CROSTHWAITE & GARDINER



About Us

Crosthwaite and Gardiner is one of the world's leading manufacturers and suppliers of parts to the historic motor racing industry. Established in 1969, the company is built on a wealth of knowledge and experience gained through over 40 years of producing parts for some of the most famous and important racing cars the world has ever seen.

Crosthwaite and Gardiner was established as a result of the joint passion of Dick Crosthwaite and John Gardiner for historic racing cars, and for Bugatti cars in particular, and has continued to build upon this Bugatti expertise ever since. The company has now worked on every Bugatti, bar the Royale. Buying stock, original pattern equipment and drawings over the decades and manufacturing parts for all the cars they have worked on has resulted in Crosthwaite and Gardiner carrying the largest stock of quality Bugatti parts in the world.



Dick and John in Neil Corner's T35B, chassis no. 4965 at Silverstone in 1967

Expanding on their renown for Bugattis, Crosthwaite and Gardiner developed their expertise into manufaturing components for other famous racing marques. This highly successful expansion has lead to a series of projects to re-create historic racing engines, resulting in brand new Coventry Climax FPF, Maserati Birdcage, Jaguar LWE and D-type engines. The resulting critical acclaim has meant that today these engines are the strongest product lines offered by Crosthwaite and Gardiner.

Crosthwaite and Gardiner's enviable and un-rivalled experience in the historic racing industry has given them an incredible depth of knowledge of the cars they work on. This expertise means that they know exactly how each car was built and finished at the time it was originally manufactured. This allows the company to create faithful restorations conserving the important originality and authenticity of the cars and its parts. Crosthwaite and Gardiner recognises that in order to complete a restoration to the highest level while maintaining historical accuracy, the ability to use as many original parts as possible is paramount. The company therefore prides itself on its ability to repair and save what others would misconstrue as un-usable parts, whilst maintaing structural integrity and reliability. The company achieves this by successfully combining traditional craftsmanship with the latest technology and manufacturing methods.

Crosthwaite and Gardiner are proud to manufacture the finest products for the finest cars in the world. Be it a precisely crafted Bugatti nut or a world beating Auto Union Grand Prix car, the attention to detail and quality is always the same.

Not all of the products we currently manufacture are in this catalogue and if you have any enquiries please do not hesitate to contact us.



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Jaguar Engine Building at Crosthwaite & Gardiner

Jaguar XK engines are a speciality of Crosthwaite & Gardiner - our Light Weight E Type and D Type engines have won historic races all over the world and are just as suited to road use, too. We have a number of different specifications available and work to not only build all-new engines, but to refurbish and bring new life to old blocks. We are especially renowned for our Wide Angle cylinder heads and aluminium blocks.

Crosthwaite & Gardiner isn't just a producer of premium quality components - it is also a known birthplace for some of the finest historic race engines to grace the planet. Our dedicated engine-building department consists of three highly experienced engine builders, all specialists in the assembly of Jaguar D Type and E Type engines (as well as Bugatti, Maserati and Coventry Climax engines) - however, a partial or complete rebuild for almost any historic race engine is well within their capabilities and a wide variety of projects have passed through this workshop over the years.

Crosthwaite & Gardiner Jaguar engines are built from only the finest components. Blocks, heads and many other sand-cast components are cast at carefully selected UK foundries using our expansive array of pattern equipment. The best quality billets available are ordered from UK suppliers too, with everything meeting at our historic Sussex factory.

Here, components are precision machined in our impressive machine shop before undergoing rigourous inspection procedures, after any neccessary metal treatments are carried out. This ensures that only the very best quality components make it onto our shelves and into our engines.

Once built, all engines go through an extensive setting up process on our in-house engine dyno, prior to delivery. We have two water brake dynamometers, the larger of which can be used for engines up to 1000bhp - all Jaguar engines are tested using this equipment, as can be seen over to the right. Our engine builders expertise extend both to carburetted and mechanically injected fuel delivery methods for all manner of applications.

Our Light Weight E Type engines are available in a number of formats. Block options include refurbishment of a customer-supplied iron block (we do have a small quantity of iron donor blocks available also), or alternatively we can supply a brand new aluminium block. Wet or dry sump lubrication can be fitted, while carburetion and fuel injection (using butterfly or slide throttles) are also fully catered for.

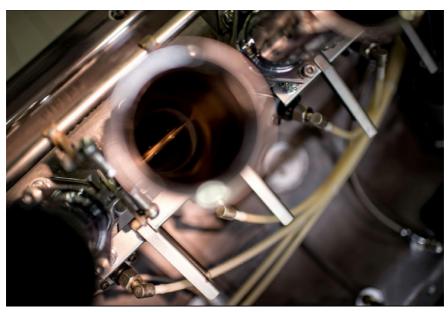
Crosthwaite & Gardiner D Type components are true to the original format, utilising a 7 degree engine slant and a cross shaft-powered dry sump system. Original engines were iron block and we abide by this, refurbishing original blocks as a base for our D Type engines.

