** Low Carbon Steel  
**LINER:** PTFE Fabric (PTFE)



Imperial Spherical Bearings—High Angle								
B Dia.	D Dia.	W Width	T Width	O Width	Ball Dia.	Mis. Angle	Maximum Load (lbs)	Part No.
0.500"	1.3125"	0.687"	0.531"	0.637"	0.937"	12°	19,902	LCOM-8T
0.625"	1.5625"	0.875"	0.687"	0.802"	1.187"	12°	32,619	LCOM-10T
0.750"	2.250"	1.250"	0.937"	1.038"	1.625"	15°	60,905	LCOM-12T

**Weldable Bearing Housings**

Machined from 4130 chrome moly steel, these bearing housings greatly simplify the fabrication of wishbones and other items, supplied complete with circlip.



Weldable Bearing Housings				
To Suit Bearing	B	W	D	Part No.
FKSSX8T	1.000"	.750"	1.250"	CP8
FKSSX10T	1.187"	.875"	1.500"	CP10
FKSSX12T	1.437"	1.00"	1.750"	CP12
WSSX12T	1.375"	1.00"	1.750"	CPW12
WSSX14T	1.625"	1.25"	2.000"	CPW14
WSSX16T	2.125"	1.50"	2.625"	CPW16
WSSX16T	2.125"	2.50"	2.625"	CPW16-1
COMM20T	2.375"	1.50"	2.875"	CP20

**UNF Thread Lock Nuts**

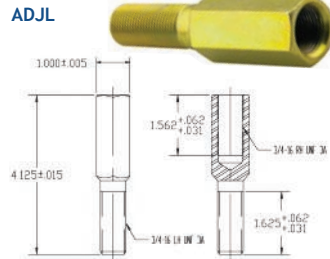
Plated steel lock nuts with UNF threads suitable for use with the rod end bearings detailed on this page, available with both R/H & L/H threads.



Steel Lock Nuts - UNF Thread			
Thread Size	Hex Size	Part No. L/H	Part No. R/H
10/32	3/8"	SJNL3	SJN3
1/4-28	7/16"	SJNL4	SJN4
5/16-24	1/2"	SJNL5	SJN5
3/8-24	9/16"	SJNL6	SJN6
7/16-20	1 1/16"	SJNL7	SJN7
1/2-20	3/4"	SJNL8	SJN8
5/8-18	15/16"	SJNL10	SJN10
3/4-16	1 1/8"	SJNL12	SJN12

**Adjuster Ladder**

Use when manufacturing in situ adjustable suspension components such as track control arms. Female section has 3/4 UNF R/H thread and the male section has 3/4 UNF L/H thread.



**Double Adjusters**

Steel turn-buckles with R/H / L/H threads for use in suspension links etc. Available as Male/Male or Male/Female. Supplied complete with two lock nuts.

Double Adjusters				
Thread	A	B	Length	Part No.
5/8"	R/H Male	L/H Male	4.25"	56196
3/4"	R/H Male	L/H Male	5.0"	56197
5/8"	R/H Male	L/H Female	4.0"	56198
5/8"	R/H Female	L/H Male	4.0"	56199

**Rod End Protective Boots**

Rubber boots that enclose the head of the rod end to protect it from dirt and moisture.

Rod End Protective Boots		
Suit Imperial Sizes	Suit Metric Sizes	Part No.
3/16, 1/4, 5/16"	6/8mm	RERS1
3/8, 7/16"	10/12mm	RERS2
1/2, 5/8, 3/4"	14/16/18mm	RERS3
7/8, 1"	20/22/25mm	RERS4



**Reducer Bushes**

Steel bushes that reduce the rod end or spherical bearing pivot ball I.D. to accept a smaller diameter bolt. Supplied in pairs.

Reducer Bushes			
O.D.	I.D.	Length	Part No.
.500"	.375"	.604"	ALL18565
.625"	.500"	.736"	ALL18566
.750"	.500"	.855"	ALL18567
.750"	.625"	.855"	ALL18568

**Imperial Rod End Cone Spacers**

Plated steel conical spacers to allow full articulation of the bearing. Supplied as a pair.

Cone Spacers - Imperial		
Width	Bore	Part No.
0.334"	3/16"	0030467
0.327"	1/4"	0030468
0.366"	5/16"	0030469
0.422"	3/8"	0030470
0.485"	7/16"	0030471
0.485"	1/2"	0030472
0.548"	5/8"	0030474
0.672"	7/8"	0030476

**High Misalignment Spacers**

Machined from stainless steel these spacers increase the misalignment angle and reduce the bore size in rod ends or spherical bearings. Supplied in pairs.

High Misalignment Spacers				
Suit Bore	A	B	C	Part No.
1/2"	.342"	.375"	.645"	8-6HB
5/8"	.530"	.500"	.840"	10-8HB
5/8"	1.250"	.500"	.840"	10-8HB-2
3/4"	.475"	.500"	.995"	12-8HB
3/4"	.475"	.625"	.995"	12-10HB
7/8"	.625"	.500"	1.040"	14-8HB
7/8"	.625"	.625"	1.050"	14-10HB
7/8"	.812"	.750"	1.050"	14-12HB

**Universal Spacers**

Universal rod end spacers from aluminium or steel. Supplied in pairs.

Universal Spacers			
I.D.	Length	Part No. Steel	Part No. Ally
.250"	.250"	-	ALL18700
.250"	.500"	-	ALL18702
.312"	.250"	-	ALL18706
.312"	.500"	-	ALL18708
.375"	.250"	-	ALL18712
.375"	.500"	-	ALL18714
.500"	.250"	ALL18570	ALL18590
.500"	.375"	ALL18571	-
.500"	.500"	ALL18572	ALL18592
.500"	.750"	ALL18574	ALL18594
.625"	.250"	ALL18580	ALL18597
.625"	.500"	ALL18582	ALL18598
.625"	.750"	ALL18584	ALL18599
.750"	.500"	ALL18587	-
.750"	.750"	ALL18588	-

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)





We have increased our range of metric bearings and associated hardware and are continuing to do so. If what you require is not listed here then please contact us as we may be able to help.

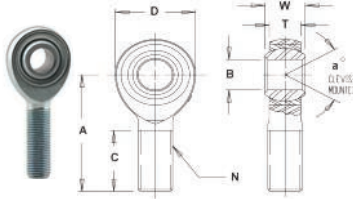
**JMX-MT Series: High Strength Alloy Steel Metric Male Rod Ends With PTFE Liner**

Suitable for suspension, steering and other high load/critical applications.

**BALL:** Heat treated steel, hard chrome plated.

**BODY and RACE:** Steel alloy, heat treated, zinc plated.

**LINER:** PTFE Fabric.



JMX-MT Precision High Strength Alloy Metric Male Rod Ends								
"B" Ø	"W" Width	"D" Ø	"A" Lgth.	Thread	"C" Lgth.	Max Load Newtons	Part No. L/H	Part No. R/H
5.0	8.0	16.0	33.0	M5 x 0.8	20.0	5,170	JMXL5MT	JMX5MT
6.0	9.0	19.0	36.0	M6 x 1.0	22.0	17,725	JMXL6MT	JMX6MT
8.0	12.0	22.3	42.0	M8 x 1.0	25.0	33,137	JMXL8MFT	JMX8MFT
8.0	12.0	22.3	42.0	M8 x 1.25	25.0	33,137	JMXL8MT	JMX8MT
10.0	14.0	27.0	48.0	M10 x 1.5	29.0	50,225	JMXL10MFT	JMX10MFT
10.0	14.0	27.0	48.0	M10 x 1.5	29.0	50,225	JMXL10MT	JMX10MT
12.0	16.0	30.0	54.0	M12 x 1.25	33.0	44,487	JMXL12MFT	JMX12MFT
12.0	16.0	30.0	54.0	M12 x 1.75	33.0	44,487	JMXL12MT	JMX12MT
14.0	19.0	34.8	60.0	M14 x 1.5	36.0	71,745	JMXL14MFT	JMX14MFT
14.0	19.0	34.8	60.0	M14 x 2.0	36.0	71,745	JMXL14MT	JMX14MT
16.0	21.0	38.0	66.0	M16 x 1.5	40.0	76,290	JMXL16MFT	JMX16MFT
16.0	21.0	38.0	66.0	M16 x 2.0	40.0	76,290	JMXL16MT	JMX16MT
18.0	23.0	42.0	72.0	M18 x 1.5	44.0	100,740	JMXL18MT	JMX18MT
20.0	25.0	46.0	78.0	M20 x 1.5	47.0	120,210	JMXL20MT	JMX20MT

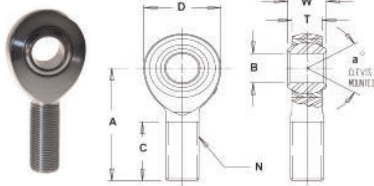
**DXTM Series: High Strength Chrome Moly Steel Metric Male Rod Ends With Nylon Liner**

Suitable for suspension, steering and other high load / critical applications.

**BALL:** Heat treated steel, hard chrome plated.

**BODY:** Chrome Moly Steel, polished chrome finish.

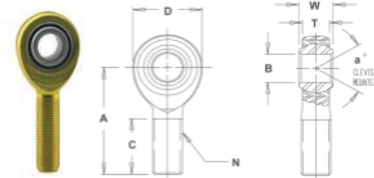
**RACE:** Nylo



DXTM Chrome Moly High Strength Metric Male Rod Ends								
"B" Dia	"W" Width	Ball Dia.	"A" Lgth.	Thread (Metric)	"C" Lgth.	Max Load (Newtons)	Part No. L/H	Part No. R/H
18.00	23.00	31.70	72.00	M18 x 1.5	41.00	114,042	DXTM18	
20.00	25.00	34.90	78.00	M20 x 1.5	45.00	T.B.A.	DXTM20	

**General Purpose Metric Male Rod Ends**

3 piece precision rod end. This rod end has a low carbon steel body and a steel ball with brass race. They are ideal for low stress applications such as throttle and gear linkages and steering column supports.



General Purpose Steel Metric Male Rod Ends								
"B" Ø	"W" Width	"D" Ø	"A" Lgth.	Thread	"C" Lgth.	Max Load Newtons	Part No. L/H	Part No. R/H
5.0	8.0	16.0	33.0	M5 x 0.8	20.0	5,168	CML5M	CM5M
6.0	9.0	19.0	36.0	M6 x 1.0	22.0	7,296	CML6M	CM6M
8.0	12.0	22.3	42.0	M8 x 1.25	25.0	13,591	CML8M	CM8M
10.0	14.0	27.0	48.0	M10 x 1.25	29.0	21,024	CML10MF	CM10MF
10.0	14.0	27.0	48.0	M10 x 1.5	29.0	21,024	CML10M	CM10M
12.0	16.0	30.0	54.0	M12 x 1.25	33.0	25,819	CML12MF	CM12MF
12.0	16.0	30.0	54.0	M12 x 1.75	33.0	25,819	CML12M	CM12M
14.0	19.0	34.8	60.0	M14 x 2.0	36.0	35,214	CML14M	CM14M
16.0	21.0	38.0	66.0	M16 x 2.0	40.0	37,391	CML16M	CM16M
18.0	23.0	42.0	72.0	M18 x 1.5	44.0	47,903	CML18M	CM18M
20.0	25.0	46.0	78.0	M20 x 1.5	47.0	57,101	CML20M	CM20M

**Metric Lock Nuts**

Plated steel lock nuts with metric threads suitable for use with the rod end bearings detailed on this page, available with both R/H and L/H threads.



Steel Lock Nuts - Metric Thread			
Thread Size	Hex Size	Part No. L/H	Part No. R/H
M5 X 0.8	10mm	SJNL5M	SJN5M
M6 X 1	11mm	SJNL6M	SJN6M
M10 X 1.5	14mm	SJNL10M	SJN10M
M12 X 1.75	19mm	SJNL12M	SJN12M
M14 X 2.0	19mm	SJNL14M	SJN14M
M16 X 2.0	15/16	SJNL16M	SJN16M
M18 X 1.5	1 1/8	SJNL18M	SJN18M
M20 X 1.5	1 1/8	SJNL20M	SJN20M

**Metric Weldable Tube Inserts**

These threaded inserts machined from 4130 chrome moly steel simplify the manufacture of tubular steel suspension components. Most sizes come in both left and right hand threads.



Metric Weldable Tube Inserts			
Tube I.D	Thread	Part No. L/H	Part No. R/H
10mm	M6 x 1.0	15425	15426
12mm	M8 x 1.25	15427	15428
15mm	M10 x 1.5	15411	15413
17mm	M12 x 1.75	15414	15416
18mm	M14 x 2.0	-	15418
21mm	M16 x 2.0	15420	15422
22mm	M18 x 1.5	-	15424

**JFX-MT Series: High Strength Alloy Steel Metric Female Rod Ends With PTFE Liner**

Suitable for suspension, steering and other high load/critical applications.

