



Land Rover Parts & Accessories

# accessories

## BEARMACH WORKSHOP & TUNING

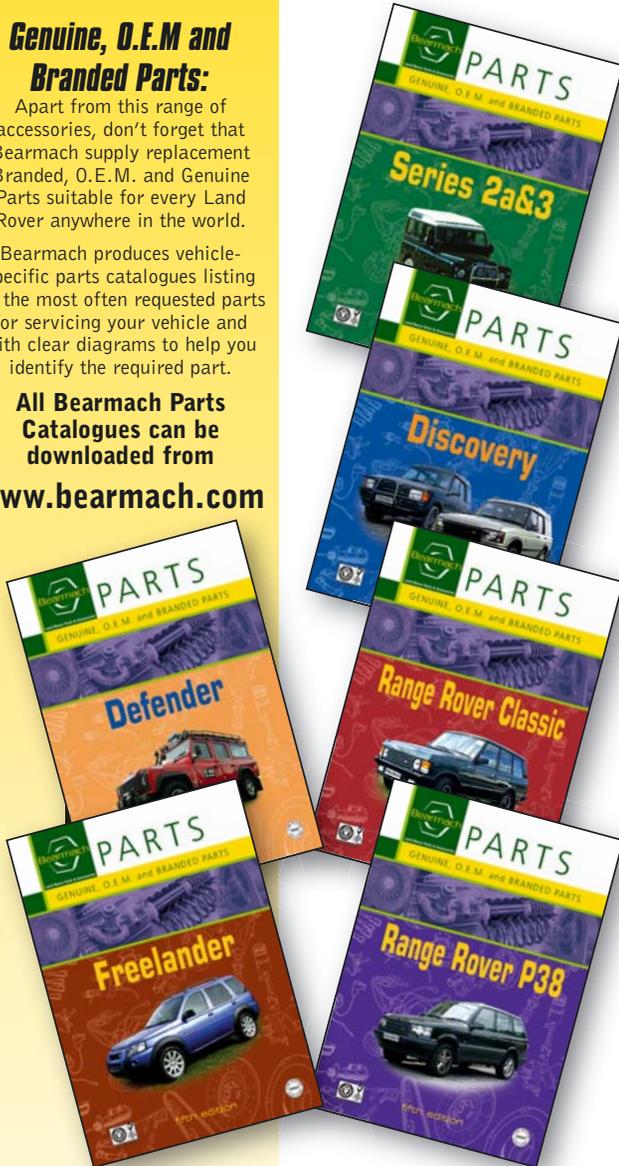
### Genuine, O.E.M and Branded Parts:

Apart from this range of accessories, don't forget that Bearmach supply replacement Branded, O.E.M. and Genuine Parts suitable for every Land Rover anywhere in the world.

Bearthmach produces vehicle-specific parts catalogues listing all the most often requested parts for servicing your vehicle and with clear diagrams to help you identify the required part.

**All Bearmach Parts Catalogues can be downloaded from**

**[www.bearthmach.com](http://www.bearthmach.com)**



**B**earthmach's reputation has been built on supplying every conceivable part for every Land Rover for fifty years.

So we obviously know a thing or two about what is required in the workshop to make life easier not just for the professional service manager but also the home mechanic.

First of all we have put together some really useful Service Kits which contain all the essential items for a basic service. Then we have a full range of diagnostic equipment to help with modern engines' ECU analysis. And make sure you don't miss Bearmach's very own Nanocom unit.

There's an advanced range of axle and differential equipment and finally a library full of Workshop Manuals and books to help guide you through the intricacies of Land Rover maintenance.

*NOTE: Manufacturers parts numbers are used for reference purposes only.*



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# BEARMACH PARTS SERVICE KITS

Parts and Accessories suitable for All Land Rovers from BEARMACH Ltd

Bearmach make it easier for you to get the right collection of parts together for basic service tasks. Each kit contains all you need to complete a quick efficient service. All parts are OEM or specialised Bearmach parts. If your vehicle isn't listed here contact your Bearmach supplier for expert advice.



## SERIES SERVICE KITS

### BK 0053

2½/4 Petrol from 1964  
Fixed Points Ignition (Lucas)

Kit contains:		
Item	LR No.	Qty
Oil filter	RTC3184	x1
Fuel filter (inline)	606168	x1
Spark plugs	RTC3570	x4
Points (fixed)	RTC3270R	x1
Condensor	RTC3472	x1
Sump plug washer	243959	x1

### BK 0054

2½/4 Petrol from 1964  
Sliding Points Ignition (Lucas)

Kit contains:		
Item	LR No.	Qty
Oil filter	RTC3184	x1
Fuel filter (inline)	606168	x1
Spark plugs	RTC3570	x4
Points (sliding)	RTC3288R	x1
Condensor	RTC6621	x1
Sump plug washer	243959	x1

### BK 0055

2½/4 Petrol from 1964  
Ducellier Ignition

Kit contains:		
Item	LR No.	Qty
Oil filter	RTC3184	x1
Fuel filter (inline)	606168	x1
Spark plugs	RTC3570	x4
Points	RTC6625	x1
Condensor	RTC6620	x1
Sump plug washer	243959	x1

## DEFENDER SERVICE KITS

### BK 0010

DEFENDER 2½/2 Petrol  
7:1 Compression ratio

Kit contains:			
Item	LR No.	Qty	
Oil filter	ERR3340R	x1	
Air filter	NRC9238R	x1	
Fuel filter	JS660LR	x1	
Spark plugs	RTC3571	x4	
Sump plug washer	243959	x1	
or	FRC4808	x1	

### BK 0011

DEFENDER 2.5 Turbo Diesel

Kit contains:			
Item	LR No.	Qty	
Oil filter	ERR3340R	x1	
Air filter	NRC9238R	x1	
Fuel filter	RTC6079	x1	
Sump plug washer	FRC4808	x1	

### BK 0012

DEFENDER 200 TDi

Kit contains:		
Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filter	NTC6660R	x1
Fuel filter	AEU2147LR	x1
Sump plug washer	213961L	x1
or	ETC7398	x1

### BK 0013

DEFENDER 300 TDi

Kit contains:		
Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filter	ESR2623R	x1
Fuel filter	AEU2147LR	x1
Sump plug washer	UAM2857L	x1
or	ALU1403L	x1

### BK 0014

DEFENDER TD5

Kit contains:		
Item	LR No.	Qty
Oil filter	LPX100590R	x1
Air filter	ESR4238R	x1
Rotor Filter	ERR6299	x1
Fuel filter	ESR4686R	x1
Sump plug washer	CDU1001L	x1



## DISCOVERY SERVICE KITS

### BK 0015

DISCOVERY 200 TDi to VIN JA018272

Kit contains:	LR No.	Qty
Item		
Oil filter	ERR3340R	x1
Air filter	NTC1435R	x1
Fuel filter	AEU2147LR	x1
Sump plug washer	213961L	x1

### BK 0016

DISCOVERY 200 TDi from VIN JA018273

Kit contains:	LR No.	Qty
Item		
Oil filter	ERR3340R	x1
Air filter	ESR1049R	x1
Fuel filter	AEU2147LR	x1
Sump plug washer	213961L	x1

### BK 0017

DISCOVERY 300 TDi

Kit contains:	LR No.	Qty
Item		
Oil filter	ERR3340R	x1
Air filter	ESR1445R	x1
Fuel filter	AEU2147LR	x1
Sump plug washer	UAM2857L	x1
or	ALU1403L	x1

### BK 0018

DISCOVERY 3.5 EFI

Kit contains:	LR No.	Qty
Item		
Oil filter	ERR3340R	x1
Air filter	RTC4683R	x1
Fuel filter	ESR4065R	x1
Sump plug washer	213961L	x1
Spark plugs	ERR3799	x8

### BK 0019

DISCOVERY V8 3.9 EFI

Kit contains:	LR No.	Qty
Item		
Oil filter	ERR3340R	x1
Air filter	ESR1445R	x1
Fuel filter	ESR4065R	x1
Sump plug washer	ETC7398	x1

### BK 0014

DISCOVERY 2 TD5

Kit contains:	LR No.	Qty
Item		
Oil filter	LPX100590R	x1
Air filter	ESR4238R	x1
Rotor filter	ERR6299	x1
Fuel filter	ESR4686R	x1
Sump plug washer	CDU1001L	x1

### BK 0031

DISCOVERY 2 V8 4.0

Kit contains:	LR No.	Qty
Item		
Oil filter	ERR3340R	x1
Air filter	ESR4238R	x1
Spark plugs	NLP100320	x8
Sump plug washer	ALU1403L	x1

### BK 0063

DISCOVERY 3  
2.7 Diesel to 6A Chassis

Kit contains:	LR No.	Qty
Item		
Oil Filter	1311289	x1
Air Filter	PHE000112R	x1
Cabin Filter	JKR500010	x1
Fuel Filter	LR007311	x1
Gasket	1005593	x1

### BK 0064

DISCOVERY 3  
2.7 Diesel from 7A Chassis

Kit contains:	LR No.	Qty
Item		
Oil Filter	1311289	x1
Air Filter	PHE000112R	x1
Cabin Filter	JKR500010	x1
Fuel Filter	WJ1500020	x1
Gasket	1005593	x1

### BK 0065

DISCOVERY 3  
4.0 Petrol to 5A Chassis

Kit contains:	LR No.	Qty
Item		
Oil Filter	4454116	x1
Air Filter	PHE000112R	x1
Cabin Filter	JKR500010	x1
Spark Plug	4585576	x6
Gasket	1005593	x1

### BK 0066

DISCOVERY 3  
4.0 Petrol from 6A CHASSIS

Kit contains:	LR No.	Qty
Item		
Oil Filter	4454116	x1
Air Filter	PHE000112R	x1
Cabin Filter	JKR500010	x1
Spark Plug	LR000604	x6
Gasket	1005593	x1

### BK 0068

DISCOVERY 3 - 4.4 Petrol

Kit contains:	LR No.	Qty
Item		
Oil Filter	4508334R	x1
Air Filter	PHE000112R	x1
Spark Plug	LR005253	x8
Cabin Filter	JKR500010	x1
Gasket	1005593	x1