Please note that all of our engines are designed to simply use premium pump fuel (Shell V Power, for example), with no need for additives.





Jaguar Engine Building at Crosthwaite & Gardiner







Jaguar LWE Engines



Jaguar LWE engine - iron block, carbureted, wet sump

Complete replacement engine using original iron cylinder block

ENGJAGLWE-1

Specification includes:
Wide Angle cylinder head
High lift camshafts
48 DCOE carburettors
Full refurbishment of customer's cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Wet sump lubrication system
Lightweight steel flywheel
Alloy water pump

Jaguar LWE engine - iron block, carbureted, dry sump

Complete replacement engine using original iron cylinder block

ENGJAGLWE-2

Specification includes:
Wide Angle cylinder head
High lift camshafts
48DCOE carburettors
Full refurbishment of customer's cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Dry sump lubrication system
Lightweight steel flywheel
Alloy water pump



Jaguar LWE engine - aluminium block, carbureted, wet sump

Complete replacement engine using all new parts

ENGJAGLWE-3

Specification includes:
Wide Angle cylinder head
High lift camshafts
48DCOE carburettors
Aluminium alloy cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Wet sump lubrication system
Lightweight steel flywheel
Alloy water pump

Jaguar LWE engine - aluminium block, carbureted, dry sump

Complete replacement engine using all new parts

ENGIAGLWE-4

Specification includes:
Wide Angle cylinder head
High lift camshafts
48DCOE carburettors
Aluminium alloy cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Dry sump lubrication system
Lightweight steel flywheel
Alloy water pump

Jaguar LWE engine - aluminium block, butterfly throttle fuel injection, dry sump

Complete replacement engine using all new parts

ENGIAGLWE-5

Specification includes:
Wide Angle cylinder head
High lift camshafts
Lucas metering unit (refurbished)
Butterfly throttle fuel injection
Aluminium alloy cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Dry sump lubrication system
Lightweight steel flywheel
Alloy water pump



Butterfly Throttle Fuel Injection

These butterfly injection assemblies are faithful to the original LWE fuel injection systems, use premium quality components throughout and are assembled by our experienced engine builders. All-new components are used in conjunction with a refurbished Lucas fuel metering unit. Fuel injection systems are only available when purchasing a complete engine.

Jaguar LWE engine - aluminium block, slide throttle fuel injection, dry sump

Complete replacement engine using all new parts

ENGJAGLWE-6

Specification includes:
Wide Angle cylinder head
High lift camshafts
Lucas metering unit (refurbished)
Slide throttle fuel injection
Aluminium alloy cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Dry sump lubrication system
Lightweight steel flywheel
Alloy water pump



Slide Throttle Fuel Injection

These slide throttle injection assemblies are faithful to the original LWE fuel injection systems, use premium quality components throughout and are assembled by our experienced engine builders. All-new components are used in conjunction with a refurbished Lucas fuel metering unit. Fuel injection systems are only available when purchasing a complete engine.



Jaguar D Type Engines



Jaguar D Type 3.4-litre engine - iron block, carbureted, dry sump Complete replacement engine using all new parts and customer's iron cylinder block ENGJAGD3.4

Specification includes:
Wide Angle cylinder head
High lift camshafts
Full refurbishment of customer's cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Dry sump lubrication system
Lightweight steel flywheel
Alloy water pump
Carburettors not included

Jaguar D Type 3.8-litre engine - iron block, carbureted, dry sump Complete replacement engine using all new parts and customer's iron cylinder block ENGJAGD3.8

Specification includes:
Wide angle cylinder head
High lift camshafts
Full refurbishment of customer's cylinder block
C&G-designed pistons
H-section connecting rods
8 weight C&G-designed crankshaft
Dry sump lubrication system
Lightweight steel flywheel
Alloy water pump
Carburettors not included



Jaguar D Type Engines







C&G Jaguar XK Wide Angle Cylinder Heads

Crosthwaite & Gardiner Wide Angle cylinder heads are being used by competitors in historic motorsport around the world. These proven race winning cylinder heads are equally suited to road use.



Each Crosthwaite & Gardiner Jaguar cylinder head begins life at one of our carefully selected UK foundries, where they are sand-cast as in period. Following this it undergoes a series of machining processes at our Sussex factory. This includes 5-axis CNC porting and the fitting of valve guides and seats. All heads are put through a rigurous inspection process using micron-accurate computer-based measuring systems, as well as the eyes of our extremely experienced team of engineers.



