



International 1000 Km  
UK Fastest 100 mile  
**Record Holders**



# 2017

**Jaguar E-Type Performance** Catalogue

# Jaguar Performance masters

“ If you want the best, the quickest and most reliable car. Then trust us to deliver for you, as we have for so many others. ”



Jeremy Welch, Managing Director.



the finest all-in-one facility



You will always find a warm welcome at our Yoxall premises, near Burton-on-Trent, where we have specialised in classic cars for over 36 years, establishing a world renowned reputation for the specialist development of Jaguar E-Types and Austin Healeys .

In the 6 years since our last E-Type catalogue we have made significant investments in the business involving even greater use of CAD to help us to improve the design and functionality of many products. The addition of a new CNC lathe has enabled greater accuracy and consistency for products as well as reducing costs.

This catalogue includes a host of new products and explains what makes us 'The Performance Masters' as opposed to simply parts suppliers. We are committed to improving the products we offer and the range of services that our customers can benefit from.

Our staff have been extensively trained in the skills required to service and maintain these attractive and individual vehicles to the highest standards. Working with these cars on a daily basis increases our knowledge and as

problems arise (such as consistent failures of some ageing components) we devise new and improved replacements. Utilising modern techniques, we manufacture in our own factory and outsource products, which are successful, but do not destroy the cars impeccable heritage.

It is our constant aim to provide the very best service available, whether for road, race or rally use. We believe that the many famous cars and champions we have helped towards success bear testament to our ambition to be:

**'the very best partner, for you to achieve your ambitions'.**

We offer a comprehensive resource ranging from routine road car maintenance, bodywork, MOT testing, engine building and dyno testing, together with race preparation, support and development.

All this is backed by our parts manufacturing facility and fully-stocked store with worldwide mail order capability.



Jeremy Welch and Martyn Corfield receive the International record certificates for the 6 FIA records held by the Healey Endurance Car, presented by the Chairman of the RAC.

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# Service

bodyshop, rebuilds  
and performance

We're right behind you  
– what ever you need  
– where ever you go

Our customers are truly global - UK, USA, Germany, France, Italy, Australia and South Africa - even TVR's from Malaysia, they don't come all that way without good reason - they want the best!

All of our customers are important to us and few other companies match our passion for excellence, skill levels and resources. We offer a full service from 'season starter check-ups' (which are often the starting point for long term customer relationships) to the more exotic demands of a long distance race or international rallying. We have served some customers for over 30 years which is a testament to the level of satisfaction we achieve.

Our ambition is always to be the best in our field, and that means excelling at customer service.

If your engine is at the stage where it requires re-building, why not consider an upgrade? Engines are a major strength at Denis Welch Motorsport and we have a large array of specialist parts, developed by us to enhance performance.

For the more spirited driver, we can offer a large array of options to improve cars:

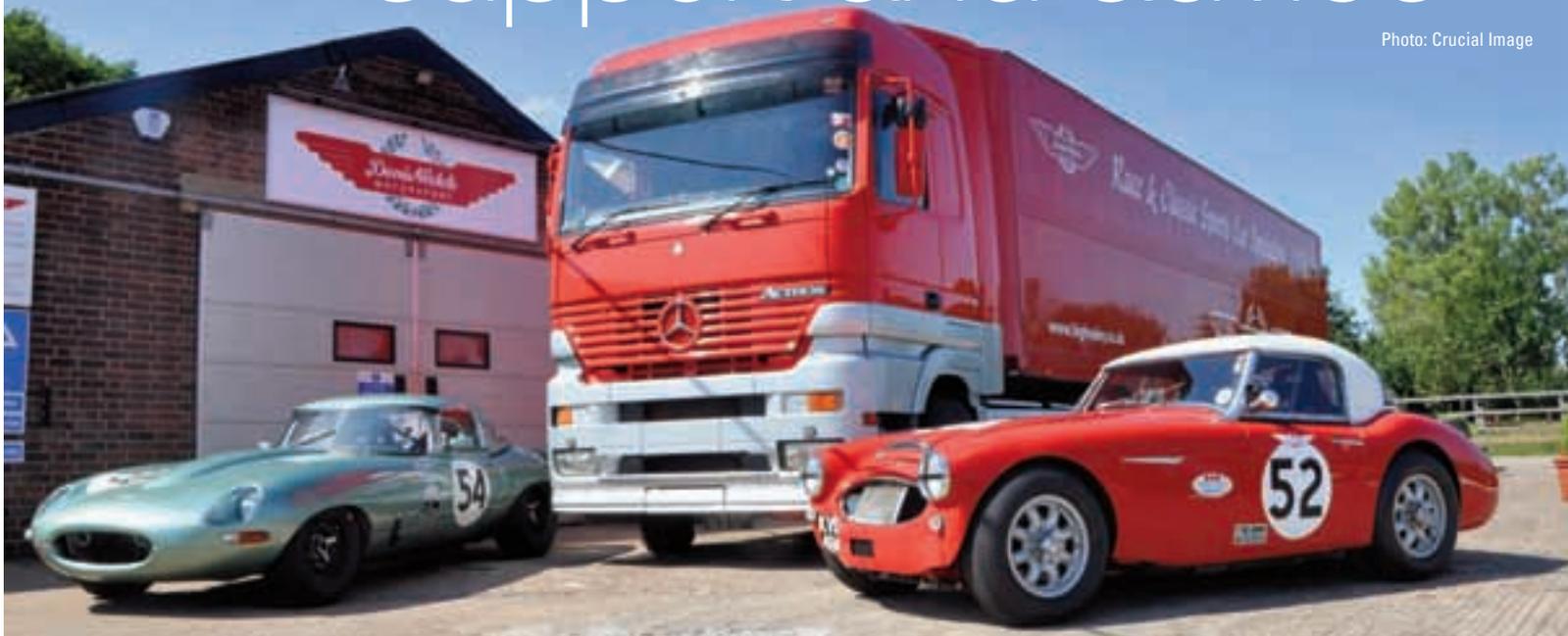
- Magnesium peg drive wheel conversions
- Balance bar dual circuit brake boxes
- Dunlop style brake upgrades
- Wider track wishbone & drive shaft conversions
- Straight cut gearboxes and race clutches
- Oil and water cooling improvements

These are complete Denis Welch products, designed and manufactured in our own factory.



# Race track testing, specialist support and advice

Photo: Crucial Image



## DYNAMOMETER

To monitor the increasing power and develop ever more sophisticated cam and ignition systems, we have our own in-house Dynamometer facilities.

A purpose built, fly-by-wire controlled cell, sports a barrage of sensors to provide us with a huge amount of information on your engine's performance. This Dyno has been called 'the most sophisticated in classic racing' and we know that it enables us to give our customers the extra power they seek.

We are able to cater for more exotic engines in other marques as well, such as

Cosworth BDA and BDG's and American V8's, with power ratings up to 850 bhp and 14,000 rpm can be accommodated giving them our 'winning edge' too.

## PRE-BUILD ADVICE

Customers often consult us before they get involved with a particular car or type of competition. This enables us to advise on choice of engine, cam, crank, gearbox or wheels etc. This often helps to avoid expensive oversights such as ensuring that 100/4 crankshafts are crack detected before being rebuilt as they are notoriously frail due to the long stroke of the engine.

## DEVELOPMENT CONSULTANCY

For those interested in pushing the envelope even further, we offer a consultancy service for car development. Using up-to-date technologies puts us at the forefront of Historic Motorsport which helps to provide

solutions for improved performance which can give that all important competitive advantage.

## RACE SUPPORT & TRANSPORTATION

To win, you must have a car that is capable of fulfilling your talents as a driver.

To achieve that ambition you need a team of experts at your disposal both in the workshop and at the circuit.

We can transport your car and look after it over the weekend, so you can concentrate on the driving and having fun.

So – no matter what you require – we are here to help, to advise and to advance your dreams.





*Jaguar ramp angle block*

*CNC machined from billet steel they transform the performance of the standard Salisbury Diff Unit, improves strength and grip under acceleration and reduces under steer when off the gas.*

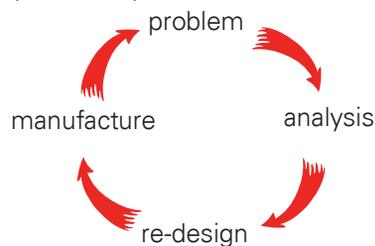
# Design

## that improves the original

In our long experience, parts fail in competition for a variety of reasons, but there is always a cause and often a remedy. We have taken a pro-active attitude towards these issues for many years and re-engineered products to enable superior performance to the original part.

For example, the ball race clutch release bearing featured opposite has been used in racing for many years and the superior performance it provided was also useful for road use. So, we adapted it for economic production, in total 5 prototype designs were required before the item was deemed perfect for both applications and could be put into production.

This is now a standard engine improvement, available to all, but it demonstrates the way in which our process improves the breed.



allowed us to manufacture new items with superb quality engineering, that are better than the original with the advantage that it stops the car consistently.

In order to guarantee quality and reliability, it is our policy to control as many aspects of our product and service as possible. This is why we have developed a self-sufficient engineering factory, that is second to none. We find this especially necessary in the high-performance field.

That's why you should be sure you get a Denis Welch original - look for our logo.



The Jaguar brake problem known as "Dunlop fear"

has been resolved with stiffer and safer callipers which are FIA compliant and are based on the originals.

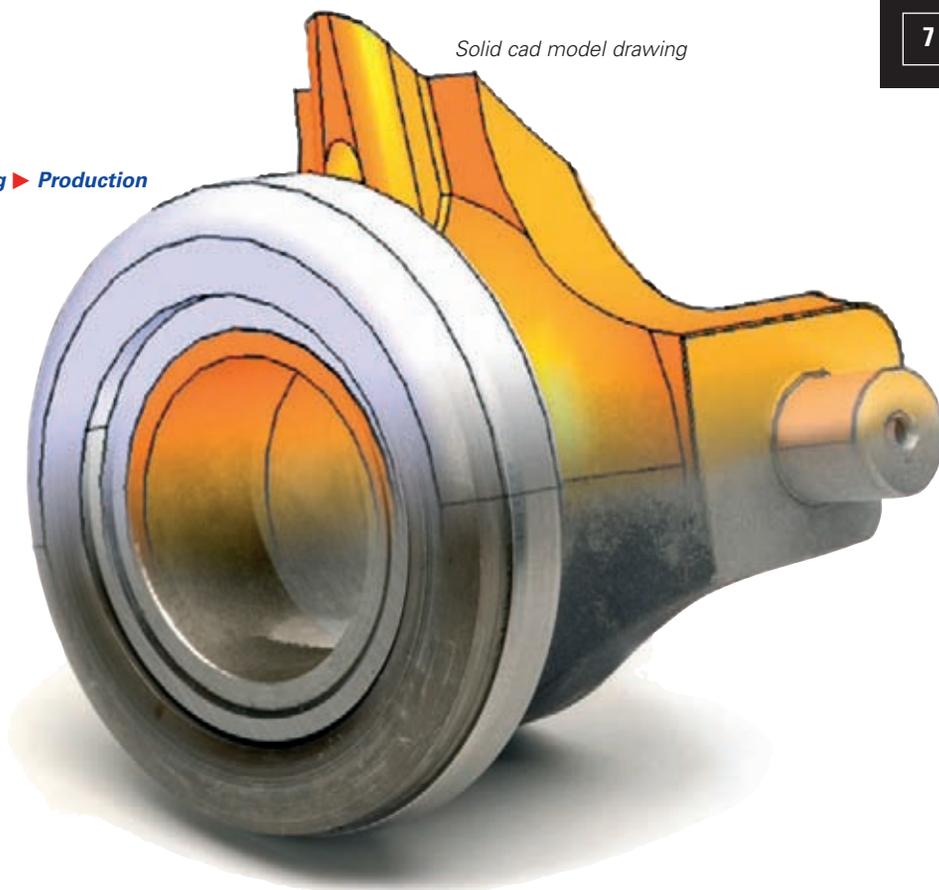
A complete re-design and new tooling based on the original drawings,

*Dunlop front brake calliper*



**In House Design ▶ Prototyping ▶ Production**

*Ball race clutch release bearing*



Developing and improving parts year on year isn't easy. It takes skill, experience and a lot of in-house facilities. That's what makes us unique.



Jeremy Welch, Managing Director.



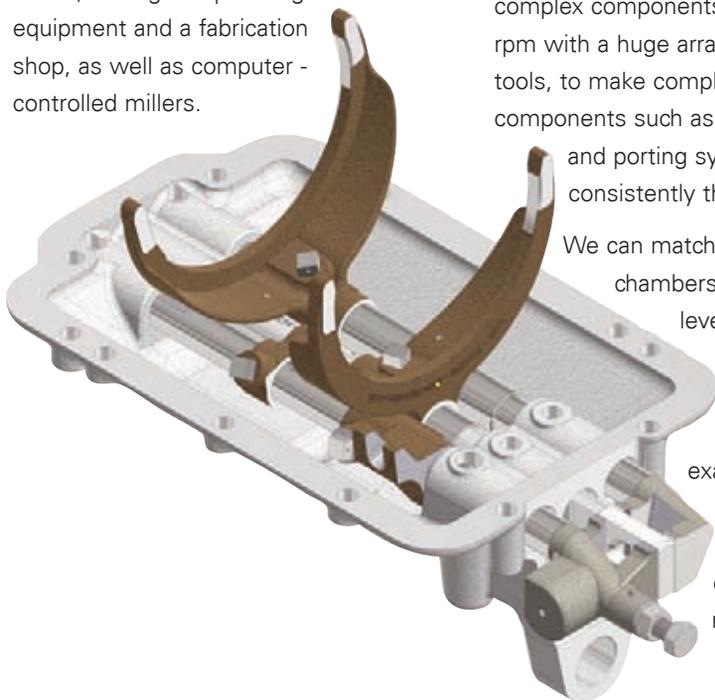
*Lightweight steel billet flywheel to suit 7/4" clutch.*



# Manufacturing

## quality control that maintains performance

As each year progresses, new challenges arise and Denis Welch Motorsport have recognised the need to have the ability to consistently manufacture, high quality engineered products, in ever increasing numbers. We have invested heavily in our machining equipment to facilitate this. Our factory has a fully equipped machine shop with crack detecting, pressure testing, precision and CNC lathes, folding and pressing equipment and a fabrication shop, as well as computer - controlled millers.



Our computer aided design capability has significantly increased and become ever more sophisticated. Recently we have acquired a 3-D printer to model components and prefit them onto cars prior to manufacture, this is also useful in developing patterns for castings so we can be assured that the quality is exactly as we want.

This has been assisted by our new CNC machining centre that machines complex components at up to 12,000 rpm with a huge array of specialist tools, to make complicated components such as cylinder heads and porting systems more consistently than ever before.

We can match combustion chambers and ports to high levels of precision. This makes sure that the components are exactly to specification and do not vary from one batch to the next.



Jeremy Welch and Martyn Corfield discuss CAD drawings for Endurance car components.  
Photo: Paul Hardiman



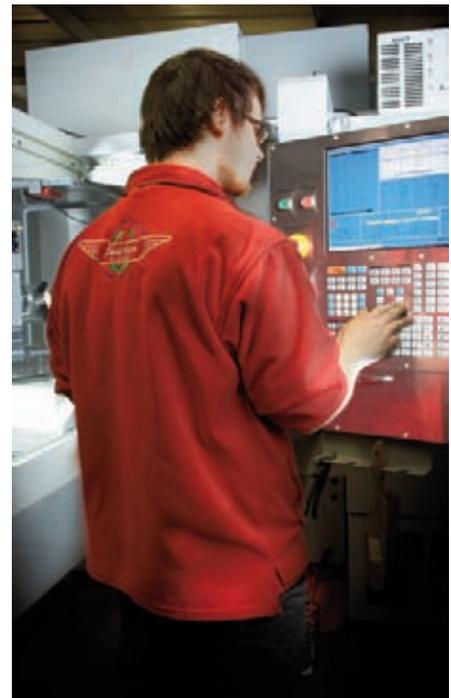
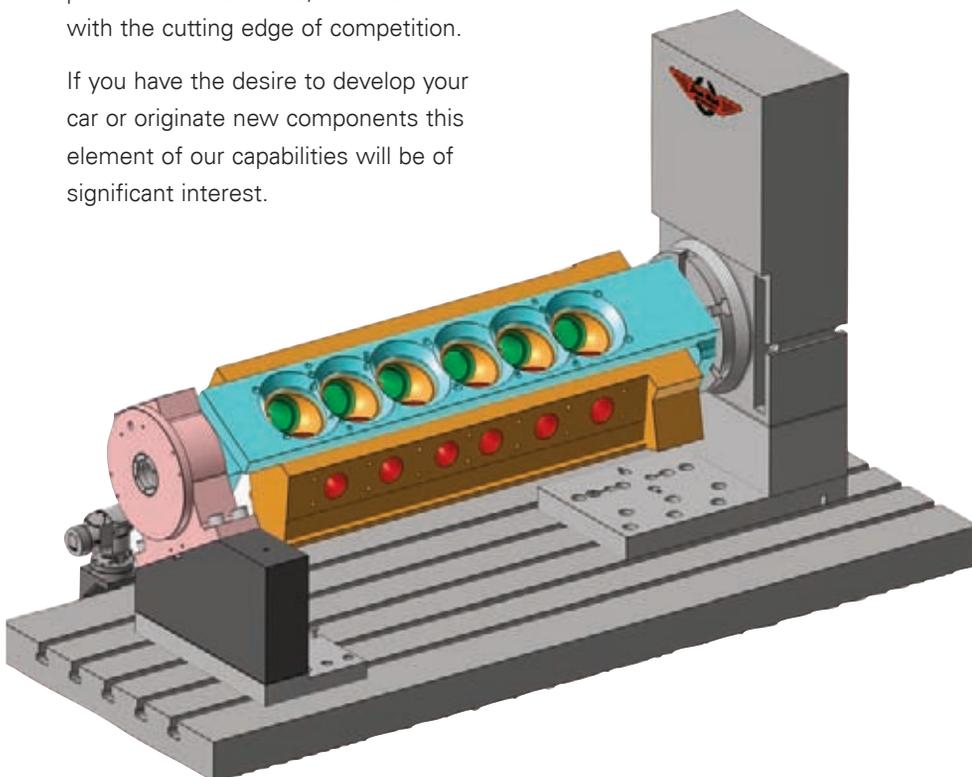
This complete design-to-manufacturing capability sets us aside from most component companies, in that we can design solutions and then produce precision engineered components to satisfy engineering problems.

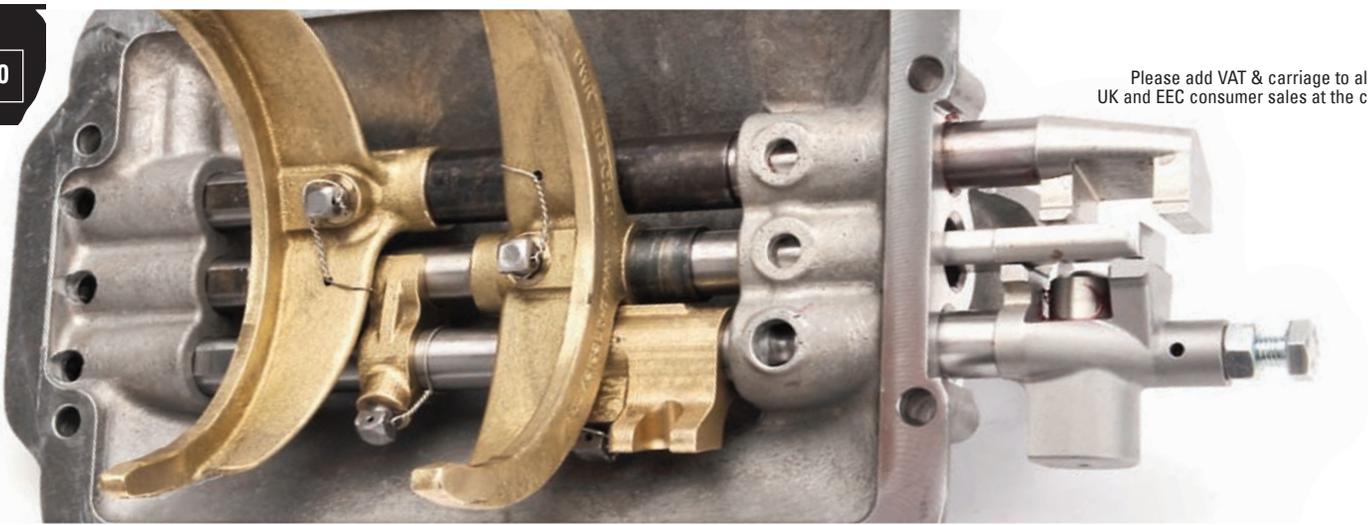
This is vital to our ability to develop prototypes when exploring increased performance demands, which arise with the cutting edge of competition.

If you have the desire to develop your car or originate new components this element of our capabilities will be of significant interest.

With all these facilities under one roof, we have a considerable edge over our competitors:

- Problem solving and solution provision
- The ability to produce winners, when time is at its most precious





# Stores

## expanded by 1600 sq ft

We have a long standing ambition to provide the best solution to race problems, although our parts facility goes well beyond competition requirements.

We manufacture and stock a vast array of standard road-going parts and can usually fulfil orders the same day.

As a result of demand the Autumn of 2010 saw the Denis Welch Motorsport Stores Department undergo a huge re-development, extending the existing parts storage area by some 245% to accommodate the vast array of parts now available.

Then again in 2015 the stores was expanded, with the addition of a 1600 sq ft parts warehouse.

We now have an exemplary inventory of parts exceeding 260,000 items covering over 9,500 product lines, and backed by fully trained staff who are supported by a full e-commerce website with **UPS Carriage Cost Calculator** and secure online payment system with **HSBC World Pay**.

**HSBC** 



Each member of the team has a dedicated desk and area to ensure each order is processed quickly and efficiently, from initial order through to dispatch.

Our van frequently delivers to Northern Europe and customers can arrange pick up and delivery of heavy items - even whole cars can be catered for, by contacting us in advance to take advantage of beneficial carriage costs.

Many of our overseas customers make use of our fast, reliable mail order service as it is backed up by one of the worlds leading couriers - **UPS**.

**We can advise and supply solutions to your E-Type Jaguar problems**



Talk to the people who know the marque well and can advise on the best solution.



Huge range - many parts made in house and not available elsewhere.



Extensive stock - most orders we can fulfil next day.

# 9,500 Product lines

You might be surprised at just how economic it is to use our mail order or online service.

Aftersales care is an important element of the service we offer, we are proud to lead this industry with the high level of product fitting instructions and technical advice offered by our staff as and when required. Our customers

value our wealth of knowledge and information and as a result we see them returning time and time again.

For further information please contact us on:

**Tel: +44 (0)1543 472244**

**Fax: +44 (0)1543 472339**

**Email: [sales@bighealey.co.uk](mailto:sales@bighealey.co.uk)**

### TIPS ON USING THIS CATALOGUE

Please note that where replacement parts are listed they are highlighted in red. These parts are included in the original item when purchased and so further purchases would be as spares.

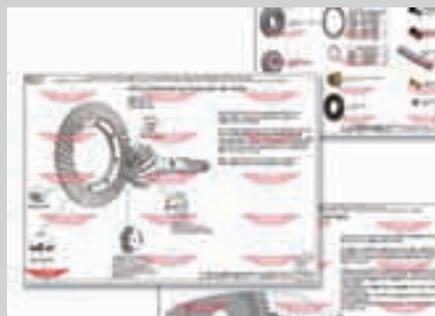
**2015 saw even more stores capacity added with a further 1600 sq ft extension.**



**over 260,000 items in stock, collection and delivery available.**



Deliveries and collections Worldwide, also regular van deliveries to Europe.



Complete fitting instructions, the best in the business, makes fitting much easier.



CAD designed for accurate fitting, don't waste your time with poor quality parts.

# Wide angle



## ALUMINIUM CYLINDER HEADS

Increased investment in CAD software has allowed us to redraw the head in 3D as a solid model, producing all new technical drawings - including fully modelling and drawing the inlet and exhaust ports.

We further enhanced this 'design to manufacture' investment philosophy by including state of the art CAM software. This allowed us to plan the tool paths and write the machining program from a professionally designated drawing office, not the shop floor, linking these programs direct to the CNC machine, with a dedicated computer network.

Around 1.5 million lines of code will download just to machine the 12 ports of a straight six cylinder head with a continuous machining time of 13 hours.

2010 saw a huge upgrade to our capabilities with the acquisition of a brand new CNC machining centre.

This allowed us to fully machine the inlet and exhaust ports along their entire length, so no more hand gas flowing like the old days with its inherent inconsistencies making each head liable to variations in flow capability - this is now eliminated.

What we design, is what you get - every time.

Now the ports are machined with symmetry and are all identical, not only from head to head but each port along an individual head. This

makes for considerably higher power gains and balanced

performance, with the potential for each engine to give much more consistent power outputs than ever before.

We not only lead the Jaguar and Austin Healey market with this technology, we are at the very front of modern engine development offering this service to all makes and types of engine.

So whether you require a standard, fast road or full race head, there really is no better or more up to date version available on the market today.