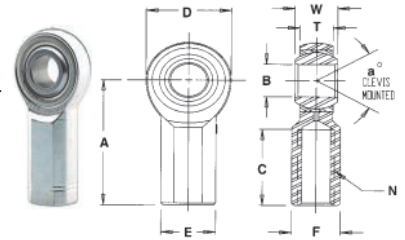
**BALL:**

Heat treated steel, hard chrome plated.

**BODY and RACE:**

Steel alloy, heat treated, zinc plated.

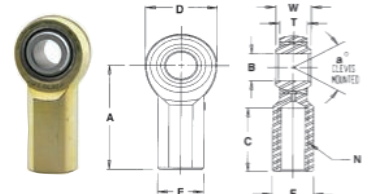
**LINER:** PTFE Fabric.



JFX-MT Precision High Strength Alloy Metric Female Rod Ends								
"B" Ø	"W" Width	"D" Ø	"A" Lgth.	Thread	"C" Lgth.	Max Load Newtons	Part No. L/H	Part No. R/H
5.0	8.0	16.0	33.0	M5 x 0.8	14.0	16,400	JFXL5MT	JFX5MT
6.0	9.0	19.0	30.0	M6 x 1.0	14.0	25,785	JFXL6MT	JFX6MT
8.0	12.0	22.3	36.0	M8 x 1.0	17.0	33,215	JFXL8MFT	JFX8MFT
8.0	12.0	22.3	36.0	M8 x 1.25	17.0	33,215	JFXL8MT	JFX8MT
10.0	14.0	27.0	43.0	M10 x 1.25	21.0	50,230	JFXL10MFT	JFX10MFT
10.0	14.0	27.0	43.0	M10 x 1.5	21.0	50,230	JFXL10MT	JFX10MT
12.0	16.0	30.0	50.0	M12 x 1.25	24.0	44,490	JFXL12MFT	JFX12MFT
12.0	16.0	30.0	50.0	M12 x 1.75	24.0	44,490	JFXL12MT	JFX12MT
14.0	19.0	34.8	57.0	M14 x 1.5	27.0	71,745	JFXL14MFT	JFX14MFT
14.0	19.0	34.8	57.0	M14 x 2.0	27.0	71,745	JFXL14MT	JFX14MT
16.0	21.0	38.0	64.0	M16 x 1.5	33.0	76,295	JFXL16MFT	JFX16MFT
16.0	21.0	38.0	64.0	M16 x 2.0	33.0	76,295	JFXL16MT	JFX16MT
18.0	23.0	42.0	71.0	M18 x 1.5	36.0	100,740	JFXL18MT	JFX18MT
20.0	25.0	46.0	77.0	M20 x 1.5	40.0	120,210	JFXL20MT	JFX20MT

**General Purpose Metric Female Rod Ends**

3 piece precision rod end. This rod end has a low carbon steel body and a steel ball with brass race. They are ideal for low stress applications such as throttle and gear linkages and steering column supports.



General Purpose Steel Metric Female Rod Ends								
B Dia	W Width	Ball Dia.	A Lgth.	Thread (Metric)	C Lgth.	Max Load (Newtons)	Part No. L/H	Part No. R/H
5.00	8.00	11.10	27.00	M5 x 0.8	14.00	8,247	CFL5M	CF5M
6.00	9.00	12.70	30.00	M6 x 1.0	14.00	11,895	CFL6M	CF6M
8.00	12.00	15.88	36.00	M8 x 1.25	17.00	15,190	CFL8M	CF8M
10.00	14.00	19.05	43.00	M10 x 1.5	21.00	22,750	CFL10M	CF10M
12.00	16.00	22.23	50.00	M12 x 1.75	24.00	25,819	CFL12M	CF12M
14.00	19.00	25.40	57.00	M14 x 2.0	27.00	35,214	CFL14M	CF14M
16.00	21.00	28.58	64.00	M16 x 2.0	33.00	37,391	CFL16M	CF16M
18.00	23.00	31.75	71.00	M18 x 1.5	36.00	47,903	CFL18M	CF18M
20.00	25.00	34.93	77.00	M20 x 1.5	40.00	57,101	CFL20M	CF20M

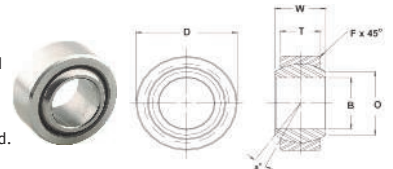
**Metric Spherical Bearings**

Metric spherical bearings with plated steel housings, chrome plated balls and a PTFE liner.

**BALL:** Heat treated steel, hard chrome plated.

**BODY and RACE:** Steel alloy, zinc plated.

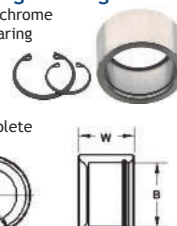
**LINER:** PTFE Fabric.



Metric Spherical Bearings							
"B" Ø	"D" Ø	"W" Width	"T" Width	"O" Ø	Ball Ø	a°	Part No.
8mm	22mm	12mm	9.0mm	10.35mm	15.88mm	14.0°	COMAT-M8
10mm	26mm	14mm	10.5mm	12.88mm	19.05mm	13.5°	COMAT-M10
10mm	21mm	14mm	10.5mm	12.90mm	19.05mm	13.0°	COMAT-M10-1
12mm	30mm	16mm	12.0mm	15.39mm	22.23mm	13.0°	COMAT-M12
14mm	34mm	19mm	13.5mm	16.86mm	25.40mm	16.0°	COMAT-M14
16mm	38mm	21mm	15.0mm	19.34mm	28.58mm	15.0°	COMAT-M16

**Weldable Bearing Housings**

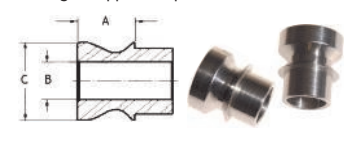
Machined from 4130 chrome moly steel, these bearing housings greatly simplify the fabrication of wishbones and other items, supplied complete with circlip.



Weldable Bearing Housings			
B	W	D	Part No.
22mm	18.3mm	26mm	24076
26mm	21.7mm	31mm	24077
30mm	24.2mm	36mm	24078
34mm	27.0mm	40mm	24079
38mm	28.5mm	44mm	24080

**High Misalignment Spacers**

Machined from plated steel these spacers increase the misalignment angle and reduce the bore size in rod ends or spherical bearings. Supplied in pairs.



High Misalignment Spacers				
Suit Bore	A (mm)	B (mm)	C (mm)	Part No.
8mm	7.38	6	10.87	14245
10mm	9.35	8	14.44	14199
12mm	10.08	8	15.83	14203
12mm	9.95	10	15.80	14202
20mm	25.60	16	25.40	30950

Telephone: 01327 857991 email: sales@competitionsupplies.com

**Retained Bonnet Pins**

Available in steel or in a choice of colours in lightweight aluminium. Supplied as a pair with mounting hardware.



Plated Steel: **GE52**  
 Silver Aluminium: **GE52S**  
 Black Aluminium: **GE52BL**



Blue Aluminium: **GE52B**  
 Red Aluminium: **GE52R**

**Terry Spring Clips**



Commonly used to keep boot lids closed on competition cars but suitable for a variety of other uses such as retaining exhaust silencers.

Minimum grip length 90mm. Supplied as a pair with fixings for the spring eye.

Stainless Steel: **GE53**  
 Black: **GE53B**

**Rubber Bonnet and Boot Hooks**



Commonly used to secure bonnets and boot lids. Available in two sizes:

Small (33mm minimum grip length): **GE62**  
 Large (89mm minimum grip length): **GE63**

**Camloc Tension Latches**



Adjustable for length and featuring a secondary lock for increased safety. Grip length: 59-67mm. Latch size: 72mm (L) 29mm (W) 21mm (H). Strike size: 14mm (L) 16mm (W) 8mm (H). Latch: **V951L014-1X1AGV** Strike: **V951L7-1AGV**

**R-Clips**

Plated steel R-Clips for pin retention. Available in a range of sizes.

R-Clips		
Wire Ø	Length	Part No.
2mm	43mm	RC1
3mm	54mm	RC2
4mm	75mm	RC3
5mm	105mm	RC4
6mm	115mm	RC5

**Bonnet Pin Cups**



Aluminium cups for use with our retained bonnet pins allowing them to fit sub flush with the panel, available in silver or black.

Silver Aluminium: **GE515S**  
 Black Aluminium: **GE515BL**

**Traditional Bonnet Pins**

Lightweight bonnet pins with aluminium posts and steel pins. Available with either 3/8" or 1/2" posts and in a choice of black or silver. Supplied as a pair.

3/8" Black: **ALL18484**  
 3/8" Silver: **ALL18480**  
 1/2" Black: **ALL18504**  
 1/2" Silver: **ALL18500**

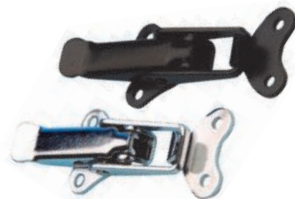


**Bonnet Pin Panel Support**

Screw the support on to the bonnet pin post before installation and lock off at the desired panel height with the grub screw. Supplied as a pair.

3/8" UNF: **ALL18478**  
 1/2" UNF: **ALL18479**

**Toggle Latches**



Compact over centre toggle latches suitable for panel fixing and a variety of other applications. Supplied as a pair. Standard Plated: **GE64** Standard Black: **GE64B**



Slightly smaller than our standard latch the lockable version incorporates a small tab allowing them to be locked with a padlock. Supplied as a pair.

Lockable Latch Plated: **GE65**  
 Lockable Latch Black: **GE65B**

**Wheel Spacers**

Made from pressure die cast aluminium and supplied singly. Please ensure that your wheel studs / bolts have sufficient thread engagement to accommodate the spacer.

Wheel Spacers			
Thickness	No. of Studs	P.C.D. Range	Part No.
3mm	4 & 5	95-121mm	SP11
6mm	4	95-114mm	SP13
10mm	4	95-114mm	SP17
19mm	4	95-114mm	SP18
25mm	4	95-114mm	SP19
6mm	5	95-120mm	SP14
10mm	5	95-130mm	SP15
20mm	5	95-130mm	SP16

**AeroCatch**

Aerodynamically efficient and IVA compliant the AeroCatch combines a strong yet light thermoplastic body with a stainless steel shear pin. The body is designed to accept the pin from directly below or from the side increasing the fitment options. The AeroCatch is available as flush with a 2.5mm thick flange that sits on top of the panel or a flush version that fits from beneath the panel allowing a completely flat installation. For added security a locking version of all types is available. The standard versions are available with a black or carbon effect finish and have a lightweight aluminium pin. The Xtreme version has a stronger plated steel pin and is suited for harsher, high stress applications. Supplied as a pair with bolts and captive nut lower mount.



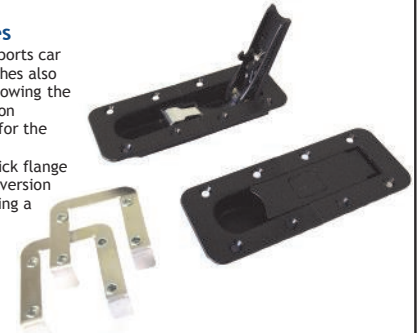
Type	Non-locking		Locking	
	Plus Flush	Flush	Plus Flush	Flush
Black	120-2000	125-2000	120-2100	125-2100
Carbon Effect	120-3000	125-3000	120-3100	125-3100
Xtreme Black	120-4000	125-4000	120-4100	125-4100

**AeroCatch 3 Tension Latches**

Typically used for panel fastening on sports car bodies these high strength tension latches also feature a shear engagement tongue allowing the latch to carry loads in 3 axis. Installation requires a simple cut-out in the panel for the latch to fit in to.

Available as flush with a 2mm thick flange that sits on top of the panel or a flush version that fits from beneath the panel allowing a completely flush installation. Supplied as a pair.

Plus Flush: **320-2000**  
 Flush: **325-2000**



**Wheel Studs**

High tensile steel replacement wheel studs in a selection of threads, spline sizes and lengths.