## FREELANDER SERVICE KITS

### BK 0032

#### FREELANDER

1.8 Petrol to VIN YA999999

**Kit contains:**

Item	LR No.	Qty
Oil filter	CDU1268R	x1
Air filter	ESR4103R	x1
Pollen filter	JKR100200	x1
Sump plug washer	ALU1403L	x1
Spark plugs	NLP100290L	x4

### BK 0033

#### FREELANDER

1.8 Petrol from VIN 1A000001

**Kit contains:**

Item	LR No.	Qty
Oil filter	CDU1268R	x1
Air filter	ESR4103R	x1
Pollen filter	JKR100280	x1
Sump plug washer	ALU1403L	x1

### BK 0034

#### FREELANDER 2.0 Diesel TCiE

**Kit contains:**

Item	LR No.	Qty
Oil filter	ERR5542R	x1
Air filter	ESR4103R	x1
Fuel filter	WJN100460R	x1
Pollen filter	JKR100200	x1
Sump plug washer	ALU1403L	x1

### BK 0020

#### FREELANDER TD4 to VIN 2A209830

**Kit contains:**

Item	LR No.	Qty
Oil filter	LRF100150L	x1
Air filter	PHE100500L	x1
Fuel filter	MUN000010R	x1
Pollen filter	JKR100280	x1
Sump plug washer	ALU1403L	x1

### BK 0021

#### FREELANDER TD4

from VIN 2A209831

**Kit contains:**

Item	LR No.	Qty
Oil filter	LRF100150L	x1
Air filter	PHE100500L	x1
Fuel filter	WJN000080R	x1
Pollen filter	JKR100280	x1
Sump plug washer	ALU1403L	x1

### BR 0056

#### FREELANDER 2 - 2.2 Diesel

**Kit contains:**

Item	LR No.	Qty
Oil Filter	LR001247	x1
Air Filter	LR005816	x1
Fuel Filter	LR01313	x1
Cabin Filter	LR000899	x1
Cabin Filter	LR000901	x1
Gasket	LR006295	x1

### BK 0057

#### FREELANDER 2 - 3.2 Petrol

**Kit contains:**

Item	LR No.	Qty
Oil Filter	LR001419	x1
Air Filter	LR005816	x1
Spark Plug	LR005483	x6
Cabin Filter	LR000899	x1
Cabin Filter	LR000901	x1
Washer	LR000506	x1

*Don't forget - Bearmach stocks EVERY part for EVERY Land Rover.*

*So if your vehicle needs more than a basic service - contact your nearest Bearmach stockist for ALL your Land Rover needs.*

## RANGE ROVER SERVICE KITS

### BK 0035

#### RANGE ROVER 3.5 V8 1970 - 1975

**Kit contains:**

Item	LR No.	Qty
Oil filter	RTC3186R	x1
Air filters	605191	x2
Fuel filter	JS660LR	x1
Spark plugs	RTC3573	x8
Flame traps	603330	x2
Points (fixed)	RTC6623	x1
Condensor	RTC3472R	x1
Sump plug washer	213961L	x1

### BK 0022

#### RANGE ROVER 3.5 V8 1975 - 1982

**Kit contains:**

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	605191	x2
Fuel filter	JS660LR	x1
Spark plugs	RTC3573	x8
Flame traps	603330	x2
Points (fixed)	RTC6623	x1
Condensor	RTC3472R	x1
Sump plug washer	213961L	x1

### BK 0023

#### RANGE ROVER 3.5 V8 1982 - 1983

**Kit contains:**

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	605191	x2
Fuel filter	JS660LR	x1
Spark plugs	RTC3570	x8
Flame traps	603330	x2
Points (sliding)	RTC6623	x1
Condensor	RTC3472R	x1
Sump plug washer	213961L	x1

### BK 0036

#### RANGE ROVER 3.5 V8 1984 - 1986

**Kit contains:**

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	605191	x2
Fuel filter	JS660LR	x1
Spark plugs	RTC3570	x8
Flame traps	603330	x2
Sump plug washer	213961L	x1

### BK 0024

#### RANGE ROVER 3.5 V8 carb

1986 - 1991

**Kit contains:**

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	605191	x2
Fuel filter	JS660LR	x1
Spark plugs	RTC3812	x8
Flame traps	603330	x2
Sump plug washer	213961L	x1

### BK 0037

#### RANGE ROVER 3.5 and 3.9 Efi V8

1986 - 1991 to GA464553

**Kit contains:**

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	RTC4663R	x1
Fuel filter	NTC5958R	x1
Sump plug washer	213961L	x1



**RANGE ROVER**  
**SERVICE KITS** CONTINUED**BK 0045**RANGE ROVER 3.9 Efi V8 1986 -  
1994 from HA464554 to LA647644

## Kit contains:

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	RTC4683R	x1
Fuel filter	ESR4065R	x1
Sump plug washer	213961L	x1

**BK 0030**RANGE ROVER 3.9 Efi V8 1992 -  
1994 from MA647645

## Kit contains:

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	ESR1445R	x1
Fuel filter	ESR4065R	x1
Spark plugs	ETC7244	x8
Sump plug washer	213961L	x1

**BK 0046**

RANGE ROVER 4.2 V8 1992 - 1994

## Kit contains:

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	ESR1445R	x1
Fuel filter	ESR4065R	x1
Spark plugs	ERR3799	x8
Sump plug washer	213961L	x1

**BK 0016**

RANGE ROVER CLASSIC 200TDI

## Kit contains:

Item	LR No.	Qty
Oil filter	ERR3340	x1
Air filters	ESR1049	x1
Fuel filter	AEU2147LR	x1
Sump plug washer	213961L	x1

**BK 0017**

RANGE ROVER CLASSIC 300TDI

## Kit contains:

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	ESR1445R	x1
Fuel filter	AEU2147LR	x1
Sump plug washer	UAM2857L	x1
or	ALU1403L	x1

**BK 0038**RANGE ROVER P38 4.0 and 4.6 V8  
to TA346793 and from WA376580  
to WA385948

## Kit contains:

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filters	ESR341R	x1
Fuel filter	ESR4065R	x1
Pollen filters	BTR8037R	x2
Spark plugs	ERR3799	x8
Sump plug washer	UAM2857L	x1
or	ALU1403L	x1

**BK 0039**RANGE ROVER P38 4.0 and 4.6 V8  
from VA346794 to VA376579 and  
from WA385949

## Kit contains:

Item	LR No.	Qty
Oil filter	ERR3340R	x1
Air filter	ESR4238R	x1
Fuel filter	ESR4065R	x1
Pollen filters	BTR8037R	x2
Spark plugs	ERR3799	x8
Sump plug washer	UAM2857L	x1
or	ALU1403L	x1

**BK 0040**RANGE ROVER P38 2.5 DT to engine  
no. 33978348 to type A oil filter (Dec  
1995)

## Kit contains:

Item	LR No.	Qty
Oil filter Type A	STC2180R	x1
Air filter	ESR341R	x1
Fuel filter	STC2827	x1
Pollen filters	BTR8037R	x2
Sump plug washer	VYX000040	x1

**BK 0041**RANGE ROVER P38 2.5 DT from  
engine no. 33988348 (Dec 1995) to  
VIN TA346793 type B oil filter

## Kit contains:

Item	LR No.	Qty
Oil filter Type B	STC3350R	x1
Air filter	ESR341R	x1
Fuel filter	STC2827	x1
Pollen filters	BTR8037R	x2
Sump plug washer	VYX000040	x1

**BK 0042**RANGE ROVER P38 2.5 DT from  
engine no. 33988348 (Dec 1995) from  
VIN TA346794 type B oil filter

## Kit contains:

Item	LR No.	Qty
Oil filter Type B	STC3350R	x1
Air filter	ESR4238R	x1
Fuel filter	STC2827	x1
Pollen filters	BTR8037R	x2
Sump plug washer	VYX000040	x1

**BK 0043**

RANGE ROVER L322 3.0 diesel

## Kit contains:

Item	LR No.	Qty
Oil filter	LPZ000020	x1
Air filter	PHE000040R	x1
Fuel filter	WFL000070R	x1
Pollen filters	JM0000010R	x1
Sump plug washer	VYX000040	x1

**BK 0044**

RANGE ROVER L322 4.4 V8 M62

## Kit contains:

Item	LR No.	Qty
Oil filter	LPW000010	x1
Air filter	PHE000050	x1
Pollen filter	JM0000010R	x1
Sump plug washer	VYX000040	x1
Spark plugs	NLP000030	x8

**BK 0058**

RANGE ROVER SPORT - 2.7 Diesel

## Kit contains:

Item	LR No.	Qty
Oil Filter	1311289	x1
Air Filter	PHE000112R	x1
Fuel Filter	LR007311	x1
Cabin Filter	JKR500010	x1
Cabin Filter	JKR500020	x1
Gasket	1005593	x1

**BK 0059**

RANGE ROVER SPORT - 3.6 Diesel

## Kit contains:

Item	LR No.	Qty
Oil Filter	LR002338	x1
Air Filter	PHE000112R	x1
Fuel Filter	WJ1500020	x1
Cabin Filter	JKR500010	x1
Cabin Filter	JKR500020	x1
DRAIN PLUG	1013938	x1

**BK 0061**

RANGE ROVER SPORT - 4.2 Petrol

## Kit contains:

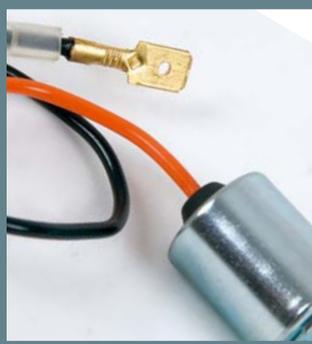
Item	LR No.	Qty
Oil Filter	4508334R	x1
Air Filter	PHE000112R	x1
Spark Plug	LR005253	x8
Cabin Filter	JKR500010	x1
Cabin Filter	JKR500020	x1
Gasket	1005593	x1

**BK 0062**

RANGE ROVER SPORT - 4.4 Petrol

## Kit contains:

Item	LR No.	Qty
Oil Filter	4508334R	x1
Air Filter	PHE000112R	x1
Spark Plug	LR005253	x8
Cabin Filter	JKR500010	x1
Cabin Filter	JKR500020	x1
Gasket	1005593	x1



# BEARMACH EQUIPMENT DIFFERENTIALS

Parts and Accessories suitable for All Land Rovers from BEARMACH Ltd



Bearmach are pleased to offer the range of transmission related products from KAM Differentials Ltd – a UK based company whose range includes traction control devices, axle half shafts, spiral and hypoid bevel gearing.