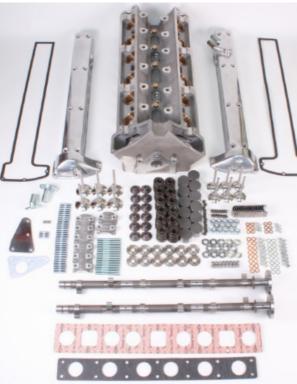
Our latest port profiles and processes have been developed using state of the art engine development software, and are thoroughly optimised for power and torque across the rev range and designed to work perfectly with our camshafts, pistons and other components. With the introduction of the latest design, we have seen proven and repeated results on our in-house engine dyno - the current Crosthwaite & Gardiner range of Jaguar cylinder heads really are the ultimate, and will truly outperform all competitors.



Jaguar XK Wide Angle Cylinder Head Kit

Crosthwaite & Gardiner Wide Angle Cylinder Head Kits comprise of a cylinder head fitted with valve seats, valve guides and tappet guides along with everything to completely assemble it, from valves and camshafts to manifold gaskets. See right for full listing - head studs and gasket not included, please see pages 12 and 25 respectively.

C1884-EASM: LWE Wide Angle cylinder head kit C1884-DASM: D Type 3.8-litre Wide Angle cylinder head kit C1884-3.4ASM: D Type 3.4-litre Wide Angle cylinder head kit



All parts available to order separately

C1884-EASM shown an C1884	id described below: W/A Cylinder Head
JAG195	Camshaft (x2)
JAG184	Cam Bearings, set
C2172-2	Cam Cap, wide (x2)
C2172	Cam Cap, Narrow (x6)
JAG213	Spring Retainer (x12)
XK1935	Spring Seat (x12)
JAG154	Valve Spring (x12)
JAG192	Inlet Valve (x6)
JAG193	Exhaust Valve (x6)
JAG123	Split Collets, pair (x12)
XK1403	Cam Follower (x12)
JAG129	Tappet Shim (x12)
JAG157	Head Nut (x14)
JAG189	Head Nut Washer (x14)
JAG281	Cam Cover Gasket (x2)
JAG147	Inlet Gasket
JAG148	Exhaust Gasket
C9803	Cam Cover, Inlet Side
C9804	Cam Cover, Exhaust Side
JAG146	Breather Tube Set
JAG330	Blanking Plate for Head
JAGLWE-55-016	Gasket for Blanking Plate
JAG168	Cam Cap Stud (x16)
JAG169	Cam Cap Dowel (x16)
5/1.5CF	Manifold Stud (x32)
5/1.75CF	Head Mounting Stud (x4)
4/1.25CF	Cam Cover Stud (x4)
4/1CF	Cam Cover Stud (x2)
B4/0.75C	Rear Cover Bolt (x4)
NNY5/F	Cam Cap Nut (x16)
N4-FH	Cam Cover Nut (x6)
N5-FH	Cam Cover Nut (x16)
5-PW	Cam Cap Washer (x16)
CWM8-16	Cam Cover Washer (x16)
CW250-562	Cam Cover Washer (x6)



Jaguar XK Wide Angle Cylinder Head Components



C1884-E LWE Wide Angle Cylinder Head (shown) C1884-D D Type 3.8-litre Wide Angle Cylinder Head C1884-3.4 D Type 3.4-litre Wide Angle Cylinder Head All come fitted with valve seats, guides and tappet guides



XK100-3: W/A head, alloy block XK100-2: N/A head, alloy block JAG336: W/A head, iron block JAG395: N/A head, iron block



JAG157 Cylinder Head Nut



JAG189 Washer for Cylinder Head Nut



Cam Cover - inlet side



Cam Cover - exhaust side



Cam Cover Breather Tubes Set



JAGLWE-55-005 Hose Linking Cam Covers



Jaguar XK Wide Angle Cylinder Head Components



JAG194

Camshaft .4375 lift

For use in D-type and Road going E-type engines, the Cam profile is optimised for low end torque and driveability. Operating on a smaller base circle and with less aggressive ramps, the cam can easily be accommodated without cylinder head modification to bucket mildes.

JAG195

High Lift Camshaft - Inlet or Exhaust

C&G's High lift race camshaft was carefully developed in house to offer exceptional mid-range torque without sacrificing top end power. With the increase in mid-range torque, the Cam creates an engine that's very driveable, with smooth power delivery exactly where you need it. As such, this Cam is equally suited to fast road engines as it is full on race engines.