Press Fit Splined Wheel Studs				
Thread	Length	Spline Diameter	Notes	Part Number
3/8" UNF	35mm	10.3mm	Mini, MG Midget	SS31
3/8" UNF	50mm	10.3mm	Mini, MG Midget	SS32
3/8" UNF	55mm	10.3mm	Mini, MG Midget	SS32A
3/8" UNF	60mm	10.3mm	Mini, MG Midget	SS33
3/8" UNF	80mm	10.3mm	Mini, MG Midget	SS30
7/16" UNF	43mm	13.1mm	Pre '75 Ford	SS34
7/16" UNF	55mm	13.1mm	Pre '75 Ford	SS35
M12 x 1.25	63mm	14.3mm	Subaru, Nissan	SS41
M12 x 1.5	47mm	13.1mm	Post '75 Ford	SS36
M12 x 1.5	63mm	13.1mm	Post '75 Ford	SS37
M12 x 1.5	51mm	14.3mm	Ford, Vauxhall	SS38
M12 x 1.5	60mm	14.3mm	Ford, Vauxhall	SS39
M12 x 1.5	67mm	16.5mm	Volvo	SS85
M14 x 1.5	60mm	15.0mm	VW Press In	SS43
M14 x 1.5	70mm	15.0mm	VW Press In	SS44

**Conversion Wheel Studs**

These studs allow applications designed for wheel bolts to be converted to studs and nuts allowing easier wheel changing.



Conversion Studs			
Hub Thread	Nut Thread	Length	Part No.
M12 x 1.25	M12 x 1.25	50mm	SS22
M12 x 1.25	M12 x 1.25	60mm	SS23
M12 x 1.25	M12 x 1.25	80mm	SS24
M12 x 1.25	M12 x 1.25	100mm	SS24A
M12 x 1.25	M12 x 1.5	60mm	SS25
M12 x 1.25	M12 x 1.5	80mm	SS26
M12 x 1.5	M12 x 1.5	50mm	SS12
M12 x 1.5	M12 x 1.5	60mm	SS13
M12 x 1.5	M12 x 1.5	80mm	SS14
M14 x 1.5	M14 x 1.5	50mm	SS28
M14 x 1.5	M14 x 1.5	60mm	SS29
M14 x 1.5	M14 x 1.5	80mm	SS29A

**Open Wheel Nuts**

Plated steel wheel nuts of the open ended type preferred by scrutineers! Popular fitments in both metric and UNF threads are listed below, many others are available on request.



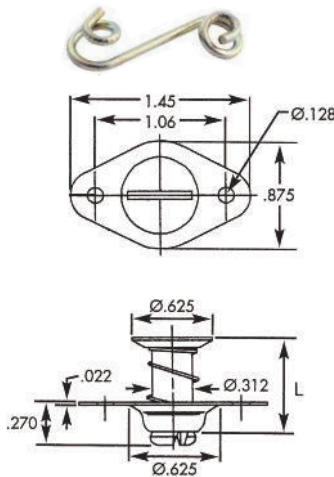
Open Wheel Nuts			
Thread	Seat	Hex	Part No.
3/8" UNF	60° Taper	17mm	SN10
7/16" UNF	60° Taper	19mm	SN96
1/2" UNF	60° Taper	19mm	SN97
M12 x 1.25	60° Taper	19mm	SN43
M12 x 1.25	60° Taper	21mm	SN43/21
M12 x 1.5	60° Taper	19mm	SN41
M12 x 1.5	Radius	19mm	SN41R
M12 x 1.5	60° Taper	21mm	SN42
M12 x 1.75	60° Taper	19mm	SN95
M14 x 1.5	60° Taper	19mm	SN434
M14 x 1.5	Radius	19mm	SN436

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)

Quarter Turn Fasteners



These versatile 1/4 turn fasteners have a 5/16" Ø stud and are available in a range of lengths. Commonly referred to as Dzus fasteners, they are particularly useful on curved or contoured surfaces where ejection of the fastener is essential to remove the panel. When properly installed they have a rated strength of 38kg in tension and 90kg in shear. Overall length is about 1/8" (3.2mm) longer than the working lengths listed. To select the correct fastener length add together the thicknesses of the panels to be fastened (making allowance for any panel gap required or seals) plus the spring clearance then subtract 0.047" (1.2mm) for spring deflection. Alternatively simply select your preferred fastener and spring combination for the required total material thickness from the table below.



Stud Part No.	Length "L"		Spring Height	Spring Part No.	Total Material Thickness	
	Inches	mm			Inches	mm
E5400	.400"	10.2	0.300"	S5300	.102" - .135"	2.6 - 3.4
E5400	.400"	10.2	0.250"	S5250	.152" - .185"	3.9 - 4.7
E5400	.400"	10.2	0.225"	S5225	.177" - .210"	4.5 - 5.3
E5450	.450"	11.4	0.300"	S5300	.152" - .185"	3.9 - 4.7
E5450	.450"	11.4	0.250"	S5250	.202" - .235"	5.1 - 6.0
E5450	.450"	11.4	0.225"	S5225	.227" - .260"	5.8 - 6.6
E5500	.500"	12.7	0.300"	S5300	.202" - .235"	5.1 - 6.0
E5500	.500"	12.7	0.250"	S5250	.252" - .285"	6.4 - 7.2
E5500	.500"	12.7	0.225"	S5225	.277" - .310"	7.0 - 7.9
E5550	.550"	14.0	0.300"	S5300	.252" - .285"	6.4 - 7.2
E5550	.550"	14.0	0.250"	S5250	.302" - .335"	7.7 - 8.5
E5550	.550"	14.0	0.225"	S5225	.327" - .360"	8.3 - 9.1
E5650	.650"	16.5	0.300"	S5300	.352" - .385"	8.9 - 9.8
E5650	.650"	16.5	0.250"	S5250	.402" - .435"	10.2 - 11.0
E5650	.650"	16.5	0.225"	S5225	.427" - .460"	10.9 - 11.7

AeroLoc Quarter Turn Fasteners

AeroLoc® is a modern, reliable, consistent performing, self ejecting quarter turn fastener, setting new standards for the 21st century, providing a leap forward in performance that race engineers will appreciate in the frenetic atmosphere of qualifying and pit-stops.

Available in cross recess and bail handle head styles, these strong and easy-to-use fasteners come in a variety of sizes to suit a wide range of panel thickness. A cam receptacle replaces the more commonly used spring receptacle and locking is made more positive. The positive lock enhances security as the stud stays locked in place. The self ejecting spring makes panel removal quick and easy. The choice of head styles makes AeroLoc ideal for hand or tool operation. An additional benefit of these fasteners is that they share key mounting dimensions with the ubiquitous Dzus EHF5 series so retro fitting/upgrading applications originally fitted with Dzus or similar quarter turn fasteners is easy. Minimum combined panel depth is 5.1mm, for retaining thin panels below this depth selectable spacers are available to fit between the receptacle and the bottom panel.

Four versions are available:  
 200-1000 Series: Cross Head, Plain Hole.  
 200-1100 Series: Cross Head, Csk. Hole.  
 200-1000 Series: D-Ring, Plain Hole.  
 200-5000 Series: D-Ring, Csk. Hole.



Grip		Shim Part No.	Part Number			
Min	Max		200-1000	200-1100	200-5000	200-5100
3.55	4.30	205-9015	200-1007	200-1107	200-5007	200-5107
4.30	5.10	205-9018	200-1007	200-1107	200-5007	200-5107
5.10	5.85	N/A	200-1007	200-1107	200-5007	200-5107
5.85	6.60	N/A	200-1008	200-1108	200-5008	200-5108
6.60	7.30	N/A	200-1009	200-1109	200-5009	200-5109
7.30	8.15	N/A	200-1010	200-1110	200-5010	200-5110
8.15	8.9	N/A	200-1011	200-1111	200-5011	200-5111
			Cup Type Receiver		205-1000	
			Flat Type receiver		205-3000	

Quarter Turn Fastener Tool



This tool fits neatly into the head of Dzus type 1/4 turn fasteners reducing the risk of causing bodywork damage by using a badly fitting screwdriver.  
**ALL19400**

Transfer Punch Tool

This transfer punch sits in the hole in the retaining panel for a 5/16" quarter turn stud and engages on the retaining spring. Simply position the panel to be retained and tap it above the punch to leave an accurate centre mark for the drilling stud hole.  
**PAN8421**



Spring Height Adjuster Tool

This handy tool allows the effective height of an installed fastener retaining spring to be tweaked in either direction to ensure effective tension and perfect panel retention.  
**PAN7602**



Dzus Slide Latch

The latch comprises a sliding bar which is supplied assembled to a housing/mounting plate which is riveted to the panel. This assembly engages onto a bush which can be riveted, bolted or screwed to the retaining panel. The spring action of the slide claw resists opening under vibration and shock loads.  
**Slide latch: 1500**  
**Bush: 150003**



Insulated Drinks Bottle



Keep drivers hydrated with our large 1250ml capacity drinks bottle. The bottle is double insulated to keep the contents cool and is supplied complete with drinking tube and bite valve. Optional Lightweight anodised aluminium holder includes roll cage bracket to allow the bottle to be mounted on various angle tubes and is available to suit both common tube diameters.  
**Bottle with 38mm Bracket: 22553**  
**Bottle with 44mm Bracket: 22551**  
**Bottle Only: 22556**

Drink System Accessories



A range of handy components for driver hydration. Drink tube is 120cm length and is supplied complete with bite valve. The quick disconnect coupler is valved to prevent leakage from the bottle and can be released by pressing the latch but also has a breakaway feature that allows it to disconnect with a sharp tug should the driver need to exit in a hurry  
**Drink Tube With Bite Valve: DSBVT**  
**Breakaway Q.D. Coupler: DSCQUP**  
**Q.D. Nipple: DSNIP**  
**90 Degree Connector: DS90**

Temperature Dabs



Self adhesive temperature strips allow to the peak temperature experienced by a component during use to be monitored. Supplied in a pack of 10 there are various temperature ranges available.

- Range "A" 37-65°C: **THETEMA**
- Range "B" 71-110°C: **THETEMB**
- Range "C" 116-154°C: **THETEMC**
- Range "D" 160-199°C: **THETEMD**
- Range "E" 204-260°C: **THETEME**

Brake Temperature Paint Kit



A kit comprising three different thermal indicating paints, thinners and brushes. When applied to the outer circumference of the brake disc an indication of the peak temperature reached by the disc will be given by the colour change of the paint.  
**BTPK**

Valve Action Paint Pens



Valve action markers available in a range of colours, ideal for marking tyres and other components.

- Blue: **TP1-B**
- Orange: **TP1-O**
- Red: **TP1-R**
- White: **TP1-W**
- Green: **TP1-G**
- Pink: **TP1-W**
- Silver: **TP1-S**
- Yellow: **TP1-Y**

Longacre Cage Hooks

Billet aluminium black anodised hook which clamps to the roll cage. Available to suit 38 or 44mm Ø tube ideal for hanging steering wheels, helmets or headsets inside the car.  
**Hook Suit 38mm: 22572**  
**Hook Suit 44mm: 22570**

Safety Decal Sheet

Invaluable sheet of self adhesive decals as required by motorsport regulations, pre-cut and ready to apply.  
**DC1**



Novice Cross

Novice Cross: **NC1**



Race Number Packs

Available in 9" Standard or 11" Standard or GP style and in black or white. Each pack of 63, includes six each of numbers 0-9 and nine number 1's.



Race Numbers and Backgrounds			
Size	Type	Black Part No.	White Part No.
9"	Std.	RN9B	RN9W
11"	Std.	RN11B	RN11W
11"	GP	RN11GPB	RN11GPW
450mm Round Background			RBG
Rectangular Background			OBG

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## Hawk Performance Brake Pads

Hawk Performance offer a range of proven compounds developed with the benefit of decades of R&D and by directly working with and responding to the requirements of competitors. Hawk performance offer professional level compounds and an excellent range of applications whilst maintaining competitive prices.



### DTC-70

A high friction brake pad with aggressive but controllable initial bite and stable friction characteristics. It continues to generate high friction levels at extremely high temperatures yet still offers good pad wear rates, low disc wear, superior pedal feel and excellent release characteristics.

### DTC-60

With slightly less initial bite than DTC-70 it is ideal for use in applications where grip levels or driver preference make this desirable. Beyond the initial bite it retains all the other characteristics of DTC-70 and offers even better pad wear rates. It is well suited for use on the rear of applications when DTC-70 is used on the front.

## Ferodo Competition Brake Pads

Ferodo offer an excellent range of pad shapes in compounds to suit applications from fast road to GT and endurance racing. The DS1.11 compound offers the best friction and wear characteristics for GT and endurance applications. DS3000 compound remains popular in saloon car applications whilst DS2500 is a cost effective fast road and track day compound. 4003 remains popular in lightweight race cars such as Formula Ford and F3 where it's moderate and consistent friction level provide excellent feel and modulation characteristics.

### DS1.11

This heavy duty endurance compound is based upon a chemical family known as Siloxanes which unlike carbon based materials do not decompose at high temperatures meaning DS1.11 keeps on working up to the highest temperatures a brake pad could ever see. That means it won't fade and has excellent life, the best in the Ferodo Racing range and is also kind to the discs. Formulated to provide a very flat friction profile over a wide temperature range whilst low material compression offers a short, consistent pedal. Average coefficient of friction of 0.46 between 200°C and 700°C.