KAM Differentials has a worldwide patent on a diff locking system which has been successfully applied to many different axle types.

## KAM's Modular Axle Upgrade System.

The KAM Diff lock system is a modular solution to meet your mobility needs. The whole system has been designed so that the customer has a range of optional KAM components from strengthened half shafts, to a full diff lock system with Limited Slip Diff (LSD). KAM is the only company in the world to offer this unique application to upgrade your entire axle.



To order the KAM Diff Locker from BEARMACH quote:  
 BA 5782 - 24 spline to suit 300TDi Rear  
 BA 5783 - 24 spline to suit RR 300TDi Front  
 BA 5786 - 23 spline to suit TD5  
 BA 5789 - 32 spline to suit 300TDi



## Diff Locker Application and Mobility Advantage

Mobility is crucially important for vehicles that are being used in heavy off road applications. Most light vehicles under 6 tons do not have axle diff lockers, so the ability to double traction with a KAM diff locker is a valuable tool when fitted. The KAM system not only protects the vehicle from becoming stuck, but also increases the vehicle's ability to travel over arduous terrain when fully laden and/or towing equipment.



The requirement for a diff lock system is paramount when vehicles are to be utilised to their full potential in adverse conditions. In these situations, traction to the wheels needs to be immediate and continuous.

The reliability of the OEM axle comes into question particularly when vehicles are equipped with larger tyres, payloads or operational equipment. The KAM system addresses all these issues by not just replacing the carrier unit with a locker carrier but also with far stronger half shafts and hubs as well. If you are considering reconditioning the axle and differential unit, then the KAM system is a very cost effective way of adding extra traction to the wheels and replacing all of the internal parts in the same operation.

- Doubles Vehicle Traction
- Improved Strengthened Parts
- Improved Towing Ability
- Strategic Advantage
- LSD - Diff Locker Combination
- Push Button Operation
- Replaces Most Internal Parts
- Ideal For Reconditioning

With the KAM system installed to both front and rear axles, drive can instantly be doubled and applied evenly to all 4 wheels when the system is engaged. The vehicle may then tackle terrain - where it would normally become stuck and therefore able to take a route which other vehicles would not consider.

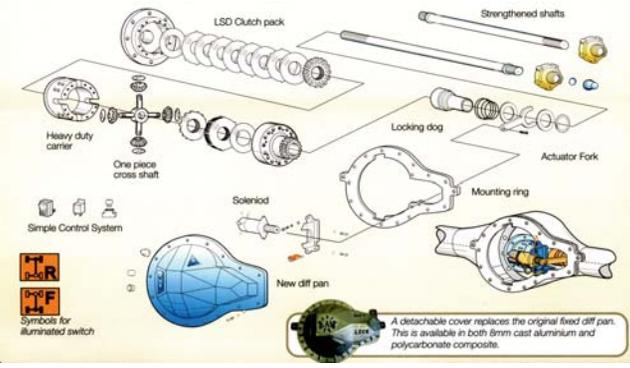
## KAM Solenoid Diff Locker + LSD Combo

The KAM Diff Lock is electrically controlled via a heavy duty solenoid located inside the diff pan. A cable runs from the solenoid to an illuminated rocker switch in the cab that engages the diff lock.

The solenoid itself is a dual coil type, electronically controlled and protected by an integral solid state commander module. A short 45 amp burst of power activates the solenoid which then preloads a spring. The spring then forces the sliding-dog along the half shaft until it locks onto the carrier locking-dog. The diff locker is now engaged.

This method allows a smooth engagement of the dog gears and has a lock up time of 0.4 seconds. A constant 0.5 amp draw holds the solenoid in a locked state until the driver switches it off.

The detachable diff pan houses the entire locking system without any protrusions from the axle. All parts necessary for the complete installation are supplied with the kit, including fully illustrated step by step instructions. The entire kit is easily installed within 5 man hours.



## KAM Heavy Duty Carrier

### KAM 4 Pinion Differential

The KAM heavy duty 4 pinion differential carrier is included in the Diff Lock kit. This unit is over 40% stronger than standard. It has been designed as a 3 part unit, held together with 12 x 12/9 bolts. It can be upgraded to our Limited Slip Diff assembly, simply by removing spacer plates and installing a KAM clutch plate kit.

This carrier unit can be fitted independently as an upgrade 4 pinion carrier or as a LSD unit. We are able to produce these units in any quantity to fit most vehicle types.



**To order a KAM HEAVY DUTY CARRIER from BEARMACH quote:**

- BA 5874** - 4 Pin Carrier
- BA 5786** - 4 Pin Carrier with Lock Flange



## KAM Limited Slip Differential (LSD)

KAM offers a unique solution for a fully adjustable and upgradeable differential assembly (i.e. you can have both full diff locker and LSD combination).

The KAM unit is a clutch type LSD. In simple terms, the more power you apply, the more lock up you get across halfshafts. There are 3 options of clutch plate configuration and pre load is fully adjustable. Its ability to be set up gives it a major advantage over other LSD's on the market and they have been successfully tried and tested by top race vehicles with 450bhp/500 ft/lbs torque. This clutch plate LSD unit has smoother power delivery than our competitors units and this ensures less stress is applied to the shafts. Specialist F1 material ensures longevity of clutch plates.

### Clutch Plate Configuration

This diagram illustrates the clutch pack configuration and shows how the plates can be rearranged within the differential to give different amounts of Slip or Grip. The spring preloads can also be adjusted by means of grub screws.



We are in a position to offer this type of LSD unit for most axle types from 25 to 250 off at a time.

**To order a KAM Limited Slip Differential from BEARMACH quote:**

- BA 5785** - LSD Carrier 24 Spline Front
  - BA 5781** - LSD Carrier 24 Spline Rear
- Supplied with shafts

## KAM Half Shafts

KAM shafts have greater flexibility and are approximately 40% stronger than standard shafts. The KAM shafts have been used for the last 16 years in many trial & competition vehicles world wide. Last year KAM supplied over 5000 shafts, of which many were supplied to the Military and competition applications.

We hold an extensive range of Land Rover shafts in stock and we can produce for any axle type.



**To order KAM Half Shafts from BEARMACH quote:**

- BA 5774** - Rear 24/24 to suit 300TDi
  - BA 5776** - Rear 24/24 with no seal
  - BA 5770** - Front 24/32
  - BA 5772** - Front 24/23
- Supplied as pairs

## KAM Driving Member Hubs

KAM are able to design and produce a range of axle components. One of our best selling parts is a universal driving member hub which fits both narrow and wide type Land Rover hubs. They have 10 bolts holes to fit either pcd types and are internationally design protected. They are made from the same high grade erial as our motor port gears sets and are heat treated to 60 HRC.



**Ultimate Competition Hubs**  
Patents Office Design  
Registration 3025504

**To order KAM Driving Member Hubs from BEARMACH**  
consult the chart on the next page for fitment details.

# BEARMACH EQUIPMENT DIFFERENTIALS

Parts and Accessories suitable for All Land Rovers from BEARMACH Ltd



## KAM Strengthened CV Conversions

We produce a range of CV's that are an up-rated version of the standard part. The picture shows a CV conversion kit that replaces the 32 spline CV for a stronger 23 spline assembly suitable for Land Rovers. This allows use of the stronger 24/23 spline halfshafts.

The CV cup offers around a 35% increase in strength over a standard CV.

Unique to KAM; we have developed stub shafts that are fusible. They are designed to shear at a preset level of torque. This protects the rest of the driveline and only incurs 5 minutes of vehicle downtime to replace. 3 Stub shafts are supplied in the kit, 2 to fit and 1 as a spare.



To order a KAM CV Conversion from BEARMACH consult the chart opposite for fitment details.

## KAM Crown Wheel & Pinions

KAM are the only company in the World to offer a range of alternative ratios that have been specifically designed for the competition and military Land Rover applications. KAM offer a choice of ratios to suit the varying engines and tyre sizes used around the world.

If you are increasing the payload of the vehicle then the gearing dynamics need to be changed. With the ratios below, we can offer both speed reduction and speed increase to suit your application combined with considerable extra strength of the gear.



Up to 70% stronger

### Ratios available:

- 4.75 Speed reduction large off road tyres,
- 3.8 Safari race
- 4.1 Off road/ trial
- 2.83 High speed road

3.54 is the standard ratio from Land Rover. With KAM ratios fitted you can see from the table the changes that are possible.

### Power Handling

The torque increases are calculated by using the standard gears as a datum. Input torque is produced by the engine power put into the differential and output torque is produced by the feedback into the differential from traction obtained.