JAG184 Cam Bearings







Jaguar XK Wide Angle Cylinder Head Components



JAG154 Valve Spring



JAG192 Inlet Valve



JAG193 Exhaust Valve



JAG123 Split Collets for Valves



XK1403-2 - 1 5/8", D Type XK1403-4 - 44mm, LWE Cam Follower



JAG129 Tappet Shim



5/1.5CF Manifold Stud



C19043 Cylinder Head Rear Blanking Plug



JAG330 Cylinder Head Blanking Plate



C2153-1 Rev Counter Drive for Cambox



C19044 Rev Counter Drive O Ring



C2428 Rev Counter Drive Oil Seal



Jaguar XK Carburation

Crosthwaite & Gardiner inlet manifolds are all produced using aluminium alloy castings from our carefully seleced UK foundries. These fine castings are produced using period-correct sandcasting methods and are formed using only the finest aluminium alloys available. Using these castings, we CNC machine the flanges, threads and use our CNC porting techniques to ensure that they feature optimum flow characteristics.

LWE



XK1834-45E 45DCOE Inlet Manifold

XK1834-48E 48DCOE Inlet Manifold



XK1834-45E-ASM 45DCOE Inlet Manifold Assembly

XK1834-48E-ASM 48DCOE Inlet Manifold Assembly

D Type



XK1834-7453 45DCO3 Inlet Manifold, 7 degree

XK1834-745E 45DCOE Inlet Manifold, 7 degree



XK1834-7453-ASM 45DCO3 Inlet Manifold Assembly, 7 degree

XK1834-745E-ASM 45DCOE Inlet Manifold Assembly, 7 degree



Jaguar LWE Fuel Injection Carburation

LWE



C20189ASM Fuel Injection Angle Drive Assembly

Jaguar XK Exhaust

LWE



JAG298

Exhaust Manifolds (sold as pair) for Wide Angle Head FIA Appendix K approved - passes between engine and front

D Type



JAGD-55-011

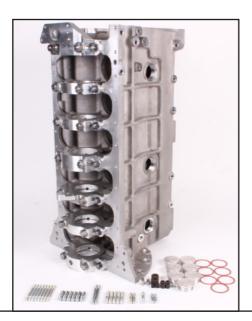
Exhaust Manifold for Wide Angle Head



JAG273 Exhaust Downpipe



Jaguar XK Engine Components



XKC1636D (dry sump) XKC1636W (wet sump) Alloy Cylinder Block

Crosthwaite & Gardiner aluminium alloy cylinder blocks are cast from the finest mateerials, at carefully selected UK foundries. Once cast, they are transported to Crosthwaite & Gardiner's historic Sussex factory for machining, liner fitting, line-boring and honing. Our blocks come complete with liners and core plugs as well as studs, caps, washers and nuts for the main bearing. Unlike the original alloy blocks found in the Light Weight E Type, Crosthwaite & Gardiner blocks are compatible with wet sump lubrication, and weigh less than half the iron equivalent. Each one undergoes stringent inspection processes throughout its manufacture to ensure that the finished article is utterly perfect.



JAG255 Cylinder Liner for Aluminium Block



JAG327 Cylinder Liner for Iron Block



JAG295L (dry sump) JAG295S (wet sump) 8 Weight Crankshaft

Crosthwaite & Gardiner designed crankshafts are suitable for both wet and dry sump engines. Machined from EN408 billet, hardened, tempered and finally nitrited, they exhibit superior balance characteristics and strength over the standard item.



Jaguar XK Engine Components



Pistons

Crosthwaite & Gardiner lightweight pistons are designed inhouse and optimised to work flawlessly with our cylinder heads, with which they achieve a compression ratio of either 10.7:1 or 10:1. Consulting with a championship winning F1 engine designer and using the latest CAD tools, C&G were able to refine the crown shape to reduce detonation and optimise the 'squish' region. These pistons are produced from our own forge tool by the UKs leading piston manufacturer, ensuring the highest possible quality is achieved.

JAGXK-55-005

84mm Piston with Rings & Pin (Standard Height)

JAGLWE-55-041

87mm Piston with Rings & Pin (Standard Height)

JAGLWE-55-026

88mm Piston with Rings & Pin (Short Compression Height)

JAGLWE-55-036

88mm Piston with Rings & Pin (Standard Height)

JAGXK-55-010

83mm Piston with Rings & Pin (Standard Height)

JAGLWE-55-397

84mm Piston with Rings & Pin (Standard Height)

JAGLWE-55-026-R

88mm Piston Ring Set

IAGLWE-55-041-R

87mm Piston Ring Set

Con-Rods

Crosthwaite & Gardiner designed connecting rods are of H-section format and crafted from the finest forged steel by the UKs leading manufacturer. Small ends are thoroughly optimised to our design and each rod comes complete with ARP fastening hardware. Additionally, we offer a 'long' rod, which can be used exclusively with piston number JAGLWE-55-026. By engineering the rod and piston as an exclusive pair, design improvements were made which improve cranktrain geometry and reduce acceleration loads, resulting in increased engine performance.