### DSUNO

The latest heavy duty racing material from Ferodo replacing DS2.11 is already race proven in GT, touring car, Formula and rally. The technical objective for DSUNO was to provide a high friction output, whilst improving pad and disc life and to offer excellent modulation to reduce the risk of wheel locking compared to other pads of similar friction coefficient. Average coefficient of friction of 0.48 between 200°C and 700°C.

## Pagid Competition Brake Pads

Manufactured to exacting standards in Germany, the large range of Pagid RS compounds offer something for all disciplines of motorsport.



### PAGID RST

A choice of compounds developed sprint races and rallying with high friction levels, instant pedal response and good release characteristics. A firm pedal at all temperatures and excellent fade resistance at high disc temperatures.

### RST1

High friction compound with good initial bite and progressive torque curve. Ideal for cars with high downforce and/or high grip levels.

### RST2

Medium to high friction compound with a mild progressive torque curve and good pedal feel. Recommended for GT racing on tracks where high temperatures are an issue.

### RST3

Medium friction metal-ceramic compound with good initial bite whilst retaining excellent modulation and release characteristics. Fade resistant to 800°C and low heat conductivity.

### RST4

Medium to high friction compound with good initial bite and excellent release and modulation characteristics. Suitable for applications with high downforce and/or high grip.

### PAGID RSL

A choice of compounds developed for long distance/endurance racing.

### RSL1

Endurance compound with good thermal stability in respect to friction, pad and disc wear. Low pedal effort, slightly progressive in-stop behaviour and good modulation.

### RSL2

Endurance compound which offers the same characteristics as RSL1 but at a lower friction level making it ideal for light cars or cars with lower grip levels.



### HT-14

A very high friction level with excellent initial bite, it does however offer excellent pedal feel and release characteristics without the locking up tendency of some other carbon metallic based compounds. This compound is suitable for high inertia cars and those with high levels of grip and downforce finding favour in applications such as GT's and saloons.

Optimal temperature range 150°C - 870°C.

### HT-10

A medium to high friction compound with similar characteristics to Blue 9012, but stable to higher temperatures making it suitable for heavier duty applications where the temperature range of Blue 9012 is insufficient and where the extremely high friction levels of HT-14 are not required. It is very easy to modulate and typical applications include higher powered single seaters and production sports and saloons. Its easy modulation characteristics also make it ideal for rallying on both tarmac and gravel. Optimal temperature range 150°C - 650°C.

### BLUE 9012

A medium to high friction level brake pad, offering low pad and disc wear. Excellent low temperature friction makes it particularly suitable for Formula Ford, Sports 2000 and all light single seaters, but also widely used in historic sports and saloons and all forms of club race and rally applications. Optimal temperature range 120°C - 530°C.



### DS3000

A heavy duty all-round compound offering a high initial bite combined with an average coefficient of friction of 0.48 between 200°C and 650°C this compound has been the choice of champions in touring car, rally, Group N and GT categories. The high friction level allows less pedal pressure and offer easy pedal modulation.

### 4003

This compound was specifically developed for lighter Formula type cars such as Formula Ford, Formula Renault and F3 combining excellent bite with great release characteristics and low disc drag. 4003 is easily modulated to avoid wheel locking as down force reduces during the braking period. Average coefficient of friction of 0.46 between 200°C and 450°C.

### DS2500

Ideal for track days and fast road use as well as rear brakes on FWD race saloons / hatchbacks. The consistent average coefficient of friction of 0.42 between 20°C and 500°C gives very predictable braking with great pedal modulation and the material's low compressibility ensures a firm pedal feel. DS2500 provides great life for both disc and pad, low dusting of the wheels and low noise.



### PAGID RS

Premium organic based compounds with medium average friction, consistent in-stop behaviour. Good pedal feedback, release behaviour, low disc wear and low heat conductivity.

### RS14

Medium to high friction ceramic type compound with good initial bite & release. Very good modulation. Low wear rate and fade resistant to 650°C.

### RS14

Medium to high friction ceramic type compound with good initial bite & release. Very good modulation. Low wear rate and fade resistant to 650°C.

### RS19

Low to medium friction compound favoured for long distance/endurance racing thanks to its low wear rate, wide temperature range & disc friendliness.

### RS29

An evolution of RS19 which offers a higher initial bite & higher average friction level. Popular in GT racing.

### RS42

Medium friction compound with immediate low temperature response. Ideal for rally cars & single seater cars.

### PAGID RSH

A choice of compounds designed with historic competition cars & their requirements in mind.

### RSH42

A low to medium friction compound with immediate low temperature response. Ideal for rally cars & single seater cars.

### RSH29E

Designed for long distance racing with a medium to high friction level and low pad and disc wear. Low pedal effort, slightly progressive in-stop behaviour and good modulation.

### RSH3

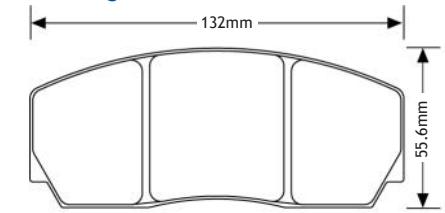
A high friction metal-ceramic compound with high initial bite whilst retaining excellent modulation. Firm pedal at all temperatures and fade resistant to 800°C and low heat conductivity.

## Brake Pads

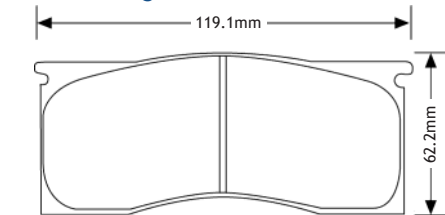
We stock brake pads from a number of manufacturers in a number of different compounds. A selection of the more popular pad types we hold are illustrated below, but many others are also available. If you would like assistance in identifying the correct pad and in selecting a compound to suit your application please contact us or refer our website for more information.



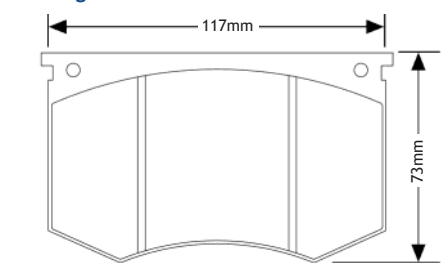
### AP Racing CP3215



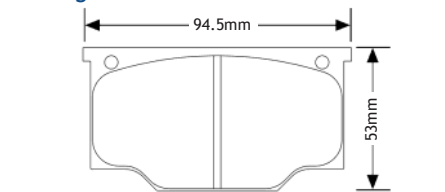
### Ford Mustang/Falcon



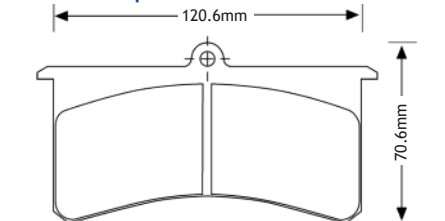
### Girling CR



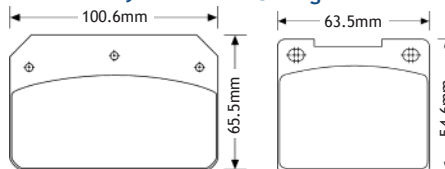
### Girling BR/ORR/AR Mk5



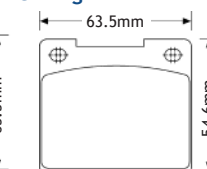
### Wilwood Superlite



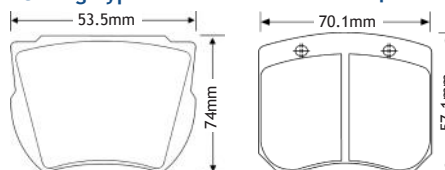
### Wilwood Dynalite



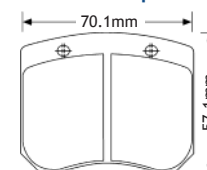
### Girling 14LF



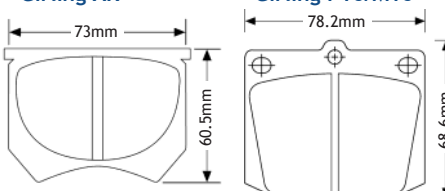
### Girling Type 14



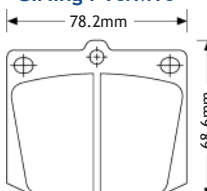
### Lockheed Cooper "S"



### Girling AR



### Girling P16/M16





**Italian Made Steering Wheels**

This range of steering wheels are hand crafted in Italy using top quality leathers combined with lightweight aluminium frames. The Vintage and Sport Line feature stitched black leather grips with the remainder of the range being covered in black suede. Mounting for all models excluding the Formula is by 6 bolts on the common 70mm PCD making them interchangeable with MOMO, Sparco and OMP steering wheels. The choice of diameters and amount of dish should offer something suitable for every application. We are able to offer a wide range of vehicle specific boss kits as well as a range of high quality quick release bosses.



Classic



Sport Line



Sprint



Imola



Racing 3



Competition



Formula

Steering Wheels				
Model	Diameter	Dish	Rim	Part No.
CLASSIC	360mm	Flat	Leather	20222
SPRINT	350mm	Flat	Suede	20159/S
SPORT LINE	350mm	Flat	Leather	20142/35
IMOLA	350mm	Flat	Suede	20124/S
IMOLA	330mm	Flat	Suede	20122/S
IMOLA	300mm	Flat	Suede	20128/S
RACING 3	380mm	65mm	Suede	20190/S
RACING 3	350mm	65mm	Suede	20189/S
RACING 3	330mm	65mm	Suede	20187/S
RACING 3	350mm	90mm	Suede	20189/1/S
COMPETITION	330mm	Flat	Suede	20126/S
COMPETITION	300mm	Flat	Suede	20138/S
FORMULA	270mm	Flat	Suede	20162/S

Telephone: 01327 857991 email: sales@competitionsupplies.com

**COMPETITION SUPPLIES LTD**

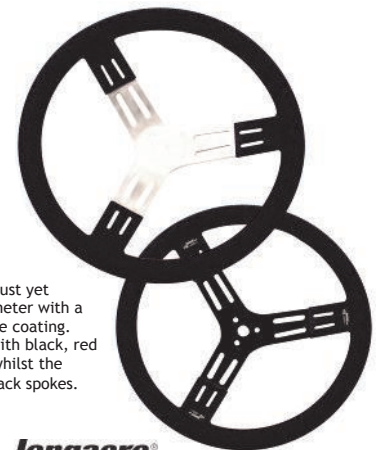


**Momo Prototipo**

The Momo Prototipo has graced some of the world's finest sports cars and thanks to its high quality and classic design it is still extremely popular for both competition and road use. The rim of the wheel is covered with fine black leather with contrasting colour stitching whilst the aluminium frame is available in either a brushed aluminium or matt black finish. 350mm diameter with a 25mm dish. Supplied with a horn push.  
**Black spokes: M11111525211**  
**Brushed spokes: M11111525111**



**Longacre Steering Wheels**



Popular for short track oval racing these robust yet lightweight steering wheels are 380mm diameter with a 70mm dish and have a high grip polyurethane coating. The aluminium frame versions are offered with black, red or blue rims and natural aluminium spokes whilst the steel frame version is black rim only with black spokes.

- Black Rim Aluminium: 56801**
- Blue Rim Aluminium: 56803**
- Red Rim Aluminium: 56805**
- Black Rim Steel: 56841**

**Longacre Hex QR Boss**

Popular for short track oval racing these low cost hex quick release boss kits can be welded to either 5/8" or 3/4" steering columns and feature a double groove retention and push button release. Three bolt pattern matches that on the Longacre steering wheels above.

**Hex QR Boss: 56600**



**Wireless Wheel Mounted Control System**



This innovative system allows wireless control of up to 8 configurable functions via a series of push button switches attached to the steering wheel. The wireless system is a particular advantage on detachable steering wheels. The 8 channel receiver is fully configurable with the capability to choose momentary, latching or flashing functions for each switch and each channel incorporates a 10A relay. The steering wheel switch panel is multi-drilled for compatibility with most aftermarket steering wheels with a 6 bolt fixing. The kit includes the steering wheel switch panel pre-fitted with 8 sealed push button switches, infra-red receiver and a relay control unit.

Relay control unit size: 108 x 85 x 30mm.  
Weight: 240g.  
Steering wheel switch panel size: 200 x 160mm.  
Weight including battery: 220g.  
CK-WK-08



**Steering Wheel Switches**

Momentary switches suitable for steering wheel mounting commonly used for controlling dash logger and timing system functions. Requires 12mm hole.