Land Rover	Ratio	Land Rover	Strength Inc %
3.8 ratio up to +70% in engine motor torque	4.75:1	-25.47%	50%
3.8 ratio up to +50% in tractive effort as road speed increases and decreases	4.1:1	-13.65%	25%
	3.8:1	-7%	70%
	3.54:1	0%	Same
	2.83:1	+25.08%	28%

### To order KAM Crown Wheel & Pinion from BEARMACH quote:

BA 5770 - 4.1 Ratio to suit Rover type Diff





**BEARMACH are able to supply the full product range from KAM Differentials suitable for Land Rovers. The chart below lists some of the items we have available but if your required application is not listed here please call for availability.**



BEARMACH KAM differentials

Item Description	KAM Build Reference	KAM Part No	LR Part No	BM Part No
<b>Land Rover Crown Wheel / Pinions</b> 3.8 CW/P fit 4.7 carrier 24 spline 4.1 CW/P to fit 4.7 carrier 24 spline	KAM Build Reference 3.8-24s Splined on pinion end 4.1-24s Splined on pinion end	KAM Part No 3.8-LR-24s 4.1-LR-24s	LR Part No	BM Part No BA 5710 BA 5700
<b>Salisbury Crown Wheel / Pinions</b> 3.8 Salisbury cvpw	KAM Build Reference 3.8-SAL	KAM Part No 3.8-SAL	LR Part No	BM Part No BA 5711
<b>CV Conversions 32 to 23 with shafts</b> CV Conversions 32 to 23s With 24-23 shafts + 3xStubs CV Conversions 32 to 23 Without shafts + 3xStubs CV Stub shafts. 26.5 - 27 - 27.5 - 28 (mm) Please confirm undercut depth on Fusable shafts when ordering the 3 above part numbers i.e., 26.5 - 27.5 - 28 (mm) CV 23-24 Spline KAM High Strength	KAM Build Reference CV-24/23-WA-SUC-26.5 CV-24/23-NOS-SUC-26.5 CV-STUB-26.5 KAM-CV/24/23	KAM Part No CV001 CV002 CV-STUB-26.5 CV003	LR Part No 606665 K	BM Part No BA 5712 BA 5713 BA 5714 BA 5715
<b>Rear Shafts 90 - Land Rover - Range Rover Early 200</b> Range Rover - No Oil Seal 90 Pre 300 Long 24/24 Rover - No Oil Seal 90 Pre 300 Short 24/24	KAM Build Reference RR-24/24-NOS-R-LS-979 RR-24/24-NOS-R-LS-705	KAM Part No RHS-L-RR-001 RHS-S-RR-001	LR Part No	BM Part No BA 5776 BA 5776
<b>Rear Shafts 200 - 300 TDI - Land Rover With Oil Seal</b> TDI 200 Early No Oil Seal Long 24/24 TDI 200 Early No Oil Seal Short 24/24 TDI300 + 1992 > Range Rover Long 24/24 with oil seal TDI300 + 1992 > Range Rover Short 24/24 with oil seal	KAM Build Reference TDI200-NOS-R-LS-979 Spacer Bronze for Shaft TDI300-24/24-WOS-R-LR-953 TDI300-24/24-WOS-R-SS-683	KAM Part No RHS-L-RR-001 RHS-L-110-003 RHS-S-000-002	LR Part No TOB500020 TOB500030	BM Part No BA 5776 BA 5776 BA 5774 BA 5774
<b>Rear Shafts 110 - Land Rover</b> 110 Short 640 mm FTC1724 110 Long 957 mm FTC1725 110 Short 705 mm 110 Long 977 mm Give lengths of original shafts when ordering - 3 different shaft lengths available	KAM Build Reference 110-24/24-SS-640 DISK 110-24/24-SL-957 DISK 110-24/24-SS-705 DRUM 110-24/24-SL-977 DRUM	KAM Part No RHS-S-110-003 RHS-L-110-003 RHS-S-110-003B RHS-L-110-003A	LR Part No AFTC1724K AFTC1725K	BM Part No BA 5716 BA 5717 BA 5717 BA 5717
<b>Rear Series Shafts</b> Series 2A - 3 Short Series 2A - 3 Short Light Weight Long Light Weight Short	KAM Build Reference 2A-24/24-R-LS-868 2A-24/24-R-SS-643 2A-24/24-R-LS-855 2A-24/24-R-SS-630	KAM Part No RHS-L-2A-004 RHS-S-2A-004 RHS-L-LW-005 RHS-S-LW-005	LR Part No	BM Part No EA 5719 BA 5719 BA 5720 BA 5720
<b>Front Shafts 90-110 - Land Rover - Range Rover</b> R/R - 90 Pre 300 Long 24/23 < R/R - 90 Pre 300 Short 24/23 <	KAM Build Reference RR-90-24/23-F-LS-977 RR-90-24/23-F-SS-452	KAM Part No FHS-L-RR-006 FHS-S-RR-006	LR Part No	BM Part No BA 5772 BA 5772
<b>Front Shafts 200-300 TDI-Land Rover</b> TDI 200 Early Long 24/23 TDI 200 Early Short 24/23 TDI 300 Long 24/32 onwards> TDI 300 Short 24/32 onwards> Confirm spline numbers on the CV end i.e., some 200 tdi may have 24/32 shafts	KAM Build Reference TDI200-24/23-F-LS-837 TDI200-24/23-R-SS-452 TDI300-24/32-F-LS-843 TDI300-24/32-F-SS-456	KAM Part No FHS-L-200-007 FHS-S-200-007 FHS-L-300-008 FHS-S-300-008	LR Part No	BM Part No BA 5772 BA 5772 BA 5770 BA 5770
<b>KAM Solenoid Diff-Lock Rear Land Rover</b> RR/90 Imperial 1970>24/24 No oil seal Wide Hub + Bearing Adaptors RR/90 Metric 1986> 24/24 No oil seal Wide Hub 200TDI Metric 1989 24/24 Oil seal Wide Hub 200TDIMetric1992>24/24NooilsealNarrowHub 300TDI Metric 1994>24/24 Oil seal Narrow Hub Disco2-TD5 Metric 1998> 24/24 Oil seal Narrow Hub 110 + 130 2004> P38 type diff 24/24 Narrow Hub	KAM Build Reference LR-LR-R-M-35-24/24-NOS-DMH-W55 LR-LR-R-M-35-24/24-NOS-DMH-W55 LR-LR-R-M-35-24/24-OS-DMH-W55 LR-LR-R-M-35-24/24-NOS-DMH-N40 LR-LR-R-M-35-24/24-OS-DMH-N40 LR-LR-R-M-35-24/24-OS-DMH-N40	KAM Part No RL001 RL002 RL003 RL004 RL005 RL006 RL007	LR Part No	BM Part No BA 5722 BA 5723 BA 5723 BA5782 BA 5782 BA 5782 BA 5724
<b>KAM Solenoid Diff-Lock Rear Land Rover</b> RR/90 Front-L Imperial 1970> 24/23 + Bearing Adaptors RR/90 Front-L Metric 1986> 24/23 200 TDI Front-L Metric 1989< 24/23 200 TDI Front-L Metric 1992> 24/32 300 TDI Front-L Metric 1994> 24/32 Disco 2 - TD5 L Front Metric 1998> 24/32 110 + 130 2004> P38 type diff 24/32	KAM Build Reference LR-LR-F-L-35-24/23 LR-LR-F-M-35-24/23 LR-LR-F-M-35-24/23 LR-LR-F-M-35-24/23 LR-LR-F-M-35-24/32 LR-LR-F-M-35-24/32 LR-LR-F-M-35-24/32 LR-LR-F-M-35-24/32	KAM Part No FL001 FL002 FL003 FL004 FL005 FL006 FL007	LR Part No	BM Part No BA 5725 BA 5789 BA 5789 BA 5786 BA 5736 BA 5786 BA 5726
<b>KAM Solenoid Diff-Lock Rear Land Rover</b> RR/90 Imperial 1970>24/24 No oil seal Wide Hub + Bearing Adaptors RR/90 Metric 1986> 24/24 No oil seal Wide Hub 200 TDI Metric 1989 24/24 Oil seal Wide Hub 200 TDI Metric 1992+> 24/24 No oil seal Narrow Hub 300 TDI Metric 1994+> 24/24 Oil seal Narrow Hub Disco 2 - TD5 Metric 1998+> 24/24 Oil seal Narrow Hub 110 + 130 2004> P38 type diff 24/24 Narrow Hub	KAM Build Reference LR-LR-R-M-35-24/24-NOS-DMH-W55-LSD LR-LR-R-M-35-24/24-NOS-DMH-W55 LR-LR-R-M-35-24/24-OS-DMH-W55 LR-LR-R-M-35-24/24-OS-DMH-N40 LR-LR-R-M-35-24/24-OS-DMH-N40 LR-LR-R-M-35-24/24-OS-DMH-N40 LR-LR-R-M-35-24/24-OS-DMH-N40	KAM Part No RL001-LSD RL002-LSD RL003-LSD RL004-LSD RL005-LSD RL006-LSD RL007-LSD	LR Part No	BM Part No BA 5727 BA 5728 BA 5728 BA 5783 BA 5783 BA 5783 BA 5729
<b>KAM Solenoid Diff-Lock Rear Land Rover</b> RR/90 Front-L Imperial 1970>24/23 + Bearing Adaptors RR-90 Front-L Metric 1986+> 24/23 200 TDI Front-L Metric 1989 24/23 200 TDI Front-L Metric 1992 +> 24/32 300 TDI Front-L Metric 1994 +> 24/32 Disco 2 - TD5 L Front Metric 1998+> 24/32 110 + 130 2004> P38 type diff 24/32	KAM Build Reference LR-LR-F-L-35-24/23 LR-LR-F-M-35-24/23 LR-LR-F-M-35-24/23 LR-LR-F-M-35-24/23 LR-LR-F-M-35-24/32 LR-LR-F-M-35-24/32 LR-LR-F-M-35-24/32 LR-LR-F-M-35-24/32	KAM Part No FL001-LSD FL002-LSD FL003-LSD FL004-LSD FL005-LSD FL006-LSD FL007-LSD	LR Part No	BM Part No BA 5730 BA 5731 BA 5731 BA 5732 BA 5732 BA 5732 BA 5733
<b>Optional Upgrades for Locker Land Rover</b> HM Heavy Duty Billet 30 Hole Hub Narrow Spacer for 10 hole Hub to fit Wide Conversions	KAM Build Reference HM-H-10-24s DMH-SP-001	KAMPartNo DMH-H-10-24s DMH-SP-001	LR Part No	BM Part No BA 5790 BA 5971
<b>Land Rover Classic Diff - Heavy Duty Carrier (HDC) + LSD Land Rover</b> Heavy duty carrier 24 spline LSD Carrier 24 splines sun gears	KAM Build Reference Heavy duty carrier 24 Spline LR/LSD/354	KAMPartNo HDC-24-002 LSD-24-002 F+R	LR Part No FRC8187K	BM Part No BA 5780 BA 5781 Front BA 5785 Rear
<b>P38 Range Rover / Wolf - Short Nose Diff</b> P38 Heavy Duty Carrier 24 Spline P38 LSD Carrier 24 Spline	P38/HDC/24/354 P38/R/LSD/354	HDC-24-007 LSD-24-007		BA 5737 BA 5738



Land Rover Parts & Accessories

Bearthmach is pleased to be able to offer the range of professional diagnostic equipment from industry leader **OmiTec**

Please contact us on **02920 856 550** for pricing details and ordering information

## OmiPro

Land Rover Professional

BEARMACH Ref  
**BA 5013**



The OmiPro Land Rover 'Professional' diagnostic tool was developed in conjunction with the vehicle manufacturer. It is the only tool available that delivers the same performance levels as in Land Rover dealers worldwide.