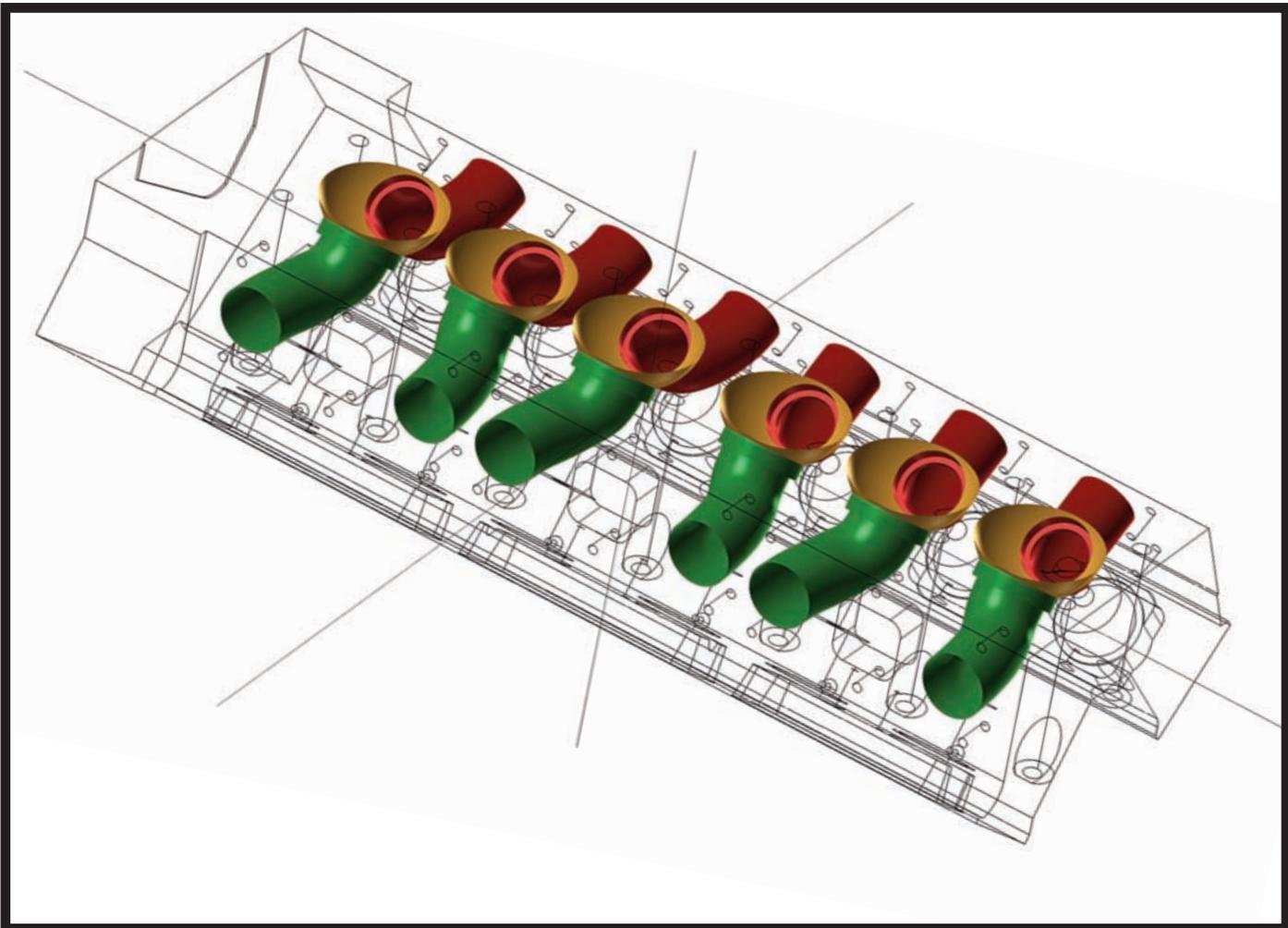
Be sure to buy a Denis Welch Motorsport original...look for our logo!



## BENEFITS OF OUR HEADS

- Fully CNC machined chambers
- Pressure tested water jacket
- Precision ground, replaceable lead free valve seats of the latest high grade material
- Fully inspected and assembled in-house
- CNC ported inlet manifolds match seamlessly





### 3.8 WIDE ANGLE FULL RACE BARE HEAD

Fully machined including both inlet and exhaust ports then hand fettled after CNC porting to achieve the desired surface finish and gas flow characteristics. Approx 120cc chamber volume depending on valve depth.

Assembled in our own factory with our precision valve seat inserts, our Colisbro-Bronze cam follower sleeves fitted and bored to suit our 44mm buckets. Pressure tested.

Supplied with valve seats still to be cut and no guides fitted.

JCENG999WG LWE 3.8

£9950-00

### 4.2 WIDE ANGLE FULL RACE BARE HEAD

Fully machined including both inlet and exhaust ports then hand fettled after CNC porting to achieve the desired surface finish and gas flow characteristics. Approx 110cc chamber volume depending on valve depth.

Assembled in our own factory with our precision valve seat inserts, our Colisbro-Bronze cam follower sleeves fitted and bored to suit our 44mm buckets. Pressure tested.

Supplied with valve seats still to be cut and no guides fitted.

JCENG997WG LWE 4.2

£9950-00

For further information and to view machining videos please visit our website –



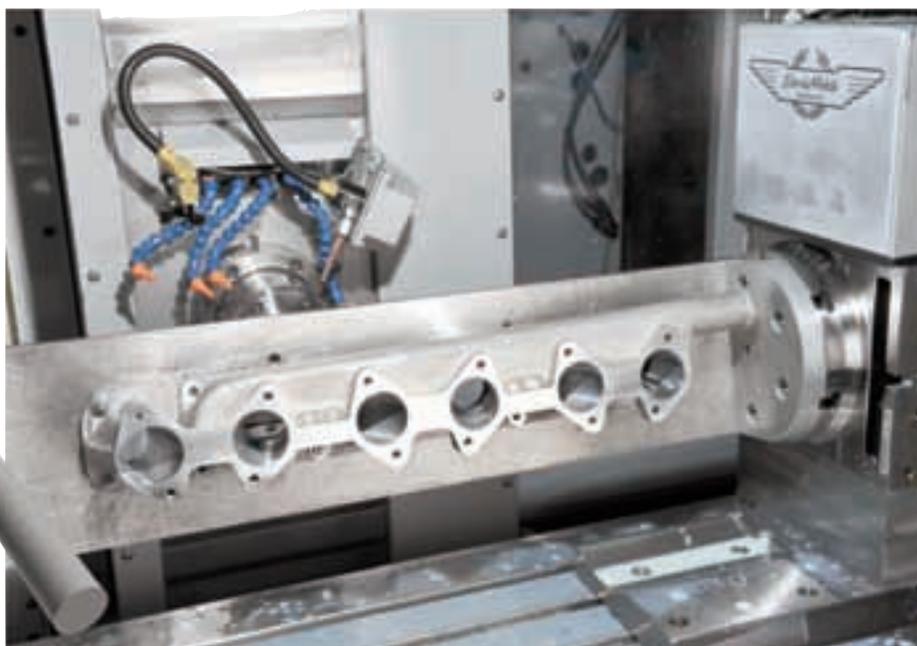
[www.cncporting.co.uk](http://www.cncporting.co.uk)



Alternative port shapes can be machined to your specification with full confidentiality, please enquire.

Straight port cylinder head options also available.

3.4 & 3.8 D Type heads also available to order.



# Wide angle



## STEEL BILLET CAMSHAFTS

Brand new, made from the best quality steel and fully heat-treated, available in various profiles with large base circles. Gun drilled with an oil feed to each lobe and four bolt sprocket fixings.

JENG656W	Fast Road	each £499-80
JCENG656W	Full Race 1	each £499-80
JCENG656WA	Full Race 3	each £499-80

**Note.** Camshafts can be supplied to any customer specified profile.

## BLANK STEEL BILLET CAMSHAFTS

Fully finished blank steel billet camshaft for final profiling and heat treatment to your specification, by ourselves or your cam grinder. These four bolt sprocket fixings camshafts are gun drilled through their entire length. Lobe oil feed holes can then be drilled in each cam base circle as required after final grinding. Purchased individually.

JCENG656B	each £399-00
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## CAMSHAFT LUBE

Specially formulated to help lubricate camshaft and buckets on start up. Always apply liberally to both cam and buckets during engine build-up.

CENG966	100ml	bottle £2-95
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## STEEL CAM FOLLOWERS

Lightweight and fully heat treated steel, these 44mm diameter bucket followers suit wide angle heads.

JCENG660W	each £24-95
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## CYLINDER HEAD DOWEL

Maintain precise location of the head and gasket when these ring dowels are fitted over two studs.

JCENG601	each £9-50
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## VALVES

All our valves are made from one-piece forgings in 214N stainless steel with stellite tips and plasma nitrided stems for increased life. Suitable for both leaded and unleaded fuel.

These are made to the lightest design using standard size 5/16" stems and collets.

JCENG720W	Inlet valve 2.093"	each £27-50
JCENG721W	Exhaust valve 1.687"	each £23-00

## COMPETITION HEAD STUD SET

Made specifically to our design, these high tensile waisted studs give the best clamping force possible. Supplied as 7 long & 7 short for no lifting bridge or 5 short & 4 extra long to suit 0.375" thick lifting bridge.

JCENG761	Top Face Iron Block/Wide angle	
	- no bridge	£195-00
JCENG760	Top Face Ally Block/Wide Angle	
	- no bridge	£195-00
JCENG761B	Top Face Iron Block/Wide Angle	
	- with bridge	£195-00
JCENG760B	Top face Ally Block/Wide Angle	
	- with bridge	£195-00



# Wide angle



## TOP HAT VALVE SHIMS

To suit original  $\frac{5}{16}$ " valve stems. This design has a dramatically reduced mass to the original. Available finish ground in 0.001" increments from 0.040" to 0.300" or semi finished blanks - still to be ground to size.

JCENG661/040	0.040"	each £5-95
Through to		
JCENG661/300	0.300"	each £5-95
JCENG661/125B	0.125" Blank	each £4-45
JCENG661/165B	0.165" Blank	each £4-45
JCENG661/204B	0.204" Blank	each £4-45
JCENG661/244B	0.244" Blank	each £4-45
JCENG661/300B	0.300" Blank	each £4-45

## CAM FOLLOWER SLEEVE CLAMP SET

Steel plates designed to lock the cam follower sleeves down to stop them moving around.

JCENG660WK	set £64-50
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## CAM FOLLOWER SLEEVES.

44mm diameter sleeves to suit the large cam buckets required when using race camshafts. Precision ground OD manufactured from Colisbro-Bronze, the best lubrication and hardest wearing material, a must for this application. Supplied with slightly undersize ID to allow for final sizing once fitted.

JCENG660WS	each £29-50
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## COLISBRO BRONZE VALVE GUIDES

To suit the original  $\frac{5}{16}$ " valve stem diameter. Suits inlet and exhaust.

JENG722W	0.502" OD	each £24-50
JENG722C	Circlip	each £0-49

## MANIFOLD GASKETS

One piece solutions.

JENG759W	Inlet	£12-95
JENG759EW	Exhaust	£12-95



## FRONT BREATHER

More reliable than the original D-Type cam cover breathers this -16 JIC union which is attached as part of the fuel injection mount blanking plate, will not throw out any unwanted oil.

JCENG775		£59-50
JCENG774W	Blanking plate only	£12-95

## VALVE SPRINGS

Tried and tested competition springs to suit these demanding conditions.

To suit our top caps, fitted lengths must be checked upon installation.

JCENG725W	Set £189-95
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## SPRING BOTTOM CUP

Heat treated steel thin cups fit for the job.

JCENG725WCU	0.510" ID	each £12-95
JCENG725WCS	0.625" ID	each £12-95

## VALVE TOP CAPS

CNC machined to our CAD drawings in high grade steel and heat treated.

JCENG731W	each £16-50
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## VALVE COLLETS

Reproduction of standard item.

JENG733	pair £3-45
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## COMPETITION VALVE STEM SEALS

Modern design lip with spring, bonded to steel case, these require the top of the valve guide to be machined to suit.

JCENG735	each £3-95
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## MANIFOLD BLANKING COVERS

Protect your engine whilst in transport or storage.

JENG759WB	Inlet	£4-95
JENG759EWB	Exhaust	£4-95



## VALVE SPRING SHIMS

We have had these made specifically so that the race engines and badly worn road engines can have all the valve springs shimmed to the correct length.

CENG725A	0.010" Thick 0.595" Bore	each £0-52
CENG725B	0.015" Thick 0.595" Bore	each £0-52
CENG725C	0.020" Thick 0.595" Bore	each £0-52

# Straight port



## STEEL BILLET CAMSHAFTS

Brand new, made from the best quality steel and fully heat-treated, available in various profiles with large base circles. To suit straight port heads. Gun drilled with an oil feed to each lobe and four bolt sprocket fixings.

JENG656	Fast road	each £499-80
JCENG656D	Full race 1	each £499-80
JCENG656E	Full Race 2	each £499-80

## RE-GROUND CAMSHAFTS (exchange)

Original iron cams re-profiled, all supplied with oil fed base circles and four bolt sprocket fixings. Available with a choice of profiles.

JENG657	Fast road - exchange	pair £325-00
JCENG657	Full race 1 - exchange	pair £325-00
SURCHARGE	If old cams are not 4 bolt or have no oil holes	pair £50-00

## CAST IRON NEW CAMSHAFTS

Brand new cast iron camshafts as the originals, all supplied with oil fed large base circles and four bolt sprocket fixings. Now an affordable option for a brand new outright sale.

JENG657A	Fast Road	pair £583-00
JCENG657A	Full race 1	pair £583-00

Note. Camshafts can be supplied to any customer specified profile.

## BLANK BILLET CAMSHAFTS

Fully finished blank billet camshaft for final profiling and heat treatment to your specification, by ourselves or your cam grinder. These four bolt sprocket fixings camshafts are gun drilled through their entire length. Lobe oil feed holes can then be drilled in each cam base circle as required after final grinding. Purchased individually. Available in steel or cast iron.

JCENG656B	Steel	each £399.00
JCENG656BI	Iron	pair £445-00

## STEEL CAM FOLLOWERS

1<sup>3</sup>/<sub>8</sub>" diameter standard size bucket cam followers, fully heat treated steel and lightweight. A direct replacement for the standard item.

JCENG660A	each £19-60
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## LARGE DIAMETER STEEL CAM FOLLOWERS

Lightweight and fully heat treated these 1<sup>1</sup>/<sub>2</sub>" diameter bucket followers are necessary when using race cams. They will require the cylinder head sleeves to be replaced with larger ones.

JCENG660	each £19-60
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## CAMSHAFT LUBE

Specially formulated to help lubricate camshaft and buckets on start up. Always apply liberally to both cam and buckets during engine build-up.

CENG966	100ml	bottle £2-95
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## VALVES

All our valves are made from one-piece forgings in 214N stainless steel with stellite tips and plasma nitrided stems for increased life. Suitable for both leaded and unleaded fuel. These are made to the lightest design using standard size 5/16" stems and collets.

JCENG720S	Inlet valve 1.875"	each £24-00
JCENG721S	Exhaust valve 1.625"	each £21-50

## COMPETITION HEAD STUD SET

Made specifically to our design, these high tensile waisted studs give the best clamping force possible. Supplied as 2 dowel locating studs and 12 plain to give the cylinder head that extra location. To suit with & without the 0.375" thick lifting bridge.

JENG760	Top Face Iron Block/Std. head - no bridge	£165-00
JENG760A	Through water Iron Block/Std. head.	£234-95
JENG760B	Top Face Iron Block/Std. head - with bridge	£195-00
JCENG760L	Top Face Ally Block/Std. head - no dowel, no bridge	each £13-95



# Straight port



## TOP HAT VALVE SHIMS

To suit original  $\frac{5}{16}$ " valve stems. This design has a dramatically reduced mass to the original. Available finished ground in 0.001" increments from 0.040" to 0.300" or semi finished blanks - still to be ground to size.

JCENG661/040	0.040"	each £5-95
Through to		
JCENG661/300	0.300"	each £5-95
JCENG661/125B	0.125" Blank	each £4-45
JCENG661/165B	0.165" Blank	each £4-45
JCENG661/204B	0.204" Blank	each £4-45
JCENG661/244B	0.244" Blank	each £4-45
JCENG661/300B	0.300" Blank	each £4-45

## CAM FOLLOWER SLEEVE CLAMP SET

Steel plates designed to lock the cam follower sleeves down to stop them moving around.

JCENG660K	set £64-50
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## LARGE DIAMETER CAM FOLLOWER SLEEVES.

$1\frac{1}{2}$ " diameter sleeves to suit the large cam buckets required when using race camshafts. Precision ground OD manufactured from Colisbro-Bronze, the best lubrication and hardest wearing material, a must for this application. Supplied with slightly undersize ID to allow for final sizing once fitted.

JCENG660S	each £32-50
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## COMPETITION VALVE STEM SEALS

Modern lip with spring design, bonded to a steel case, these require the top of the valve guide to be machined to suit.

JCENG735	each £3-95
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## BRONZE VALVE GUIDES

To suit the original  $\frac{5}{16}$ " valve stem diameter and a choice of outside diameters.

JENG722E	Exhaust 0-501" OD	£8-95
JENG722I	Inlet 0-501" OD	£8-95
JENG722EB	Exhaust 0-506" OD	£8-95
JENG722IB	Inlet 0-506" OD	£8-95
JENG722C	Circlip	each £0-49

## VALVE SPRINGS

Tried and tested competition springs to suit these demanding conditions. Both sets suit the original top cap, however fitted lengths must be checked.

JENG725HD	Fast Road Set	£59-50
JCENG725	Race Set	£198-75

## VALVE TOP CAPS

CNC machined reproduction of standard.

JENG731	each £8-95
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## VALVE COLLETS

Reproduction of standard item.

JENG733	pair £3-45
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## SPRING BOTTOM CUP

Heat treated steel thin cups, fit for the job.

SCENG725CU	each £2-25
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## FRONT BREATHER

Replaces the original to provide a-16 JIC hose fitting, this will not throw out any unwanted oil.

JENG775S	£59-50
JENG774S	Blanking plate only £12-95

## VALVE SPRING SHIMS

We have had these made specifically so that the race engines and badly worn road engines can have all the valve springs shimmed to the correct length.

CENG725A	0.010" Thick 0.595" Bore	each £0-52
CENG725B	0.015" Thick 0.595" Bore	each £0-52
CENG725C	0.020" Thick 0.595" Bore	each £0-52

## INLET MANIFOLD GASKET

One piece solution.

JENG759	each £4-75
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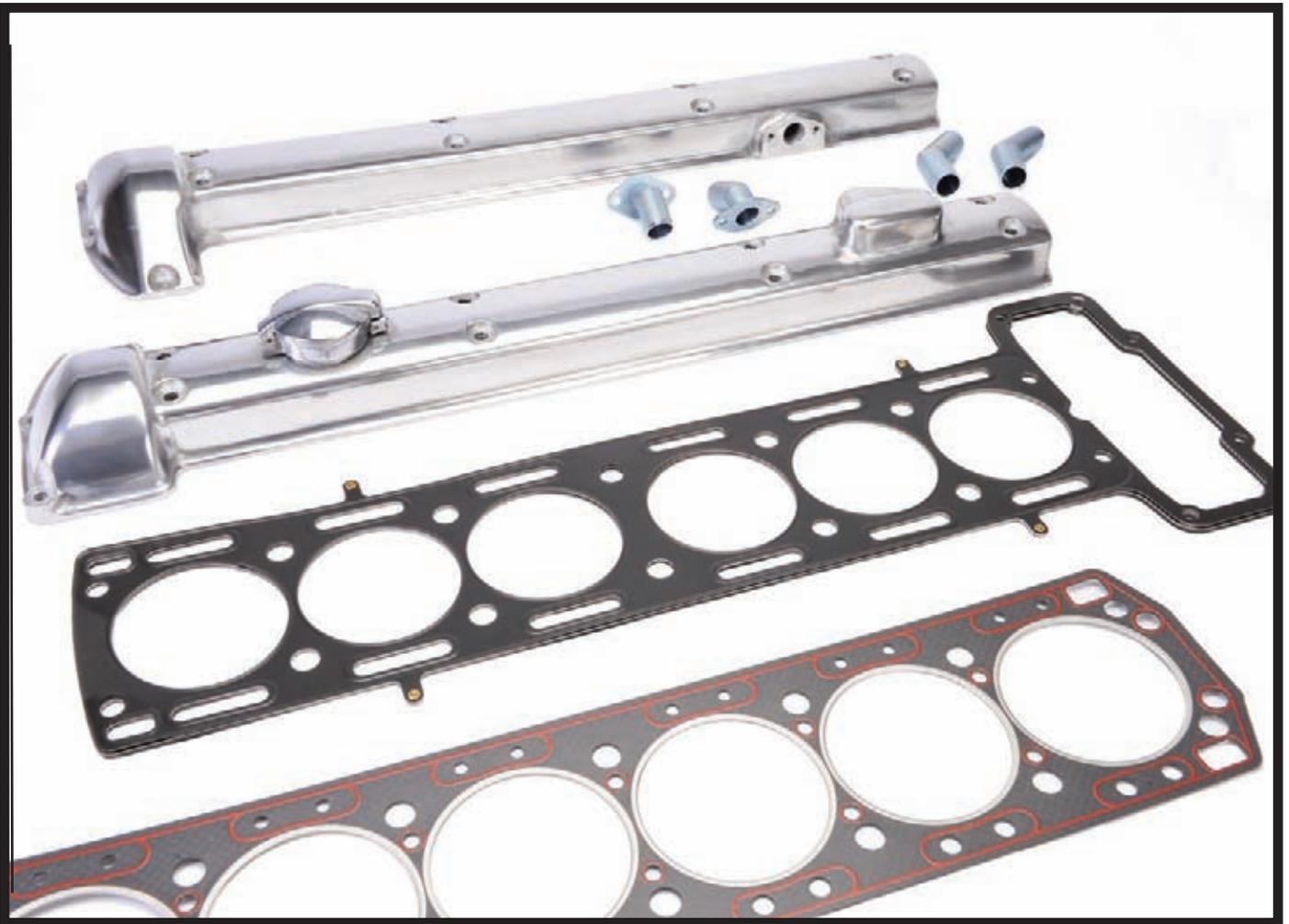


## BLANKING COVERS

Protect your engine whilst in transport or storage.

JENG759B	Inlet - one piece	each £4-95
JENG759EB	Exhaust - 2 required	each £4-95





#### STEEL HEAD GASKET

Modern multi layer steel construction, makes this design the ultimate for competition use. Available in a very wide range of thickness from 0.027" through to 0.140" makes adjusting the compression ratio a breeze. Stocked mainly in 89mm diameter for 3.8 Ltr although we also stock a limited range in 88mm diameter 3.8 Ltr and 93.2mm or 93.7mm diameter for 4.2 Ltr. Please contact our sales team for an up-to-date list of current stock. New thicknesses constantly being added. Our recommended starting point for a new engine build is 0.060" thick. Diameters quoted refer to the gasket diameter not cylinder size. Suitable for iron or aluminium block.

JCENG602C/027	89mm	£195-00
Through to		
JCENG602C/140	89mm	£220-00
JCENG602D/027	88mm	£195-00
Through to		
JCENG602D/140	88mm	£205-00
JCENG602E/027	93.2mm	£195-00
Through to		
JCENG602E/140	93.2mm	£205-00
JCENG602F/027	93.7mm	£195-00
Through to		
JCENG602F/140	93.7mm	£205-00

#### COMPOSITE HEAD GASKET

Considerably thicker than the original having a compressed thickness of 1.3mm these gaskets are the strongest most reliable, composite type we know of. Perfect for road or mild race. Suitable for iron or aluminium block.

JCENG602B	4.2 Ltr	£155-00
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#### HEAVY DUTY CYLINDER HEAD WASHERS

Thick and strong to avoid distortion.

CENG762	each £1-25
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#### HEAVY DUTY CYLINDER HEAD NUTS

A replacement for the standard with improved quality and no possibility of bottom out.

CENG562	each £1-56
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#### CAM COVERS

Polished Aluminium covers with the original D type & LWE breather pipes. With or without a 2" Monza filler cap if required. Breather tube set purchased separately.

JCENG736E	Exhaust - no filler	£409-95
JCENG736EW	Exhaust - with Monza filler	£495-00
JCENG736I	Inlet	£409-95
JCENG737	Breather tube set	£148-95

#### CAM COVER BLANKING PLUGS

CNC machined aluminium reproduction of the original to fill the rear cover/head hole.

JENG654	each £29-50
SUF107S	O ring each £0-43



#### CAM SPROCKET BOLTS

High grade lightweight aircraft quality bolts pre-drilled for lock-wire. Fit for the job, road or race.

JENG653	each £6-95
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**FORGED PISTONS**

We have forged pistons machined exclusively for us by Omega, the worlds leading piston manufacturer. Several

types available, all benefiting from the latest piston ring technology and having the lightest designs. The crown thickness is generous, allowing for the compression ratio to be adjusted by easily machining the flat top away. The valve reliefs will accept a wide range of cams all to match with std. length con rods. Supplied in sets of six, including gudgeon pins, circlips and rings.

Sizes quoted are to suit a finished honed bore.

JCENG611 3.8 88mm bore £995-00

46cc protrusion volume, suitable for standard type straight port or early wide angle heads with a minimum chamber diameter of 83mm.

JCENG611W 3.8 88mm bore £995-00

66cc protrusion volume, suitable for wide angle heads with a minimum chamber diameter of 88mm.

JCENG612 4.2 93mm bore £1975-00

46cc protrusion volume, to suit standard type straight port heads or our 4.2 wide angle heads with a minimum chamber diameter of 83mm.

Replacement rings, pins and clips available, please state diameter and width when ordering.

**STEEL CON ROD SET**

These are English made from forged billets and fully machined with H-beam style. This lightweight design to the original length utilises the original big end bearing dimensions and suits the standard 7/8" gudgeon pin, they are the ultimate to have. Suitable for 3.8 or 4.2.

JCENG632R set £1399-00

Replacement parts  
CENG605 Rod Bolts each £12-95

**3.8 STEEL BILLET CRANKSHAFT**

Manufactured by Britain's leading crankshaft supplier, these EN40B nitride hardened steel crankshafts are considerably stronger than the original, allowing for higher revs with maximum reliability. Keeping the original bearing dimensions, flywheel fixing, rear scroll seal and stroke they have the latest design of 12 staggered counter weights and overall lightening.

Suitable for 3.8 or 3.4 Ltr.

JCENG632KW Wet sump £3250-00

JCENG632K Dry sump £3250-00

Other specifications available to order

**HARMONIC CRANKSHAFT DAMPER**

This crank damper is like no other on the market. It has dual frequency balancing and therefore makes the engine far smoother than others. It does require the mounting hub, listed below, in order to fit it and the fan belt pulley must be modified.

CENG643 £305-00

Replacement Parts  
CENG643R O ring overhaul kit £69-00

**DAMPER HUB**

Made from solid billet steel. Required to fit above harmonic crankshaft damper.

JENG643P £159-00

JENG643PR 0.040" undersize £179-00

**CRANK PULLEY**

Billet aluminium single 1/2" wide vee groove fan belt pulley, designed to attach to the above crank damper.

JCENG643V Single vee £87-55

JCENG643Y Double belt - single vee - D type £225-00

(Other pulleys inc W groove available on request)

**TDC MARKER**

To suit our Super damper.