JAG141

Connecting Rod, long

JAG145

Connecting Rod, standard length

Bearing Shells

Crosthwaite & Gardiner offer a full selection of Jaguar shells and thrust washers, including oversize thrusts for worn cranks. Wide and narrow rear main bearings are also available. All C&G blocks and cranks are manufactured to accommodate the narrow shell, as per period Jaguar competition engines. The narrow shell allows the rear crank web to be strengthened, a known area of weakness.

JAG216

Main Bearings

JAG217

Big End Bearings

JAG218

Thrust Washers



Jaguar XK Engine Components



JAG218 Thrust Washers



JAG170L Rattler Damper, dry sump



JAG170S Rattler Damper, wet sump



C5896 (8 weight crank) C5896CG (12 weight crank) Crank Damper Bolt



C34064 Crankshaft Damper Distance Piece - Wet Sump



C2305 Screwed Core Plug - Front, D Туре



C2157 Screwed Core Plug - Rear, D Туре



JAGLWE-55-055 Hydraulic Damper



Jaguar XK Engine Timing Components



C29369 Timing Pointer



JAGLWE-55-017 Timing Pointer, for use with rattler dampers



JAG198-106 Timing Chain for WA Head - 106 Link



JAG198-108 Timing Chain for WA Head - 108 link



JAG199 Timing Chain - Bottom



C10332 Hydraulic Tensioner



C24686 Camshaft Sprocket



C25275 Idle Sprocket



C2170 (wet sump) C29330 (dry sump) Crankshaft Sprocket



XK1487 Chain Guide



C20397 Lock Tab for Timing Chain Guide



C2310 Camshaft Sprocket Retaining Screw



C8646 Distributor Drive Shaft



C8647 Distributor Drive Shaft Bush



C2152 Distributor Drive Gear



UFN256-L Half Nut for Distributor Drive Shaft



Jaguar XK Engine Timing Components



C2151 Tab Washer for Distributor Drive Shaft



C2393 Washer for Distributor Drive



Key for Distributor Drive Shaft



Jaguar XK Water Pump & Drive



Crosthwaite & Gardiner lightweight alloy water pumps feature several advantages over the period items. Not only is a great deal of weight saved with the use of alloy (original items were only available in iron), but the alloy material also provides much better corrosion resistance. Along with this benefit, Crosthwaite & Gardiner water pumps feature fully sealed bearings for much improved service life and longevity.

XK5299

Alloy Water Pump, LWE (pictured)

XK1551

Alloy Water Pump, D Type

LWE



JAG394 Water Pump Replacement Seal



JAG130 Water Pump Bearing



XK5747 Water Pump Pulley (magnesium also available)



XK5773 (without damper) XK5773-F (with damper) Crankshaft Pulley



C23158 Tab Washer - Crank Pulley



C2468 (8 weight crank) C2468CG (12 weight crank) Crank Pulley Washer



JAG124 Impellor for Water Pump



JAG250 Flange for Water Pump Pulley



Jaguar XK Water Pump & Drive

D Type



JAG131 Water Pump Pulley



JAG325 Crank Pulley



JAG331 Water Pump Belt



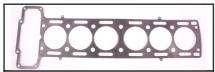
JAG251 Flange for Water Pump Pulley



JAG124 Impellor for Water Pump



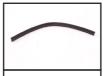
Jaguar XK Gaskets and Seals



JAG393-0.050

Head Gasket - Wide Angle head

Multi-layered steel head gasket produced by Cometic to C&G design



C36499

Rubber seal for rear of sump



C2303 Water Pump Gasket



JAG281

Cam Cover Gasket



JAG269

Oil Filter to Block Gasket



JAG262 (wet sump) JAG158 (dry sump) Front Main Oil Seal





C19654

Rear Main Rope Seal



JAG363 Rear Lip Seal (for use with XK3620-L)



JAG148

Exhaust Gasket For Wide Angle Head



C16319 LWE/D dry sump JAG247 wet sump Sump Gasket



XK3662

Oil Pipe Flange Gasket, LWE dry sump



Jaguar LWE Dry Sump Kit

For alloy block with alloy sump:

For alloy block with magnesium sump:

For iron block with alloy sump:

JAG317-AB
JAG317-AB-M
JAG317-I
For iron block with magnesium sump:

JAG317-I-M

Jaguar LWE Dry Sump Kit comprises:

C1342-A Sump - aluminium (magnesium optional - C1342-M)

XK3631 Front Timing Cover
XK3652-L Gear - oil pump
XK3718 Drive Shaft - oil pump
XK3617ASM Scavenge Pump - rear
XK3920ASM Oil Pump - front

XK3620-R Housing - rear rope oil seal

XK3620-L Housing - rear lip oil seal (optional)

XK3662 Gasket - oil pipe flange
JAG275 O Ring - oil pump
JAG338 Scavenge Pipe - front
JAG339 Scavenge Pipe - rear
JAG340 Scavenge Pipe - side

JAG322 Breather

JAG248 Boss - dry sump external pipe JAG248A Outlet Boss - dry sump external pipe JAG253ABDS Oil Delivery Pipe - alloy block

JAG321 Oil Pipe- inlet

JAG242 Inspection Plug JAG237 Sump Drain Plug JAG247 Sump Gasket - pair

CH5/1.25C Caphead CH5/0.75C Caphead 5/1.5CF Stud

0460-16x22Copper Washer - sump plug0460-42x49Copper Washer - sump inspection



Jaguar LWE Dry Sump Kit

Crosthwaite & Gardiner LWE Dry Sump Kits are manufactured using the original factory drawings, feature all new components and comprise of one pressure and two scavenge pumps. The improved flow and higher delivery pressure over the standard wet sump system results in enhanced reliability and longer engine life, particularly under race conditions.



All parts available to order separately



Jaguar XK Engine - Oil System



XK3620-RSW (wet sump) XK3620-RSD (dry sump) Rear Oil Seal Housing - Rope Seal



XK3620-L Rear Oil Seal Housing - Lip Seal



JAG149S Oil Filter Base - spin-on filter. Use OC275 filter



JAG149A Oil Filter Base - canister filter. Use JAG376 filter



JAG386 Oil Filter Head for Oil Cooler. Use JAG140 filter



OC275 Oil Filter, spin-on type



JAG376 Oil filter Bowl Assembly



JAG140 Oil Filter, spin-on type



JAG254(KIT) - alloy block JAG349(KIT) - iron block Braided Cam Oil Feed Pipe Kit



JAG361 Oil Pressure Take Off Union



C5846L Banjo Bolt, Oil Feed to Head



JAG178 Oil Feed Banjo Stud



JAG173 Dome Nut - oil feed



C2352 Side Oil Gallery Plug



C15867 Oil Filter Flange Core Plug



C15867 Oil Filter Flange Core Plug

Jaguar LWE Specific Oil System

Wet Sump



C24457

Sump Pan

Crosthwaite & Gardiner prides itself on the ability to offer an authentic reproduction of the original Jaguar E Type sump. Produced in cast aluminium which is machined to stringent tolerances and thoroughly inspected throughout the production process.

JAG358 Sump Baffle

C23435 Sump Drain Plug

C16752 Sump Oil Strainer

link pipe form filter

JAG253ABWS Oil Delivery Pipe



JAG-55-395 Dipstick for Oil



Jaguar LWE Specific Oil System

Dry Sump



Jaguar D Type Specific Oil System



C9209 Sump, Main Part



C9660 Sump Pan



JAGASM118 Pressure Pump



JAGASM117 Scavenge Pump



C9189 Front Main Bearing Cap



C9189-BD Front Main Bearing Cap - Big Dowel



JAGASM102 Cross Shaft Gear Assembly



C9237 Cross Shaft



C9238 Drive Gear with Square Hole



Cross Shaft Gear, Bronze



Breather Body and Tube



JAG111 Oil Connector Block



Gaskets for Jaguar D Type Dry Sump Kit

JAG100: Sump to pan JAG103: Scavenge pump to sump outer (shown) JAG103-1: Scavenge pump to

sump, inner JAG104: Pressure pump to sump,

JAG104-1: Pressure pump to sump, inner

JAG105: Breather to sump C16319: Sump to block



Image Not Available

JAG294

D Type Complete Dry Sump Kit

All parts above (either small or big dowel Front Main Bearing Cap) supplied with all neccessary studs, bolts and gaskets

Jaguar XK Electrical Components

Manufacturing and building distributors is not for the light-hearted: it takes a great deal of expertise. When Crosthwaite & Gardiner decided to involve itself in the manufacture of recreated Lucas 23D distributors, they had to be perfect; the Crosthwaite & Gardiner design comprises of needle roller lower pearings and ballrace upper bearings for highly accurrate spindle location and long life. A high quality externally-mounted condenser gives greater reliablility, while double points springs safeguard against bounce at high engine speeds.