The 'Professional' tool contains everything that a technician needs to carry out all of the required diagnostic procedures on all Land Rover vehicles except Discovery 3 and Range Rover 2006MY.

The OmiPro Land Rover 'Professional' tool is based around the latest laptop PC technology which is at the heart of the diagnostic platform and is therefore the most suited and effective solution to Land Rover vehicle diagnostics.

The kit is supplied with laptop PC; cables and software in a laptop style carry case and contains all of the items in order to run the diagnostic software at the most competitive and cost effective price in the market.

A technical support and hardware warranty exchange programme is available at an extra cost that runs from one up to three years.

### Key Features

- Developed in conjunction with Land Rover.
- Extensive coverage of Land Rover range.
- Completely portable.
- User configurable.
- Free delivery and on-site training.
- 12 months RTB warranty.
- Technical support available\*.
- Rapid Exchange Warranty programme available\*.

\*Technical support and Rapid Exchange are part of the Maintenance Programme available at an additional cost.

## Omitec

Modular Integrated Diagnostics

### INTRODUCING THE NEW UCM LAND ROVER DIAGNOSTIC PLATFORM

BEARMACH Ref  
**BA 5014**



The new UCM Land Rover Diagnostic Platform enables you to increase your diagnostic portfolio;

you will now be able to work on the latest Land Rover vehicles such as Discovery 3 and RR Sport, with the benefit of regular updates to increase capability. The software can be easily installed onto your existing Omitec Diagnostic equipment or onto a different laptop offering a user friendly, flexible and cost effective solution

#### What is UCM?

UCM consists of the following components:

- Universal Communication Module (UCM)
- UCM to USB lead
- UCM to Vehicle harness
- Software CD
- Quick start User Guide
- Free software updates for 12 months
- Regular updates with more vehicles and applications to come

#### What does UCM do for you?

- Supports the newer Land Rover vehicles such as Discovery 3 and Range Rover Sports
- Read DTC
- Clear DTC
- Fully mobile. Can be used for road testing
- Can be loaded onto existing Omitec Diagnostic equipment or on separate laptop
- Ability to pick live data values to monitor and graph
- Service reset procedures

The new UCM Diagnostic System : the latest generation diagnostic platform, which will provide a user friendly, cost effective diagnostic solution enabling not only the specialist, but also independent workshops to diagnose the latest Land Rover vehicles

**AUTODIAGNOS****MULTI-TESTER PRO**

EMS, ABS, DSC, ESP, SRS, transmission, security, immobiliser, body controller, climate control, instruments, cruise control, park distance control, electro-hydraulic power steering, electronic suspension, particulate filter, light control modules, steering angle sensor, service light reset, tyre pressure monitoring, door management and many more...

- Easy to use
- Best functionality in the aftermarket
- Compact and portable
- Simple menu driven operation
- Software uploads and downloads
- Save on costly trips to the main dealer
- Best European software coverage

**BEARMACH Ref**  
**BA 5063**

**In Depth Diagnostics For The Multi-Make & Land Rover Repairer****The growing need for a Diagnostic Tool**

The technician of today is constantly facing advanced technology and complexity each and every time he repairs or services his customers' cars. It's not unusual today to find even a low specification car with up to 15 computers or controllers onboard. These computers control the engine, ABS, traction control, climate control, dashboard and many other systems.

Approximately 30% of the manufacturing cost of a new vehicle is the electronics, wiring and associated systems.

It is more important than ever for technicians to make a fast and accurate diagnosis. Autodiagnos can provide the independent workshop with the means to carry out this lucrative and profitable work. A well-equipped workshop is able to instil confidence in its customer base at the same time as winning new customers.

The Autodiagnos Multi-Tester Pro is the most cost effective investment the modern independent workshop can make.

**The customer is always right**

*"The Multi-Tester Pro has certainly proved to be the technicians' choice here. Every time I need to use it, I have to join a queue."*

Ed Dodwell R.A. Engineering, Reading Berkshire.

*"The depth of coverage in the software far surpasses any other diagnostic tool I have owned or used, Multi-Tester Pro is the closest you will get to a vehicle manufacturers tool. I should have bought it years ago!"*

John Padgett, Carcroft, Central Garage Doncaster.

**Serial application Land Rover v3.26 / v1.01****Pro-Line kit 9012x contents**

- Software activation code
- 2 way cable A0903111-1
- 3 way cable A0903121-1
- 1 way cable A0904121-1

**Vehicle Coverage**

- Model Year 1990 to 2007
- Range Rover Classic
- Range Rover P38
- Range Rover L322
- Range Rover Sport L320
- Defender 90/110
- Discovery series 1
- Discovery series 2
- Discovery series 3
- Freelander '97 Freelander'01

**Functionality**

- Read fault codes
- Erase fault codes
- Freeze frame data
- Read data stream
- Custom monitor list
- Component activation
- Idle speed adjustment
- Suspension settings
- Key programming
- Reset adaptations
- Read EKA code
- Plijp programming
- Cylinder balancing
- Set/Clear transport mode
- Immobiliser re-synchronisation
- Injector grade configuration
- BECM module configuration
- Snapshot

**System Coverage**

- Engine – Diesel
- Engine - Petrol
- ABS
- SRS
- Transmission
- Cruise Control
- Instrument pack
- Immobiliser
- Security
- Air suspension
- Body controller
- Climate control
- Active cornering enhancement (ACE)
- Fuel burning heater
- Electronic EGR



## Omitec

Modular Integrated Diagnostics

### THE ULTIMATE CHOICE IN DIAGNOSTICS

#### The User Friendly Diagnostic Tool.

The OmiScan hand-held diagnostic tool provides the service technician with a simple, easy to use scan tool capable of performing diagnostic tasks on 26 different vehicle manufacturers - including Land Rover.

BEARMACH Ref  
BA 5064



OmiScan covers engine management, airbag, ABS, service light reset, and many other systems. It will read and clear fault codes, give live data, component actuation and gives graphing and capture of live data when linked through a laptop or PC.

The OmiScan/OmiPro hand-held diagnostic tool provides the technician with an easy-to-use scan tool capable of performing electronic diagnostics and resets on many vehicle systems.

The OmiScan/OmiPro can be used as a stand-alone scan tool, in or outside the workshop environment and interfaces with the OmiTechcenter and CAPS technical workshop manual when used through a PC.

- Printer option available
- OmiTechCenter software, allows graphing of live data, live data snapshots and data logging
- CAN enabled
- Engine Management Systems (Petrol and Diesel), ABS, SRS, Auto Transmission, Diesel Particulate Filter Re-set, Ford TDCI Injector Programming, An extensive range of Body Control Modules, TPMS, Climate Control, Park Distance Control, Electronic Parking Brake Systems, Airbag,
- CAPS software gives technical advice and rectification hints. i.e. (guided diagnostics)



### OmiPro offers all the functionality of the award winning OmiScan but on a laptop PC

#### Why OmiPro?

OmiPro offers all of the functionality of the award winning OmiScan but on a laptop PC. The inclusion of CAPS technical data means that the technician can link the fault codes directly to the recommended tests for the potentially faulty component. This guides the user through a number of well-defined steps to ensure that all necessary checks are completed before proceeding to the next stage. The results will save time and expense incurred when fitting new components unnecessarily. Diagnose the problem accurately first time every time. The need to involve main dealers and diagnostic specialists are minimised meaning that the garage can save cost and at the same time sell his services and skills effectively. The OmiPro can be expanded in the future to include scope options and other tools on the same platform. OmiPro is CAN enabled.

OmiScan/OmiPro are supplied with factory-installed software and technical data, covering a wide range of vehicle manufacturers. They provide the opportunity to diagnose faults reported by vehicle control modules and view 'live data' parameters in real time.

The OmiScan/OmiPro allow the professional technician to read and clear faults on engine management, airbag, ABS and other vehicle systems. Both scantools provide the opportunity to graph four streams of 'live data' at a time, faults and 'live data' can be logged for later playback, viewing and printing. The technician can also perform a range of adaptations and actuator tests dependent on the vehicle selected.

## OmiScan Gas The High Performance Portable Diagnostic Gas Station

The OmiScan Gas has all the functions of a hand held gas analyser but also a unique diagnostic and data capture facility. It measures gas, diagnostically analyses the results and suggests to the user possible faults on the vehicle - The OmiScan Gas comes as either a 4 or 5 gas analyser with OIML Class 0 accuracy and BET'S test. The guided diagnostics function can identify typical faults such as; ignition problems, air leaks, oxygen sensor faults, faulty catalysts and more.

BEARMACH Ref  
BA 5015



The OmiScan Gas can also be used to identify combustion faults which only occur when the vehicle is driven. To enable this, the handset remains in the cab whilst being connected via Bluetooth to the gas analyser in the boot.

# OmiPro

## Modular integrated Diagnostics

OmiPro is an integrated PC-based vehicle diagnostic solution. OmiPro is supplied with factory-installed software and technical data, covering a wide range of vehicle manufacturers.

It provides the opportunity to diagnose faults reported by vehicle control modules and view 'live data' parameters in real time.



BEARMACH Ref  
**BA 5019**

The OmiPro allows the professional technician to read and clear faults on engine management, airbag, ABS and other vehicle systems. It provides the opportunity to graph four streams of 'live data' at a time, faults and 'live data' can be logged for later playback, viewing and printing. The technician can also perform a range of adaptations and actuator tests.

### Why OmiPro?

OmiPro offers all of the functionality of the award winning OmiScan but on a laptop PC for greater flexibility and analysis of data. CAPS technical data allows fault codes to link directly to tests for the potentially faulty component. Software ensures all necessary checks are completed before proceeding to the next stage. The results save time and expense incurred when fitting new components. Diagnose the problem accurately first time every time. The OmiPro can be expanded in the future to include options and other tools on the same platform. OmiPro is CAN enabled and already covers such systems as Mercedes Sensotronic Braking Systems as well as VAG and FAL digital service reset.