JCENG644 £4.95





#### HEAVY DUTY TIMING CHAINS

Stronger than original these are a must for fast road and race cars.

JENG648BD	Bottom chain	£39-95
JENG648TD	Top chain std head	£44-95
JENG648TW	Top chain wide angle head	£47-95
JENG648TWS	Wide angle 1 pin shorter	£47-95
JENG648TWSS	Wide angle 2 pins shorter	£47-95

#### HYDRAULIC TIMING CHAIN TENSIONER

Suitable to replace the bottom chain tensioner this is a fresh approach to the very out of date original design, it consists of a nylon slipper pad and uses the engines oil pressure to assist in the tensioning with the use of a small ball valve. Extremely reliable and should be used on all race and road engines.



CENG650N4	£129-50
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#### BIG BORE OIL PICK-UP PIPE

7/8" diameter oil pick up pipe to suit rotor oil pump and E-Type sump.

JENG672P	£79-95
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#### OIL GALLERY PLUGS

Lightweight aluminium threaded blanking plugs for each end of any iron Jaguar cylinder block.

JENG763	Front - Iron block	each £18-50
JENG764	Rear- Iron block	each £19-50
581405	Side	each £3-60



#### ROTOR OIL PUMP

This eccentric rotor pump requires a 7/8" diameter pick-up pipe and a 3/4" diameter pressure pipe.

JENG672	£49-91
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#### SUMP STRAINER

This non standard sump strainer is perfect to attach to the oil pump pick up pipe by bronzing on our flange.

JCENG663	Strainer	£65-00
JCENG664	Flange	£2-45



#### BIG BORE OIL PRESSURE PIPE

3/4" diameter should be used in conjunction with a rotor oil pump.

JENG672R	3.8 litre iron block	£125-00
JENG672S	4.2 litre iron block	£59-95
JENG672A	3.8 litre all block	£195-00

#### HEAVY DUTY ROD, NUTS AND BOLTS

Made by ARP to suit standard con rods.

JENG605	Bolt	each £8-59
JENG606	Nut	each £2-92

#### HEAVY DUTY FLYWHEEL BOLT SET

Made by ARP with 12 point head.

JENG637	set £49-75
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#### CORE PLUG STRAP KIT

This kit is designed to fit across the core plugs to stop them blowing out when under high stress from race or rally conditions. Suitable for all Jaguar iron cylinder blocks.

JCENG670	£19-50
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### STEEL FLYWHEELS

Designed by ourselves, these steel billet flywheels are extremely lightweight yet very strong. To suit a 7/4" racing clutch and our original diameter, thin ring gear or the 9/2" clutch & a standard width ring gear. Both suit the original crankshaft flange. Suitable for all straight 6 Jaguar Engines.

JENG635SR	7 1/4"	£425-00
JENG635SO	9 1/2"	£395-00

### ALUMINIUM FLYWHEEL

English made to our design. The quality of these is outstanding. Fully assembled with steel friction ring fitted and a thin ring gear grub screwed on. To suit the 9/2" organic bolt spacings. Ideal for rally, fast road or sprint cars, which wish to retain the large diameter clutch with the lightest of flywheels.

Installing with a pre-engaged starter motor is recommended.

JCENG6360G	3.8 with ring gear	£495-00
JCENG6370G	4.2 with ring gear	£495-00

### THIN RING GEAR

Having the same diameter and number of teeth as original these ring gears have been thinned down to 3/8" thick thus giving a 40% weight saving over the original.

JCENG635	3.8	£76-38
JCENG635A	4.2	£76-38

### MAIN STUD, NUT AND WASHER SET

Heavy duty excellent quality wasted studs with ARP nuts and washers, to replace the standard bolts and improve the main bearing cap clamp load.

Suitable for any Jaguar 6 cylinder iron block.

JCENG630	set	£225-00
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### HEAVY DUTY CRANK BOLT AND WASHER

High tensile waisted bolt and strong thick washer maintain a stronger clamp load on the damper in the most demanding of applications. Sold separately, but must be used together.

JCENG646	Bolt	£24-95
JCENG645	Washer	£15-00

### FRONT COVER

Reproduction of the original wet sump standard item. Supplied extra tall to be machined when facing your own cylinder block.

JENG780	£305-00
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### CYLINDER LINERS

Cast-iron high quality straight plain liners in a range of sizes.

JENG618	3.565" OD to suit 3.8	£37-50
JENG618A	3.574" OD to suit 3.8	£96-00
CENG417A	3.597" OD to suit 3.8	£40-00
JENG618B	3.765" OD to suit 4.2	£40-00

### ALUMINIUM CYLINDER BLOCK

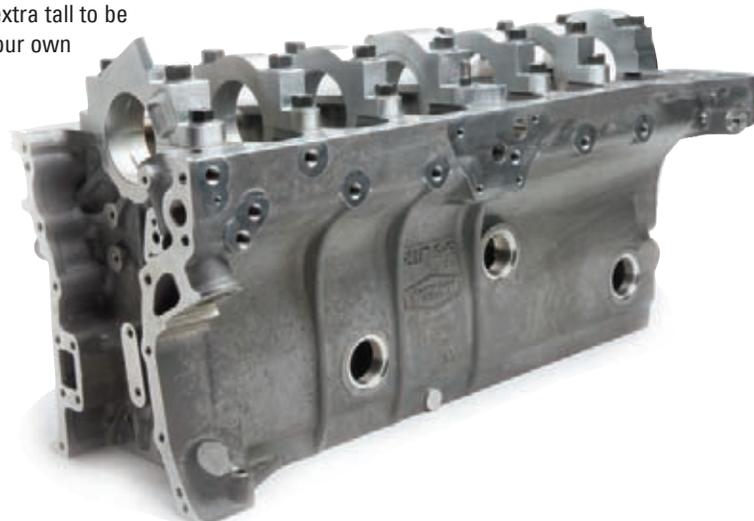
Manufactured by Crosthwaite & Gardiner these high quality 3.8 Ltr cylinder blocks come ready to use with 88mm honed bore. Supplied complete with main caps.

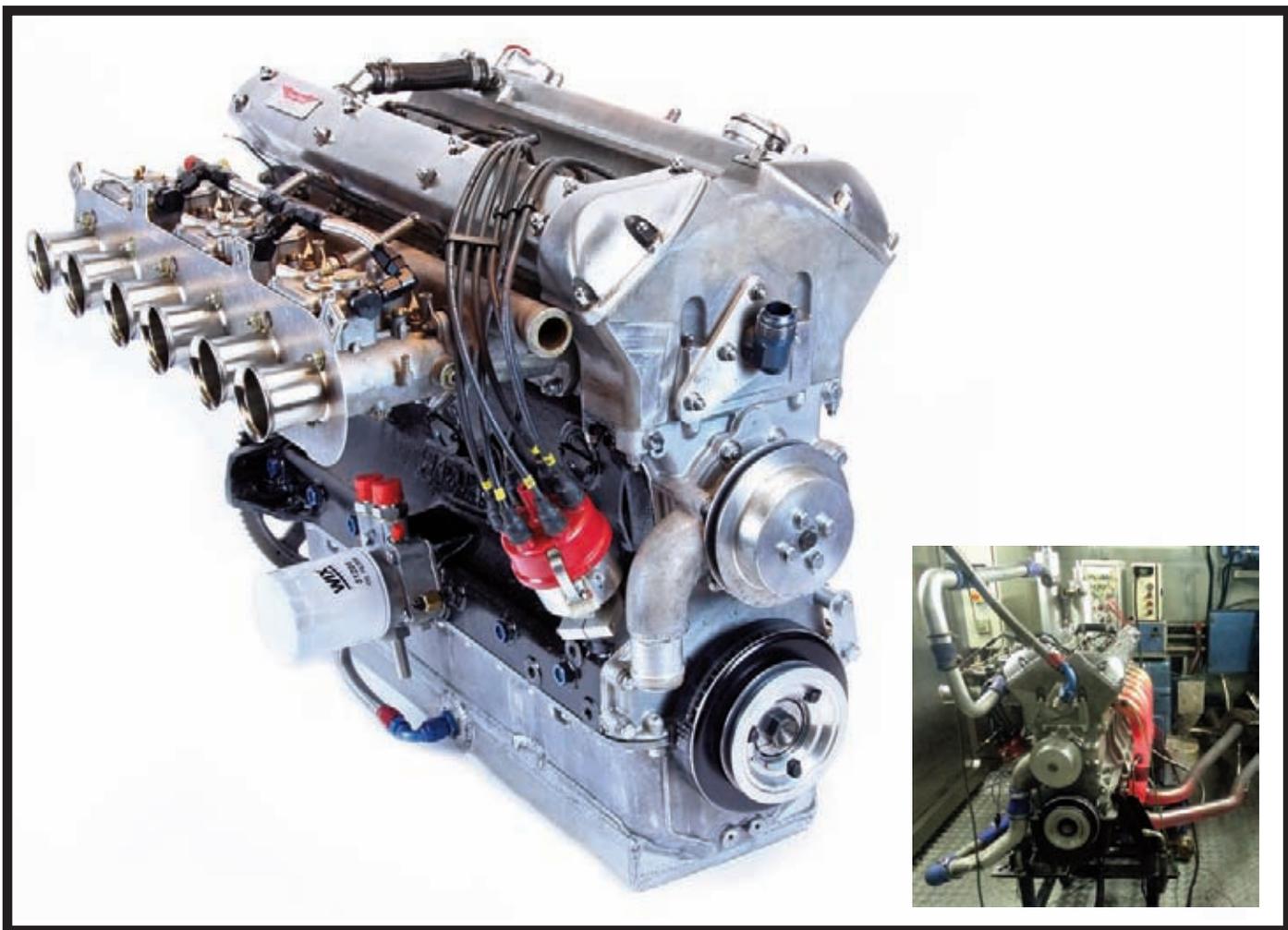
JCENG900	Wet sump	£10,950-00
JCENG901	Dry sump	£10,950-00

### Replacement parts

JCENG618	liner to suit ali block	£72.65
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Fitting service available, please ask.





### COMPLETE ENGINES

Engine building has always been a strength at Denis Welch Motorsport as both Denis and Jeremy Welch worked in professional F1 and touring car engine building facilities, before starting work here in Yoxall.

The success of many customers over the years bears testimony to the preparation and reliability of our fully built units. This capability to build and develop engines has been greatly enhanced by our in-house CAD design studio and the on-site dyno testing that can handle engines up to 850 bhp, this enables us to prove our work before despatching to customers all over the globe.



We often partner customers to develop the exact specification of a unit that is tailor made to suit their individual needs.

We also have the ability to problem solve components and configurations that have long been an issue with original units.

Whilst we offer this individual service we supply standardised set ups a few examples of which are listed here.

All supplied with; Full race steel camshafts. Steel crank and rods, Forged Pistons Competition distributor with silicone HT leads, 48 DCO-SP Webers on CNC ported Manifold, Triple plate 7.25" clutch, lightweight steel flywheel, No old units required. Dyno tested, ready to go.

### ENGINE ONE

Wide Angle CNC ported cylinder head. Reconditioned 3.8 Ltr Iron block. Wet sump.

£43,500-00



### ENGINE TWO

Wide Angle CNC ported cylinder head. New Aluminium 3.8 Ltr block. Wet sump.

£48,500-00



### ENGINE THREE

Reconditioned CNC ported str. Port cyl head. Reconditioned 3.8 Ltr Iron block. Wet sump.

£29,500-00



### ENGINE FOUR

Reconditioned CNC ported str. Port cyl head. New Aluminium 3.8 Ltr cyl block. Wet sump.

£34,500-00



Note.

Dry sump and fuel injection options available. The above selection is a guide, we prefer to quote to your specific specification, prices reduced if suitable donor parts supplied.

Photo details are for example only.



#### AP RACING 7 1/4" CLUTCH COVER

The reduced diameter of these racing clutches gives much improved acceleration and have a far greater torque capability with the choice between twin plate for mild race and triple plate for the ultimate race car. These do need a ball race release bearing and the centre plates are not included.

CCLU103R	Twin Plate Cover	£344-20
JCCLU103R	Triple Plate Cover	£485-92

#### AP RACING 7 1/4" CLUTCH CENTRE PLATES

These sintered plates fit with the above covers.

CCLU108T		each £69-14
JCCLU108T	Thin centre plate	each £69-14

#### LIGHTWEIGHT SLAVE CYLINDER

Replace the standard iron cylinder with this top quality aluminium cylinder of the same bore size.

Note it may rub slightly on the gearbox tunnel.

CLU133G		£96-85
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#### AP RACING 9 1/2" CLUTCH COVER

Heavy duty cover to suit either the paddle or organic centre plate available with or without centre pad depending on the choice of release bearing.

CCLU103P	with pad	£193-77
CCLU103PP	without pad	£193-77

#### AP RACING 9 1/2" PADDLE CLUTCH PLATE

Suitable for hard rally/racing. Fits with a normal 9 1/2" clutch cover.

CCLU108P	£222-27
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#### AP RACING 9 1/2" ORGANIC CLUTCH PLATE

Suitable for fast road/rally. With a more progressive take up than the paddle plate.

CCLU108A	£129-96
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#### CLUTCH BLEED PIPE

Whether road or race, why struggle when this simple braided pipe will make bleeding the clutch easy.

CCLU130	£ 18-54
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**NOTE.** All the clutch plates listed here are to suit the standard Jaguar input shaft splines. 1 1/8" x 10. Plates to suit other shafts are available to order.

#### 4.2 DIAPHRAGM CLUTCH KIT

9 1/2" top quality replacement, suitable for mildly tuned road cars.

CCLU103K	£179-95
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#### Replacement parts

CCLU103	Cover	£141-42
CCLU108	Plate	£64-00
CLU112	Thrust	£30-85

#### BALL RACE RELEASE BEARING

Designed to fit onto the original fork mechanism. These are far more reliable if replacing the carbon thrust and a must if being used with a racing clutch.

One type fits all diaphragm clutches, fits directly onto fingers after removal of the centre pad if fitted.

CCLU112M	£95-00
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#### Replacement parts

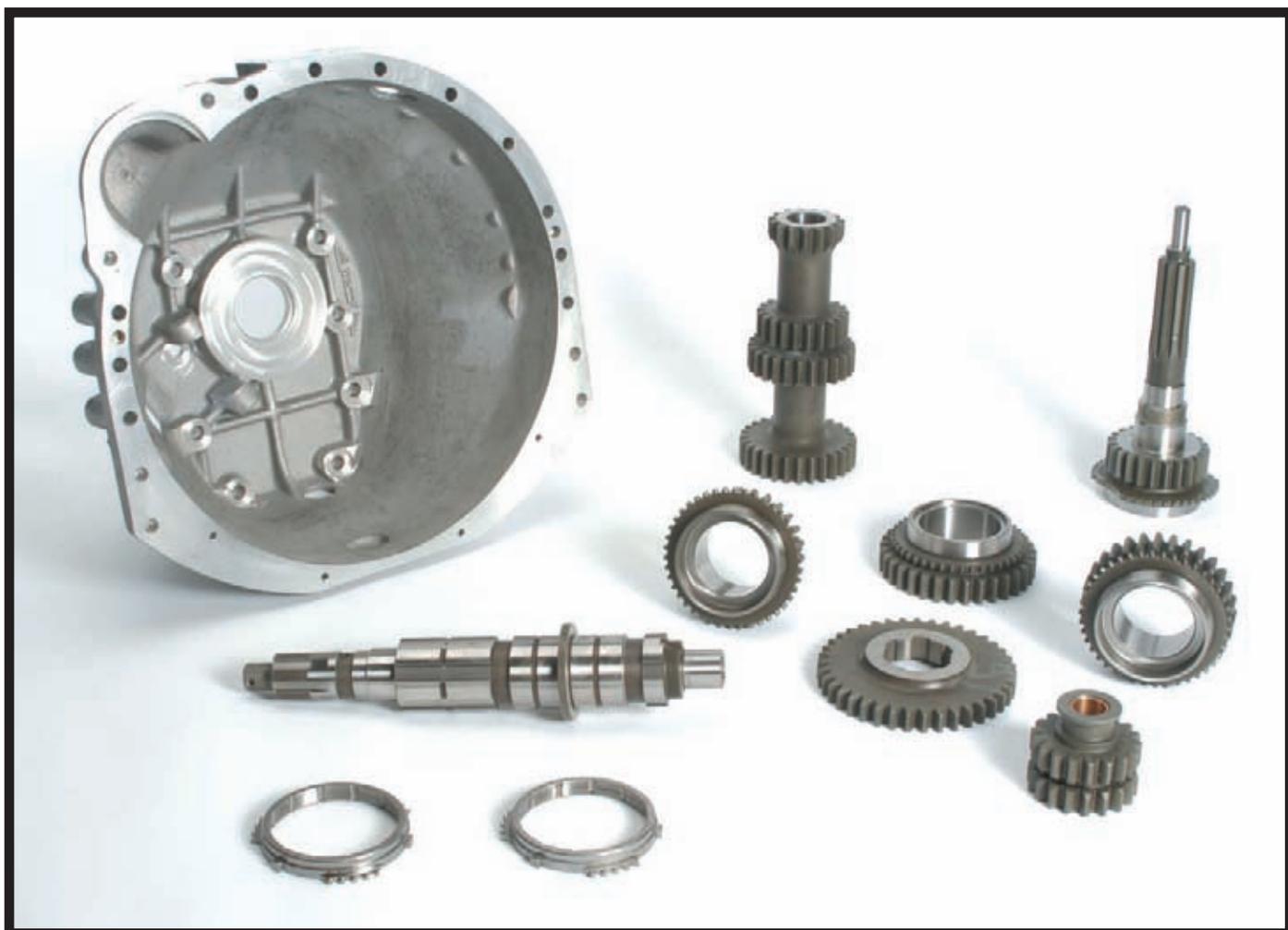
YCLU112B	Bearing	£21-79
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#### CLUTCH ALIGNMENT TOOL

A must have tool for aligning twin or triple plates. Metal construction for long life.

JCLU160	£30-85
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#### STRAIGHT CUT GEAR SET

Manufactured exclusively for us by two of England's leading gear manufactures, these incredibly strong gears have the same ratios as the original close ratio E-Type gears, as set out in the chart below. The set comprises of all gears including reverse, all brand new manufacture. They will fit directly into any 4.2 all synchromesh overdrive or non-overdrive gearbox using all the original type bearings and synchros etc. with no modifications or machining. The competition set is made from a higher grade steel and being Vibro deburred has a superior surface finish.

JGBS301	Normal	£1975-00
JGBS301C	Competition	£2350-00

	STANDARD 'E' TYPE	ORIGINAL CLOSE RATIOS
1st	2.750 : 1	2.678 : 1
2nd	1.905 : 1	1.739 : 1
3rd	1.389 : 1	1.266 : 1
Top	1 : 1	1 : 1

Denis Welch Straight Cut Gears are the same ratio as the original works close ratios.

#### HEAVY DUTY BAULK RINGS

Considerably stronger than the original, these will resist cracking, breakage and wearing out to a much greater degree. Two types available;

Steel - designed for the most demanding drivers, mainly for racing.

Brass - for those slightly more sympathetic drivers who prefer a faster shift.

The steel may require routine servicing every season. Both fit to the original or our straight cut gears with no modifications. Fits any 4.2 all synchro gearbox.

JGBC131	Steel	each £119-50
JGBC132	Brass	each £119-50

#### 4.2 NON OVERDRIVE MAIN SHAFT

Brand new reproduction of the standard item with smaller diameter hole to increase strength. Spline ground as original.

JGBC123	SWB	£395-00
JGBC124	LWB 2+2	£425-00

All standard bearings and gaskets etc are carried in stock.

#### 4.2 BELLHOUSING

Made from our own pattern equipment these are cast in top quality Aluminium and now Magnesium, both heat treated. Both being far superior to the original in terms of strength and accuracy of alignment.

We have a choice of original clutch release fork mechanism or a solid pad in the centre to accept your own co-axial release mechanism. Also the choice between the original large starter dog housing (for the original starter) or our slim line design (when using our modern pre-engaged



starter) which helps to make it possible to remove the gearbox from the car leaving the engine in place.

Fits any 4.2 all synchro gearbox.

Now also a choice to suit 4.2 ring gear as well as 3.8.

To suit 3.8 Starter & ring gear.

JGBS300A	Std. fork/big starter Aluminium	£645-00
JGBS300B	Std. fork/small starter Aluminium	£645-00
JGBS300D	Co-Axial/small starter Aluminium	£645-00
JCGBS300B	Std. fork/small starter Magnesium	£975-00
JCGBS300D	Co-Axial/small starter Magnesium	£975-00

To suit 4.2 Starter & ring gear.



JGBS400A	Std. fork/big starter Aluminium	£645-00
JGBS400B	Std. fork/small starter Aluminium	£645-00
JGBS400D	Co-Axial/small starter Aluminium	£645-00
JCGBS400B	Std. fork/small starter Magnesium	£975-00
JCGBS400D	Co-Axial/small starter Magnesium	£975-00





#### COMPETITION SEALS

A considerably higher grade material allows these seals to stand increased heat levels. Particularly useful when competing in long distance races.

JCGBS149	1st Motion Seal	£13-95
JCGBS192	Rear Seal	£8-95

#### OIL PUMP HOUSING

Reproduction of the original 4-2 non-overdrive oil pump gear housing.

JGBC404		£105-00
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#### RETAINING NUT

Reproduction of the original 1st motion and mainshaft nut.

JGBC157		each £23-70
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#### WE ONLY USE BRANDED BEARINGS

We learnt a long time ago that fitting non branded bearings whilst overhauling gearboxes and axles was a fool's errand. It takes a long time to disassemble a component and similarly a long time to re assemble it so you don't want all that hard work again do you?



#### RETAINING NUT SOCKET

Heavy duty tools to do the job correctly. Although the nut is the same size, the mainshaft is best approached with a shorter socket.

JGBC158	Input shaft - long	£95-00
JGBC158A	Main shaft - short	£95-00

#### OIL FILTER GAUZE

Reproduction of original.

JGBC406		£25-00
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#### HEAVY DUTY LAYSHAFT

Top quality high grade product carefully made to give increased life under demanding conditions.

JGBC160	4-2	£64-50
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#### GEARBOX LID BRACE

Fabricated steel brace to strengthen the weak mounting point of the gearstick, as fitted to the factory cars.

JCGBC109B		£65-00
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#### SELECTOR HUB - "AVAILABLE AGAIN"

Original new old stock item of the later design which incorporates reverse taper teeth to aid locking the hub into gear. This hub suits 1st/2nd & 3rd/4th.

JGBC142	4-2	£395-00
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#### GEARSTICK SELECTOR SHOE

Reproduction of original hard to find part. Induction hardened for long life as the original.

JGBS106	Shoe	£165-00
JGBS108	Retaining bolt	£14-50



#### BLANKING PLUGS

Aluminium blanking plugs to replace the overdrive and reverse light switches in the gearbox lid and the speedo drive hole.

JGBS120	Switches	each £8-50
JCGBS156	Speedo drive	each £16-50
JGBS155	Speedo 'O' ring	each £0-20





#### GEARSTICK GAITOR AND TRIM RING

Black vinyl and aluminium ring.

JGBC102	Gaitor	£24-95
JGBC102A	Ring	£12-95

#### PROPSHAFT FLANGE

Top quality reproduction with close fitting holes for a snug fit with the four bolts.

JGBC405	4.2 SWB	£69-00
JGBC410	4.2 LWB - Mk2	£95-00

#### REAR END CASE

Top quality reproduction of the original, cast from our own pattern equipment in LM25 and heat-treated to TF. Then CNC machined to our CAD drawings. Direct replacement for original.

JGBC403	4.2 SWB	£295-00
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#### REAR OIL SEAL HOUSING

CNC machined, a direct replacement for the original.

JGBC402	4.2 SWB	£62-50
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#### SPEEDO DRIVE HOUSING

Reproduction of this hard to find original part.

JGBS156		£49-50
JGBS155	Speedo 'O' ring	£0-20



#### HEAVY DUTY PROP SHAFT BOLT

High tensile top quality bolt with correct length shank to suit this application. A must for the most demanding power trains when used with the all metal stiff nut both ends.

CRAx222	Bolt	each £4-95
038SNNF	Stiff nut	each £1-15



#### TOP LID - BARE

Top quality reproduction of the original, cast from our own pattern equipment in LM25 and heat-treated to TF then CNC machined in our own factory to our CAD drawings. A direct replacement for original, although much stronger around the usual weak gear stick mount as not only thickened up this material is much stronger than original.

JGBS310	4.2 SWB - bare	£495-00
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#### SELECTOR FORKS

A reproduction of the original by ourselves, cast using our own pattern equipment.

Fits 1st/2nd and 3rd/4th for all Jaguar 4 synchro gearboxes.

JGBC240		each £199-00
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#### SELECTOR SHAFTS

A reproduction of the originals by ourselves, machined to our CAD drawings. Fits all Jaguar 4 synchro gearboxes.

JGBC234	1st/2nd	£149-00
JGBC238	3rd/4th	£152-00
JGBC230	Reverse - bare	£195-00
JGBC230A	Reverse - complete	£235-00

#### GEAR KNOBS

Aluminium traditional style with standard  $\frac{3}{16}$ " thread or  $\frac{3}{8}$ " to suit our stronger gearstick or a more ergonomic spherical design, kinder on the hand, also with the larger thread.