Black Switch: 1036296  
Red Switch: 10362807  
Rubber Cover: 1036303



**Pedal Extensions**

Set of 3 lightweight cast aluminium pedal extensions. Supplied with bolts and nyloc nuts. Accelerator: 112 x 55mm. Brake/clutch: 70 x 60mm. GE57

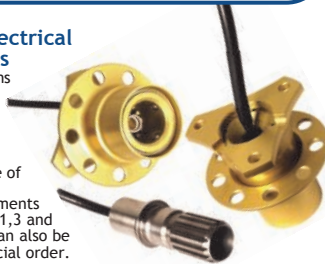


**Quick Release Steering Wheel Bosses**

The Lifeline range of quick release steering wheel bosses feature a fine tolerance spline for zero play whilst a master spline ensures that the wheel is always fitted in the same orientation. Unless otherwise stated the bosses are anodised in high visibility gold to satisfy FIA requirements. Three steering wheel fittings are available; 3-Bolt for undrilled wheels, 6-Bolt for Sparco / Momo/APS pattern wheels and 9-bolt fitment to suit classic Mota-Lita pattern steering wheels.

**Optional Electrical Connections**

Selected versions are available with a pre-wired 8 way electrical connector to allow the use of steering wheel mounted instruments or switch gear. 1,3 and 5 pin versions can also be supplied to special order.



**6 And 9 Bolt With Weld On Slug**

These quick release bosses allow the direct mounting of any steering wheel with the common 6 bolt on 70mm P.C.D. mounting pattern such as Momo, Sparco and APS. Supplied as standard with a 20mm O.D. EN3B steel slug with a 5mm pilot hole for weld fitment to the steering column.

The electrical version has an integral 8 pin plug. SAE 4130 or Titanium slugs can be supplied to order.



6 Bolt, Weld-on: 410-100-002  
6 Bolt, Weld-on Electrical: 410-200-002

Classic 9 bolt version for Mota-Lita pattern steering wheels  
Classic 9 Bolt Weld-on: 410-100-007

**Steering Wheel Spacers**

Made from high quality aluminium with a black anodised finish these steering wheel spacers are available as either a 60mm fixed length or as an adjustable unit with a range of 45-70mm. Both models are multi drilled allowing use with APS, MOMO, Sparco, OMP, Nardi and Personal steering wheels.

60mm fixed: BG4923  
Adjustable 45-70mm: BG4922

Lightweight billet aluminium spacers with a black anodised finish 19mm (3/4") deep available with either the single seater 3 bolt pattern or the APS, MOMO, Sparco and OMP 6 bolt pattern.

19mm Three Bolt: SWS3  
19mm Six Bolt: SWS6



**Steering Wheel Boss Kits**

Application specific steering wheel bosses to allow the fitment of any of our 6 bolt pre-drilled steering wheels to the specified vehicle. A small selection of popular applications are shown, many more available on request, please contact us or refer to our website for details.



**3 Bolt With Weld On Slug**

These quick release steering bosses attach to the wheel using 3 6mm (1/4") bolts on a 44mm P.C.D. Most commonly used on small diameter single seater/sports prototype steering wheels. They are supplied with a 20mm O.D. EN3B steel slug with a 5mm pilot hole for fitment to the steering column.



The electrical version has an integral 8 pin plug. SAE 4130 or Titanium slugs can be supplied to order.  
3 bolt weld-on: 410-100-001  
3 bolt weld-on electrical: 410-200-001

**Bolt-on, 6 And 9 Bolt**

The Group N quick release simply bolts between the boss and the steering wheel on applications using the popular MOMO/ Sparco/APS 6 bolt on a 70mm P.C.D pattern, bringing the steering wheel approximately 50mm closer to the driver. The electrical version has an integral 8 pin plug.



6 on 70mm PCD: 410-100-003  
6 on 70mm PCD Electrical: 410-200-003  
Road and track day version with black anodised boss.  
6 on 70mm PCD: 410-100-004

The Classic 9 bolt version offers a direct bolt on fitment for Mota-Lita pattern steering wheel/boss applications.  
Classic 9 Bolt Black Anodised: 410-100-005

Steering Wheel Boss Kits			
Make	Model	Year	Part No.
BMW	3 Series E30	83-90	C/523/1
BMW	3 Series E36	90-94	CA/547
BMW	3 Series E36 / 5 Series E39 / Z3	95-01	CA/545
BMW	3 Series E46 / E90	98-	CA/546
Ford	Escort Mk 1	-74	MK15WB
Ford	Escort Mk 2	75-80	529
Ford	Sierra / Sierra Cosworth	82-94	532/1
Honda	Civic	96-	C/5189
Mazda	MX5 / Miata	90-	C/5215
MG	MGB / Midget	62-67	5152
MINI	Cooper	02-	CA/544
Mitsubishi	Lancer Evo 8	2004-	5279/2
Nissan	200 SX	93-	C/5310
Peugeot	205	83-87	C/585
Porsche	911S / 912S / 928	-93	595
Porsche	944/ 996	-96	596
Rover	200 / 400 Series	90-	C/5185
Subaru	Impreza	93-04	C/5658
Subaru	Impreza WRX STi	04-	CA/5660
Toyota	MR2	01-	C/5299/1
Triumph	TR4 / TR5 / TR6 / GT6		5120
Vauxhall / Opel	Corsa with electric power steering	98-	CA/580/1
Volkswagen	Golf Mk 2	-88	C/5145
Volkswagen	Golf Mk 5	04-	CA/5239

## Cobra Signature Range



The Cobra Signature service offers you the chance to have a seat just the way you like it. Whether its for a professional team who want to put sponsors on the seat or the club racer who wants their seat to match their car, this is the service for you. There are a wide range of colours available in either soft grain leather or spacer fabric.

## Cobra Technology Upgrade (Carbon composite seats only)

A visual Carbon Fibre finish to the shell coupled with EAR Confor® energy absorbing foam, Outlast® technology to aid driver temperature control and trimmed in Dinamica fabric. Custom embroidery is included as standard. Please contact us for details.

## Sebring Pro-Fit

A world class competition seat and one of the safest seats on the market. The deep sides, integral side head restraints and HANS friendly design offer an exceptional level of safety. The Pro-Fit system allows drivers up to 195cms to be comfortably accommodated. Available in either Std or GT (+30mm) width and trimmed in breathable, fire retardant Spacer fabric in black, blue, grey or red. Side mount only.

**GRP Shell:**  
Std Width: **SEP-GC-S**  
GT width: **SEP-GC-X**

**Kevlar® Shell:**  
Std Width: **SEP-KC-S**  
GT width: **SEP-KC-X**

**Carbon Shell**  
Std Width: **SEP-CC-S**  
GT width: **SEP-CC-X**



## Suzuka Pro-Fit

Offering excellent support and protection thanks to its deep sides the Suzuka Pro offers the ideal solution to those not requiring side head restraints. Available in either Std or GT (+30mm) width and trimmed in breathable, fire retardant Spacer fabric in black, blue, grey or red. HANS friendly. Side mount only.

**GRP Shell**  
Std Width: **SUP-GC-S**  
GT width: **SUP-GC-X**

**Kevlar® Shell**  
Std Width: **SUP-KC-S**  
GT width: **SUP-KC-X**

**Carbon Shell**  
Std Width: **SUP-CC-S**  
GT width: **SUP-CC-X**



## Monaco Pro

The result of extensive research into the safest and most effective way to produce a HANS friendly, steel framed FIA approved seat. The plated steel design offers strength and rigidity without compromising weight. Trimmed in breathable, fire retardant Spacer fabric in black, blue, grey or red. A vinyl trimmed version is also available for open cars. Side or base mount.

**Fabric trimmed:** **MNP-S**  
**Vinyl trimmed:** **MNP-V**

## Monaco Sport

A Non-FIA approved version of the Monaco Pro which is also slightly narrower than the Pro aiding fitment in narrow cockpits.

**Monaco Sport:** **MNL-S-BK**



For 30 years Cobra seats have been proudly manufactured in the UK combining innovative technology with safety and style.

### Please Note:

FIA seat dating rules mean we stock seats in black only, with other colours available to order.

Subframes are not included with seats and should be ordered separately.

## Cobra Pro-Fit System

The Cobra Pro-Fit system that features on many of the seats shown allowing the fit to be tailored to suit the occupant by offering differing thicknesses of each of the three cushions. With 18 different cushion combinations available the user can get the perfect cushion arrangement to suit them. The seats are supplied with Mid height cushions as standard but these can easily be changed for you alternatively why not visit our showroom and try the different cushion options to find the right fit for you.

The Pro-Fit range is available in either Std or GT (30mm wider) shell width options. The Spacer fabric used to trim the seats is a hard wearing, multi-layer fire retardant fabric that aids driver cooling thanks to a central layer that wicks moisture away from the body whilst the other open cell layers allow air to circulate. Areas susceptible to wear are protected by ultra-tough Suede-Tec material.

All the seats shown are FIA approved, suitable for use with a HANS device and will accept a 4, 5 or 6 point harness. Each seat is supplied with installation instructions and a set of high tensile 12.9 grade mounting bolts. Please contact us or refer our website if you would like weights or dimensions for any of the seats.



## Evolution Pro-Fit

Preferred by many drivers thanks to the increased visibility of the open side head restraints. The high sides, integral side head restraints and HANS friendly design offer an exceptional level of safety. Available in either Std or GT (+30mm) widths and trimmed in breathable, fire retardant Spacer fabric in black, blue, grey or red. Side mount only.

**GRP Shell**  
Std. Width: **EVP-GC-S**  
GT width: **EVP-GC-X**

**Kevlar® Shell**  
Std. Width: **EVP-KC-S**  
GT width: **EVP-KC-X**

**Carbon Shell**  
Std. Width: **EVP-CC-S**  
GT width: **EVP-CC-X**



## Imola Pro-Fit

The most cost effective way to benefit from Cobra's well earned reputation for quality and safety the Imola Pro remains one of the strongest and lightest seats in its class. Available in either Std or GT (+30mm) widths and trimmed in breathable, fire retardant Spacer fabric in black, blue, grey or red. A vinyl trimmed version is also available for open cars. HANS friendly. Side mount only.

**GRP Shell**  
Std. Width: **IMP-GC-S**  
GT width: **IMP-GC-X**

**Kevlar® Shell**  
Std. Width: **IMP-KC-S**  
GT width: **IMP-KC-X**

**Carbon Shell**  
Std. Width: **IMP-CC-S**  
GT width: **IMP-CC-X**



## Racer Pro

Originally designed to fit in Lotus 7 type cars and available as a tailored fitment for VX220 and Lotus Elise / Exige. The Racer Pro offers a HANS friendly FIA approved seat that may fit applications for which regular race seats are too wide. Trimmed in breathable, fire retardant Spacer fabric in black, blue, grey or red. Vinyl and leather trimmed versions also available for open cars. Side mount only.

**Fabric trimmed:** **RAP-GC-S**  
**Vinyl trimmed:** **RAP-GC-V**  
**Leather trimmed:** **RAP-GC-L**



## FIA Historic

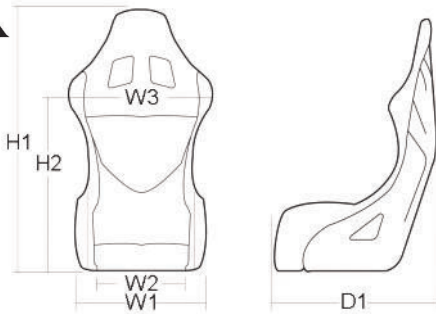
The FIA historic race seat is the narrowest FIA approved race seat on the market and has a great historic styling to complement many historic cars while still retaining the strength and safety levels required for FIA Approval. The shell is available in GRP only. Side mount only.

**Black Vinyl:** **FIA-GC-V-BK**  
**Biscuit Vinyl:** **FIA-GC-V-BIS**  
**Black Leather:** **FIA-GC-L-BK**



## Cobra Seat Dimensions

The table below provides the key installation dimensions for our range of Cobra competition seats detailed opposite.



COBRA SEAT DIMENSIONS						
Model	W1	H1	W2	H2	W3	D1
Monaco Sport	470mm	870mm	360mm	560mm	510mm	660mm
Monaco Pro	510mm	870mm	360mm	560mm	550mm	660mm
Imola Pro	520mm	880mm	360mm	590mm	580mm	680mm
Imola Pro GT	550mm	880mm	390mm	590mm	610mm	680mm
Sebring Pro	520mm	915mm	290mm	585mm	590mm	610mm
Sebring Pro GT	550mm	915mm	320mm	585mm	620mm	610mm
Evolution Pro	520mm	895mm	280mm	565mm	530mm	600mm
Evolution Pro GT	550mm	895mm	310mm	565mm	560mm	600mm
Suzuka Pro	520mm	890mm	350mm	590mm	580mm	620mm
Suzuka Pro GT	550mm	890mm	380mm	590mm	610mm	620mm
Racer Pro	450mm	895mm	310mm	580mm	515mm	560mm
FIA Historic	450mm	895mm	310mm	580mm	515mm	560mm

## Cobra Seat Mounts



All the mounts shown have 290mm centres for the seat attachment making them compatible with most FIA approved competition seats.