### What's in the Kit?

- OmiTechcenter software (as used in the OmiTechcenter diagnostic centre)
- CAPS Technical data
- OmiPro diagnostic software pre installed on a dedicated laptop PC. The software includes a set of manuals and application lists and is compatible with Windows XP (supplied as standard) and Windows 2000 machines.
- A high specification laptop PC with software pre loaded in the factory.
- The OmiPro interface box with USB connection lead
- A J1962 Universal Multi-way harness
- A full range of EOBD and vehicle specific harnesses
- Set of carry cases
- Cables – As well as the EOBD cables, a full range of vehicle cables designed to cover all vehicles in the application list are included.

### Key Features

- Wide range of manufacturers covered including both new vehicles and older vehicles
- Complies with all standard protocols: ISO 9141, Keyword 2000, J1850 PWM, VPW PWM and CAN (11 and 29 bit).
- Fast and robust vehicle communications.
- Supplied with dedicated laptop PC with factory installed software
- Unique link from fault code to CAPS Technical Data
- 'Live Data' graphing
- Data storage, record and playback functions
- Easy fault reading and clearing
- Service Interval Resetting
- Regular Software Updates
- Excellent dedicated Product Support line

# OmiPro

MG Rover Professional



BEARMACH Ref  
**BA 5017**

The OmiPro MG Rover 'Professional' diagnostic tool is based on the diagnostic platform used by all MG Rover dealers. The 'Professional' tool contains everything that a technician needs to carry out all of the required diagnostic procedures on MG Rover vehicles.

Designed in conjunction with MG Rover, the 'Professional' tool is based around the latest laptop PC technology which is the heart of the T4 platform and is therefore the most suited and effective solution to MG Rover vehicle diagnostics.

The measurement side of the kit contains the cables necessary to take measurements including voltage, current and resistance both inside the diagnostics themselves and through the toolbox functions.

The kit is supplied with laptop PC; cables and software in a laptop style carry case and contains all of the items in order to run the DST series of diagnostic software at the most competitive and cost effective price in the market.

A technical support and hardware warranty exchange programme is available at an extra cost that runs from one up to three years.

### Key Features

- Developed in conjunction with MG Rover.
- Extensive coverage of MG Rover range.
- Completely portable.
- User configurable.
- Free delivery and on-site training.
- 12 months RTB warranty.
- Technical support available\*.
- Rapid Exchange Warranty programme available\*.

\*Technical support and Rapid Exchange are part of the Maintenance Programme available at an additional cost.



Land Rover Parts & Accessories

Please contact us on  
**02920 856 550**

for pricing details and ordering information

## OmiNspect

### Quickly and Easily Diagnose all EODB and CAN-based vehicles

The OmiNspect is a compact hand held EODB diagnostic tool. It allows the user to quickly and easily diagnoses all EODB compliant vehicles. OmiNspect is also CAN enabled, letting you diagnose all the latest CAN-based vehicles.

OmiNspect is a stand-alone tool that allows the user to read and clear fault codes, read and capture 'Live Data' and perform manufacturer test routines where supported by the vehicle.

**BEARMACH Ref**  
**BA 5018**



The OmiNspect is a rugged designed hand-held EODB scan tool supplied in a convenient soft case.

#### Handset

The handset is of rugged construction with a protective boot. The keypad has well defined buttons and is powered directly from the vehicle. The clear, graphical display is easy to read and features on-screen prompts.

#### Cables

The kit is supplied with a standard EODB J1962 cable.

#### Functionality

The OmiNspect will read and clear fault codes, reads 'Live Data', captures 'Freeze Frame Data' and manufacturer test routines, whenever supported by the vehicle.

OmiNspect supports all 2001 MY and newer EODB compliant vehicles as well as CAN (Controller Area Network) and all other EODB protocols including all nine test modes of the latest EODB test specifications. OmiNspect has the capability to be updated in the future

OmiNspect is very intuitive and the user is prompted by the on screen display which lets you see all the diagnostic information you need to make a fast, accurate diagnostic decision. Built in help provides context-sensitive information on how you operate OmiNspect's full range of functionality

Easy-to-follow, comprehensive user's manual will quickly step you through everything you need to know to put the full power of EODB diagnostics into the palm of your hand. Includes technician tips and glossary of EODB terminology.

#### Key Features

- Rugged easy to use hand set with clear backlit display.
- J1962 EODB cable supplied and unit takes power directly from the vehicle.
- Fully EODB compliant from 2001 MY petrol vehicles.
- Reads and clears fault codes, reads 'Live Data' and performs manufacturer test routines.
- CAN enabled

## OmiScope

The OmiScope is an 'Automotive Digital Oscilloscope' with a range of products that have been designed specifically for the automotive diagnostic technician.

With engine scope and ignition analyser modules available, which integrate into a common hand held unit, OmiScope offers a wide range of automotive diagnostic functions at a low cost.



**BEARMACH Ref**  
**BA 5066**

#### Features

- Portable automotive diagnostic system
- Available in 3 different configurations
- Built-in, context sensitive HELP

#### Lab Scope

- 4 channel digital storage scope
- Auto scope set-up

#### Multimeter

- 4 channel digital multimeter
- Displays up to 6 panels at a time

#### Autometer

- Pre-configured for: injector, O2 sensor, MAP/MAF analog, MAP/MAF digital, TPS

#### Quick Ignition

- Shows primary or secondary ignition waveform patterns
- Digital ignition meter showing: polarity, minimum, maximum and live kV

#### Ignition scope

- 5 MHz analog peak detect circuit to capture all maximum spark signals
- Full DIS/conventional ignition system waveform display capabilities (raster, parade and single cylinder)
- Extensive vehicle database
- Displays primary and secondary ignition or DIS power and waste waveforms together

#### Engine Tests

- Pre-defined tests for: diodes, cylinder efficiency, cranking and power check

#### Specifications

Memory Card – PCMCIA type II (removable)

Report Screens Available – 20

Display Type – High Resolution LCD (256 x 320 pixels)

Cursor Functions – Full cursor in ignition scope and quick ignition. Displays two measurement points and the difference between them. Choice of 3 different cursor measurements (voltage, time and frequency).

Power Management – Power, backlight and sampling rate AC charger/converter. Fast charge in 1 hour Internal rechargeable batteries (up to 4 hours operation); Vehicle battery (via the vehicle battery adapter).

#### Options – OmiScope is available in 3 configurations:

- OmiScope Ignition Analyser - 0M2095
- OmiScope Scope/Multimeter - 0M2050A
- OmiScope Plus (Ignition analyser and scope/multimeter) - 0M100A

# OmiSonic

The OmiSonic is a sophisticated ultrasound diagnostic tool specifically designed for the automotive environment. It's a small, convenient and easy to use tool that helps to identify and isolate sound sources in the Ultrasonic range. The OmiSonic works by translating the ultrasonic sound we can't hear into audible sound, which we can. The OmiSonic enables the technician to hear ultrasonic sound. The OmiSonic allows the professional technician to use non-intrusive and non-destructive high frequency ultrasound to pinpoint and convert this to audible sound enabling difficult to find leaks to be quickly isolated. The industrial quality headphones eliminate extraneous noise allowing the technician to focus on the ultrasound source, furthermore the LED bar graph also displays the signal strength.

Solid and acoustic probes can be used to help pinpoint ultrasound sources or get to difficult locations. For non-pressurised leaks or enclosures, which do not create ultrasound, then the OmiSonic transmitter can generate ultrasound to help find the leak.

## OmiSonic Automotive Kit contents

- OmiSonic Ultrasound Detector
- Standard 40 kHz general purpose, detachable transducer head
- Industrial headphones
- OmiSonic transmitter
- Solid contact probe
- Acoustic probe
- User manual
- User training CD
- Carry case

## Optional accessories (Planned for future release)

- Additional transducer heads at different ultrasound operating frequencies for specialised inspection work
- Receiver cones
- Acoustic probe extension
- Flexible probes

## Technical specifications

Audible frequency range – 400 to 4000 kHz  
 Microprocessor controlled analogue and digital electronics.  
 Operating temperature range – 10 to +50 C  
 Controls push button – Power: On - Off (LED shows On)  
 Gain: 4 Gain sensitivity settings  
 Bandwidth: Wide or narrow (LED shows wide)  
 Audible volume: 10 audible levels  
 Display – Signal strength: 10 LED analogue bar graph  
 Power source – 9 Volt alkaline battery PP3 or 6LR61

**BEARMACH Ref  
BA 5016**

# OmiTire Plus

**BEARMACH Ref  
BA 5062**

OmiTire Plus is the complete solution for tyre fitters wishing to test or replace Tyre Pressure Monitoring System (TPMS) valves. The kit contains an OmiDetect for activating and checking that tyre valve sensors are working and an OmiTire for reprogramming ECU's to accept new valves or re-registering existing valves.

The technician will find this tool essential when working with vehicles equipped with TPMS. The OmiDetect will activate a wide range of TPMS

valves for testing prior to and after tyres have been fitted or the valve on the vehicle's ECU. It gives results instantly and is simple to use. The OmiTire connects via the vehicle diagnostic port and will programme the ECU to register new valves or re-register existing valves if wheels have been moved into different positions.

## Why do I need OmiTire?

The OmiTire Kit is designed to allow technicians to replace damaged or expired valves without having to send the vehicle back to the main dealer. Simple prompted steps allows the valves to be checked, registered and to make the system operational.

## OmiDetect

The OmiDetect is a lightweight, battery operated diagnostic tool. Housed in a rugged rubber boot it is designed for both workshop and outside use. A simple and easy to use tool, one-handed operation gives rapid results, displayed both as an LED display and series of beeps.

## OmiTire

OmiTire is also housed in a rugged rubber boot and draws its power direct from the vehicle. The handset is lightweight and easy to use.

## Cables

The kit is supplied with a J1962 Universal Multi-way harness, providing access to different vehicles' ECU's, and an extension cable so that one man operation is achieved when used in conjunction with the OmiDetect.

## Manual

The kit is supplied with comprehensive instructions that include manual procedures for systems that do not require a tool.

## Functionality

- TPMS valve sensors (direct systems) activation test for Schrader, Beru, Siemens and many other makes.
- TPMS valve sensor transmission check for where direct activation is not supported on the vehicle.
- Pressure loss check for RF sensors.
- ECU programming on a wide range of vehicle types (where TPMS is fitted)
- OmiTire can be updated in the future to cover new vehicle applications.