JGBC103	5/16" Thread Original	£29-50
JGBC103	3/8" Thread Original	£29-50
JGBC103R	3/8" Thread spherical	£35-00



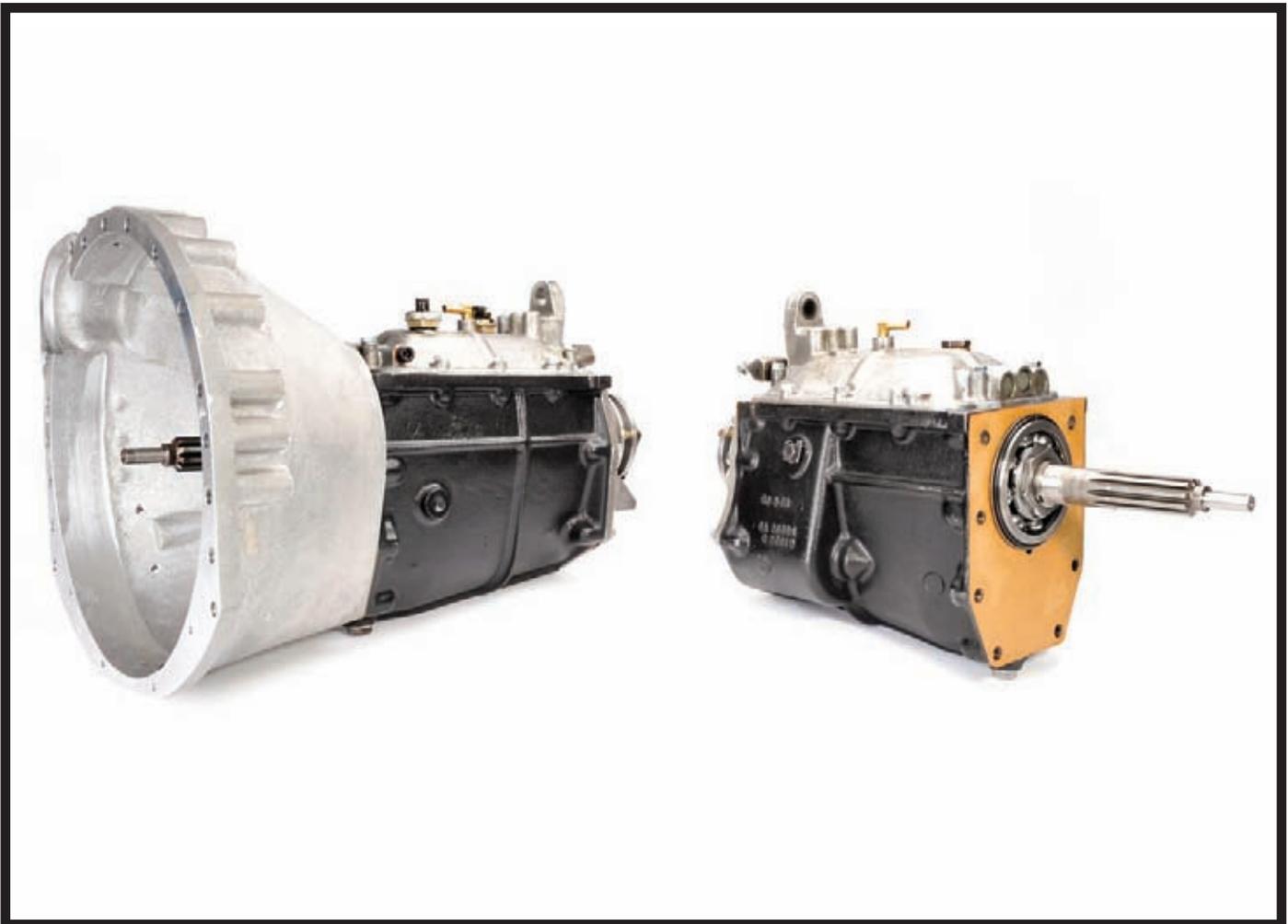
#### HEAVY DUTY GEARBOX MOUNT KIT

A considerably stronger & more rigid solution. Bolts directly to the gearbox and mounts to your existing cross plate. Fit and forget.

JGBS250		£47-50
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#### Replacement parts

FGBS250	Rubber mounting	£20-50
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#### RECONDITIONED STANDARD GEARBOX

Standard fully reconditioned 4 synchro, 4.2 E type gearboxes now from stock. Rebuilt with new bearings, seals and layshaft etc. assembled into a combination of new and used cases with original standard or close ratio helical gear sets. Supplied with speedo drive and without bellhousing. Sold on an outright purchase basis or exchange with; £1500-00 rebate for input shaft number. C28415

£2000-00 rebate for input shaft numbers. C25435 or C20497

JGBS700	Std ratio	£3750-00
JGBS701	Close ratio	£4450-00

#### OUTRIGHT COMPLETE STRAIGHT CUT GEARBOX

New straight cut gears (JGBS301), mainshaft and bearings etc. assembled into a combination of new and used cases. This outright sale gearbox is a must have for any serious racer. Supplied assembled with or without bellhousing and clutch fork etc. The competition version uses the higher grade gears (JGBS301C) and a brand new bare lid casting.

Suitable for any all synchro SWB application.

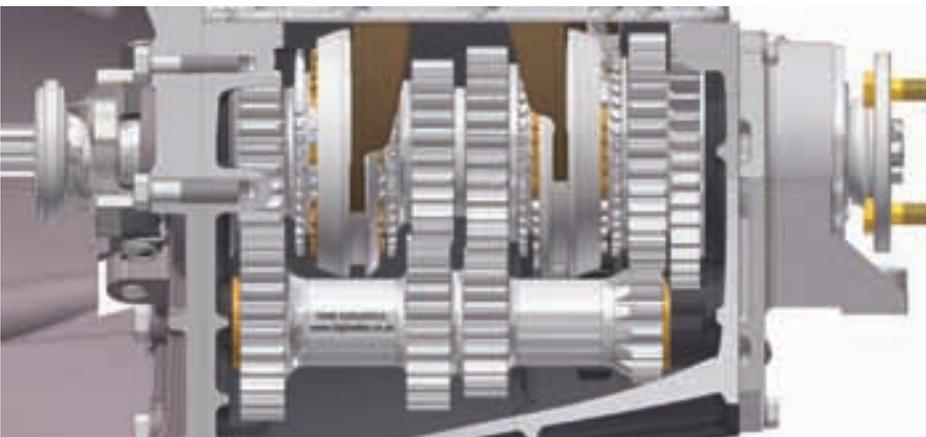
Supplied with mainshaft speedo drive fitted, however external fitting blanked.

JGBC800	No bellhousing	£5950-00
JGBC800A	With aluminium bellhousing	£6695-00
JGBC800C	Competition - no bellhousing	£6395-00

#### TOP LID - COMPLETE

Fully assembled with all new parts, selector shafts and forks etc. as listed in this catalogue.

JGBS310A	4.2 SWB - complete	£1395-00
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Reconditioned, used complete lids also available. Please enquire.

**ARP LSD CASE BOLT**

High quality reliable bolts to hold the original Salisbury diff together.

JCRAX305 set £36-00

**HEAVY DUTY PINION FLANGE**

Brand new item.

Fits with seal below to avoid any leaks.

JRAX140 £79-50

**HEAVY DUTY PINION SEAL**

High quality item to suit above flange.

JRAX137 £12-95

**HEAVY DUTY PROP SHAFT BOLT**

High tensile top quality bolt with correct length shank to suit this application. A must for the most demanding power trains when used with the all-metal stiff nut. Suitable for both gearbox and axle.

CRA222 Bolt each £4-95  
038SNNF Stiff nut each £1-15

**QUAIFE ATB**

Ideal for fast road and track day cars or race cars where regulations allow. Unit is to suit a 1-000" crown wheel offset. It does not suit all ratios or diff cases – Please check before ordering.

JCRAX100Q £815-00

**ORIGINAL SALISBURY TYPE LSD PARTS**

The items below all suit the original case with or without our ramp blocks shown in the next column.

JRAX100/171	Planet Gear	each £79-00
JRAX100/323	Sun Gear	each £116-50
JRAX100/172	Pre-load Plate	each £19-95
JRAX100/173	Friction Plate	each £19-95
JRAX100/174	4 Lug Plate	each £19-95
JCRAX100/203	0.020" shim	each £3-25

**30°/60° RAMP ANGLE BLOCKS**

CNC machined from billet steel to our design, these transform the performance of the standard Salisbury Diff Unit. Fitted without the original cross pins improves strength and the new angles improve grip under acceleration and reduce under steer when off the gas.

JRAX300 pair £349-69

[Alternative angles available to special order.](#)

**CROWN WHEEL SPACER**

Helpful if fitting differing offset crown wheel and diffs together.

JRAX130 0.050" Thick £39-25



Testing and tuition at Sepang, Malaysia 2015, prior to competing in the five rounds of the Asia Classic Car Cup. Both cars fully supported by Denis Welch Motorsport.



### ALUMINIUM DIFF COVER

Made from our own pattern equipment. Cast in LM25 aluminium, heat treated to TF & then CNC machined these are not only considerably stronger & clamp the gasket well, they are also lighter than other Magnesium covers available.

JCRAX101	Standard fitment	£180-25
JCRAX101C	With cooler tapping	£198-50

### DIFF COOLER KIT

Complete kit with top quality metal pump & mounting, braided hoses, cooler, unions, fittings, temp switch and filter gauze.

To suit tin or aluminium cover plate (not included).

JCRAX200	Red/blue fittings	£895-00
JCRAX200B	Black fittings	£895-00

### Replacement parts

JCRAX200C	Oil cooler - 8 10 row	£67-00
JCRAX200P	Metal top quality pump	£482-50
JRAX104	Temperature switch	£20-50

### PINION SOLID SPACER

Made from high grade steel with extra length to avoid using shims in the most demanding applications.

JRAX128	£26-95
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### DIFF COOLER PUMP

All metal construction makes this the most reliable option available, supplied with waterproof electrical plug. Mating socket supplied separately.

JCRAX200P		£482-50
JCRAX200E	Mating Socket	£19-25



### Replacement parts

JCRAX200R	Overhaul Kit	£44-22
JCRAX200S	O Ring	£0-36

### HEAVY DUTY PINION NUT & WASHER

High quality items with the nut having a crimped edge to ensure no loss of clamp load.

RAX142	£4-95
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### TECH TIP

Use an old nut whilst setting up the Pinion preload, when happy then install the new H/D nut once.

### ARP CROWN WHEEL BOLT SET

12 point head, excellent quality. Direct replacement for standard.

JENG637	0.813" Std length	set £49-75
JENG637A	1.0" Extra long set	set £39-50



### CROWN WHEEL & PINIONS

To suit series III or later cases. Although can be installed into early cases with a change of small pinion bearing and the correct diff offset or the use of JRAX130 crown wheel spacers.

JCRAX150F	4.55:1	£625-00
JCRAX150	4.09:1	£625-00
JCRAX150A	3.77:1	£625-00
JCRAX150B	3.54:1	£625-00
JCRAX150E	3.31:1	£625-00
JCRAX150C	3.06:1	£625-00
JCRAX150D	2.88:1	£625-00





**DIFF QUARTER SHAFT HOUSINGS**

Machined from billet aluminium for the lightest weight and hard anodised for durability or made from cast iron for originality, these diff quarter shaft housings are available in a variety of types to suit the different diff cases and brake set ups. All as direct replacements for both the standard iron or competition magnesium diff cases.

The SR1 unit fit either side and accept the standard or our aluminium separate brake calliper adaptor brackets.

The SR3 unit with integral calliper mounts is available to suit the standard small Dunlop or Girling callipers handed left & right or with wider spaced integral calliper mounts to suit the E-Type Homologated large Dunlop Calliper. Not handed.

All three types accept the standard SR1 quarter shaft lip seal or our heavy duty high temperature seal JCRA102S.

JCRA102S SR1 each £125-00 JCRA102S SR3 Large Dunlop LH & RH each £195-00



JCRA102S SR3 Small Dunlop RH each £150-00  
 JCRA102S SR3 Small Dunlop LH each £150-00

**HEAVY DUTY QUARTER SHAFT SEAL**

A considerably higher grade material allows these to withstand increased levels of heat.

JCRA102S each £12-95





#### LIGHTWEIGHT QUARTER SHAFTS

High grade steel, top quality reproduction of the original made to our CAD drawings. Optimised for the lightest weight. Supplied with our own top quality driveshaft studs ready fitted.

JCRAX160AS	Series 1	each £220-00
JCRAX160S	Series 3	each £220-00

**NOTE:** Our Series1 shafts require Series 3 metric bearing retaining nuts.

#### SOLID BEARING SPACERS

Made from high grade steel with extra length in order to be ground to length on assembly to avoid using shims in the most demanding applications.

JCRAX105	Series I	each £17-50
JCRAX106	Series III	each £17-50

#### QUARTER SHAFT NUT

Reproduction of the original metric thread item.

JRAX162	Series III	each £8-95
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#### QUARTER SHAFT TAB WASHER

Standard item.

JRAX102A	All	each £1-95
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#### DRIVE SHAFT BOLTS

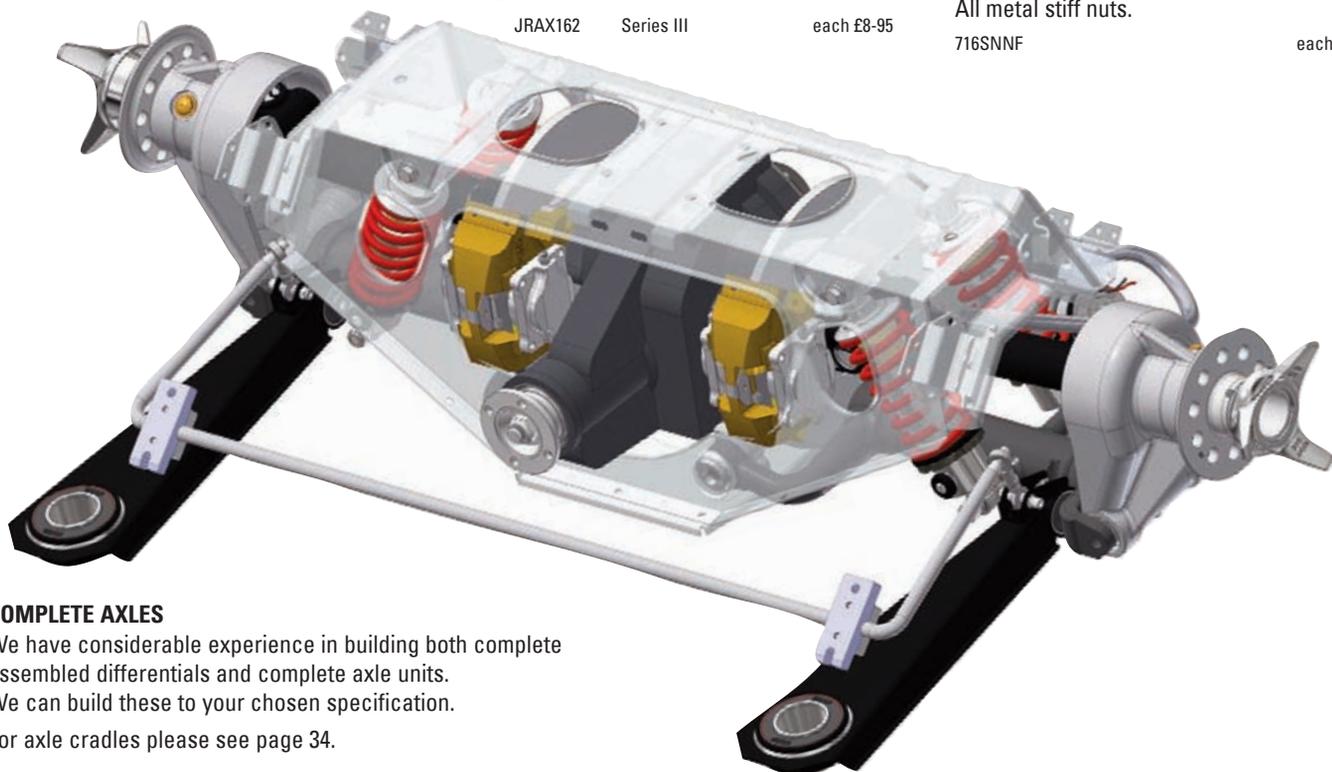
High quality bolts with stepped diameter shank to locate into the flange. Made to our specification.

JRAX170B	1.98" UHL	each £6-25
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#### HEAVY DUTY DRIVE SHAFT NUTS

All metal stiff nuts.

716SNNF		each £1-25
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#### COMPLETE AXLES

We have considerable experience in building both complete assembled differentials and complete axle units. We can build these to your chosen specification. For axle cradles please see page 34.



#### TUBULAR SHAFTS

Brand new, manufactured in-house. Tig welded and heat treated for strong performance, available in two diameters. 2" for up to 360BHP and 2.5" for over. Both manufactured to the lightest weight design, stocked in a choice of lengths or made any length to order.

JCRAX152S	2" Dia std length	each £295-00
JCRAX152	2" Dia LWE length	each £295-00
JCRAX153	2.5" Dia LWE length	each £345-00

#### REAR WHEEL BEARING SPACERS

Designed to replace the tiny original item, this substantial top quality steel spacer is supplied with extra length, allowing for machining to length on fitting to achieve your desired wheel bearing clearance.

JRAX176A	each £24-49
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#### DRIVE SHAFT INNER YOKE

Reconditioned and lightened component.

JCRAX156	each £75-00
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#### DRIVE SHAFT CAMBER SHIMS

0.020" thick for 1/4 degree camber adjustment.

JRAX161	each £4-95
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#### SPINNERS

Reproduction of the lightweight E-Type variety, to suit our wheels.

JCWHE122	RH	£215-00
JCWHE123	LH	£215-00

#### HEAVY DUTY UNIVERSAL JOINT

Reduce unwanted rear wheel movement with these high quality drive shaft U.J.'s.

JCRAX217	each £39-50
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#### PEG DRIVE REAR HUB

Machined from top quality billet steel to accept the peg drive wheels as the lightweight E-Types.

JRAX205	RH	£295-00
JRAX206	LH	£295-00



#### DRIVE SHAFT OUTER YOKE

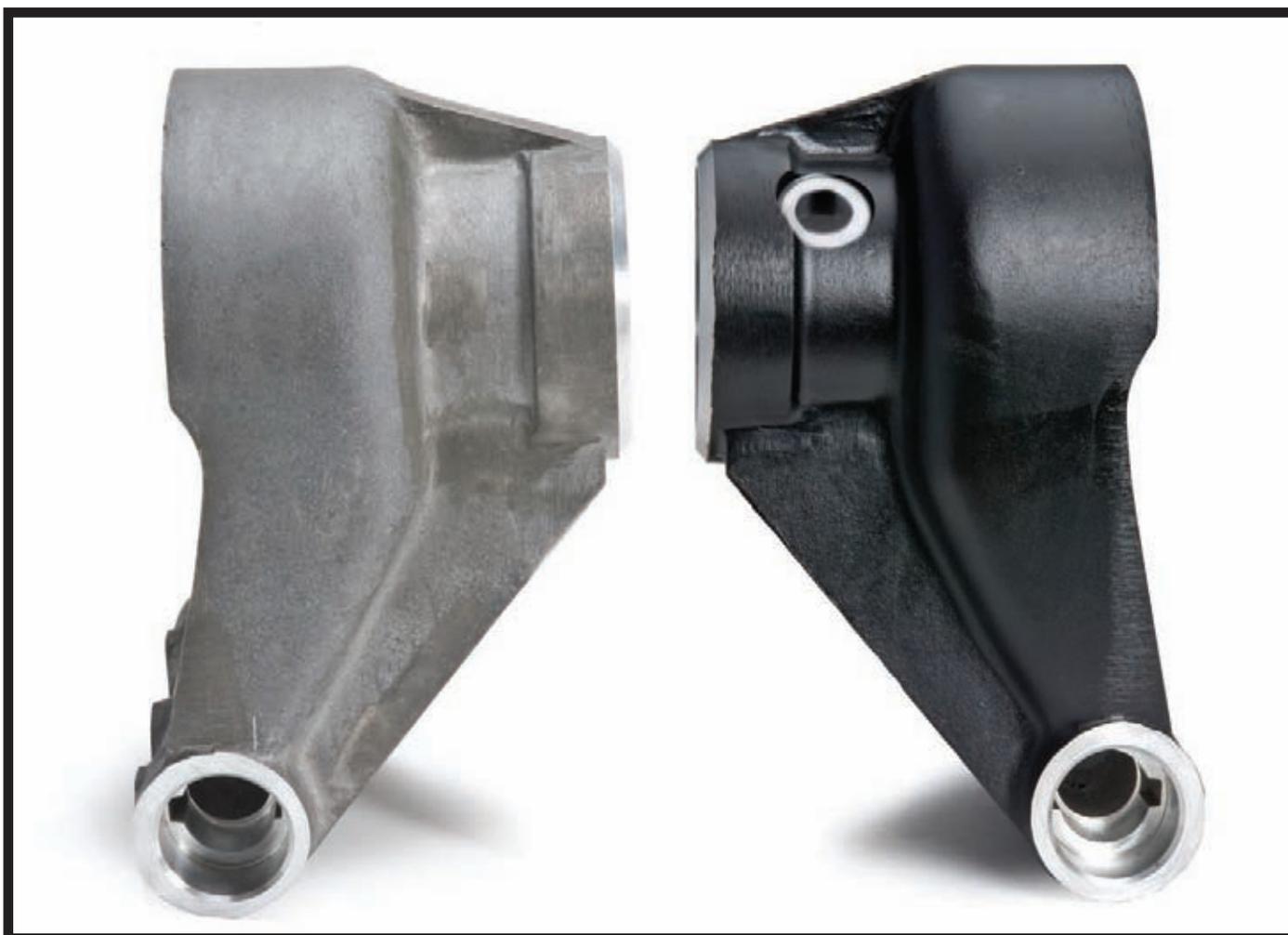
Reconditioned and lightened component, modified to accept our own bolt system. Don't be let down by the thread snapping off the original item.

JCRAX155	Yoke	each £195-00
JCRAX184W	Washer	each £19-50
JCRAX184	Bolt	each £22-50

#### TECH TIP

When using our wheel bearing spacers, outer drive shaft yoke and bolt system, we have never experienced a failure and would expect wheel bearing clearance to stay consistent for around 2 seasons race service.





## REAR UPRIGHTS

Due to the lack of availability of the original uprights we have designed and manufactured these new products from solid modelled CAD drawings based on the original specifications and made using specially commissioned pattern equipment.



These components have been designed to give extra strength to the vulnerable bottom link which are notorious for their fragility and liability to crack under pressure.

### Features include:

- Redesigned using original specifications but improved modern design parameters.
- Reproduction of the original.
- Resistant to cracking and failure.
- Reduces unsprung weight if using magnesium option.
- Totally compatible with our new Jaguar Wellite wheel and hub assembly.



Magnesium

They are offered in two variants:

### Aluminium

Cast in LM25 and heat treated to TF these faithfully replicate the design and finish as fitted to the original cars.

JRAX400 each £395-00

### Magnesium

A high quality light and strong material that reduces weight.

JCRAX400 each £495-00

### HUB SEALS

Standard parts, also fit our uprights.

JRAX172	Inner	each £4-49
JRAX174	Outer	each £6-35
JSUR150	Lower	each £2-95



Aluminium

**If you want to make sure you have the best components you can buy ensure it's one of ours and look for our logo**





#### RADIUS ARM BUSHES

Polyurethane for a stiffer and long life.

JCSUR135	Large	each £53-15
JCSUR125	Small	each £34-23

#### REAR WISHBONES

Made In-house, from reconditioned units, on our strong purpose-made jig. Stocked at the correct LWE length or manufactured any length to order.

Available in 2 specifications for outright sale.

JSUR130	Standard Weight	pair £595-00
JCSUR130	Light Weight	pair £750-00

[Exchange also available.](#)

#### REAR SUBFRAME MOUNTINGS

Polyurethane for a stiffer ride and long life. Suitable for road or race.

JCSUR140	each £14-95
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#### REAR AXLE DOG BONES

CNC machined from our own castings. Available in iron as original or heat treated Aluminium.

JCRAX320	Aluminium	each £295-00
JRAX320	Iron	each £239-50
JCRAX330	Aluminium - non Std.	each £295-00
JRAX330	Iron - non Std.	each £239-50

#### RADIUS ARMS

Brand new reproduction of the standard item, with a choice of bush material to suit the std. ARB mounting or no bushes & modified to suit our rear ARB kit.

JSUR125	Std. bushes	each £90-00
JSUR125P	Poly bushes	each £135-80
JSUR125N	No bushes	each £68-78
JCSUR125N	No bushes modified to suit our ARB mount	each £119-50

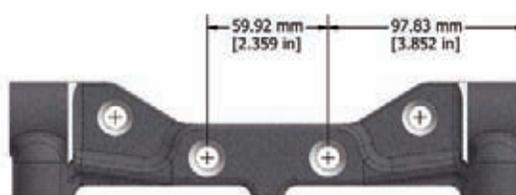
#### AXLE CRADLE

Brand new manufacture by one of Britain's leading panel manufacturers. A direct replacement for standard. Suitable to use with a SR1 or SR3 diff case and our Dog Bones JCRAX320 or JRAX320.

JSUR200	Cradle	£759-70
JSUR201	Bottom plate	£44-22



JCRAX330 - Aluminium JRAX330 - Iron



JCRAX320 - Aluminium JRAX320 - Iron



**COMPETITION REAR ANTI ROLL BARS**

Mounting to the original chassis and radius arm points in order to achieve a fast response. The correct width to suit the wider LWE track. Many sizes available to allow for tuning from track to track. Can be swapped in just a few minutes.

JCSUR192P/B	0.625"	£130-00
JCSUR192P/C	0.688"	£130-00
JCSUR192P/D	0.750"	£130-00
JCSUR192P/A	0.875"	£130-00
JCSUR192P/E	0.937"	£130-00
JCSUR192P/F	1.000"	£130-00
JCSUR192P/G	1.062"	£130-00

**ANTI ROLL BAR FITTING KIT**

Rose joints, cones, bolts etc. to professionally connect our ARB to the radius arm, kit includes reducer tubes which will require bronzing to the radius arm.

JCSUR192F £115-00



**ANTI ROLL BAR MOUNTING SET**

Machined from billet aluminium and anodised black. These bolt onto the standard E-Type mounting points and are available to suit a wide variety of bar diameters. Supplied as a car set.

JCSUR201/B	0.625"	£149-50
JCSUR201/C	0.688"	£149-50
JCSUR201/D	0.750"	£149-50
JCSUR201/A	0.875"	£149-50
JCSUR201/E	0.937"	£149-50
JCSUR201/F	1.000"	£149-50
JCSUR201/G	1.062"	£149-50



The 2016 edition of the Tour Auto was won by Jean Pierre Lajournade and co-driver Christophe Bouchet in his Jaguar E-Type 3.8. Lajournade's win was his second consecutive win in a Jaguar E-Type. The pairing dominated the event, finishing well ahead of their rivals.