Steel: **SUBFR10**

Black Aluminium: **SUBFR11**

## APS Aluminium Side Mounts



FIA compliant lightweight steel side mount set made from 5mm aluminium

Side Mount: **GRP3820**

## Weld-In Steel Seat Rail Kit



Universal weld-in set rail kit to accept seat side mounts, comprising tubular steel cross bars, with reinforcing gussets and seat mount brackets incorporating a floating captive nut system to allow lateral adjustment to accommodate different seat widths. Bar length: 600mm.

Weld In Seat Rail Kit: **GRP5090**

## Seat Trimming Fabric



An anti-bacterial, fire retardant, breathable fabric which is ideal for covering bead or two part foam seats. 3mm thick and available in black only it is cut from a 132cm wide roll and is supplied per linear meter.

SFBLK

## Tillett Pro Side Mounts



CNC machined from billet aluminium the Tillett Pro seat side mounts combine light weight with exceptional strength.

Pro-FIA Black Aluminium: **TBFIA/B**

Pro-FIA Natural Aluminium: **TBFIA/N**

## Sabelt Narrow Fit Side Mounts



These aluminium side mounts drop down directly from the side of the seats providing the benefit of reducing the overall base width of the installation at the expense of requiring a little more height to accommodate the heads of the mounting bolts beneath the seat base. The long version can be useful where suitable mounting positions are too distant to be straddled by the standard length mounts.

Std. Length Narrow : **Z200005B**

Long Narrow: **Z200045B**

## Double locking Seat Slides



OE quality double locking seat slides that can be used with either base or side mounted seats. These are a universal part therefore some modification may be required to install.

DLSS

## Seat Foam Kit

Commonly used to make custom seats in Formula and Sports Prototype cars.

The two part foam kit is used by simply mixing the contents of the two cans

together in a strong bin liner inserted into the car that the driver then sits on allowing the foam to mould itself around the driver. When set the foam is easily trimmed for fine adjustments.

2x 1 Ltr Cans: **CSMTPF**  
Clear Extra Strong 300 Gauge Bag  
48"x36"x22": **CSMSFB**



## Schroth Indi Seat



Schroth Racing Indi Seats use a vacuum casting bag with a unique bead and slow cure resin mix making it a simple system to fit any driver into any competition car. The flame resistant core materials won't shrink over time meaning your insert will last longer. There is also quick cure resin option which can be used with the 20, 25 and 30 litre kits that cures in just 30 minutes making it ideal for seat fittings at the track.

**20L:** Designed as a seat insert to fit under the legs, lumbar and back area.

**25L:** Ideal for big drivers in small cockpits or seat shells. Designed for torso or legs.

**30L:** Ideal for tight spaces or as a insert for a seat shell or extractable seat.

**40L:** Ideal for tight spaces or as a insert for a seat shell or extractable seat but for smaller drivers.

**50L:** Ideal for the majority of single seater applications including LMP, GP2, GP3 and F3.

**70L:** As with the 50L this is best used on its own in open cockpits such as Radical, Caterham and Sports 2000 installations.



## Tillett Racing Seats

Tillett have designed their range of racing seats using the years of experience gained making kart seats with little or no padding bringing car drivers that "seat of the pants" feel of a racing kart. These rigid yet lightweight seats are remarkably comfortable and their compact dimensions allow them to fit many applications where no other manufacturer's seat can be accommodated.

### B6

The B6 is a narrow, full height seat that is well suited to vehicles with a narrow cockpits. Suitable for use with 4, 5 or 6 point harnesses and designed to allow use with a HANS device. Weighing as little as 4 kg and available in either GRP or a Carbon/GRP mix. The B6 has a maximum width of 44cm but can be ordered with the rolled edges removed saving 3cm in width. For extra comfort the seat can be supplied fitted with Dinamica® covered soft padded panels. Base mount only.

### B6/F

The B6/F is a FIA approved version of the 44cm width B6 featuring a super strong full height integral back frame and side mounting points designed for competition use with the option to utilise the extra mounting points fitted to the upper sides and headrest to give ultimate safety and rigidity. Weighing as little as 7.5 kg and available in either GRP or a Carbon/GRP mix. For extra comfort the seat can be supplied fitted with Dinamica® covered soft padded panels. Side mount only.

### B7

The B7 is a lightweight FIA approved seat based on the B6/F but constructed using carbon epoxy which allows it to tip the scales at only 3.5kg. Available in either 40 or 44cm widths (the internal dimensions are the same) allowing fitment into the narrowest of cockpits. The side mounting points are designed for competition use with the option to utilise the extra mounting points fitted to the upper sides and headrest to give ultimate safety and rigidity. For extra comfort the seat can be supplied fitted with Dinamica® covered soft padded panels. Side mount only.

### W1i

A low back version of the B6 which is available in either 40 or 42 cm widths (the internal dimensions remain the same). Weighing as little as 3.5 kg and available in either GRP or a Carbon/GRP mix. The seat can be ordered uncovered, half covered or fully covered and is supplied with slots to facilitate lap and crutch straps.

Base mount only.

Due to the large range of model options available we ask you to contact us for further information and pricing.





**MOTORSPORT EQUIPMENT**

Proudly manufactured in Britain under ISO9001 quality control the TRS range of harnesses offer excellent value for money with a model range to suit all budgets and applications. All FIA approved harnesses are HANS compatible and are fitted with a compact lightweight quick release buckle as standard. Saloon harnesses are supplied with the appropriate number of eyebolts and if required can be easily converted to wrap around the roll cage. Where required an economical and efficient custom made service is also available, please contact us for more details.

STANDARD COLOURS		
SPECIAL ORDER COLOURS		

**Hans Specific Saloon Harnesses**

Whilst the entire range of TRS harnesses are suitable for use with a HANS device we can also offer a harness that is specifically designed for use with a HANS device. These harnesses feature 2" / 50mm webbing on the upper part of the shoulder straps fitted which locates better on to the HANS device. These harnesses are only approved for use in conjunction with a HANS device and should not be used without one.



**Pro Superlite Hans**

HANS specific shoulder straps, 2" lap straps with lightweight aluminium adjusters on the shoulder straps and steel adjusters on the lap straps. Also available with pull down lap strap adjusters to aid driver changes.

6 Point: **MH560-152**

**Pro Ultralite Hans**

HANS specific shoulder straps, 2" lap straps with lightweight aluminium adjusters on the shoulder and lap straps. Also available with pull down lap strap adjusters to aid driver changes.

6 Point: **MH560-162**



**Magnum Superlite Hans**

HANS specific shoulder straps, 3" lap straps with lightweight aluminium adjusters on the shoulder straps and steel adjusters on the lap straps.

5 Point: **MH450-152**

6 Point: **MH460-152**

**Magnum Ultralite Hans**

HANS specific shoulder straps, 3" lap straps with lightweight aluminium adjusters on the shoulder and lap straps.

5 Point: **MH450-162**

6 Point: **MH460-162**

**Magnum Saloon**

3" / 75mm shoulder and laps straps with steel adjusters on all straps.

4 Point: **MH440-100**

5 Point: **MH450-100**

6 Point: **MH460-100**

**Magnum Superlite Saloon**

3" / 75mm shoulder and laps straps with lightweight aluminium adjusters on the shoulder straps and steel adjusters on the lap straps.

4 Point: **MH440-150**

5 Point: **MH450-150**

6 Point: **MH460-150**

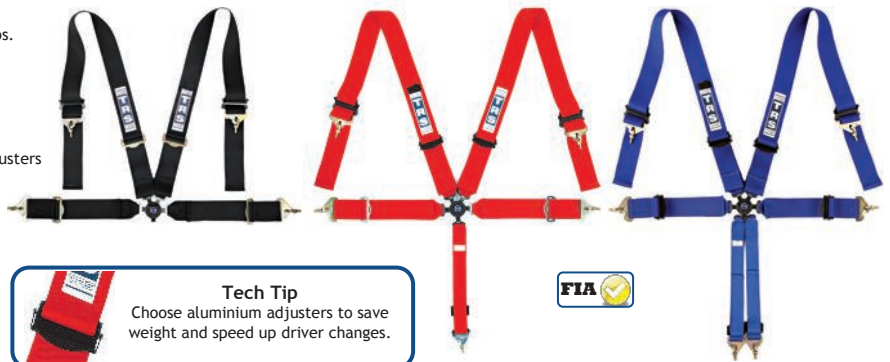
**Magnum Ultralite Saloon**

3" / 75mm shoulder and laps straps with lightweight aluminium adjusters on the shoulder and lap straps.

4 Point: **MH440-160**

5 Point: **MH450-160**

6 Point: **MH460-160**



**Tech Tip**  
Choose aluminium adjusters to save weight and speed up driver changes.

**Pro Saloon**

3" / 75mm shoulder, 2" / 50mm laps straps with steel adjusters on all straps.

4 Point: **MH540-100**

5 Point: **MH550-100**

6 Point: **MH560-100**

**Pro Superlite Saloon**

3" / 75mm shoulder, 2" / 50mm laps straps with lightweight aluminium adjusters on the shoulder straps and steel adjusters on the lap straps.

4 Point: **MH540-150**

5 Point: **MH550-150**

6 Point: **MH560-150**

**Pro Ultralite Saloon**

3" / 75mm shoulder, 2" / 50mm laps straps with lightweight aluminium adjusters on the shoulder and lap straps.

4 Point: **MH540-160**

5 Point: **MH550-160**

6 Point: **MH560-160**



**Custom Harness Service**  
A fast, efficient custom made harness service is available allowing us to supply a suitable harness for any application. Please contact us for details.

**Single Seater Harnesses**

**Magnum SS**

3" / 75mm shoulder and laps straps with steel adjusters on the shoulder straps. Lap straps adjust via bolted pinch plates.

6 Point: **MH460-200**

**Magnum SS Superlite**

3" / 75mm shoulder and laps straps with lightweight aluminium adjusters on the shoulder straps. Lap straps adjust via bolted pinch plates.

6 Point: **MH460-250**

**Pro SS**

3" / 75mm shoulder, 2" / 50mm lap straps with steel adjusters on the shoulder straps. Lap straps adjust via bolted pinch plates.

6 Point: **MH560-200**

**Pro SS Superlite**

3" / 75mm shoulder, 2" / 50mm lap straps with lightweight aluminium adjusters on the shoulder straps. Lap straps adjust via bolted pinch plates.

6 Point: **MH560-250**

**HANS Specific Single Seater**

**Magnum SS Superlite HANS**

HANS specific shoulder straps, 3" lap straps with lightweight aluminium adjusters on the shoulder straps. Lap straps adjust via bolted pinch plates.

6 Point: **MH460-252**

**Pro SS Superlite HANS**

HANS specific shoulder straps, 3" lap straps with lightweight aluminium adjusters on the shoulder straps. Lap straps adjust via bolted pinch plates.

6 Point: **MH560-252**

**Eye Bolts**

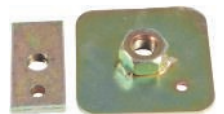
High tensile 7/16 UNF eye bolts for use with snap hook type harness mountings.

- Available in 3 lengths:
- 23mm Thread Length: **GE50**
- 32mm Thread Length: **GE50AL**
- 50mm Thread Length: **GE50AL50**



**7/16 UNF Backing Plates**

Load spreading plates for the safe anchorage of harness eye bolts. Standard 50x25x6mm: **GE50B**  
FIA Specification 65x65mm: **GE50BS-FIA**



**Harness Cutter**

Web cutting knife ideal for rally cars as required by the MSA Blue Book: **MA160-0001**



**Shock Cord**

Bungee/Shock cord for retracting harness straps for long distance or multi driver events. Supplied Per Metre. **6mm Shock Cord: SC6MM**



Telephone: 01327 857991 email: sales@competitionsupplies.com



**Nascar Harnesses (Not FIA Approved)**

The NASCAR range is fitted with an over-centre latch buckle which is virtually unaffected by water or dirt making it the ideal choice for autograss, oval or drag racing. Whilst not FIA approved the 3" / 75mm version can be supplied with SFI approval labels upon request. Supplied without eyebolts.

**Nascar 3"**

3" / 75mm shoulder and lap straps.  
 4 Point: **MH640-100**  
 5 Point: **MH650-100**  
 6 Point: **MH660-100**



**Nascar 2"**

2" / 50mm shoulder and lap straps.  
 4 Point: **MH640-105**  
 5 Point: **MH650-105**  
 6 Point: **MH660-105**



**Crutch Straps**

The TRS range of crutch straps allow a 4 point harness to be easily converted to a 5 or 6 point.

Single FIA: **MA700-410**  
 Dual FIA: **MA700-420**  
 Single NASCAR: **MA700-610**  
 Dual NASCAR: **MA700-620**



**Harness Pads**

These pads increase the comfort of the shoulder straps. Simple wrap around fitment. Available in black, blue or red.