## Key Features

- Check valves operation before and after fitting new tyres
- Allows replacement of damaged or expired TPMS valves
- Set winter/summer tyre settings
- Check live operating parameters (depending on vehicle)
- Free up expensive diagnostic equipment
- Simple to use
- OmiDetect 'Point and Test' gives instant results
- LED and sound indicators



Land Rover Parts &amp; Accessories

Please contact us on  
**02920 856 550**  
 for pricing details and  
 ordering information

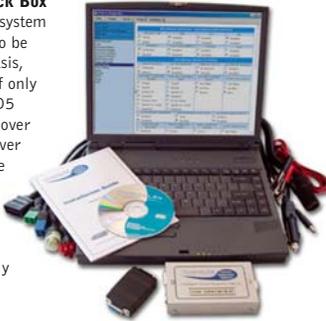
## DIAGNOSTIC SYSTEMS

Bearmach is pleased to announce that we are now able to supply diagnostic systems from entry level to full garage systems. For the purposes of the catalogue, featured are two systems one at an entry level, and one on a modular basis. Customers looking for full systems should not disregard the IDS from SPX tools, the Autologic and the Rovacom Pro systems which are not covered in the catalogue.



### ROVACOMLITE

**RovacomLite** from **Black Box Solutions** is a modular system that allows the system to be built on a 'Per ECU' Basis, allowing the purchase of only one module (example TD5 engine) or a full set to cover one or all of the Landrover Range. Current coverage is all models to 04MY, with the introduction of the Discovery 3, Range Rover Sport and L322 Range Rover 06My onwards now imminent.



Offering solid, robust and reliable communications, **RovacomLite** allows not only fault code reading and clearing but access to vast amounts of live, real time sensor input data which can be captured in four different ways for later analysis, outputs which can be forced on or off for testing and simply incredible amounts of configurable settings and information, which can be saved and reloaded as standard HTML internet documents. This allows new ECU coding, new or used ECU cloning, restoring ECU contents back to previous states and even repairing of ECUs with corrupted or damaged memory contents. It can also read and write Flash engine management ECU contents.

The system comprises two portions:-

#### HARDWARE

Rovacom Lite vehicle server  
Vehicle communications interface (Lite)

#### Cables and Sundry Items

Black OBDII lead (light duty) • Yellow EGR lead (light duty) • Red 14CUX / classic air suspension lead (light duty) • Green early airbag lead (light duty) • Blue early abs lead (light duty) • Cigar lighter power lead • Battery clip power lead • MEMS 1.6 converter (requires yellow EGR lead) • 5AS converter (requires yellow EGR lead) • Brown CPU lead • Vehicle server to vehicle communications interface extension lead • Power Supply 100-240/12v • USB to RS232 • Serial connection lead (null modem cable)

#### SOFTWARE

Consisting of all the various module software for the system

#### Upgrading and Support

Blackbox Solutions provides all support via an online forum, and all upgrades for purchased modules are free. New modules can be purchased at any time for the cost of the module, and will then become part of the system. Telephone support is also offered via a 3rd party on an annual subscription rate.

For further information and ordering on **RovacomLite**, please contact Bearmach directly.

[www.bearmach.com](http://www.bearmach.com)

### NANOCOM TD5 VEHICLE DIAGNOSTICS

Advanced real-time diagnostics of Land Rover Defender and Discovery TD5



- ◆ Self contained unit and PC based diagnostics
- ◆ Unit display shows coolant temperature, battery voltage, turbo boost and RPM
- ◆ Read/Clear fault codes
- ◆ Read/Write settings
- ◆ Map file programming
- ◆ View inputs/outputs

**Bearmach Exclusive**

## Introducing the Nanocom

An entry-level system designed specifically for use on Defender TD5, with full diagnostic capability. The **Nanocom** system has been designed for the individual but can also be used in a garage situation. The system is intended only for use on Defender TD5 and the associated systems of alarm and ABS, enabling full diagnostic capability to this vehicle. Discovery and further will be future developments.

The **Nanocom** has the following features.

- ◆ The ability to be permanently installed within a vehicle, giving real time readout whenever required, via the integrated display.
- ◆ Ability to connect to a PC with (software provided) having full diagnostic capability with pc software.
- ◆ Ability to views inputs (Engine, alarm and ABS – e.g. temperature and vehicle speed)
- ◆ Ability to actuate functions
- ◆ Ability to read settings and modify settings, as well as saving them to a memory for later analysis.

The integrated display not only displays data for clearing of fault codes and real time information, but also has the ability to display a permanent screen with voltage engine temperature turbo boost and more. The screen can be automatically set to switch on every time the vehicle is running without further user intervention, thus providing extra gauge information digitally.

The system uses the vehicle's power and enters sleep mode when unused, drawing minimal current when the engine is off or left overnight.

**Nanocom** is the ideal companion for self-servicing or for any journey, long or short. For the individual or fleet operator, on a home driveway or in the middle of a site. Diagnostics are no longer reliant on specialists, and problems can be diagnosed while the vehicle is still in the field.

- BA 5010** Nanocom System including Cables
- BA 5012** USB to serial cable – not included in kit.
- BA 5012U** USB-A to USB-B cable – not included in kit.

to order – contact official stockists



## Performance Chips

Bearmach now supply a range of power upgrade chips for most Diesel Land Rover vehicles. They are easy to fit – they just plug in and you drive away benefiting from the improvements in power, torque and efficiency!!! A superb performance upgrade whether you want better on-road speed and acceleration or more torque to enhance towing capabilities, we can supply you the chip to suit your needs.

### Benefits of Bearmach Power Chips:

- ◆ Better Acceleration ◆ More Power
- ◆ More Torque ◆ Improved Fuel economy
- ◆ Improved Driveability ◆ Direct Plug-in device
- ◆ No wiring necessary



Due to the wide variety of Performance Chip products available - please contact us for further information

Land Rover Parts & Accessories



Vehicle	Typical Power/ Torque Increase	Order Ref
<b>DEFENDER</b>		
Defender TD5 (to 01MY)	+40bhp/30ft.lbs Torque	<b>BA 2178</b>
Defender TD5 (02MY onwards)	+40bhp/30ft.lbs Torque	<b>BA 2178Z</b>
<b>DISCOVERY</b>		
Discovery TD5 (to 01MY)	+40bhp/30ft.lbs Torque	<b>BA 2177</b>
Discovery TD5 (02MY onwards)	+40bhp/30ft.lbs Torque	<b>BA 2177Z</b>
Discovery TD5 (to 01MY Auto)	+40bhp/30ft.lbs Torque	<b>BA 2177A</b>
Discovery TD5 (02MY onwards Auto)	+40bhp/30ft.lbs Torque	<b>BA 2177AZ</b>
<b>FREELANDER</b>		
Freelander 2.0 sdi	+25bhp/30ft.lbs Torque	<b>BA 2176</b>
Freelander TD4 (up to 2000)	+25bhp/30ft.lbs Torque	<b>BA 2176A</b>
Freelander TD4 (2000 on)	+25bhp/30ft.lbs Torque	<b>BA 2176B</b>
<b>RANGE ROVER</b>		
Range Rover DT/DSE	+25bhp/42ft.lbs Torque	<b>BA 2174</b>
<b>BA 4200</b> – Range Rover TD6	+40bhp/60ft.lbs Torque	
<b>BA 4201</b> – Disco 3/ RR Sport TDV6		
<b>BA 4202</b> – ECU Re-location loom TD5 Def & Di2		

## TURBO GUARD

EFFECTIVE PROTECTION FOR ALL TURBO DIESELS

Easily fitted to all Turbo Diesel vehicles in the Land Rover Range – this is the most effective way to guarantee a longer life for your turbocharger and diesel engine.



**BA 2188** – Turbo Guard Oil Feed for Diesels



**WHY DO YOU NEED A TURBO GUARD**  
Hot engine shut-downs and cold start-ups are the prime cause of turbocharger failure. Revving the engine before full oil pressure is achieved can cause serious problems to the turbocharger – particularly in colder weather climates.

Just as serious is the effect of shutting down the engine while it is still hot. Shutting the engine down immediately after a run stops the oil pump and thus the oil flow to the turbocharger. In fact oil that is left in the turbocharger bearings can form a carbon and varnish build-up. These problems can be further exacerbated if a vehicle is frequently started and stopped – as with some delivery vehicles.

**TURBO GUARD** is specifically designed to overcome these problems – it provides pressurised oil to the turbocharger at all times the engine is operating. When the turbocharger is not operating the oil is still present in the system, ready to be distributed immediately on start-up.

**HOW TURBO GUARD WORKS** – The **TURBO GUARD** consists of an oil reservoir that connects to the oil line feed to the turbocharger. A check valve permits pressurised oil to flow into the reservoir providing an immediate supply of oil to the turbocharger at shut-down and start-up.

**INSTALLATION** – only requires the fitting of a mounting bracket, adding a fitting into the inlet oil line and make a hose connection – this can be carried out in less than an hour by any competent DIY mechanic.

## SPECIALIST TOOLS

### QUALITY TOOLS

Occasionally you need a specialist tool to do the job correctly and easily - below are the popular ones that Bearmach stock.



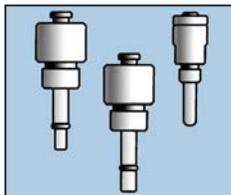
**BA 3131**



**BA 3039**

**BR 0814**

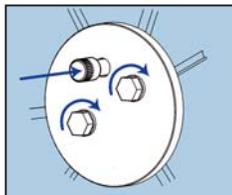
**BR 0815**



### TIMING TOOLS

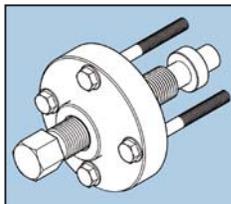
**LRT12003** – Flywheel Timing Pin 4 Cylinder Diesel

**LRT12030** – Injection Pump Timing Tool for 2.5 Diesel

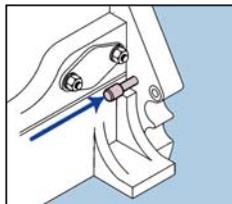


**LRT12045**

Retainer Fuel Injection Pump Gear for TDi



**LRT12049**  
Crank Damper Puller 300 TDi



**LRT12085**  
Flywheel Locking Pin for TDi

**BA 3131**  
Viscous Fan Spanner 32mm

**BA 3132**  
Viscous Fan Spanner 36mm

**BA 3039**  
Hub Nut Spanner

**BR 0814**  
Very Heavy Duty Wheel nut Wrench for Series 3, Defender, and Discovery

**BR 0815**  
Heavy Duty Wheel nut Wrench for early Series Vehicles

*Not illustrated*

**BA 3040**  
Distributor Timing Pump Tool  
**LRT54-008B**

Front Axle Ball Joint replacer for Disco 2 and P38



**TECHNICAL PUBLICATIONS ON CD**

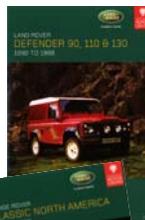
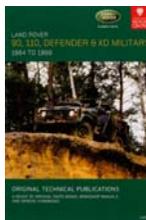
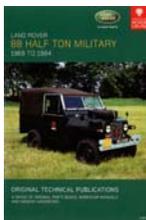
Parts catalogue, Workshop Manuals and Owner's Literature all on one PC CD Rom

This exciting new range of Land Rover original technical publications on CD Rom is the ultimate source of information for your favourite Land Rover.