The modern Tour Auto event sees over 250 entrants and combines a mixture of about 2,500 km of roads, 4 or 5 circuit races and 6 to 8 hillclimbs. For 2016 the organisers included a night stage for the first time.

Denis Welch Motorsport were pivotal to the success of the Jaguar in winning the Tour Auto. They not only sourced the original donor car but also had the privilege of supplying the running gear including the legendary XK engine, axle, gearbox and brakes, all of which take a great deal of punishment during the 5 day event through France.

Photo: Peter Auto



### KONI DAMPERS

Double adjustable, these steel bodied, oil filled hydraulic dampers perform extremely well, even without any gas assistance as per FIA regulations.

The rears are supplied with adjustable coil spring platforms which you must remove for FIA regulations once your desired ride height is achieved.

JCSUF101	Front	each £595-00
JCSUR102	Rear	each £595-00

### DAMPER FITTING KITS

Precision made shafts and stepped spacers, nuts, bolts and washers required to mount our Koni dampers.

JCSUF101F	Front car set	£74-50
JCSUR102F	Rear car set	£197-50



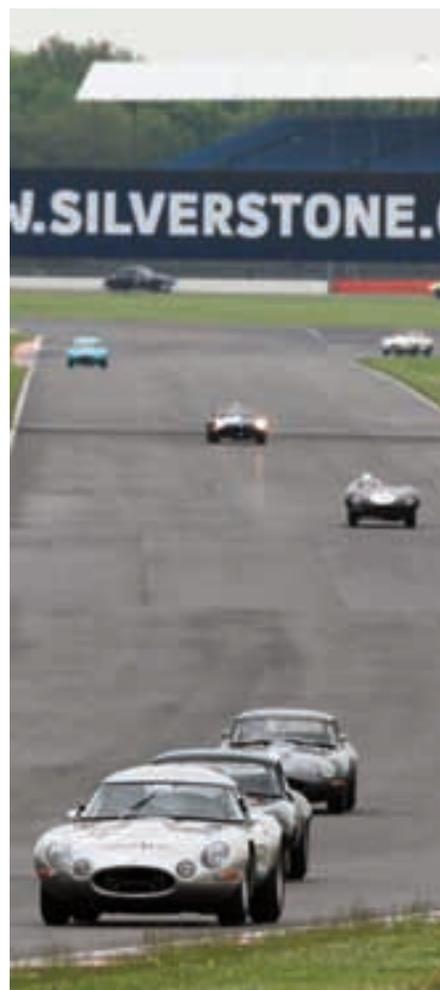
### EIBACH REAR SPRINGS

- Ultra lightweight for reduced unsprung weight
- Maximum travel in combination with smallest block heights
- Exceptional block resistance and durability
- Precision tolerances - the tightest in the industry
- Precision planparallel and square end configurations under unloaded and loaded conditions to +/- 1 degree
- Lowest sideloads with load centre ideally located relative to spring axis
- Highest lineality and guaranteed rate consistency within 2% of advertised rate
- Each spring individually tested and rated
- Eibach springs lifetime warranty

Stocked in a wide choice of strengths and lengths, all 2 1/4" ID to suit Koni dampers.

JSUR121/B225	8" x 225 lbs	£62-50
JSUR121/B250	8" x 250 lbs	£62-50
JSUR121/B275	8" x 275 lbs	£62-50
JSUR121/B300	8" x 300 lbs	£62-50
JSUR121/A325	7" x 325 lbs	£62-50
JSUR121/A400	7" x 400 lbs	£62-50
JSUR121/A500	7" x 500 lbs	£62-50

Other lengths and rates available to order.



Julian Thomas and co-driver Calum Lockie, first place, Jaguar Classic Challenge, Silverstone 2016. Fully built and prepared by Denis Welch Motorsport. Photo: Charlie Wooding



### COMPETITION FRONT ANTI ROLL BARS

Made to our design, these link to the furthest point out on the wishbone in order to achieve a fast response. Many sizes available to allow for tuning from track to track. Can be swapped in just a few minutes.

JCSUF192P/A	0.875"	£185-00
JCSUF192P/E	0.937"	£185-00
JCSUF192P/F	1.000"	£185-00
JCSUF192P/G	1.062"	£185-00
JCSUF192P/H	1.125"	£185-00
JCSUF192P/I	1.250"	£185-00

### ANTI ROLL BAR FITTING KIT

Rose joints, cones, bolts etc. including long special bolts to attach the dampers to the same wishbone hole, to professionally connect up our ARB.

JCSUF192F	£184-50
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### ANTI ROLL BAR MOUNTING SET

Machined from billet aluminium and anodised black. These bolt onto the standard E-Type mounting points and are available to suit a wide variety of bar diameters. Supplied as a car set.

JCSUF201/A	0.875"	£159-50
JCSUF201/E	0.937"	£159-50
JCSUF201/F	1.000"	£159-50
JCSUF201/G	1.062"	£159-50
JCSUF201/H	1.125"	£159-50
JCSUF201/I	1.250"	£159-50



Bruno Senna drives a Jaguar E-Type 3.8 Semi-Lightweight for the Classic Car Show TV programme in 2014. Senna drove the E-Type against the clock on the short but demanding Mercedes test circuit at Brooklands in Surrey.

The featured E-Type is owned by long-term customer and Lebanese architect Galal Mahmoud who kindly allowed his car to be used for the programme. Bruno absolutely loved the car, describing it as 'his favourite'.



#### FRONT UPPER WISHBONE MOUNTS

Machined from billet aluminium for the lightest weight.

JSUF105A	Front	£42-50
JSUF105B	Rear	£32-50

#### STEERING RACK MOUNTS

Two types available, machined from solid billet aluminium for the lightest design in order to achieve a fixed mounting for race, or polyurethane to achieve a stiffer mount than standard although retaining some compliance.

JCSTG160	Polyurethane	each £35-00
JCSTG161	Aluminium	each £49-50



#### WISHBONE PIVOT SHAFT WASHER SET

Manufactured in Aluminium and hard anodised means this 10 piece set saves 600 grams over the original steel washers.

JCSUF107	Car Set	£59-50
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#### SPINNERS

Reproduction of the lightweight E-Type variety, to suit our wheels.

JCWHE122	RH	each £215-00
JCWHE123	LH	each £215-00

#### UPPER WISHBONE MOUNT SHIMS

Aluminium in two thicknesses.

JSUF106A	1.0mm Front	each £1-98
JSUF106B	1.5mm Front	each £1-98
JSUF107A	1.0mm Rear	each £1-98
JSUF107B	1.5mm Rear	each £1-98

#### WISHBONE PIVOT SHAFTS

Newly manufactured in-house from high grade steel and reduced in diameter for the lightest weight.

JCSUF102	Upper	each £69-00
JCSUF134	Lower	each £59-00

#### PEG DRIVE FRONT HUB

Machined from top quality solid steel to accept the peg drive wheels. Available in two options; 6 bolt small PCD as per the original LWE, or 5 bolt large PCD to suit the MKIX disc.

JCSUF184A	RH 5 Bolt	MKIX	£295-00
JCSUF185A	LH 5 Bolt	MKIX	£295-00
JCSUF184	RH 6 Bolt	LWE	£295-00
JCSUF185	LH 6 Bolt	LWE	£295-00

#### FRONT WHEEL BEARING SPACERS

The addition of these spacers and shims between the bearings allows the stub axle nut to be tightened fully, thus making the assembly more rigid and reducing brake pad knock back.

JSUF141	Spacer	each £19-95
SUF155	0.003" Shim	each £1-05
SUF156	0.005" Shim	each £1-60
SUF157	0.010" Shim	each £1-22
SUF158	0.032" Shim	each £1-05

#### FRONT WISHBONE BUSHES

Polyurethane for a stiffer ride and long life.

JCSUF105	Upper	car set £35-43
JCSUF133	Lower	car set £27-56

#### LOWER WISHBONE MOUNTS

Machined from billet aluminium for the lightest weight.

JCSUF132F	Front	each £79-95
JCSUF132R	Rear	each £69-95



Jeremy Welch co-driving with Paul Pochciol in his XJ12 Broadband recreation. Spa Sept 2014. Photo: John Retter.



### Better Design = Less stress



Current available product on the market



### Denis Welch Motorsport NEW product

Key Blue = low Stress  
Red = High Stress

Equal stress levels applied to both designs

### FITTING KIT

Comprehensive aircraft quality nut, bolt and washer set. Including 4 Noggin pairs.

JCSUF130 Set £109-50

### EXTRA NOGGIN KIT

16 Noggin pairs in addition to those supplied in the fitting kit. Then allowing a full range.

JCSUF130N £159-95

### COMPETITION TORSION BARS

0.900" Diameter and hollow for full race applications.

JCSUF122 Pair £631-80

### TORSION BAR REACTION PLATE

Our Torsion Bar Reaction Plate system for the Jaguar E-Types is a greatly improved replacement over the original, with a new design which is considerably lighter and up to four times stronger than others currently on the market. A fresh approach was taken using CAD and Finite Element Analysis (FEA) to produce this off the shelf kit which makes it straight forward for easy adjustment to accurately and professionally achieve the desired ride height. The Reaction Plate is made from top quality steel and has been heat treated for extra strength. For ease of installation and to guarantee the end user a better fitting component, due to the many varying car widths the Reaction Plate is available in different torsion bar centre widths.



It is necessary to order the comprehensive Fitting Kit separately which consists of aircraft quality nuts and bolts, including 4 Noggin pairs to allow adjustment, with a further 16 Noggin pairs available in the Extra Noggin Kit, allowing the ride height to be adjusted in  $\frac{3}{16}$ " increments.

JCSUF130P/E	15.980"	£185-00
JCSUF130P/A	16.000"	£185-00
JCSUF130P/F	16.032"	£185-00
JCSUF130P/G	16.045"	£185-00
JCSUF130P/B	16.062"	£185-00
JCSUF130P/C	16.085"	£185-00
JCSUF130P/D	16.100"	£185-00
JCSUF130P/H	16.125"	£185-00
JCSUF130P/I	16.156"	£185-00
JCSUF130P/J	16.186"	£185-00
JCSUF130P/K	16.218"	£185-00

### NOTE

Extra sizes constantly being added. Contact us for an instruction leaflet explaining the easiest way to measure your torsion bar centre distance prior to ordering.



Denis & Jeremy Welch finish 2nd overall in the 3 hour Autosport race Snetterton 2014. Race trophies were presented by Marcus Pye and Jack Sears.  
Photo: Charlie Wooding



### MILD STEEL EXHAUSTS

All our Mild Steel exhaust systems are manufactured to the highest tolerances and specification and are made from top quality thick mild steel.

They are supplied with heat proof black paint on the manifolds and gloss black, flame proof paint on the systems. Mandrel bent to avoid reduced pipe diameter on the bends.



### NOW AVAILABLE IN STAINLESS STEEL

We now offer our range of exhaust parts in high-grade T304 stainless steel. These are made to the same high standards as our mild steel exhausts.

Stainless steel exhausts are ideal for the weight conscious as the components are typically lighter than the mild steel equivalent. Also a popular fitment due to their, clean appearance and resistance to corrosion. Noise levels are comparable to mild steel systems, however there may be a small increase in resonance.

### TUBULAR MANIFOLDS

These are a similar design to the original, providing the best flow/design possible to stay on the inside of the chassis rail, as per FIA requirements. We stock both straight port and wide angle head versions. Supplied as pairs.

JCEXS120R	Straight Port - Mild Steel - 4.4kg	£662-50
JCEXS120RS	Straight Port - Stainless - 4.1kg	£1123-36
JCEXS120RW	Wide Angle - Mild Steel - 5.4kg	£646-00
JCEXS120RWS	Wide Angle - Stainless - 5.1kg	£1095-59

### DOWN PIPES

To suit our manifolds and under left hand floor silencer, to suit 60mm ID, side or rear exit silencers. Supplied as pairs.

JCEXS140	Straight Port - Mild Steel - 3.0kg	£198-50
JCEXS140S	Straight Port - Stainless - 2.8kg	£270-52
JCEXS140W	Wide Angle - Mild Steel - 3.0kg	£198-50
JCEXS140WS	Wide Angle - Stainless - 2.8kg	£321-02

**Note:** To maximise the life of the silencers on our cars we swap between components. At a 108dB event such as Donington Festival we use a main silencer and open tail pipes, whilst at a Goodwood track day with a 98dB restriction we would use the main silencer along with a second tail silencer.

When fitted to our race cars we would not expect to have to replace or restuff a silencer for 18 months to 2 years.

All of our stainless steel silencers are restuffable.



Galal Mahmoud co-driving with Nigel Greensall, GT & Sports Car Cup, Donington 2015. Photo: Peter Baker, Retro-Speed

### REAR EXIT SILENCERS

Handmade straight through design to fit 60mm down pipes and mount under the left hand floor. Twin exit pipes which follow through to a joint under the rear axle. Choose from either a pair of open tail pipes, twin round rear silencers or a single oval tail silencer.

JCEXS127M	Main - single oval	
	- Mild Steel - 15.2kg	£615-15
JCEXS127MS	Main -single oval	
	- Stainless -13.0kg	£1294-95
JCEXS127T	Tail - single oval	
	- Mild Steel - 10.4kg	£375-00
JCEXS127TS	Tail - single oval	
	- Stainless - 9.0kg	£898-63
JCEXS127BTS	Tail - twin round	
	- Stainless - 6.8kg	£746-46
JCEXS127PT	Open Tail Pipes	
	- Mild Steel - 4.2kg	£197-50
JCEXS127PTS	Open Tail Pipes	
	- Stainless - 3.2kg	£326-98



### NOTE:

Our primary silencers mount under the left hand floor and require the footwell to be of the flat floor type.

Weights stated are approximate.

# Stainless steel



Side exit silencer stainless steel



3 Exhaust variants open tail, twin round, or a single oval tail silencer.

## SIDE EXIT SILENCER

Twin exit side pipes which curl up the bodywork in front of the LH rear wheel. Handmade straight-through design to fit 60mm down pipes.

JCEXS127W	Mild Steel - 13.2kg	£553-65
JCEXS127WS	Stainless Steel - 12.5kg	£1050-86

## BLANKING COVERS

Protect your engine whilst in transport or storage.

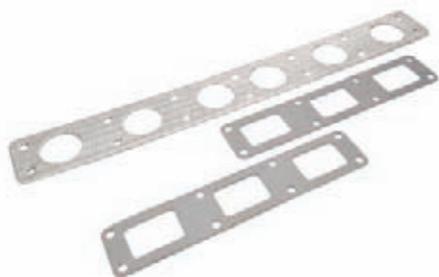
JENG759EB	Straight port - 2 required	each £4-95
JENG759EWB	Wide angle	each £4-95



## EXHAUST GASKETS

Fit for the job.

JENG759E	Straight port - 2 required	each £4-25
JENG759EW	Wide angle	each £12-95



## HEAVY DUTY EXHAUST MOUNTING

Universal Silencer mounting supplied with M8 nuts.

CEXS173A

£2-94



Smooth continuous tig welded seams.

## SILENCER RE-PACKING MATERIAL KIT

Suitable for our restuffable silencers. Wire wool for the first wrap and high heat resistant S-Glass (red thread) for main silencers and more economical E-Glass for secondary silencers. Supplied in correct quantities for a single oval silencer.

JCEXS125S	S-Glass for main silencers	£99-50
JCEXS125E	E-Glass for secondary silencers	£29-50



Precision engineered to fit your car.



High quality mounting brackets.



#### WEBER THROTTLE CABLE CONVERSION

Twin cable set up, requiring no extra holes in the bulkhead.

JCFUL244L To suit wide angle £225-00

#### Replacement parts

CFUL245 60" Throttle cable each £6-99

#### WEBER INSULATING SPACER

Perfect to insulate the Weber from the manifold heat. Two required per carburettor and four gaskets.

JCFUL260 1/4" Thick 48/45mm each £8-95

CFUL262 Gasket 48/45mm each £0-95

#### WEBER RETURN SPRING SET

Keep the scrutineers happy with these external return springs and mountings which attach to the manifold studs.

JCFUL244R set of three £30-00

#### TRIPLE WEBER AIR FILTER

High flow, foam construction one piece element design with a choice of aluminium base plates. Order parts individually.

JCFUL259 Element £172-00

JCFUL259B Base-48 dco-sp £47-50

JCFUL259BA Base-45/48 dcoe £47-50

JCFUL259BB Base-blank £39-50

JCFUL259C Clip - base £0-99

CFUL263 400ml Dust retention spray £12-50

#### WEBER CARBURETTORS

A full range of Weber jets & chokes etc. are also always carried in stock.

CFUL400 45 DCOE Fast Road / Rally each £299-60

JCFUL400 48 DCO-SP Full Race each £452-00

#### FUEL RAIL

Earls aeroquip aluminium fittings ready assembled to suit triple Webers. Designed to feed from underneath for maximum bonnet clearance & suits all manifold types.

JCFUL400RU Black £217-37

#### HEAVY DUTY THROTTLE PEDAL

Designed to cope with the most aggressive of drivers, this pedal is good and strong.

JCFUL292 £95-00

#### INLET MANIFOLDS

Aluminium castings. Fully CNC ported in-house to suit horizontal applications.

JCFUL242WG 48mm W/Angle £1225-00

JCFUL242WAG 45mm W/Angle £1225-00

JCFUL242G 48mm Str port £795-00

JCFUL242 45mm Str port £525-00

#### FACET FUEL PUMP

Extremely reliable, competition fuel pump with increased flow and pressure.

#### NEGATIVE EARTH ONLY.

CFUL131 Comp. Silver Top – Fast Road / Rally £67-85

CFUL131R Red Top – Race £71-30

All types of fuel pump fittings are kept in stock - please enquire.

#### BOSCH FUEL PUMP

High pressure to suit Lucas fuel injection.

JCFUL131 £95-00



#### COMPLETE INLET/CARBS ON MANIFOLDS

We can build and supply complete manifolds to your specification, with port sizes and manifold configurations to your spec, to order, please enquire.



Other manifold configurations and port sizes available to order

FOR FUEL ADDITIVES SEE PAGE 48



### FUEL GAUGE AND SENDER

A more modern approach to a very bad original. The sender design is such that it fits well with foam filling. It is designed to be shortened to suit the depth of the individual tank and is then adjustable for the full and empty gauge settings (instructions included).

This will fit aluminium or bag fuel tanks but not the original (negative earth only). Now sold separately but must be used together.

CFUL117A	Sender - up to 540mm	£103-68
CFUL117G	Gauge	£46-27
CFUL120A	Aluminium Flange	£26-95

#### Replacement parts

CFUL120B	Gasket	£2-45
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### FOAM STRIP

Self adhesive on one side, this very versatile product is ideal for mounting fuel tanks on. Sold in 2 metre lengths.

CFUL107	2" wide x 1/2" thick (50 x 13mm)	£2-95
CFUL107A	1 1/2" wide x 1/4" thick (38 x 6mm)	£1-95
CFUL107C	1" wide x 1/8" thick (25 x 3mm)	£1-55

### SMALL FUEL CAPS

We have a range of small fuel caps to suit different style and function requirements.

CFUL114	2 1/2" Monza Cap	£61-72
CFUL114A	2 1/2" Aston Cap	£66-84
CFUL114H	2 3/4" Aston Cap	£71-56
CFUL114C	Brass Collar 2 1/2"	£12-81

### ALUMINIUM FUEL TANKS

Made to order to suit your capacity and requirements.



### ALUMINIUM STRAPS

Perfect for holding down aluminium fuel tanks, with a professional look to the rear fixing, you cut the front fixing to length and bolt in. Includes fittings.

CFUL102S	pair	£45-00
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Julian Thomas takes 1st place in the Jaguar Classic Challenge, Donington 2016. Photo: Marvin Hall

### 3/2" LOCKING CAP AND NECK

Ideal for LWE applications giving the security of a modern locking inner cap. Also a FIA requirement for externally positioned caps. The neck suits 2.5" and 2.75" ID hose, or attach directly to the tank.

CFUL114B	3 1/2" Aston Cap	£206-61
CFUL114E	3 1/2" Aston Cap roller catch	£190-56
CFUL114K	Flush Fitting Cap Locking	£69-29
CFUL114F	3 1/2" BSP fuel cap neck for locking cap	£105-00

### BAG TANKS

Made to order due to FIA 5 year life. Our stock sizes below or any variant, as you wish. Supplied with blanking plates only. Collector pot, pickup pipes and neck all to purchase separately.

JCFUL102	140 Litre	£1950-00
JCFUL104	120 Litre	£1950-00
All fittings required extra		
JCFUL102P	Collector Pot	£105-00
CFUL102D	Breather Valve 1/4" push on	£25-25
CFUL102E	Breather Valve - 6 JIC	£37-24

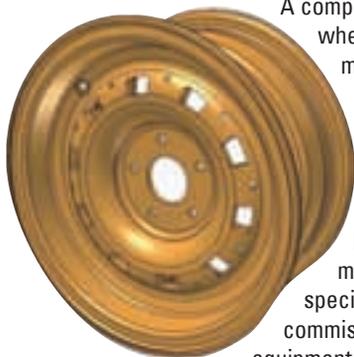


# Wellite

Jaguar peg drive lightweight wheels



## NEW Peg Drive lightweight wheels for Jaguar E-Type's.



A completely new wheel, solid modelled from new CAD drawings to the original specifications made in lightweight magnesium, using specially commissioned pattern equipment.

These wheels are offered in 2 distinct finishes:

### Smooth 'machined face'

With a smooth finish. These wheels are 10 % lighter than our cast face variety, ideal for racing.

### Traditional 'cast face'

With a grained finish as per those fitted to original works cars.

We have developed these wheels following the tremendous success of our Healey version of the Wellite wheel. These were received so well in the market place we sought to put the improved design philosophy into a new Jaguar variant.



Smooth 'machined face'



Traditional 'cast face'

We believe that these are the finest wheels on the market today.

They come pre-balanced to ensure the top performance for racing.

The choice of machined finish is both an aesthetic improvement as well as a weight saving option.

### These are the lightest peg drive wheels on the market today.

Other features include the safety beads on the rim to resist tyres coming off when run at low pressures or high speed.

Options also include:

- polished rim
- painted finish
- aluminium available to order



Traditional 'cast face'

Smooth 'machined face'



**Features include**

- Made from magnesium enabling these to be the 'lightest wheel on the market' reducing unsprung weight significantly (up to 10% with machined face option).
- Safety beads on the rim to resist tyres coming off when run at low pressures or high speed.
- Supplied pre-balanced to zero.
- Lightweight centre with removable lightweight pegs.
- A polished rim is also available.
- High quality casting gives Cast face option a superb finish - in the original style.
- Any other rim width to order.
- Painted finish also available to match your car or desired colour scheme.



Smooth 'machined face'

**MACHINED FACE SMOOTH FINISH**

JCWHE110F	7" Front	Weight 6.75K	each £725-00
JCWHE110R	8" Rear	Weight 7.00Kg	each £725-00

**CAST FACE TRADITIONAL FINISH**

JCWHE110FC	7" Front	Weight 7.30Kg	each £725-00
JCWHE110RC	8" Rear	Weight 7.75Kg	each £725-00

**DUNLOP WHEEL STICKER**

JCWHE110S	Dunlop sticker - black	each £5.95
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Traditional 'cast face'





## RECORD BREAKING

### Building a car that breaks records

To faithfully recreate the 1954 world beating Healey Endurance car is no easy undertaking, so careful research was undertaken. The start point was an original works lightweight chassis which was brought up to specification using our specialised modern jig.

Finally the detail that was so specific to the original prototype car was carefully matched and verified by Roy Jackson Moore one of the original record breaking drivers. It was completed in July 2008 and final setup tests were successfully concluded in Oct 2008.

Late 2008 tests had proved the cars straight line speed but further work was required on suspension and aerodynamics to suit the small, 2 mile, circular, Millbrook track designated for a record attempt.

The higher speeds achieved at the Millbrook test facility were bordering on the scary, as the original configuration made from the Bonneville settings were too harsh leading to some skittishness, which you do not need at nearly 150 mph.

In a test on 19th March 2009 at Millbrook proving ground during a one hour constant-run it exceeded the speed achieved by its predecessor by 10 mph.

The car made an attempt on the 1000 km endurance record in Nov 2009.

The car successfully completed 308 laps, with an average speed adjudged on the day as 148.32 mph (finally adjusted to 148.13 by



This was then cloaked in an all aluminium body encompassing aerodynamic modifications as per the original works car. The mesmeric metallic green paintwork was applied after verifying the colour with the late Geoff Healey shortly before his death.



The original 1954 works Healey achieved 132.81 mph average for 1000 kilometres. Our recreated car was built with the ambition to 'exceed all non-supercharged Healey records' and was developed continuously during the 2008/9 winter to try to better the works record car achievements.



the time keepers). It was a trouble free run, the Healey not even consuming any oil in the entire run, that involved 3 scheduled pit stops. Driven by owner Martyn Corfield and constructor Jeremy Welch in 4 stints of one hour each, it took 11 National and 6 International records. Seven years later it is still the 'fastest 100 mile' UK record holder!

# Breaking records

## getting the know how



International and UK records	1,000 kms	4h 11m 40.650s	148.13 mph
International and UK records	500 miles	3h 23m 33.434s	147.37 mph
International and UK records	500 kms	2h 05m 51.697s	148.10 mph
International and UK records	100 miles	39m 52.207s	150.48 mph
International record	100 kms	24m 53.159s	149.80 mph
International and UK records	1 hour	147 miles 668 yds	147.38 mph

Outright UK record	100 miles	39m 52.207s	150.48 mph
UK record	200 miles	1h 22m 21.817s	145.69 mph
UK record	10 miles	3m 55.143s	153.09 mph
UK record	10 kms	2m 26.030s	153.18 mph
UK record	5 miles	1m 57.495s	153.19 mph
UK record	3 hours	443 miles 1,724 yds	147.99 mph



Setting up the suspension on the record breaking Healey Endurance Car became more involved than you might have thought. Normal race circuit set up was only suitable up to 130 mph!

To achieve stability above this a number of modifications were introduced including positive camber on the inside front wheel,

pre-loaded corner weights in excess of 100 kg difference and the skewing of the rear axle, all in order to cope with the tight, banked Millbrook bowl and to achieve the final 153.19 mph speeds achieved for the 5 mile record.

We also found out a lot about some of the myths that have surrounded the Healey

shape and its airflow, by putting the car through the windtunnel at MIRA.