23D6 23D6 Distributor Assembly



LUC-90-032 Distributor Cap



LUC-90-041 Points Set



DRB106C Rotor Arm



LUC-90-027 Condenser



DLB105 Lucas Sports Coil



JAG320 Plug Lead Set



B7ECS Spark Plug



Model-Specific Electrical Components

LWE



JAGLWE-90-397 Alternator Kit - 65A

The contemporary alternator makes for a practical, reliable enhancement to a classic Jaguar whether for racing for or the road. For those wanting to keep the original look, we also produce Dynator kits - internally these are the very same as an alternator but with the classic appearance of a dynamo, perfect for keeping a period look.



Alternator Belt - 1050mm



JAGLWE-90-390 Dynator Kit - 65A

D Type



Junction Box - 4 way



JAGD-90-398 HT Lead Seperator & Bracket



Jaguar LWE Transmission



Lightweight Steel Flywheel - to suit 7.25" clutch



JAG391 7.25" Triple Plate Clutch



JAGLWE-55-031 Flywheel 9" single plate clutch



JAG252 Magnesium Bell Housing



JAG350 Release Bearing



C4810 Flywheel Locking Plate



C4855 Flywheel Retaining Screw



C2313 Flywheel Dowel



Jaguar LWE Transmission



C20019 Magnesium Gearbox Casing



JAG350 Release Bearing



C4810 Flywheel Locking Plate



C4855 Flywheel Retaining Screw



C2313 Flywheel Dowel



Jaguar LWE Differential



4HU-004-25MASM (magnesium) 4HU-004-25AASM (aluminium) LWE Differential Case & Cover

Jaguar LWE differential case and cover cast in magnesium, weighing approximately 6.5kg - this is for serious racers.

Our aluminium case and cover assembly weights 11kg and is better suited to road use.



JAG353 Aluminium LSD

Lightweight but heavy duty limited slip differential produced by Gripper with 40/65 ramp angles as standard. Customer-specified ramp angles can also be catered for. Please note that some final drive ratios require a different carrier to be fitted to the differential.



Rear Trunnion Bracket





GEARBOX & BELL D-TYPE Gearbox Assembly Jaguar D-Type



Jaguar D Type Clutch & Flywheel



JAG-80-392 Cerametallic Clutch, Flywheel & Ring Gear Assembly - road use JAG-55-393: Flywheel JAG-55-394: Ring Gear CP7382-OH80-SF: Clutch Kit CP8400-A-004: Clutch Plate



JAG142ASM Sintered Clutch, Flywheel & Ring Gear Assembly - race use JAG142: Flywheel JAG143: Ring Gear JAG347: Clutch Kit JAG348: Clutch Plates



C9285 Bell Housing



JAGD-90-002 Starter Motor



JAG234 Release Bearing & Carrier for 7.25" Clutch



C8543 Cover for Input Shaft



Clutch Operation

C9273: Clutch operating shaft C3261: Clutch operating lever C568: Taper bolts for clutch fork & lever