To suit 2" / 50mm straps: **MA200-000**

To suit 3" / 75mm straps: **MA200-003**



**Towing Straps**

Made from high quality 2" / 50mm webbing with a MSA compliant large diameter sewn loop. Three different versions are available.

Available in orange, red or yellow.

235mm fixed length with 11mm bolt hole: **MA610-000**

265-650mm adjustable with 11mm bolt hole: **MA612-000**

1.5mtr adjustable designed to wrap around a chassis tube: **MY903-000**



**Tow Rope**

4 metre overall length with heavy duty snap hook ends. 5000 kg capacity. Available in black, blue or red.

**MA650-000**



**Map Pockets**

Constructed using a steel frame on 3 sides with an elasticated top these pockets provide handy storage for maps, time cards etc. Available in two sizes and supplied with 4 fitting clips.



Large 380 x 240mm: **MA431-0002**

Small 290 x 180mm: **MA431-0001**

Spare fitting clip set: **MZ026-0001**



**Spare Wheel Straps**

Made from 1" / 25mm wide webbing and fitted with a high quality ratchet. The two parts are joined with a hook and eye allowing quick access once the ratchet has been released. Available as a permanent bolt in fitment or with quick release mounting feet.

Available in black, blue or red.

Bolt in: **MA620-000**

Quick release: **MA621-000**



**Sports Prototype Ultralite Harnesses**

Designed with quick driver changes in mind, these harnesses are similar in design to the traditional single seater harness but feature pull up quick adjusters on the lap belts rather than the pinch plate system. This range of harnesses is ideal for sports prototype cars or single seater hill climb cars where quick & easy adjustments are required to suit drivers of differing size.

Alternative mountings can be accommodated by using the efficient TRS custom harness service. Available with either a saloon type crutch strap attached to the buckle or single seater D-ring type. All models feature lightweight aluminium adjusters on the shoulder and lap straps.



**With Standard Crutch Strap**

Magnum 6 Point With 3" / 75mm Lap Straps: **MZ902-000**

Pro 6 Point With 2" / 50mm Lap Straps: **MY913-000**

**MY913-000**

**With D-Ring Crutch Strap**

Magnum 6 Point With 3" / 75mm Lap Straps: **MZ864-000**

Pro 6 Point With 2" / 50mm Lap Straps: **MY914-000**

**MY914-000**

**Clubman Harnesses (ECE Approved)**

Suitable for road use, track days or events that do not require FIA approval such as sprints, hill climbs or road rallies. The shoulder straps are sewn to the lap straps with an ECE approved push button buckle joining the lap straps. All straps are made using 2" / 50mm wide webbing.

Available as either bolt in or snap hook and eyebolt fitment.

**Bolt In**

3 Point: **MH130-100**

4 Point: **MH140-100**

**Snap Hook Fitment**

3 Point: **MH330-100**

4 Point: **MH340-100**

**Short Version For "7" Type Kit Cars**

3 Point: **MH330-300**

4 Point: **MH340-300**



**Rally Packages**

Ideal for new builds, the rally package offers a great saving over purchasing the included items separately. These packages are available with either Magnum (3" / 75mm shoulder and lap straps) or Pro (3" / 75mm shoulder and 2" / 50mm lap straps) harnesses. Available in black, blue or red (the tow rope is blue in all packages).

Each pack contains:  
 2x 6 point FIA approved harness with steel adjusters  
 1x Helmet hammock  
 1x Map pocket  
 1x Spare wheel securing strap  
 1x 4 meter tow strap

Magnum package: **MH460-900**

Pro package: **MH560-900**



**Window Nets**

Manufactured in accordance with FIA appendix J and available in 2 sizes, standard (45 x 60 cm) or shaped quarterlight (45 x 60 / 80 cm). Sewn loops top and bottom for mounting. Available in black, blue, green, orange, red, silver or yellow.

Standard: **MA100-000**

Quarterlight: **MA100-060**

**Window Net Fitting Kit**



Allows a secure fitment with a quick release push button catch: **MA560-0001**

**Easy-Fit Window Net**

Easy fitment to roll cage by VELCRO® straps. 54 x 58 cm: **MA101-000**

**Arm Restraints**

Arm restraints to help to keep your arms within the confines of the vehicle in the event of an accident, they are becoming mandatory in an increasing number of open cockpit race series. Available in black, blue or red.

**MA120-000**



**Helmet Hammocks**

Protective storage for your helmets between stages, attaches easily to the roll cage. The fine mesh prevents microphones or leads getting trapped. Available in black, blue or red.

**MA113-000**



For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)

For over 50 years SCHROTH have been manufacturing racing and tuning (street legal) harnesses. Since 1960 SCHROTH have conducted numerous crash tests to further increase product quality and performance to meet the increasing safety requirements. With the knowledge gained from extensive testing SCHROTH is the technological leader in competition harnesses, supplying F1, IndyCar, WRC, NASCAR, Porsche, ALMS, Dakar Rally, FIA GT and many other top teams and series world-wide.



**Enduro Harnesses**

Success in endurance racing depends on durability, quality and speed (quick driver changes). The Schroth Endurance harness introduces the latest in innovative technology to maximise pit stop efficiency in both GT and Saloon applications.

- 1) Simple and easy to adjust "ZIP Adjusters" integrated into the lap belt latches.
- 2) Extra large, easy to see yellow "hand loops" on the lap belts.
- 3) Extra large, easy to grab "hand loops" on the shoulder belts.
- 4) Clearly marked lap belt release straps.
- 5) Sewn in "bungee loops" on the shoulder belts.
- 6) Rotary buckle.
- 7) 2"(50 mm) lap belts for unmatched comfort.

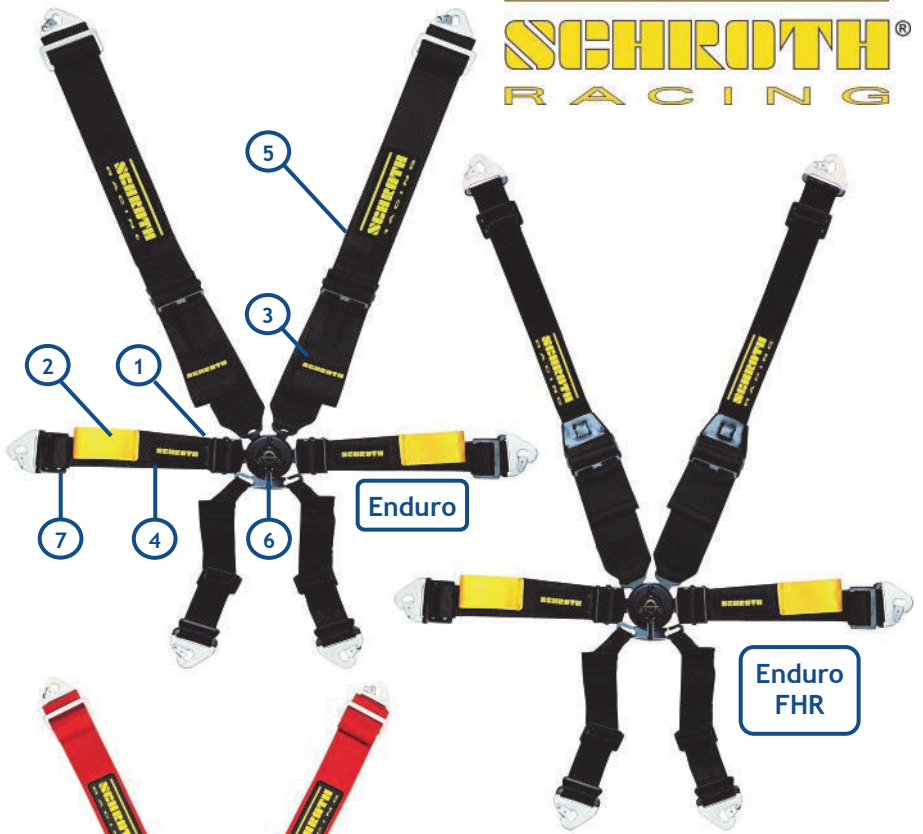
**Enduro Belt: 91210-0**

**Enduro Belt FHR Specific: 91210H-0**

**Profi II/III-6**

This range of FIA approved lightweight 6-pt professional harnesses are designed for saloon/GT installations. They feature rotary buckle and alloy adjusters and standard versions have 3" shoulder straps (wrap/snap hook fitting) and are available with 2" or 3" pull-up lap and 2" T-Bar crutch straps. In Addition FHR specific and Flexi Belt system versions are also available, please refer information panels for details.

Profi II/III-6				
Model	Lap Belt	Flexi Belt	FHR	Part No.
Profi II-6	2"			20X11
Profi II-6 Flexi Belt	2"	●		20X12
Profi II-6H	2"	●	●	20X13
Profi III-6	3"			40X12
Profi III-6H	3"		●	40X13



**FHR Specific Harnesses**

The concept of the FHR (Frontal Head Restraint) specific restraint designed and developed by Schroth is quite simple, the use of 2" webbing on the portion of the shoulder straps which rest on the FHR means the shoulder straps fit cleanly and completely onto the surface of the FHR without any extra webbing hanging off the side of the FHR, this allows secure and optimal routing of the restraint. The FHR 2"/3" design is available on all Schroth 5 and 6-point models. FHR specific restraints must ONLY be used with FHR.

Telephone: 01327 857991 email: sales@competitionsupplies.com



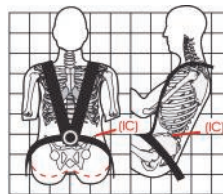
**Flexi Belt System**



With conventional harnesses the lap belts must be specified with "pull-up" or "pull-down" adjusters and the adjuster positions can still be sub optimal with regard to interference with seat, tunnel etc. Schroth have developed the Flexi Belt system, a solution allowing the installation to be optimised whatever the application with just one lap belt model. The lap belt latches and brackets supplied are secured to the lap belts with a two-bar sliding bracket allowing the lap belts to be custom assembled and easily re-configured. Either pull-up or pull-down adjustment can be achieved and if required the left and right belts can be configured differently with the lengths of each section optimised to suit the installation. Chassis mounting hardware can be selected to allow either bolt-in or a snap-hook. "Flexi Belt™" is only available with 50mm (2") lap belts.



**Lap Belts - Why Do We Recommend 2"?**



Although some competitors still specify 3" waist straps our recommendation is to use 2". To explain why 2" webbing is more effective than 3" webbing one needs to look at the shape of the human body. The Iliac Crest (IC) is the part of the pelvic bone that sticks out above the hips. 2" webbing fits entirely within the recession created by the IC where 3" webbing rides over the top of the IC. The 3" webbing has less contact area by percentage than the 2" webbing which will cause more bruising during an impact where the belt is making contact with the pelvic bone. Since the 2" webbing rides inside the IC the lap belts can be tensioned as much as 25 mm to 40 mm tighter whilst maintaining increased comfort. Since the 2" webbing fits well within the IC of the pelvis it is less likely to slide up above the crest and cause submarining, a condition where the body slides down below the lap belt possibly causing internal organ damage. Research shows that the faster the pelvis is captured the lower the resultant loads on the chest, head, and neck. There is no difference in the strength of the webbing, all webbing 2" or 3" must meet the same homologation test loads. In addition the webbing and adjusters are lighter and the force required to properly tension 2" lap belts in the car is lower.



**Hybrid Harnesses**

Schroth's unique hybrid is an ultra-light professional 6 point competition harness. They feature rotary buckle and alloy adjusters and are supplied with either 2" pull-up lap straps and with standard 3" or FHR specific 2"/3" shoulder straps, both with wrap/snap hook fitting. The crutch strap is Schroth's unique hybrid design, for more information see the information panel to the right

Hybrid II/III-6			
Model	2" Lap Belt	FHR	Part No.
Hybrid II-6	●		20X92
Hybrid II-6H	●	●	20X93



**Profi II-6 Hybrid**

**Profi II/III asm**

This range of FIA approved lightweight 4-pt professional harnesses are designed for saloon/GT installations. They feature rotary buckle and alloy adjusters and standard versions have 3" shoulder straps (wrap/snap hook fitting). They are available with 2" or 3" pull-up lap straps with a Flexi Belt version also available, please refer information panels for details. All versions incorporate Schroth's asm (anti-submarining) system where load limiting stitching lengthens the R/H shoulder strap by a controlled amount in the event of a heavy impact allowing the torso to twist slightly reducing the likelihood of submarining. Please specify L/H or R/H fitment when ordering. In addition to the standard models various application specific versions are available to order:

**Lotus Version:** Wrap around shoulder straps with bolt-in lap straps suit most Elise and Exige S1/S2 models.

**Caterham Version:** Bolt in shoulder and lap straps suits most models.

**Westfield Version:** Snap hook shoulder and bolt-in lap straps suits most models.

Profi II/III asm				
Model	Lap Belt	Flexi Belt	L/H Part No.	R/H Part No.
Profi II asm	2"		20X00	25X00
Profi II asm Flexi	2"	●	20X01	25X01
Profi III asm	3"		40X01	45X01
Lotus II asm	2"		91158	91159
Caterham II asm	2"		91184	91185
Westfield II asm	2"		91186	91187



**Profi II asm**

**Schroth "FE" Push Button Buckle**



Light and compact, Schroth's patented push button buckle is not only around 30% lighter than other products it is still one of the strongest in the market and is uniquely both FIA and ECE-R 16.04 approved making it ideal for use in any rally, race or track day car which also requires a road legal restraint.