The airflow through the grill caused considerable disturbance in the engine bay and the lift generated by what is today a high ride height had a considerable effect on the stability at over 130 mph.



## MILLERS OILS



### CF5 10w60 NT ENGINE OIL

Fully synthetic engine oil with the latest Nanodrive Technology. For reduced friction in the most demanding applications.

CENG970NT 5 Ltr £52-77

### CF5 10w60 ENGINE OIL

Fully Synthetic Engine Oil to be used in all high performance road, race and rally applications.

CENG970 5 Ltr £41-73

### CLASSIC SPORT 20w50 ENGINE OIL

Ideal for standard and up-rated road engines and gearboxes with overdrive.

CENG972 5 Ltr £33-33

### CRX 75w140 NT GEAR OIL

We find this is the best product for use in the gearbox, overdrive and axle. Only for use in extreme pressure high performance applications.

CGBS960 5 Ltr £56-36

### EP 80w90 DIFF OIL

Suitable for the axle in most road Classics.

CENG956 1 Ltr £5-46

### FUEL ADDITIVE

Unleaded additive and octane booster.

FULVSP	VSPe Power Plus - Road	each £7-49
FULVSP10	VSPe Power Plus - Road	10 off £87-41
FULCVL	CVL - Competition	each £9-58
FULCVL10	CVL - Competition	10 off £74-28

### CLASSIC RUNNING IN OIL 30

Ideal oil to use for the first 500 miles whilst running in, to aid piston ring bedding. This oil should be used regardless of which engine oil is to be used later.

CENG975 5 Ltr £24-99

CENG975B 25 Ltr £91-42

"We use this running in oil in all the engines we build"

### RACING BRAKE FLUID

Synthetic fluid suitable for demanding applications.

CBRK280M 500 ml £13-30

### LIQUID GLAZE BUST

A clever little trick to remedy an engine which has been run in incorrectly and the piston rings have glazed up.

CENG976 5 Ltr £19-03

### HIGH TEMPERATURE GREASE

Suitable for the most severe conditions. Ideal for race wheel bearings.

CSUF952 500 g £3-70

### ANTI-FREEZE

Red – extended life - 5 years.

CHT951 5 Ltr £12-90

### EXTRA COOL

Add to the cooling system to reduce coolant temperature by up to 15°C. One bottle per coolant change (2% mix).

CHT960 250 ml £7-42

We stock many other Millers products, all available on our website [www.bighealey.co.uk](http://www.bighealey.co.uk)  
Any Millers products not listed please contact our Parts Team as we can order directly on your behalf.

## STEERING BOX LUBE

The correct viscosity not to leak out. Supplied with all our new steering boxes.

STG950L 1 Ltr £11-89

## CASTROL OILS

### EDGE SPORT 10w60 ENGINE OIL

Fully synthetic engine oil to be used in all high performance race and rally applications.

CENG950 4 Ltr £39-95

### CLASSIC 20w50 ENGINE OIL

Ideal for standard and up-rated road engines and gearboxes with overdrive.

CENG952 1 Gallon (4.55 Ltr) £24-95

### REACT PERFORMANCE BRAKE FLUID

Top quality Dot 4 mineral brake fluid suitable for fast road and rally cars.

CBRK280 1 Ltr £11-51

### REACT SRF RACING BRAKE FLUID

Synthetic fluid suitable for race cars, this is the ultimate, the best money can buy.

CBRK280R 1 Ltr £46-50

### LM GREASE

Good quality wheel bearing grease.

SUF950 500 g £5-25



## AUTOGLYM POLISHES

### GLASS CLEANER

WSN950 500ml Spray £4-95

### INSECT REMOVER

WSN951 500 ml Spray £5-13

### RADIANT WAX

OBP955 5 Ltr £38-24

### INTERIOR SHAMPOO

UPY951 500ml Spray £4-95

### SHAMPOO CONDITIONER

OBP954 5 Ltr £24-50

### PLASTIC CONDITIONER

OBP956 1 Ltr £13-99

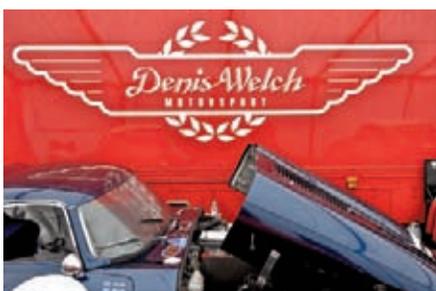
### SUPERGLYM POLISH

OBP953 5 Ltr £38-24

OBP950 Bottle for polish £1-99

### WHEEL CLEANER

WHE950 500ml Spray £4-95



## OTHER FLUIDS

### ENGINE ASSEMBLY LUBE

CENG967 30ml Sachet £1-45

### WAXOYL

Anti-rusting coating for chassis.

IBP957 2.5 Ltr Pressure can – Clear £19-95

IBP959 2.5 Ltr Pressure can – Black £19-95

IBP958 High pressure sprayer £21-99

IBP950 5 Ltr Refill can - Clear £29-95

IBP955 5 Ltr Refill can - Black £29-95

### LOCTITE 603

Strong retainer suitable for most applications.

WCB120 50 ml £39-95

### BLACK GRATE POLISH

Perfect to keep exhausts looking good.

WCB132 75 ml Tube £5-25

### CARBURETTOR CLEANER

FUL950 500 ml Aerosol £5-95

### WELLSEAL GASKET JOINTING COMPOUND

Old fashioned shellac.

CENG961 100 ml Tube £9-99

### GRAPHOGEN ASSEMBLY PASTE

Graphogen assembly paste.

CENG960 125 g Tube £24-50

### CAM LUBE

As supplied in our cam kits.

CENG966 100 ml £2-95

### WYNNS FOR OIL

Oil additive. Ideal to reduce engine wear.

CENG964 300 ml Tin £6-99

### AUTOSOL - CHROME POLISH

OBP952 75 ml Tube £4-95

### HIGH TEMP EXHAUST GASKET SEALANT

High temp silicon sealant ideal for exhaust manifold gaskets.

CEXS950 100 ml Tube £10-32

### HOLTS EXHAUST GUN GUM

Ideal to seal silencer joints – helps stop popping on over run.

CEXS951 200 g Tin £2-98

### LOCTITE FLANGE SEALANT

Flexible silicon sealer for gaskets.

CENG963 Tube £14-23

### UPHOLSTERY ADHESIVE

High heat resistant.

UPY352 1 Ltr Tin £19-95

### BARS LEAK

Ideal for leaking radiators.

CCHT950 135 ml £3-99

### BRAKE CLEANER

BRK950 500 ml Aerosol £4-95

### WD-40

Aerosol Penetrating Oil.

CENG965 400 ml £5-67

WCB950 5 Ltr £23-95

### LSD OIL ADDITIVE

Reduce the clicking noise from a clutch type LSD by adding this friction modifier. One bottle is adequate for any Jaguar axle.

CRAX951 50 ml £4-38



### ALUMINIUM RADIATOR

Extremely lightweight with high efficiency core, comes complete with brackets to mount an oil cooler on the front and our 14" electric fan on the rear if you wish, also has a fitting for a bolt-in fan temperature switch. Two sizes available, thin core for the weight conscious racer or thick core for road, rally and race cars which want greater cooling reserves.

JCCHT102A	3.8 E-Type - 40mm core	£625-00
JCCHT102B	4.2 E-Type - 40mm core	£625-00
JCCHT102T	3.8 E-Type - 60mm core	£725-00
JCCHT102BT	4.2 E-Type - 60mm core	£725-00

### ELECTRIC FAN

The direct mount fan design is ideal in that it can be mounted in various ways, either off custom made brackets or with a clever tie kit, which attaches it directly to the radiator core. The best position for a fan is as close to the radiator core as possible. All parts now sold separately.

JCHT143EB	14" Blade diameter	£97-00
CHT143M	Side mounts	each £0-99
CHT143T	Tie Kit	£8-95
JCHT142A	38 mm in-hose temp switch	£59-95



### "BOLT IN" COOLING FAN SWITCH

M22 thread, switching at 88 degrees C this very reliable option is a direct fit to our radiators.

JCCHT104		each £18-95
JCCHT104A	Aluminium threaded collar	£12-50
JCCHT104B	Brass threaded collar	£12-50

### ALUMINIUM BOTTOM WATER PIPE

Stop that bottom hose collapsing with this rigid pipe.

JCCHT114	3.8 Ltr	£90-00
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### WATER TEMPERATURE SENDER FITTING

1.50" diameter aluminium pipe to fit in the top hose with a fitting for your water temp gauge sender.

JCCHT120	Male sender	£29-95
JCCHT120F	Female sender	£29-95

### SMITHS WATER TEMPERATURE GAUGE

Single dial with female sender fitting.

INS129W		£82-25
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### Replacement parts

INS128	Copper washer	each £2-25
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### WIRE REINFORCED FLEXIBLE DUCTING PIPE

Ideal for brake ducting or fresh air to the cockpit. Sold per metre.

CCHT152	1.50" Plastic	£5-79
CCHT153	1.75" Plastic	£7-25
CCHT154	2" Plastic	£7-78
CCHT155	3" Plastic	£10-50
CCHT157	4" Plastic	£10-92

### ALUMINIUM WATER PUMP

Cast aluminium body with a choice of inlet pipes and flanges. Supplied with no heater connections.

JCCHT129A	LWE	£437-40
JCCHT129B	3.8 inlet with LWE flange	£495-00

### WATER PUMP PULLEYS

Machined from billet aluminium to suit a single vee 1/2" wide fan belt & a choice of flanges.

JCHT131	Std. 5.656" OD 3.8 flange	£98-00
JCHT131A	Std. 5.656" OD LWE flange	£98-00
JCCHT131A	Oversize 6.906" OD LWE flange	£125-00

### RADIATOR CAPS

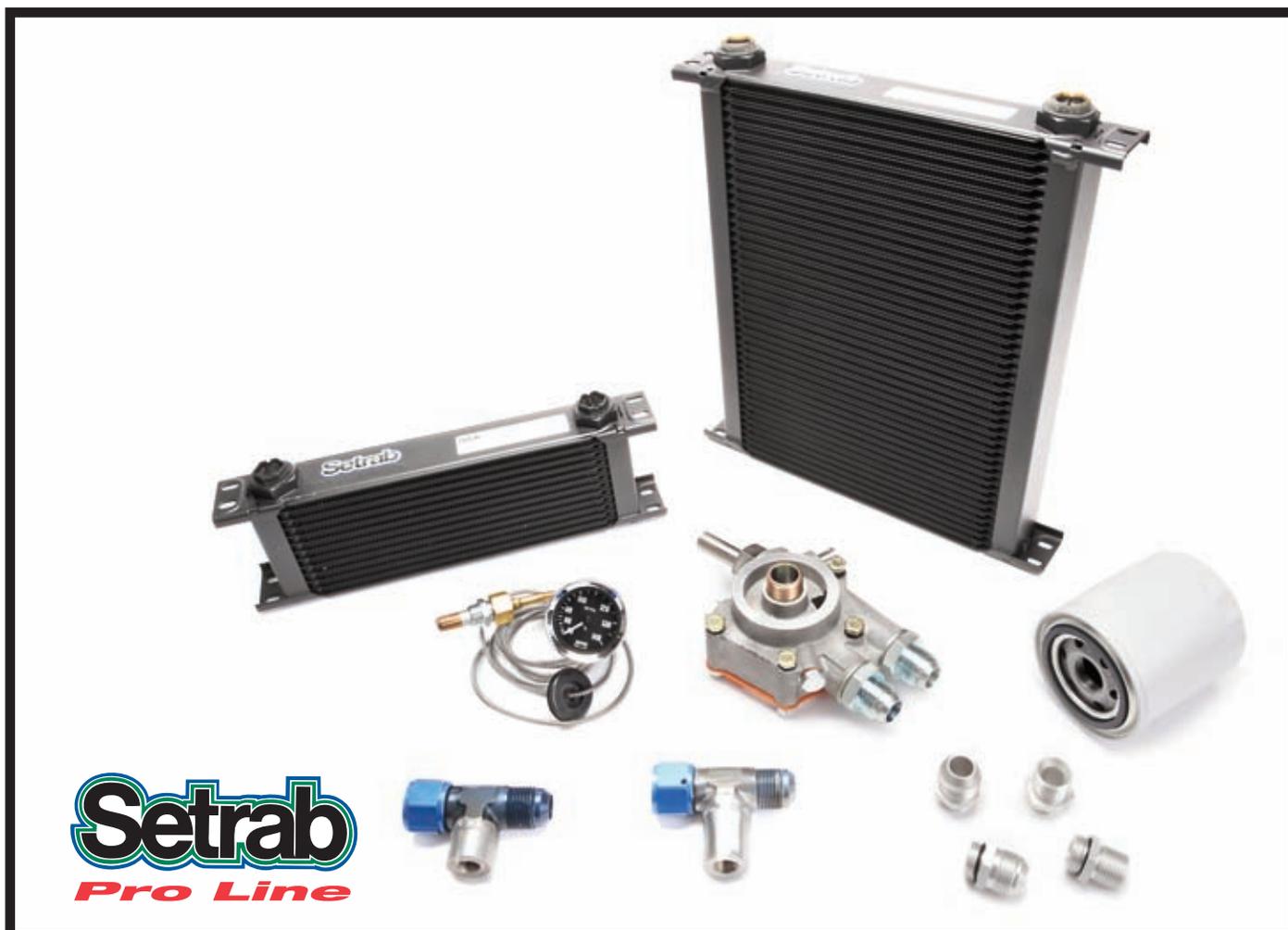
To suit short 3/4" necks on aluminium header tanks.

CCHT106	7lb	each £3-95
CCHT108	15lb	each £3-95



Jean Pierre Lajournade and co-driver Christophe Bouchet win the Tour Auto 2015.

Photo: Peter Auto



**Setrab**  
Pro Line

#### OIL COOLERS

We stock a variety of sizes, others are available to order. All with M22 thread. Purchase your desired unions separately.

ACC124E	13 row	£62-60
JACC123	34 row	£183-90
JACC124	44 row	£233-64
ACC124UD	Union M22 to -12 JIC	each £5-68
ACC124UG	Union M22 to 5/8BSP	each £5-68

#### FILTER HOUSING WITH OIL COOLER FITTINGS

Quality reproduction with horizontally mounted oil filter. Supplied with two -12 JIC unions.

JCENG688		£388-00
JENG688	Oil filter	£11-25

#### SMITHS OIL TEMPERATURE GAUGE

A necessary addition to the dashboard of any performance or competition car.

INS129	Female Fitting	£81-54
INS129M	Male Fitting	£81-54

#### Replacement parts

INS128	Copper washer	£2-25
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#### DIFF COOLER KIT

Complete kit with top quality metal pump & mounting, braided hoses, cooler, unions, fittings, temp switch, and filter gauze.

See page 29



#### OIL TEMPERATURE SENDER FITTING

Aluminium -12 JIC fitting with the oil temperature sender bulb fitting in the side. Designed for maximum oil flow around the bulb. Two types available to suit male or female senders.

JCINS150	Male sender	£98-50
JCINS150F	Female sender	£98-50



Jeremy Welch, E-Type Classic Challenge, Silverstone, 2011. Photo: Jim Houlgrave



#### DUAL MASTER CYLINDER MOUNTING KIT

This kit consists of a brake cylinder mounting with a balance bar which allows you to adjust the balance of the brakes front to rear. It is also feasible to add a cable to adjust the balance from the driving position. Being a direct bolt-on fit to the original mounting this can be used with Girling or AP Racing cylinders, sold separately. Produced from our own CAD drawings and fabricated in house using our own purpose made jig. Fits LH or RH drive.

JCBRK300 £345-00

#### BALANCE BAR ADJUSTER CABLE

This allows the balance to be adjusted from inside the car, when used in conjunction with our balance bar mounting.

CBRK301C £39-95

#### AP RACING MASTER CYLINDERS

These high quality cylinders have reduced free play for a better pedal feel and are available in a wide range of sizes.

YBRK109	0.551" (14mm)	£114-59
YBRK116	0.590" (15mm)	£114-59
YBRK110	0.625"	£88-32
YBRK117	0.660"	£88-32
YBRK114	0.700"	£88-32
YBRK111	0.750"	£88-32
YBRK112	0.812"	£88-32
YBRK113	0.875"	£88-32
YBRK115	0.937"	£114-59
YBRK118	1.000"	£114-59

#### REAR BRAKE DUCTS

Similar to the originals with our tweak, manufactured by ourselves to suit race or performance cars, these high quality aluminium items fit perfectly, cable tying to the rear wishbone.

JCBRK205 RH £175-00

JCBRK206 LH £175-00

#### GIRLING MASTER CYLINDERS

Available in the traditional three sizes.

CBRK110 0.625" £68-00

CBRK110A 0.700" £68-00

CBRK111B 0.750" £68-00

#### WIDE ALUMINIUM BRAKE AND CLUTCH PEDAL FEET

These have a serrated surface to stop your feet slipping off the pedal and are a direct bolt-on fit, to both the clutch and brake pedals.

JCBRK302A each £22-95

#### COMPETITION DISCS

These 1/2" thick competition discs are made from very high quality castings to withstand the temperatures and rigours of racing. Suitable for Girling or Dunlop callipers.

JCBRK151 12 1/8" Small 6 Bolt Front to suit LWE hub each £195.00

JCBRK152 12 1/8" Large 5 Bolt Front to suit MKIX/Std hub each £195.00

JCBRK220D 11 1/2" Dia. Rear - large each £185.00

JCBRK220C 10 7/8" Dia. Rear - normal each £185.00

#### KNOCK OFF SPRINGS

Simple but effective. Conical springs to be placed inside the brake callipers between the piston and body (in the fluid). These help to stop the pad knock off which happens when racing or rallying over kerbs or rumble strips. Can be fitted to most types of callipers, front or rear.

CBRK165 each £6-95



#### BRAKE CALLIPER SHIMS

Road or race, front or rear, large or small - callipers should always be centred to the disc 0.020" (0.5mm) thick.

CBRK155A 7/16" hole each £0-49

CBRK155B 1/2" hole each £0-49





### BR BRAKE CALLIPERS

New two pot aluminium Girling BR style front brake callipers with 3 1/2" bolt centres.

JCBRK155	RH	£439-00
JCBRK156	LH	£439-00

#### Replacement parts

JCBRK158	Piston seal	each £4-30
JCBRK402A	S/steel piston	each £17-38
JCBRK158A	End cap seal	£0-90



### GIRLING CR STYLE BRAKE CALLIPERS & PADS AVAILABLE TO ORDER

#### BR BRAKE PADS

To suit the above BR style callipers

JBRK164/1	4003 - Rally/Mild Race	£105-06
JBRK164/2	DS3000 - Sprint/Race - Require careful bedding in	£144-93
JBRK164/5	DS2500 - Fast Road	£105-06
JCBRK164/9	RS29 - Long distance race	£205-00
JCBRK164/P3	RSL1	£295-00

### REAR BRAKE CALLIPERS

Reconditioned Girling callipers including hand brake. Complete with hand brake pads and pad pins. Outright sale.

CBRK220L	Left Hand	£245-00
CBRK220R	Right Hand	£245-00

#### Replacement parts

CBRK164RP	Hand brake pad set	£17-50
CBRK201L	Seal kit - large bellows type	£32-00
CBRK201S	Seal kit - small with circlip type	£28-20
CBRK201R	H/D piston seal-only	each £4-60

### REAR BRAKE PADS

To suit the above Girling rear callipers

CBRK164R/1	4003 - Fast Road/Race	£133-34
CBRK164R/2	DS3000 - Sprint race	£135-49
CBRK164R/5	DS2500 - Fast road	£86-67
CBRK164R/7	RS5 - Sprint race	£175-00
CBRK164R/9	RS29 - Long distance race	£195-00
CBRK164R/P3	RSL1 - Long distance race	£245-00

### PLASTIC HYDRAULIC RESERVOIR

Remote mounting with steel 7/16" UNF threaded bottom.

CBRK101	each £22-35
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### RACING BRAKE FLUID

CBRK280	Castrol Performance DOT 4 - fast road/rally	1 litre £11-51
CBRK280R	Castrol SRF-Synthetic - for full race	1 litre £46-50
CBRK280M	Millers synthetic - for full race	500ml £13-30

A full compliment of Earl's Aeroquip pipe fittings are kept in stock.

### 3 POT CALLIPERS

Original equipment on the later E-types with 3 1/2" bolt centres, These Girling 17/3 cast iron 3 piston callipers are now available brand new. Also available with 3" bolt centres as a perfect cost effective performance upgrade for early road cars wishing to move off Dunlop.

JBRK155N	R/H 3 1/2" centres	£334-95
JBRK156N	L/H 3 1/2" centres	£334-95
JBRK155D	R/H 3" centres	£334-95
JBRK156D	L/H 3" centres	£334-95

### 3 POT BRAKE PADS

To suit the above Girling callipers

JCBRK164T/1	4003 -Fast Road/Race	£125-02
JCBRK164T/5	DS2500 -Fast road	£105-06
JCBRK164T/7	RS5 -Sprint race	£175-00
JCBRK164T/9	RS29 - Long distance race	£245-00
JCBRK164T/P2	RS19 - Long distance race	£245-00
JCBRK164T/P3	RSL1 - Long distance race	£245-00



1996 Eifel Klassik, Nurburgring.  
Denis Welch 2nd overall in his 3000 and  
Jeremy Welch 3rd overall in a 100/4.

# Jaguar period brakes



## No Fear - Better than the original

Changes to regulations by the FIA concerning braking systems fitted to competition E-Type Jaguars left many owners facing difficulties with their current Girling based systems. Now there is a safe and effective solution from Denis Welch Motorsport.

This ruling required that systems are based on the large Dunlop design as fitted to the Jaguar MkIX and homologated on the original race E-Types used in period. These brake systems were not without their teething problems with issues concerning flexing of callipers and heat sinking that caused reliability failures often known as 'Dunlop Fear'

Once this was announced Denis Welch Motorsport set about originating a new and modern equivalent of the Dunlop design for competition E-Type owners.

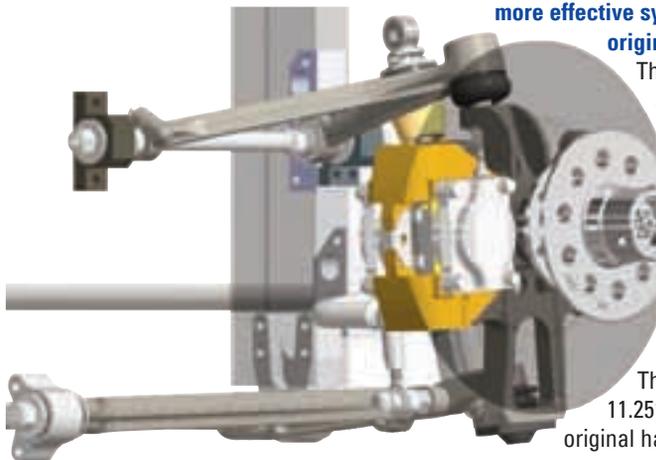


**"We looked at the original design and improved it with modern metallurgy and safety improvements and the resultant system has proved to be a superior and more effective system than the original"**

The new system is available in component parts for front and rear.

The front works with the standard or lightweight E-type upright and uses a 12.125" disc which is also stocked.

The rear suits a larger 11.25" disc and uses the original hand brake mechanism.



The total system consists of:

- Calliper body
- Discs
- Pads
- Retaining clips
- Aluminium racing piston assembly with improved seals
- Brackets and bolts

It is envisaged that this will be a popular item given the change with the FIA regulations and the improved safety it brings to all cars. Indeed some clients have already commented

**"The brakes are better than ever before"**

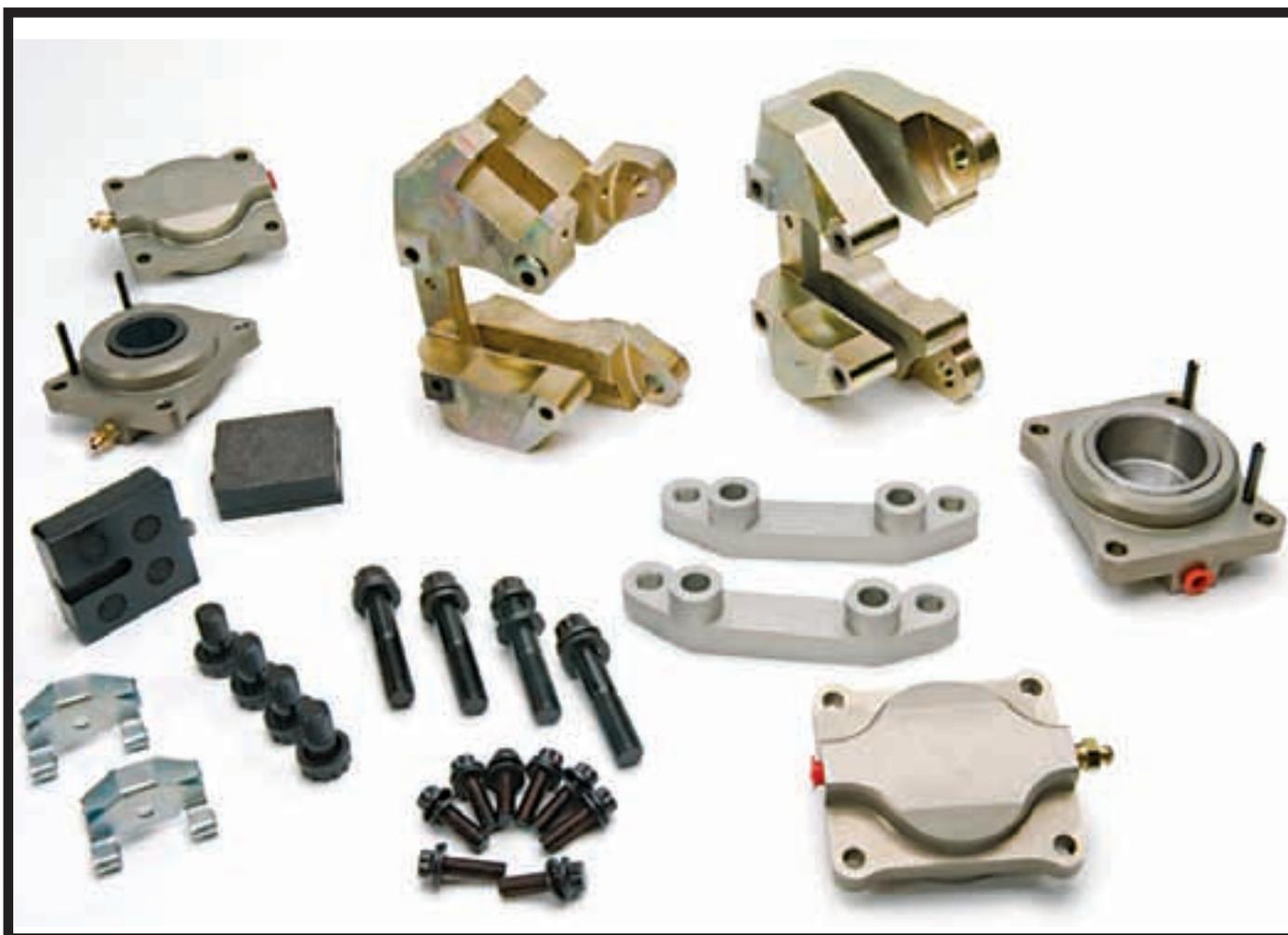
John Clarke E-Type competitor and BMW dealership principal

**"Even after the heatsink effect induced at a pit stop, the brakes were perfect"**

Jason Minshaw E-Type competitor and winner at Paul Ricard Nov 5th 2007



Mark Pangborn finds the limit, Jerez 2013.  
Photo: Richard Hampson.