C9780: Clutch operating fork



Jaguar D Type Clutch & Flywheel



LMS030AX Jaguar D Type Axial Starter Motor





JAG370 Plessey Pump Gear



Locating Screw and Washer for Clutch Shaft



C359 Setscrew and Washer for Front Cover



Taper Bolt for Clutch Fork and Lever



C584 Bronze Bush for Clutch



Fulcrum Pin Nut with Washer & Splitpin



C799 Gearbox Drain Plug



C840 Nut and Pin for Mainshaft



C845 Spring for Detent Plunger



C848 Detent Plunger - 3rd, 4th and reverse



Locking Plate Lay and Reverse Shafts



C859 Oil Seal for Mainshaft, Rear



C866 Reverse Slipper with Washer and Pin



C874 Roller for Interlock



Springs for 3rd and 4th Synchro Balls and Reverse Plunger Pin



C905 Change Speed Selector for 3rd and 4th



C910 Speedo Driving Gear



C918 Needle Roller for Layshaft and 1st & 2nd mainshaft gear



C922 Balls for 3rd & 4th Synchro and Reverse Plunger



C923 Balls for Interlock



C924 Ballrace for Tail Cover



C925 Washer



C927 Interlock Plug



C1838 Ballrace for Input Shaft



C1841 Ballrace Outer Spacer



C1850 Needle Roller, 3rd Gear



C1859 Outer Front Thrust Washer Layshaft with Peg



C1864 Spacer for Layshaft Needles, rear



C1894 Thrust Washer for Pivot Jaw



C1899 Fulcrum Pin Reverse Gear Operating Lever



C1905 Pivot Jaw Spring Washer



C1908 Thrust Washer for Selector Lever



C1909 Reverse Plunger Pin and Split Pin



C1910 Change Speed Selector for Reverse



C1912 Pivot Pin with Nut and Split Pin



C1914 Pivot Jaw Lockwasher



C1929 Pivot Jaw Spring Washer



C2043 Spacer for Layshaft Needles, Front



C2066 Locknut for Input Shaft



C2067 Circlip for Input Shaft Locknut



C2121 Oil Thrower for Input Shaft



C3261 Clutch Operating Lever



C3383 Reverse Gear Bush



C4049 Operating Sleeve, 3rd & 4th



C4120 Top Speed Driving Member



C4122 Synchro Sleeve 3rd & 4th



C6661 U Joint Flange for Mainshaft



C6738 Oil Seal for Input Shaft



C7166 Breather Elbow and Lockout



C7309 Bolt for Lid



C7310 Bolt for Lid



C10753 Lid for Gearbox



C8835 Thrust Washer for Front Layshaft



C9431 Input Shaft



C9432 Spigot Bearing for Input Shaft



C9433 Mainshaft



C9435 Mainshaft Roller Bearing



C9436 Thrust Washer for Mainshaft



C9438 Mainshaft Third Gear



C9439 Mainshaft Third Gear Driving Member



C9440 Mainshaft Second Gear



C9441 Mainshaft First Gear



C9442 Mainshaft First & Second Driving Centre Hub



C9443 Mainshaft First & Second Bronze Synchro Sleeve





C9444 Mainshaft First & Second Operating Sleeve Inner



C9445 Operating Sleeve Outer, First & Second



Operating Sleeve Pins, First & Second



C9447 Snap Ring, First and Second Synchro



C9448 Mainshaft Reverse Gear



C9449 Pick Up Ring for Oil



C9450 Cam for Oil Pump



C9451 Driving Gear for Brake Pump



C9454 Oil Supply Ring



C9455 Layshaft incorporating First & Reverse Gears



C9456Fourth Gear for Layshaft



C9457 Third Gear for Layshaft



C9458 Second gear for layshaft



C9460 Thrust Washer for Rear of Layshaft



C9463 Layshaft Spindle



C9464 Spindle for Reverse Gear



C9465 Reverse Gear



C9467 Reverse Gear Operating Lever



Tail Cover for Gearbox



C9471 Brake Pump Driven Gear



C9472 Bush for Brake Pump Driven Gear



C9474 Adaptor Plate for Brake Pump



C9475 Oil Seal for Pump Gear



C9476 Stud for Brake Pump



C9480 Pump Plunger Assembly

C9485: Spring (external) C9479: Body C9487: Spring (internal) C9819: Ball



C9488 Blanking Plug for Oil Cap



C9492 Striking Rod, First & Second



C9494 Selector Fork, First & Second



C9495 Selector Fork, Reverse



C9496 Spring for Reverse Plunger



C9498 Gear Lever Knob



C9499 Gear Lever Pivot Jaw



C9712 Inner Rear Thrust



C9896 Gearbox Extension



C9915 Front Plug for Mainshaft



C9924 Cap Screw for Gearbox Extension



C9925 Stud for mounting Tail Cover



C10030 Rear Plug for Mainshaft



C10048 Thrust Washer for Mainshaft Spigot



Spacer for Layshaft between Third & Fourth



C10726 Spacer Adjuster for Layshaft



Circlip for Layshaft Spacer & Adjuster



Interlock Plunger for First and Second Synchro



Selector Fork, Third & Fourth



C10750 Bush for Speedo Driven Gear



C10751 Driven Gear for Speedo



C10917 Spacer for Mainshaft



C10918 Retaining Ring for Roller Bearing



C10972 Split Ring for Layshaft Fourth



Spring for First & Second Interlock Plunger



C11614 Interlock Pivot Pin & Nut



C11617 Plug & Nut for Outer Detent Spring



C11618 Interlock Detent Plunger, First & Second



C11619 Interlock Base Plate



C11620 Interlock Operating Lever



C11621 Interlock Retaining Plate



C11631 Coverplate for Selector Shafts



C11643 Stud for mounting Tail Cover



CS125 Blanking Screw & Washer for Layshaft



FB504 Selector Plate Screw



Locking Plate Screw



NB519 Selector Plate Screw



JAG396 Plessey Pump



C11680 Stop Pin



C12434 Plug for Gearbox Extension



Chassis



JAGLWE-95-001L (left hand) JAGLWE-95-001R (right hand) LWE Wheel Spinner



JAGD-95-001 Dunlop Wheel