**Clubman II asm**



**Clubman II asm**

**Clubman II-6**



**Clubman II-6**

A simple entry level FIA approved 6 point harness for saloon/GT installations. Incorporating Schroth's standard rotary buckle and steel adjusters they have 3" shoulder straps (wrap/snap hook fitting) and 2" pull-up lap straps with "V" type twin crutch strap.

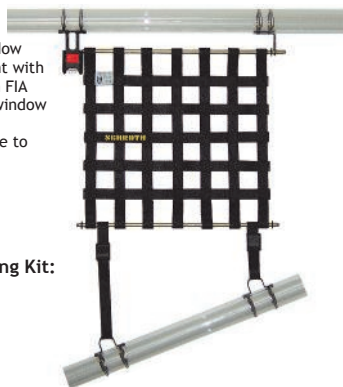
**Clubman II-6: 91152**

**Window Nets**

Suitable for all closed cockpit cars Schroth window nets are available in two sizes and are compliant with all applicable international standards from both FIA and SFI. The optional mounting kit allows the window nets to be easily mounted to the roll cage and incorporates push button quick release hardware to allow easy entrance and exit from the vehicle.

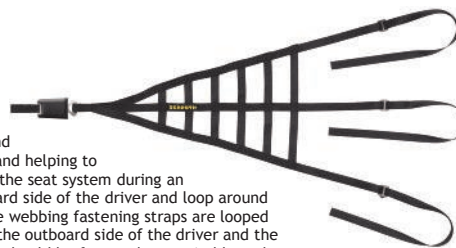
**Window Net Only:**  
 Small L 400 mm x H 405 mm: **09053**  
 Large L 525mm x H 467 mm: **09055**

**Window Net with Quick Release Mounting Kit:**  
 Small: L 400 mm x H 405 mm  
 L/H: **09043** R/H: **09543**  
 Large: L 525mm x H 467 mm  
 L/H: **09045** R/H: **09545**

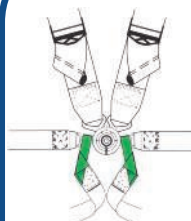


**Interior Safety Net**

These Nets are engineered to help control occupant movement and enhance the overall safety system (seat, harness, cage etc.) by strengthening the headrest and shoulders of the seat system and helping to guide the occupant back into the seat system during an impact. They run on the inboard side of the driver and loop around the rear of the seat, the three webbing fastening straps are looped around the main roll hoop to the outboard side of the driver and the single forward mounting strap should be fastened to a suitable under dash cage tube or a suitably reinforced chassis mount. Schroth's exclusive multiple "Twist-Tension" system, makes proper installation nearly effortless and removes the danger of a heavy ratchet system impacting the driver in an accident. Tested by SCHROTH Racing, SFI and the FIA, these nets provide proven performance with all nets featuring high quality materials and construction. Simple Quick Release mechanism ensures a fast exit.  
**Interior Safety Net : 09069**



**Schroth "Hybrid" System**



The Schroth Hybrid restraint offers a lighter, more comfortable and more secure harness solution. In single seaters and sports prototypes the typical alternative is the conventional "D-ring" type crutch strap. These are inefficient in maintaining the correct buckle and lap belt position and can allow significant upper body

movement in the event of an impact. To minimise this it is necessary to run very tight crutch straps which can have the effect of reducing blood flow to the legs. A "T-Bar" crutch strap offers a better restraining solution but if wide enough to properly separate the crutch straps it can dig in to the upper thighs, to avoid this many locate the buckle higher than that which provides the optimum lap belt position. The Schroth Hybrid restraint has crutch straps with sewn loops at the buckle end which are connected via specially designed elongated lap strap tangs. The routing of the anti-sub straps is wide enough not to apply pressure to the crutch region or upper thighs. The direct attachment to the buckle system allows for an optimal anchor point downwards and slightly rearwards not requiring an extreme backwards mounting position of "D-ring" straps.

**Profi II/III -FE asm**

These FIA approved lightweight 4-pt professional harnesses are designed for saloon/GT installations. They feature Schroth's FE push-button buckle (see information panels for details) and alloy adjusters with 3" shoulder straps (wrap/snap hook fitting). They are available with either 2" or 3" pull-up lap straps. All versions incorporate Schroth's asm (anti-submarining) system where load limiting stitching lengthens the R/H shoulder strap by a controlled amount in the event of a heavy impact allowing the torso to twist slightly reducing the likelihood of submarining. Please specify L/H or R/H fitment when ordering. Lotus Elise/Exige specific versions with wrap around shoulder straps with bolt-in lap straps are available to order.



**Profi II-FE asm**

Profi II/III- FE asm				
Model	Lap Belt	FE Buckle	L/H Part No.	R/H Part No.
Profi II-FE asm	2"	●	20X71	25X71
Profi III asm	3"	●	40X71	45X71
Lotus II FE	2"	●	91158A	91159A

**Webbing & Colour Options**



Schroth harnesses use a custom manufactured polyester webbing. Formulated and designed to maximise both durability and energy dissipation. Whilst the Enduro model is offered in black & red only most other Schroth harnesses are also available with either blue or silver webbing. Please contact us with your requirements and we will confirm availability.

For more products & information or to order online please visit: [www.competitionssupplies.com](http://www.competitionssupplies.com)



**Frontal Head Restraints**

**What is an FHR?**

A Frontal Head Restraint (FHR) is a system designed to reduce injury by limiting forward head movement in the event of an accident. Schroth have been pioneering this technology with their HANS devices for over 15 years and during that time have developed and refined their design and construction, resulting in the range shown here which offers exceptional performance and great value.

**Do I need to use an FHR?**

From 1 January 2016 the use of an FIA-homologated FHR is mandatory in MSA National events for the following competitors:

All drivers and co-drivers in Stage Rally events, with the exception of Historic Category 1 vehicles (pre-1968).

All drivers in Circuit Race events, except for Period Defined vehicles (pre-1977).

All drivers in Sprint and Hill Climb events, with the exception of Roadgoing category vehicles & Period Defined vehicles (pre-1977).

For more details on Period Defined vehicles, please see the definitions in the MSA Yearbook Section B (Nomenclature and Definitions).

**XLT**

The XLT HANS is Schroth's lightest FHR weighing approximately 440g. The 20° version is supplied with the patented Slipstop harness retention surface on the legs, and both 20° & 30° versions are supplied with the vision sliding tether system.

- HANS XLT 20° Medium: 42282
- HANS XLT 20° Large: 42283
- HANS XLT 30° Medium: 42382
- HANS XLT 30° Large: 42383

**XLT Super Sport 20°**

The HANS XLT Super Sport is Schroth's newly updated entry level device. Available as a 20° device only it shares many of the design features of the flagship XLT carbon device at a fantastic value for money price. This HANS device is supplied with the Vision Advantage sliding tether system and weighs around 775g.

- XLT Super Sport Medium: 42292
- XLT Super Sport Large: 42293

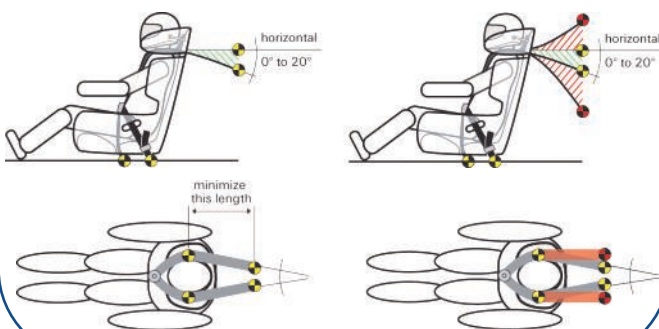
**Sport I 30°**

The HANS Sport I is our entry level 30° device combining excellent value for money with the outstanding safety features found on all the Schroth HANS devices. This HANS device is supplied with the Vision advantage tethers and weights around 1100g.

- Sport 1 Medium: 42372
- Sport 1 Large: 42373

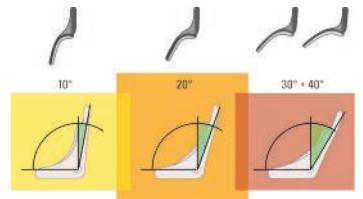
**Harness Mounting for use with F.H.R.**

Correct harness mounting is essential for effective retention of the FHR in the event of an impact, belts should run back from the device at an angle of between horizontal and a 20° downward angle and they should converge to a mounting as close as practicable to the rear of the seat.



**Which Angle Device?**

**10°** Designed for very upright seating positions such as sprint cars and rally co-drivers seats. In addition drivers with a slim upper body/ chest and smaller female drivers may find a 10° device suitable in touring car applications.



**20°** Designed for the relatively upright seating positions found in most touring & GT applications using proprietary shell seats.

**30° & 40°** Designed for semi-reclined seating applications such as formula cars, single seat sports cars and others with similar seating positions. Larger drivers may also find a 30° HANS suitable for touring car applications.

**Which Size Device?**

Sizing is based on neck size or shirt collar size with below 15" (-38cm) being small, 15" to 18.5" (38 to 47 cm) being medium and over 18" (46 cm +) being large.

**PRO HANS Device**



20°

10°



30°



40°

The HANS PRO version is the most popular version offered. The device can be supplied from 10° up to 40° and can be offered in small, medium or large sizes. All devices are supplied with the Vision advantage tethers and the 10° and 20° versions are supplied with the Slipstop harness retention surface on the legs.

- HANS Pro 10° Medium: 42102A
- HANS Pro 20° Medium: 42262A
- HANS Pro 20° Large: 42263A
- HANS Pro 30° Large: 42363A
- HANS Pro 40° F1 Medium: 42462

**Advantage Vision Tethers**



The Advantage Vision sliding tether system offers improved freedom of movement without compromising protection. They are now standard fitment on all 10° - 30° Schroth HANS devices and can be retro fitted to any earlier Schroth HANS device. The standard length for the majority of devices and installations is 18" For users with open face helmets where the clips are located further back on the helmet or those looking for a slightly shorter version we have the 17" version. In addition we have a 19" version for slightly more movement or for a 20° XL HANS.

- 17": 00030-17
- 18": 00030-18
- 19": 00030-19

**LW-II Lightweight Tethers**



These lightweight tethers are only suitable for use with 8858-2010 helmets and are retained using the screws provided making them a semi-permanent fixture on the helmet.

Lightweight 17" Tethers: 00030-LW

**Hans Padding**



Replacement padding sets for Schroth HANS devices with 13mm thick foam and Nomex covers. Available in a range of colours.  
**Black: 00043A Blue: 01043A Red: 02043A Yellow: 03043A**

**Padding Upgrade Kit**

Kit containing selectable 10mm, 13mm and 16mm thick padding complete with black Nomex covers.

**Black: 00043-KIT**

**Helmet Hans Clips**

Helmet clips for use with FIA 8858-2010, FIA 8860-2010 or Snell SAH2010 specification helmets suitable for fitment by user.

- Sliver: 00048
- Black: 00048-0
- Blue: 00048-1
- Red: 00048-2

Helmet clips for use with helmets listed in FIA technical list 29. For installation by a trained technician.

- Sliver: 00033
- Black: 00033-0



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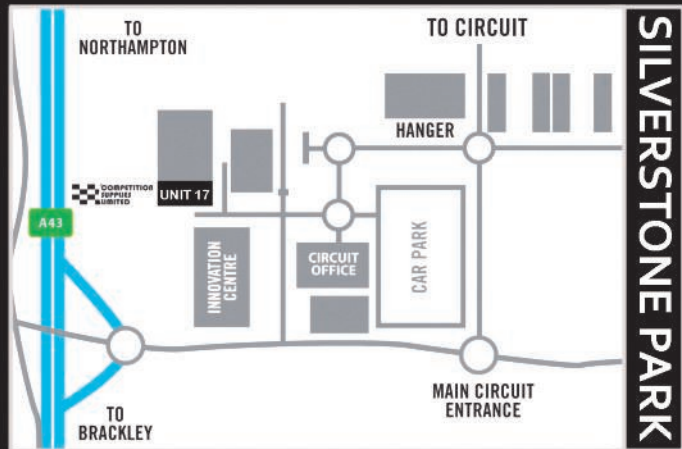
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