## Large square brakes

### LARGE Mk IX CALLIPER BODIES.

Newly manufactured by ourselves to suit the large 63mm square pads. Made from our own pattern equipment using the best grade cast iron to achieve minimal distortion under heavy braking.

The fronts have 4.875" bolt centres and are now available in two different offsets.

JCBRK420B is a direct reproduction of the MkIX calliper to fit a std E-Type upright using the adaptor bracket JCBRK410 which matches a 12.125" disc or is a direct fit to a LWE upright with 11.500" disc

JCBRK420L has offset bolt centres to bolt directly to a LWE upright and 12.125" disc.

The rear bodies are the same large size and accept the same 63mm square size brake pads incorporating the handbrake calliper mounting lugs with 4 1/2" bolt centres.



JCBRK420L	Front LWE upright	each £395-00
JCBRK420B	Front standard upright	each £395-00
JCBRK220LB	Rear LH	each £495-00
JCBRK220RB	Rear RH	each £495-00

### FRONT CALLIPER MOUNTING BRACKETS.

Aluminium brackets to mount the Mk IX Dunlop calliper on a standard Jaguar upright with 3" bolt centres, thus allowing the use of the 12.125" diameter disc, JCBRK151 or JCBRK 152.

JCBRK410		each £75-00
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### COMPETITION PISTON ASSEMBLIES – LARGE

Aluminium bodies with stainless steel pistons and modern seals to suit the large 63mm square calliper body. These help reduce the heat sink and reduce piston pull back. Must be used with brake pads which have thick steel backing plates.

Available with different piston diameters to suit front and rear.

Alternative piston diameters available to order.

JCBRK401A	2.125" Piston Assemblies	
	Front	each £125-00
JCBRK201A	1.625" Piston Assemblies	
	Rear	each £125-00

### Replacement parts

JCBRK402A	2.125" Piston	each £17-38
JCBRK402B	1.625" Piston	each £17-38
JCBRK158	2.125" Seal	each £4-30
JCBRK161	1.625" Seal	each £7-62

### ARP BOLTS

Top quality bolts to hold the calliper bodies on and reduced diameter heads to hold on the piston assemblies.

JCBRK420AB	5/16" Bolt	each £2-00
JCBRK420W	5/16" Washer	each £0-60
JCBRK420CB	1/2" x 1.25" Bolt	each £3-95
JCENG420LB	1/2" X 2.5" Bolt	each £6-50
SENG561W	1/2" Washer	each £1-45

### COMPETITION BRAKE PADS.

Available in a variety of compounds, bonded to a thick steel backing plate 63mm square.

JCBRK164D/5	DS2500 - Fast road	£124-00
JCBRK164D/P1	RS14 - Fast road	£195-00
JCBRK164D/3	DS1-11 - Sprint/race	£152-94
JCBRK164D/9	RS29 - Long distance race	£195-00
JCBRK164D/P2	RS19 - Long distance race	£195-00
JCBRK164D/P3	RSL-1 - Long distance race	£195-00

### PAD RETAINER

Reproduction of standard.

JCBRK430	each £8-97
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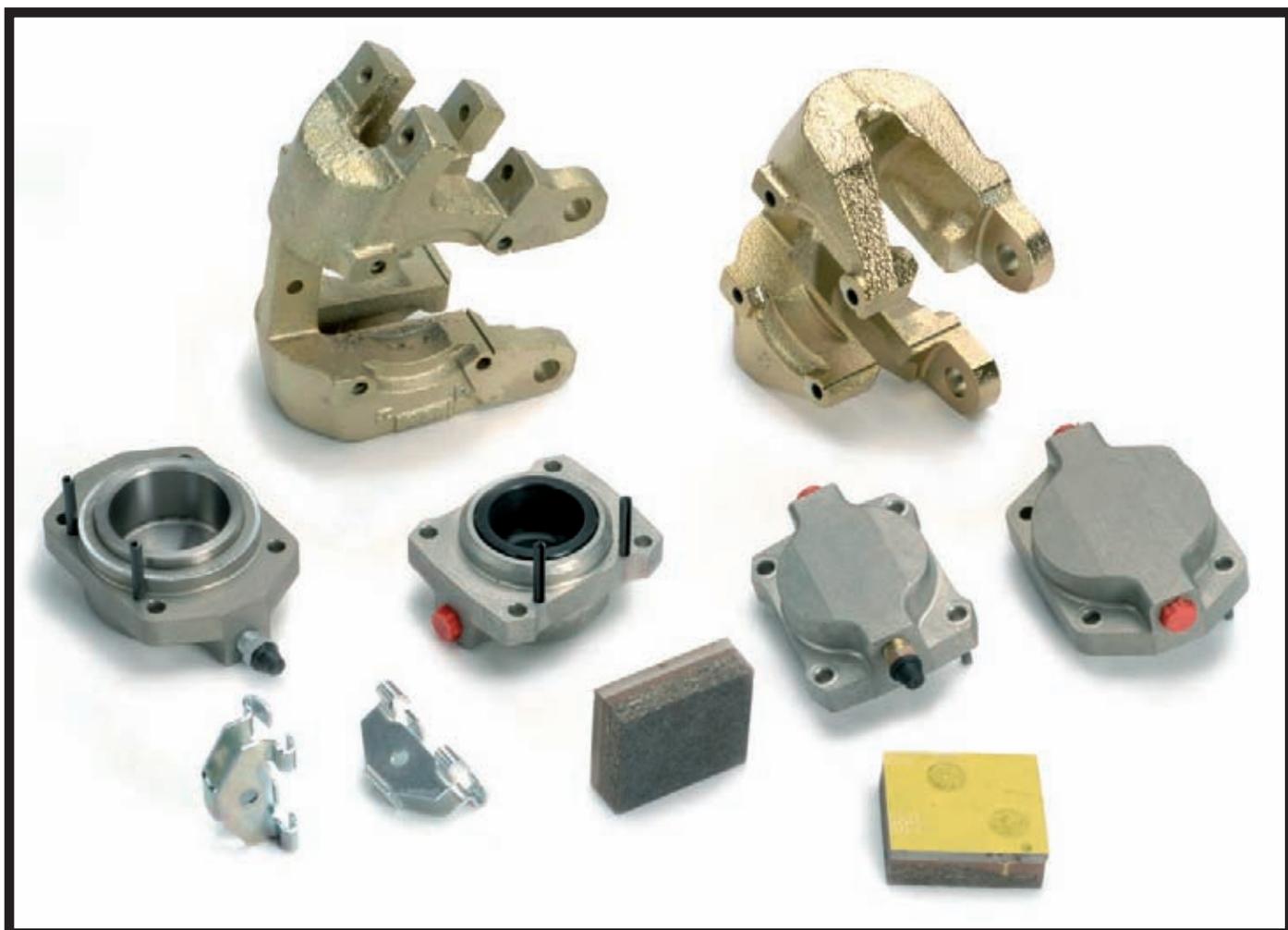
### REAR CALLIPER MOUNTING BRACKET.

Aluminium brackets to mount the large rear calliper to the standard 1/4 shaft housing bolts of a SRI to suit the 1 1/4" diameter disc – JCBRK 220D

JCBRK210	each £80-00
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For SR3 or magnesium axles with rear calliper mounts integral with the 1/4 shaft housing we have a range of new housings available, see page 30.



## Small square brakes

### SMALL DUNLOP CALLIPER BODIES.

Small Dunlop Calliper Bodies to suit 48mm square pads

Reconditioned by ourselves.

The fronts have 3.00" bolt centres to mount direct to the original standard E-Type front upright. The rear bodies incorporate the handbrake calliper mounting lugs, with 2<sup>3</sup>/<sub>4</sub>" bolt centres.

E-Types should use wide body to suit 1/2" thick discs front or rear with SR1 or SR3 diff case. narrow bodies are to suit other Jaguar applications.

CBRK420B	Front - narrow	£175-00
JBRK500	Front - wide	£175-00
CBRK220LB	Rear LH - narrow	£195-00
CBRK220RB	Rear RH - narrow	£195-00
CBRK225LB	Rear LH - wide	£325-00
CBRK225RB	Rear RH - wide	£325-00



### "BRAND NEW" NOW ALSO AVAILABLE

CBRK420BN	Front - narrow	£395-00
JBRK500N	Front - wide	£395-00
CBRK220LBN	Rear LH - narrow	£395-00
CBRK220RBN	Rear RH - narrow	£395-00
CBRK225LBN	Rear LH - wide	£395-00
CBRK225RBN	Rear RH - wide	£395-00

### COMPETITION PISTON ASSEMBLIES - SMALL

Aluminium bodies with stainless steel pistons and modern seals to suit 48mm square pad calliper body. These help reduce the heat sink and reduce piston pull back. Must be used with brake pads which have thick steel backing plates.

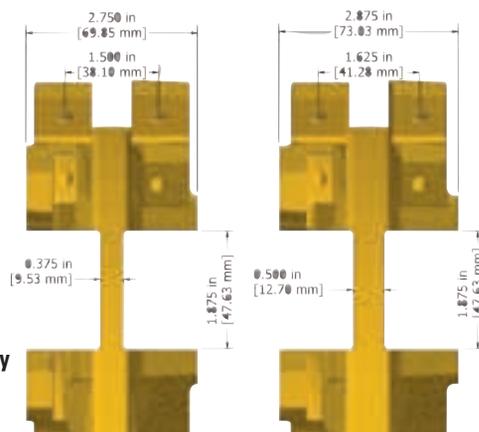
Available with different piston diameters to suit front and rear.

Alternative piston diameters available to order.

CBRK401 2.125" Piston Assemblies Front	each £120-00
CBRK402 1.750" Piston Assemblies Rear	each £120-00

### Replacement parts

JCBRK402A 2.125" Piston	each £17-38
CBRK404 1.75" Piston	each £30-00
JCBRK158 2.125" Seal	each £4-30
JCBRK160 1.75" Seal	each £7-59



Narrow body calliper

Wide body calliper

### COMPETITION BRAKE PADS.

Available in a variety of compounds, bonded to a thick steel backing plate 48mm square.

RS14 suit fast road driving, the rest suit race.

CBRK164D/5 DS2500 - Fast road	£124-00
CBRK164D/P1 RS14 - Fast road	£195-00
CBRK164D/3 DS11-11- Sprint race	£169-26
CBRK164D/9 RS29 - Long distance race	£195-00
CBRK164D/P2 RS19- Long distance race	£195-00
CBRK164D/P3 RSL-1- Long distance race	£195-00

For 63mm square pads see previous page

For brake discs see page 52

### PAD RETAINER

Reproduction of standard.

CBRK430	each £3-50
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### ARP BOLTS

Top quality bolts to hold the calliper bodies on and reduced diameter heads to hold on the piston assemblies.

CBRK220AB 1/4" Bolt	each £2-25
CBRK220W 1/4" Washer	each £0-65
YENG637 7/16" Bolt	each £3-25
CENG762 7/16" Washer	each £1-25

# VBOX MOTORSPORT



VBOX Lite

VBOX HD2

Racelogic was founded in 1992 by Julian Thomas with the goal of supplying electronic control systems for the motorsport world. The goal in motorsports is always to go faster. Many thousands are spent on improving the performance of race cars with better suspension, more power or grippier tyres. However, one area can bring even greater rewards, for less money, but it's often overlooked, the driver. We use VBOX in our own cars and have found it to be an invaluable tool in identifying potential performance gains for our customers. The data analysis tools enable quick and easy comparison of driving style and setup changes and the high quality video provides a great way to review the driver on track. This really is modern performance technology for the historic motorsport competitor.



The use of VBOX has been pivotal to the success of Julian Thomas in his Denis Welch Motorsport prepared; low drag E-Type, including victory at Le Mans by 35 seconds, a track he had not previously competed at.

## VIDEO VBOX LITE

Video VBOX Lite is the established club racer's choice. Recording standard definition video via two cameras, with real time graphical overlay and 10Hz GPS data logging, the Lite has a wealth of features at a budget price. Housed in a rugged plastic enclosure, the Video VBOX Lite is light weight, portable and robust. Our kit consists of 1 high resolution camera, 1 low resolution camera, OLED lap timer display, 4GB SD card and 2 roll cage mounts.

YCMSC100 VBOX Lite System Kit £1249-50

## VIDEO VBOX HD2

Housed in an anodised aluminium case, the VBOX Video HD2 is the ultimate in video data logging for those who want to achieve better lap times and greater consistency at the wheel. Twin wide angle lenses, ensure that every moment of track action is captured in stunning high definition – so analysis is even more precise. Camera setup is aided by connecting to a smartphone app, for a camera preview. The system will start and stop logging according to GPS speed and the internal battery allows 10 seconds before and after buffering, meaning every moment of track action – including race starts is captured automatically. Our kit consists of 2 High Definition cameras, OLED dashboard display lap timer, 32GB HC SD card and 2 basic roll cage mounts.

YCMSC105 VBOX HD2 System Kit £2099-50

## CIRCUIT TOOLS SOFTWARE

Circuit Tools is a very powerful analysis toolkit for VBOX data loggers.



The software automatically detects the country, circuit and track configuration from a database of almost 500 circuits and enables comparison of lap times, track position, side by side video and much more.



Circuit Tools is included with both VBOX products.

### Additional Parts.

YCMSC102 32GB SD UHS-1 Card £15-00



### MALLORY DISTRIBUTOR

These new distributors have a superior, adjustable advanced weight mechanism with no vacuum unit and the choice of using single or dual points.

They also come complete with cap and rotor arm, although require the fitment of a new or original drive dog.

CELI102M 6 cyl. £325-00

#### Replacement parts

CELI118M Points £19-50  
 CELI121M Rotor Arm 4 or 6 cyl. £8-50  
 CELI112M Cap 6 cyl. £32-00  
 CELI115M Carbon Brush £16-50

We recommend if using a Lucas coil to also use a Lucas condenser or our new Reliable Condenser.

### DISTRIBUTOR DRIVES

Reproduction of the standard item in a higher grade steel to aid reliability.

ELI109A Tang drive £12-50

### UNIVERSAL DISTRIBUTOR SPRING KIT

3 pairs (light, medium and strong) of distributor bob weight springs - can be fitted to most distributors as required.

CELI123 £9-50

### DISTRIBUTOR CLAMPS

These are machined from aluminium and clamp the distributor more firmly, resulting in less likelihood of the timing slipping.

JCELI104CL Mallory & CSI Distributor £21-79

For all other models, please phone.

### COMPETITION HT LEAD

The traditional yellow and black Lucas competition wire HT lead.

CELI150 per metre £3-85

### NGK 90 DEGREE PLUG CAPS

These caps have rubber seals to make them as near 100% waterproof as possible.

CELI148 each £2-85

### PLUG LEAD TERMINALS

Crimp on terminals to suit wire H.T. lead. Used for plug and coil leads.

CELI150A Straight Terminal £0-35  
 CELI150B Straight Cover £0-45  
 CELI150C 90° Cover £0-64  
 CELI150D 90° Terminal £0-80

### RELIABLE CONDENSER

At last an ultra reliable condenser. Buy once and forget. Suitable for Lucas or Mallory distributors. Mounts to side of coil.

CELI124 each £27-50

### LUCAS SPORTS COIL

Fits all models, for road or race this is the one to have.

CELI141 £20-25

### LUMENTION ELECTRONIC IGNITION

Lumention is one of the most reliable ignition kits on the market. The optical system is not disturbed by reasonable distributor wear and hence will often give a small power gain over contact breakers.

The performance kit has a constant energy design to extract the extra energy at high RPM, whether purchasing the standard or performance kit the correct chopper must be purchased to suit your distributor.

(Negative earth only)

CELI225 Lumention Module £161-00  
 CELI230 Performance Lumention Kit £232-00  
 CELI224 Chopper (Mallory 4, 6 & 8 cyl.) £40-00  
 CELI226 Chopper (Lucas 25D6/4 distributor) £16-25  
 CELI227 Chopper (Lucas DM6 distributor) £20-00  
 CELI228 Mounting Bracket £10-00

### REV LIMITER

Lumention rev limiter again extremely reliable adjustable setting.

(Negative earth only)

CELI250 £80-00





### SILICONE HT LEAD SET

Black 7mm silicon lead to maintain a period look. Fits straight port or wide angle cylinder heads.

JCELI150 Road or race set £88-50

### ELECTRONIC TACHO

Highly accurate chronometric style BRITISH MADE tachograph. 120 mm diameter to suit the original dashboard aperture.

Programmable to suit, twin shift lights and a period red tell-tail needle. By far the best, most suitable and period tachograph on the market and sporting the Denis Welch Motorsport logo. Suits electronic or points ignition.

(Negative earth only)

JCINS122 £550-00



### SPARK PLUGS

We have used NGK spark plugs forever! Ultra-reliable and cost effective. The "Iridium IX" range give benefits such as improved starting, greater idle stability and enhanced throttle response. For serious competition engines, improved combustion and superior anti-fouling capabilities.

BP5ES	Standard	each £2-95
BP6ES	Fast Road	each £2-95
CELI145	B7ECS - Race/Rally	each £4-95
CELI145R	BKR7EIX - Iridium	each £11-05
CELI146	B8ECS - Race	each £4-95
CELI146R	BKR8EIX - Iridium	each £11-05

### PLUG LEAD NUMBERS

White plastic bands with black numbers to push over standard or competition 7mm plug lead when making them up - not suitable for ready made leads.

Suffix the part number with required digit.

CELI148/1 to CELI148/9 each £0-50

### ELECTRONIC DISTRIBUTORS

With 16 advance curves designed by DWR to choose from. These take the slop out of the original mechanical advance mechanism and replace it with an electronic curve which will repeat time after time. Supplied with fitting instructions and our recommended curve selection for those who want to fit and forget, or for those who wish to tune the engine, switch between the 16 curves with the turn of a screw, no more fiddling with tiny springs.

These distributors look identical to the original Lucas 25D and 23D types.

Recommended to use with a Lucas sports coil and Silicone HT leads.

JCELI103EN	Non vacuum negative earth	£265-00
JCELI103EP	Non vacuum positive earth	£265-00
JCELI103EVN	With vacuum negative earth	£265-00
JCELI103EVP	With vacuum positive earth	£265-00

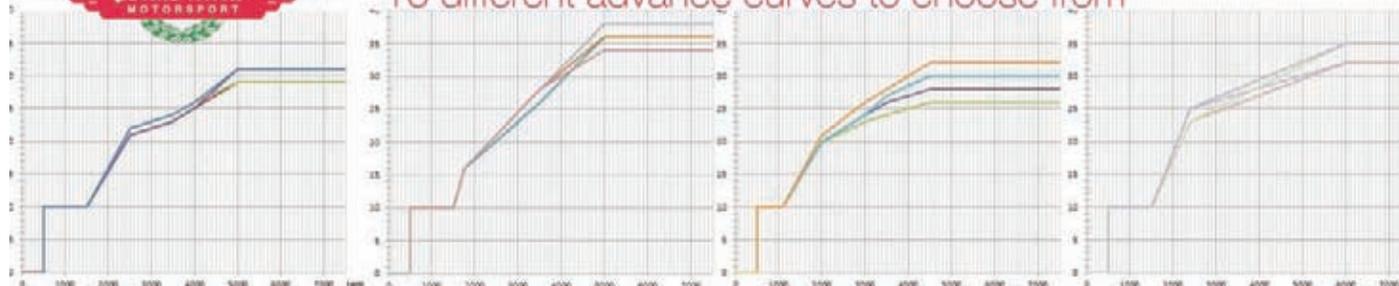
### Replacement parts

ELI121	Rotor arm - 6 cylinder	£2.65
ELI112B	Distributor cap - 6 cylinder	£9-50

We can also supply CSI distributors for most other cars please enquire.



### 16 different advance curves to choose from





### CIBIE SPOT LIGHTS

For those who require an excellent driving light beam and like a strong more modern look to the car.

Accepts H2 Halogen bulbs, not included.

CLTG226	Cibie Spot Light	each £122-00
WCB175	100 Watt bulb	each £8-33
GLB479	55 Watt bulb	each £4-99

#### Replacement parts

CLTG226L	Lens	each £36-98
CLTG226C	Cover	pair £18-00

### DASHBOARD FLICK SWITCHES

Top quality with silver contacts.

CELS124	Overdrive etc	each £5-95
CELS105RS	Dip / Main lights	each £10-95
CELS200RS	Indicator	each £8-25
CELS205RS	Washer motor	each £9-95

### DASHBOARD HORN PUSH

Period Bakelite switch.

CELG147		each £12-95
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### LOW OIL PRESSURE WARNING LIGHT KIT

Saves expensive engine damage by attracting your attention before oil pressure reaches zero. Kit consists of oil pressure switch, union and large orange warning light. Illuminates at approximately 20 psi.

JCELS190K		each £49-50
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#### Replacement parts

CELS191I	Pressure Switch	each £17-68
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### REAR RAIN LIGHT

52mm diameter LED high visibility unit as per FIA regulations. Also the perfect diameter to fit in place of the reflector in the original light cluster - with a little ingenuity.

YCLTG230	LED	each £26-00
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#### Top Tip:

For FIA events your rain light must be within 4" of the car centre line, otherwise two must be fitted.

### EXTENDED FLICK SWITCHES

Top quality with a long stalk which can be shortened if required.

CELS205RSL	Washer/Horn	each £14-95
CELS124L	Overdrive etc	each £16-95
CELS200RL	Indicator 2 way	each £15-95



### PERSPEX HEADLIGHT COVERS

Two types available, replacing the covers on a standard style steel or aluminium E-Type bonnet or the lightweight style. Supplied oversize to be trimmed to suit.

JCLTG101	Lightweight bonnet	pair £175-00
JCLTG102	Standard bonnet	pair £175-00





### FALSE REGULATORS

Ideal when fitting any kind of alternator conversion. Keeps the original bulkhead look and makes it easy to join the wires, with the benefit of an internal fuse.

CELG163	2 bobbin screw	each £39-95
CELG163A	2 bobbin spade	each £39-95
CELG164	3 bobbin spade	each £39-95

### Replacement parts

CELG163F40	40 Amp Fuse	each £3-95
CELG163F50	50 Amp Fuse	each £3-95

### LUCAS ALTERNATOR

Lucas 36 and 45 amp output 17 ACR type. Inc 2 1/2" (64mm) diameter 1/2" wide pulley & fan.

CELG169	Outright sale 36 amp	£79-00
CELG169B	Outright sale 45 amp	£89-00

### Replacement parts

Alternator no fan or pulley EXCHANGE

CELG169A	36 amp	£59-00
CELG169C	45 amp	£69-00

### RACE ALTERNATOR

Brand new Denso design. Upgraded for high performance & reliability in the UK two outputs available, both in the same size case. Ultra lightweight at 2.5 Kg. Supplied without pulley.

YCELG169R	40 amp	£186-00
YCELG169S	90 amp	£530-00

### NYLON ADJUSTER STRAP

We have developed this adjuster strap to eliminate the problem of the steel one breaking due to vibration. This can be used on all models, dynamo or alternator.

CELG172		£9-95
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### ALTERNATOR PULLEYS

Aluminium, machined from billet. To suit a 1/2" wide fan belt with a 15 mm diameter hole, these fit both our Lucas ACR or Denso alternators.

XPCELG169	2 1/2" (64mm diameter)	£15-80
CELG169PA	3 1/2" (90mm diameter)	£19-84

### LIGHTWEIGHT ALUMINIUM DYNAMO PULLEY

Cast in aluminium, these pulleys have a deeper groove to stop the fan belt jumping off at high revs and the larger diameter slows down the speed to stop the windings from over heating.

CELG187	C45 dynamo 17mm hole	£49-50
CELG187L	C40/C42 dynamo 15mm hole	£59-50



### 3-D PRINTING

As part of our quest to improve the quality of our products and manufacture, we have invested in a 3-D printing machine.

When we design a product (usually with the help of original factory drawings) it's often helpful to have a 3-D model to see how it fits with other components. CAD drawings can only do so much when mating components to older ones.

This prototyping device helps us in perfecting the fit and also helps us see if improvements can be made. In the case of items that need a casting pattern, we can also develop these with this technique meaning costs are reduced.

Our competitors often manufacture by copying the 'last one in the parts bin' and this leads to 'tooling creep' meaning that parts grow or shrink as each batch is made, leading to assembly problems. At Denis Welch Motorsport we manufacture only from toleranced drawings so this cannot happen.





#### COMPETITION STARTER MOTOR

Made to our own design these hi-torque starters use a brand new Japanese motor with our own manufactured mounting flange. Our design has increased power, strength and reliability over many others on the market. The 1.4kw motor rotates the engine far quicker than the original and for much longer with decreased battery drainage. The overall weight saving is considerable as it only weighs 4.3kg. Dual Polarity.

JELG190	4.2	£295-00
JELG190S	3.8	£295-00

#### COMPETITION BATTERY CUT-OFF SWITCH

This switch has a removable key and when turned off in an emergency with the engine running, it not only earths out the ignition killing the engine, it also discharges the charging system. As specified by the FIA.

CELS101A	£24-95
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#### Replacement parts

CELS101K	Spare Key	£3-95
CELS101R	Spare resistor	£5-95

#### TEE PULL CABLE

Can be used with either battery master switch or plumbed in fire extinguisher.

CELS101T	6' Long (1.83 m)	£8-95
CELS101L	12' Long (3.66 m)	£9-95

Joaquin Folch-Rusinol and co-driver  
Jeremy Welch achieve 2nd overall.  
Jaguar Classic Challenge,  
Nurburgring Oldtimer 2016.

#### H4 HEADLIGHT UNITS

These are a direct replacement for the sealed beam unit, those with original replaceable bulb type must also change the buckets. The units come as standard with 55/60 watt halogen H4 bulbs, 80/100 watt will also fit straight in or for real night vision try the Night Tech made by PIAA and save the loading on the wires as at only 60/55 watt draw they give light equivalent to 140/130 watt. All E marked and road legal.

LTG166	LH dip - light unit	pair £69-95
LTG167	RH dip - light unit	pair £94-50
LTG180	Bucket - plastic	each £14-95
CLTG228	80/100 Watt halogen bulb	each £5-45
CLTG230	Night Tech 60/55 Watt E-marked bulb	produces 140/130 Watt pair £34-95

#### RACING RED TOP 30 BATTERY

These red top 30 racing batteries offer an extremely high power to weight ratio at only 10.6Kg. Combine this with a high resilience to shock, vibration and G-force, and you have the most desirable characteristics sought after in motorsport. For this reason these batteries are used by some of the biggest names within the industry and are the most popular and professional racing battery on the market. Perfect for race or hill climb cars.

Dimensions (mm)	Length 250 x Width 97 x Height 142
CELG217	£151-02

#### Top Tip:

If your car is under weight, add a second battery in place of lead – Better than carrying lead!





#### DASH TOP

Lightweight fibre-glass dash top, finished in a high quality black gelcoat, suitable as is or can be trimmed as required. Complete with fixing studs as original.

JDAS106 £175-00

#### BONNET TO COCKPIT AIR VENT

Lightweight fibre-glass, finished in a high quality black gelcoat, can be over painted. Mount to the bonnet and bulkhead.

JCBON101 Top - Bonnet £95-00  
JCBON102 Bottom - Bulkhead £95-00

#### REAR TOWING EYE

Aluminium plate to bolt to the rear subframe dependant on type of exhaust fitted.

JCMSC405 £19-50

#### REV COUNTER ADAPTOR RINGS

Handy items if wanting to fit a 100mm diameter tachometer into the standard E-Type dashboard aperture.

JCINS122B Black anodised £19-95  
JCINS122E Polished £19-95

#### UNDER BODY WIPER ESCUTCHEON

Reproduction of original hard to find item, in aluminium as original.

JWSN164A each £12-95

#### UNION JACKS

Perfect for the wing or dashboard.

ACC115 Enamel screw on each £9-75  
ACC116 Sticker each £2-25  
ACC117 Enamel stick on each £6-45

#### ENGINE BREATHER HOSE

-16 JIC hose to run from the centre front of the engine to our catch tank, lightweight with black fittings.

JCACC127 RHD £144-44  
JCACC127L LHD £144-44

#### SMITHS OIL PRESSURE GAUGE

100psi gauge.

JCINS135 £63-80

#### OIL CATCH TANK

Aluminium purpose made tank, to bolt to the passenger footwell with a -16 JIC male fitting to suit our engine breather pipe, complete with drain plug suits LH or RH drive.

JCACC120 £195-00

#### TRIPMASTER TRIGGER - PROP

This steel disc fits between the prop-shaft & flange at either end enabling you to mount the magnetic pick up sensor for your Retro Trip out of harm's way and away from HOT brake discs.

CMSC450 £66-95  
CRAX222A Extra long bolts £5-95



#### JACKING POINTS

These clever attachments make it much easier to jack any E-Type directly from the front or rear, road or race.

The rear bolts to the underside of the axle cradle using existing holes and protrudes between the rear exhaust pipes

The front attachment is by clamping to the cross member so no modifications are necessary.

Both anodised aluminium for long life and ultra lightweight at only 450 grams front and 350 grams rear.

JCMSC300 Front £119-00  
JCMSC310 Rear £95-00





#### ALUMINIUM BULLET MIRROR

Lightweight single bolt design. Ideal to bolt on the bonnet or door.

CMRS108	Flat Glass	£32.00
CMRS109	Convex Glass	£32.00

#### CENTRE REAR VIEW MIRROR

Lightweight, single mounting, giving a great view of behind, perfect for modifying to fasten direct to the roll cage to suit your individual requirements.

CMRS102	£107-35
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#### QUARTER LIGHT MIRROR

Simply attaches to the window runner. No drilling required.

MRS112	each £18-95
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#### DUNLOP RACE TYRES

We stock the following sizes all in 204 compound to suit Jaguars. We also stock many other sizes for all makes of car, please enquire.

CWHE550L15	5-50L x 15"	£196-00
CWHE600L15	6-00L x 15"	£210-95
CWHE650L15	6-50L x 15"	£226-75
CWHE700L15	7-00L x 15"	£244-50
CWHE500M15	5-00M x 15"	£194-50
CWHE550M15	5-50M x 15"	£215-25
CWHE600M15	6-00M x 15"	£228-76

#### AVON TYRES

The Avon ZZ is a fantastic tyre for all occasions. The profile is tall and the look is period whether it's the skinny 185 for the road or the fat 225 for race. Particularly good on race cars for long distance and wet racing with only the 185 having a choice of compounds.

WHE400H	185/70 x 15" Hard	£164-05
WHE400S	185/70 x 15" Soft	£164-05
WHE401H	205/70 x 15" Hard	£215-68
WHE402H	215/70 x 15" Hard	£224-75
WHE403H	225/65 x 15" Hard	£235-98

#### STEERING WHEELS & HUBS

Moto-Lita, the only make to have. Polished aluminium centre with drilled holes.

STG107	13" Leather Rim - Flat	£142-00
CSTG107A	14" Leather Rim - Flat	£142-00
CSTG105	14" Wood Rim - Flat	£142-00
STG105	15" Wood Rim - Flat	£142-00
JSTG108	Boss for above wheels	£53-00
JSTG109	Boss Original - Series 1 & 1 1/2 Wheel	£105-00

#### JAGUAR BONNET STRAPS

Leather straps in a choice of colour.

JCBON130A	Black pair	£19-50
JCBON130B	Brown pair	£19-50

#### JAGUAR BONNET STICKER

JMSC175	each £4-95
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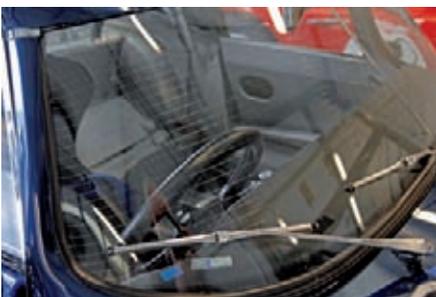




#### HEATED FRONT WINDSCREEN

These laminated glass windscreens are made to original dimensions with a heating element in the laminate. They draw only 3 amps and keep the screen completely clear in all conditions. Although the elements are not as well disguised as in many modern cars they do not distort vision in racing situations and have a period look.

JCWSN103	Drop head E-type Series I & II	£359-00
JCWSN105	Fixed Head E-type Series I & II	£525-00
JCWSN104	Low-drag coupe E-type	£954-00



Heated Windscreens available for other cars to order.

#### TILLET SEAT

The modern rigid style, with small shoulder and thigh pads allow these seats to fit in the smallest of places. Particularly suitable for low drag E-Type applications. GRP construction with carbon look. FIA approved. Mountings not included.

CSET300T	44" wide	£679-00
CSET300TW	47" wide	£679-00

Other styles and padding available to order please enquire.

#### HAND HELD FIRE EXTINGUISHER

A.F.F. foam filled, suitable for FIA regulations including mounting bracket and strap. This is a must for competition and we recommend for all road cars, check size requirements for your events.

CACC200	1.75 Litre - Road	£57-60
CACC201	2.4 Litre - Road	£70-10

#### RACING BUCKET SEAT "HIGH BACK"

Smooth black GRP shell, padded and finished in black brushed nylon with head and shoulder support. Supplied complete with aluminium mounting brackets. Ideal for race environments, FIA approved.

CSET300		£485-00
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#### RECARO "HIGH-BACK" RACE SEAT

Luxurious seat essential for long distance events. Mounting kit not included. FIA approved.

CSET300R		£623-33
CSET200M	Universal Seat Mounts	pair £78-60



Jeremy Welch and Mark Pangborn finish 3rd overall in GT & Sports Car Cup, Silverstone International Trophy 2012. Photo: Jim Houlgrave.

#### CLUBMANS SEAT BELTS

Ideal for road or track day use, with the easy to fasten clubman's buckle. 4 point mounting, 2" shoulder straps and 2" lap straps complete with eyelets.

CMSC115/A	Black	£83-52
CMSC115/B	Blue	£83-52
CMSC115/C	Red	£83-52

#### COMPETITION SEAT BELTS

Ideal for race or rally cars where a fast exit may be required using the "turn" buckle. FIA approved. 4 point mounting, 3" shoulder straps and 2" lap straps complete with eyelets.

CMSC115FIA/A	Black	£177-98
CMSC115FIA/B	Blue	£177-98
CMSC115FIA/C	Red	£177-98

#### OTHER SEAT BELTS AVAILABLE TO ORDER

#### COMPETITION WIPER ARMS

The clamping screw holding these arms on will not let them fly off! Also adjustable in length.

CWSN152	RHD spoon	£12-95
CWSN153	LHD spoon	£12-95
CWSN154	RHD bayonet	£12-95
CWSN155	LHD bayonet	£12-95





### ROUNDELS

White stick-on fablon roundel 18" diameter.  
CMSC350 each £3-08



### RACE NUMBERS

Black fablon race numbers available in two sizes.

11" suit a Jaguar with 18" roundels best.

Please suffix part number with required digit.

CMSC352/0 to CMSC352/9 9" each £0-44  
CMSC353/0 to CMSC353/9 11" each £0-75

### SCRUTINEERS DELIGHT

All the useful switch stickers to keep the scrutineers happy.

CMSC351 £2-49

### COPPER / HIDE MALLET

Take care of those shiny spinners with this original type mallet.

WHE152 £21-50

### WHEEL BALANCER

This portable wheel balancer is ideal for professional or home use. It even packs down small enough to go into the race transporter. Complete with instructions it is ideal for aluminium, steel or wire wheels on most cars. Peg drive wheels require a special adapter to be used.

WHE600	Wheel balancer	£97-85
WHE600A	Peg drive adapter	£98-00
WHE601	Balance weight pliers	£19-50
WHE602	45 Assorted knock on wheel weights - steel rim	£19-50
WHE603	30 Stick on wheel weights	£14-95



Peg drive adapter

### HEAT INSULATION CLOTH

Woven cloth with silver foil on one side. Ideal to glue to footwells and gearbox tunnels etc. Sold 1 metre wide by your choice of length.

CIBP237 per metre £38-50

For High Temperature adhesive see page 49

### REFLECT-A-COOL

Self adhesive high efficiency heat reflector, very lightweight.

CIBP236 24"x24" £38-36

### RACERS TAPE

2" wide x 50mtr roll - The tape no tool kit should be without otherwise known as duck or tank tape.

WCB650	Red	£8-95
WCB651	White	£8-95
WCB652	Yellow	£8-95
WCB653	Silver	£8-95
WCB654	Black	£8-95

### SHOCK CORD

Otherwise known as bungee cord, ideal either for holding things on the trailer, or fastening down parts on the car. Extends double in length when stretched. Colour blue/white.

WCB600	Cord sold per meter	£1-35
WCB601	Hook - pack of four	£4-95



Julian Thomas, low drag E-Type, Spa 6 hours 2015.



#### Contact

The address of the Healey Museum is: Country Estate "Groot Kantwijk", Bergseweg 28q, 3633 AK Vreeland, The Netherlands.

#### Opening hours

The Healey Museum is open weekly from Friday to Sunday from 11.00 AM to 5.00 PM. For groups and special invitees the museum can be opened at request. For visits outside of regular visiting hours please call +31 681 733 208 or send an email to [info@healeymuseum.nl](mailto:info@healeymuseum.nl).



#### Healey Museum - please go and visit this fabulous facility, it's a great day out.

We thought a dedicated facility to display memorabilia for the Healey marque was a wonderful idea and we are proud to be sponsors of the Dutch Healey Museum. In this museum you can go back in time into the rich history of Healey sports cars and see a number of unique Healeys. Also the earliest Healeys receive a prominent place in the collection including a Sportsmobile from 1948 and a Silverstone roadster from 1949!

The collection is presented based on historical material, original blueprints and drawings, trophies, personal memorabilia of famous Healey drivers such as Pat Moss and the Morley Brothers. The work of designer Gerry Coker and technical designer Roger Menadue are also featured.

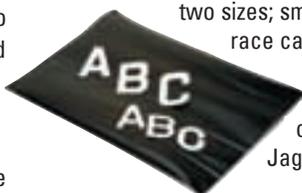
The Healey Museum owns a lot of historical film footage and a unique photo collection, for example the endurance record with the Healey 100 in Bonneville in 1954 which is the car that inspired our record success at Denis Welch Motorsport. In the library you will find original brochures and literature and even the correspondence of Donald Healey with his suppliers on the sheet metal for the Healey 100 Streamliner is there!

#### STICK-ON NUMBER PLATES

##### A do-it-yourself kit.

The satin black Fablon backing is supplied 450mm x 300mm, enough to produce two oblong or square plates.

The white stick-on letters are available in two sizes; small 2½" high to suit race cars with restricted space and 3" high digits that compliment most Jaguars best.



CMSC104	Number plate backing	£6-95
CMSC105/?	Small 2½" white digit	£0-95
CMSC106/?	Std. 3" white digit	£0-95

? = Please add specific digit as a suffix to part number  
i.e. 1-9 or A-Z



Joaquin Folch-Rusinol and co-driver Jeremy Welch finish 2nd overall driving the ex Bruce McLaren semi-lightweight E-Type.  
Jaguar Classic Challenge, Nurburgring Oldtimer 2016.  
Photo: Malcolm Griffiths

#### CAR COVER

This indoor nylon car cover has an acrylic proofing to make them 100% dust proof, so perfect to keep your E-Type as clean as when you covered it up. Machine washable. Other colours available to order.

MSC200 Red £65-00



#### PRECISION OIL CAN

The Rolls Royce of oil cans, every professional workshop should have one. No drips, no excessive pumping until it suddenly squirts out, it even works upside down. Strong aluminium canister with brass pump.

CMSC470

each £26-75





### JACKETS

Red team jacket sporting our emblem embroidered on front and back. Exceptionally good quality, made from Fine Tex material. These are ideal for all weather conditions, being waterproof yet breathable and have a removable hood. Perfect for those windy race meetings.

REG101M	Medium	£49-00
REG101L	Large	£49-00
REG101XL	Extra Large	£49-00

### BASEBALL CAPS

Dark blue cotton baseball cap with our emblem embroidered on the front. A brass adjuster clip allows one size to fit all adults.

REG301		£9-95
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### DENIS WELCH STICKERS

Red on white sticker of our emblem cut out to shape.

REG401	11" (280mm) long	£0-49
REG402	5 1/4" (134mm) long	£0-30
REG403	11" (280mm) long window sticker	£0-60

### POLO SHIRTS

Top quality red cotton polo shirt with our emblem embroidered on the front left side.

REG201S	Small	£19-99
REG201M	Medium	£19-99
REG201L	Large	£19-99
REG201XL	Extra large	£19-99
REG201XXL	Extra extra large	£19-99



### FLEECE JACKETS

Lightweight zip up Fleece in team colour sporting our logo embroidered on front and back.

REG151S	Small	£34-99
REG151M	Medium	£34-99
REG151L	Large	£34-99
REG151XL	Extra Large	£34-99

### Tax Disc Holders

Please ask as these are FREE!!!



Please add VAT & carriage to all prices for UK and EEC consumer sales at the current rate





Julian Thomas – 1st place- Le Mans, Silverstone and Donington 2016. Photos: Malcolm Griffiths

# We can help bring a smile to your face

Racing has long been a passion at Denis Welch Motorsport and not just for the company owner. Since our early days we have helped many customers achieve their ambitions. We specialise these days in building, maintaining and developing cars for all sorts of competition requirements from works cars to museum pieces and for a wide variety of customers. Racing, Rallying, event cars, fast road and track cars even Record holding cars (we still hold the UK fastest 100 mile speed record regardless of car type, after 6 years and with a 1954 Healey). Those owners want the very best and they get it.

These days we take customers briefs and engineer a car that is suited to their needs and then offer trackside support and even tuition to help them progress. To us it's all part of the service. Perhaps this is why our cars have won so many events in a variety of countries, with many different hands at the wheel.

Jeremy's great grandfather John 'Mawdesley' Brooke was the forerunner of this continuously evolving heritage. He was the inspiration behind many things mechanical, building cars as long ago as 1906 and then going on to building World Record winning speed boats. The Brooke/Welch family have overcome many of competition's more

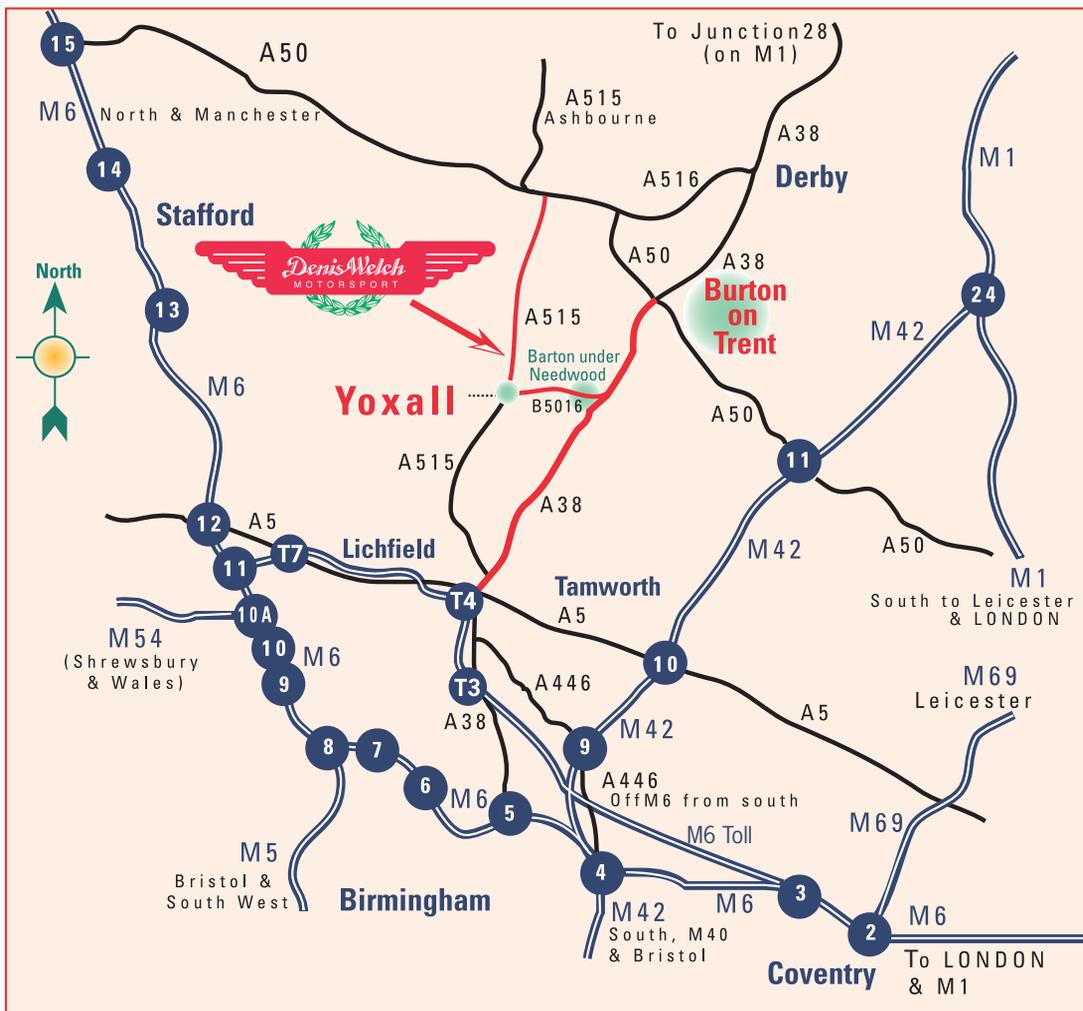
enlightening moments and continue to thrive. It also indicates the drive and commitment that has been necessary to ensure that their 110 years of motoring history can be celebrated in 2016.

Jeremy Welch now owns and manages the business, following in his father's footsteps and continues to compete in Endurance and Classic races in Europe and the UK.

At Denis Welch Motorsport we always try to look after both our customers and our supporters wherever possible. It's the very essence of our lineage to be competitive, but we still wish to retain that spirit of friendship once the heat and noise die away.

If you are at a race event and you see our truck, please wander over and have a coffee and a chat. Maybe we can be the ones to put that big smile on your face and create memories that will last a lifetime.



**HOW TO FIND US****From the south**

M1.M6, off at Junction 4 onto A446 marked to Lichfield. Onto A38 marked Burton-on-Trent & Derby. Turn off A38 at Barton-under-Needwood into Yoxall, at 'T' junction turn right. We are one mile north on the left.

**From North via M6**

Off M6 at junction 15, head towards Uttoxeter & Derby onto A50, turn right onto A515 to Lichfield. We are on the right one mile north of Yoxall.

**From North via M1**

Off M1 at junction 28 head south on A38 towards Derby & Burton-on-Trent, bypass Burton-on-Trent. Turn off at next junction marked Barton-under-Needwood into Yoxall, at 'T' junction turn right. We are one mile north on the left.



## Carriage costs less than you might think.

For example our Straight cut gear set JGBS301C, made to our world beating specification and worth £2350-00 costs only £72-38 to send UPS 3/4 day to France or Germany, including protective packaging and insurance. That's just 3% of the retail value (to New York its £127-33) - can you really afford not to buy the best?

**UK Carriage**

**First Class Post**  
up to 1Kg £5-95  
(up to £100-00 value)

**UPS Guaranteed Next Day**

up to 10 kg £9-50  
up to 30 kg £15-00  
up to 60 kg £30-00  
up to 90 kg £45-00

**Outside UK Carriage**

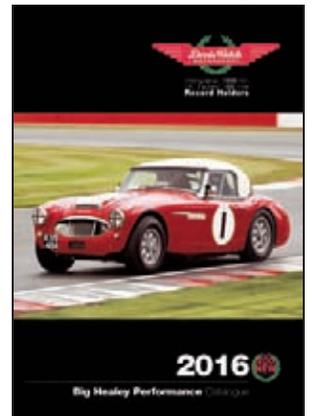
**UPS 3-4 day service not including customs clearance**

Kg	France Germany	Switzerland Channel Isles	USA Canada
2	£28-17	£54-99	£50-44
4	£34-69	£68-70	£62-52
8	£42-46	£88-17	£83-24
16	£49-74	£103-73	£107-25
30	£59-89	£121-02	£140-59
65	£147-65	£211-96	£219-23

We endeavour to provide the quickest, most cost effective service available. Please use these delivery prices as a guide only, the total cost may depend on volumetric weight, type of service & in some cases extended delivery charges. The above prices exclude insurance which is charged at 1% of goods value. Quicker overnight UPS Services are available. A quotation will be provided on request.

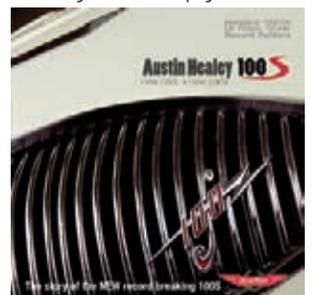


## Now available our full colour 2016 96 page Healey Performance Catalogue



## and our specialised 36 page 100S brochure now including the story of our record car

order your copy now!



# www.bighealey.co.uk

Visit our website for even more information including:

Product launches and promotions,  
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Product specifications, Current Prices, Car Sales,  
Road map, **Secure** Credit Card forwarding &  
Race calendar



LOCATION

#### Hours of business:

Monday to Friday 9.00 am to 5.00 pm  
Saturday morning by appointment.

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A regular service is available.

Carriage charged extra, please phone or fax for quotation.

Our Bank reference

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18 High Street, Burton-on-Trent,  
Staffs. DE14 1HU. England.

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#### Pricing:

We try to ensure that all of our products are manufactured to a high quality standard. Our prices are kept as low as possible, we are therefore unable to offer discounts. It is our policy to constantly develop all our parts range and specification for the best interests of our customers, thereby we reserve the right to revise the prices and specifications of our parts without prior notice.

#### Methods of payment:

Cash (£ Sterling) VISA, Mastercard or Debit card

Cheques up to the limit stated on cheque card in £ Sterling.

Bank Transfers must be in £ Sterling and drawn on a London bank.

#### Terms:

Contracts for the sale of goods which result from Denis Welch Motors Limited accepting an order from you are made subject to Denis Welch Motors Limited's standard terms and conditions of sale which are governed by the Law of England and Wales. A copy of Denis Welch Motors Limited's standard terms and conditions is enclosed with this catalogue.

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Fax +44(0)1543 472339

EMAIL [sales@bighealey.co.uk](mailto:sales@bighealey.co.uk)

# 110

# Years of Motoring History



**“ It is not just coincidence that today we specialise in six and four cylinder racing engines. ”**

Our involvement in the competition side of motor racing extends back over 110 years to the days of the pioneers.

Jeremy Welch's great grandfather built the first six cylinder engine ever made in the UK in 1906 and went on to build Brooke Marine racing engines with notable success.

Our own development programme is headed by our highly successful Big Healey (Reg KVS 484), that has seen success all over Europe and our E-type 3.8 semi lightweight (Reg 2747WK).

Our experience has extended from Ford Anglias, single seaters, sports racing cars, to 24hr Touring Cars, Record breaking cars and beyond.

Running these cars has resulted in a world conquering array of parts that quite simply guarantees success to almost anyone.



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