Each CD focuses on one model and includes the original parts catalogues, workshop manual and driver's handbook all reproduced in an easy-to-use PDF format. As appropriate to certain models, additional publications detailing special equipment are also included.

Also included are details of the Land Rover Classic Parts Programme, the Heritage Motor Centre and British Motor Industry Heritage Trust, Land Rover History Notes and other useful information on relevant car clubs and enthusiast's organisations. PDF reader software is included if required.

Minimum system requirements: Windows 2000 • Intel Pentium III or equivalent • 128Mb Ram • Adobe Acrobat Reader (not suitable for Macintosh systems)



Ref	Vehicle
LHP19	Series 1 Land Rover 48-58
LHP20	Series 2 Land Rover 58-61
LHP21	Series 2A & 2B Land Rover 61-71
LHP22	Series 3 Land Rover 71-85
LHP24	Land Rover 101 Forward Control
LHP23	88 Half Ton Military - 68-84
LHP25	90, 110, Defender & XD Military 84-99
LHP26	90, 110, & 127 Defender - 83-89
LHP27	Defender 90, 110 & 130 - 90-98
LHP28	Defender 90 & 110 N.America - 93-97
LHP3	Discovery 1 - 89-94
LHP32	Discovery Series 1 - 94-98
LHP33	Discovery 1 N.America - 94-98
LHP1	Range Rover Classic 72-85
LHP2	Range Rover Classic 86-92
LHP29	Range Rover Classic - N.America 87-95



**WORKSHOP MANUALS**

BEARMACH are able to supply a great range of useful books for Land Rover owners including original workshop manuals, extensive Parts catalogues and general interest – If your requirement is not listed here, please contact us as we are sure we'll be able to help.

**Series Vehicles**

- BA 3087 Series 1 Workshop Manual O.E. 48-58
- 606407 Series 2 & 2A Workshop Manual O.E. Parts 1 & 2
- AKM3648 Series 3 Workshop Manual O.E
- RTC9120B 101 Forward Control Workshop Manual
- BA 3029 Series 2A & 3 Diesel HAYNES Workshop Manual
- BA 3029P Series 2A & 3 Petrol HAYNES Workshop Manual

**Defender**

- BA 3089 90/110 HAYNES Workshop Manual
- SLR621EM 90/110 to 93 MY Workshop Manual O.E
- BA 3084 DEFENDER 93-95 Workshop Manual
- BA 3064 DEFENDER 96-98 Inc 300TDi & Gearbox Workshop Manual O.E.
  
- BA 3027 90/110 Owners Manual O.E.
- BA 3250 Workshop Manual for Def TD5 '99-05
- BA 3251 Electrical Manual for Def TD5 '99-05 and 300TDi 02-05.

**Discovery**

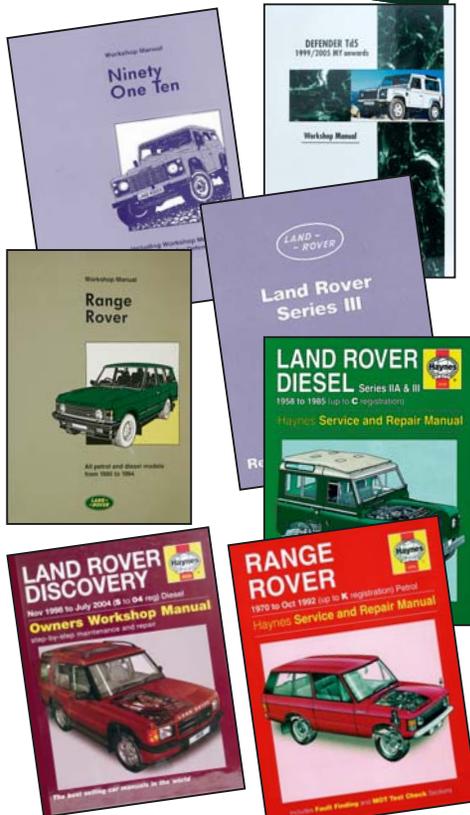
- SJR900EN DISCOVERY up to 94 Workshop Manual O.E.
- BA 3065 DISCO 95-98 Inc 300TDi & Gearbox Workshop Manual O.E.
- BA 3031 DISCO HAYNES Workshop Manual
- BA 3031A DISCO 2 - TD5 only - HAYNES Workshop Manual
- VDR10009 DISCO 2 Workshop Manual O.E.
- BA 3063 300TDi Engine & Gearbox Workshop Manual
- BA 3146 Discovery Workshop Owners' Manual
- BA 3054 V8 Engine & Gearbox Workshop Manual

**Range Rover**

- AKM3630 RANGE ROVER CLASSIC 70-85 Workshop Manual O.E.
- LSM180WM RANGE ROVER '86-89 Workshop Manual O.E.
- BA 3077 RANGE ROVER Classic (90-94) Workshop Manual
- BA 3088 RANGE ROVER HAYNES Manual
- VDR10037 NEW RANGE ROVER Workshop Manual O.E.
- BA 3068 RANGE ROVER P38 Workshop Manual

**Freelander**

- LRL0144E FREELANDER to 2001 Workshop Manual O.E.
- BA 3085 FREELANDER HAYNES Workshop Manual



**BOOKS**

BEARMACH are able to supply a great range of useful books for Land Rover owners including original workshop manuals, extensive Parts catalogues and general interest – If your requirement is not listed here, please contact us as we are sure we'll be able to help.

**PARTS CATALOGUES**

**Series Vehicles**

- BA 3066 Series 1 '48-'53 Parts Catalogue O.E.
- BA 3067 Series 1 '54-'58 Parts Catalogue O.E.
- 605957 Series 2 & 2A Parts Catalogue O.E.
- RTC9840C Series 2A Parts Catalogue O.E.
- BA 3069 Series 2A & 3 Optional Parts Catalogue O.E.
- RTC9841C Series 3 Parts Catalogue O.E.
- BA 3086 Series 3 Lightweight Parts Catalogue
- 608294B 101 Parts Catalogue

**Defender**

- RTC9863C 110 Parts Catalogue up to '86 O.E.
- STC9021CC 90/110 DEFENDER Parts Catalogue O.E.

**Discovery**

- RTC9947C DISCO 89-98

**Range Rover**

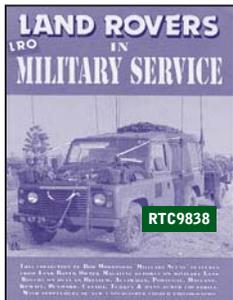
- RTC9846C RANGE ROVER Parts Catalogue up to '85 O.E.
- RTC9908C RANGE ROVER '86-'92 Parts Catalogue O.E.
- BA 3073 RANGE ROVER '92-'94 Parts Catalogue

**SPECIAL INTEREST**

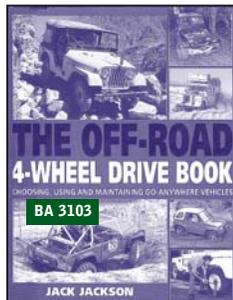
- BA 3021 DISCOVERY PERFORMANCE '89-'00
- BA 3028 WORKING IN THE WILD
- BA 3051 4WD IN 1000 PHOTOS
- BA 3052 BUYING AND SELLING YOUR LAND ROVER
- BA 3053 YOU AND YOUR LAND ROVER 90
- BA 3061 ROVER V8 ENGINE HISTORY
- BA 3062 WINCHING IN SAFETY
- BA 3071 THE 4x4 BOOK
- BA 3072 FIT FOR MOTORSPORT
- BA 3081 YOU AND YOUR DISCOVERY
- BA 3082 LAND ROVER IN MILITARY SERVICE
- BA 3103 OFFROAD & 4 WHEEL DRIVE
- BA 3105 TUNING ROVER V8
- BA 3109 LAND ROVER SIMPLY THE BEST
- BA 3112 YOU AND YOUR FREELANDER
- BA 3113 YOU AND YOUR RANGE ROVER (P38)

**RESTORATION**

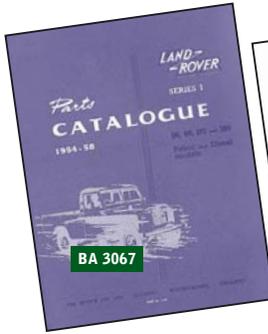
- BA 3060 LAND ROVER GUIDE PURCHASE & RESTORATION
- BA 3070 RANGE ROVER RESTORATION MANUAL
- BA 3083 LAND ROVER RESTORATION - PRACTICAL CLASSICS
- BA 3108 LAND ROVER DEFENDER RESTORATION
- BA 3119 DISCOVERY EXTREME Manual



RTC9838



BA 3103



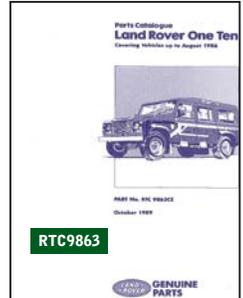
BA 3067



BA 3066



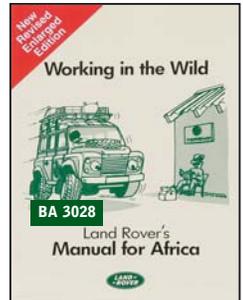
RTC9841



RTC9863



BA 3062



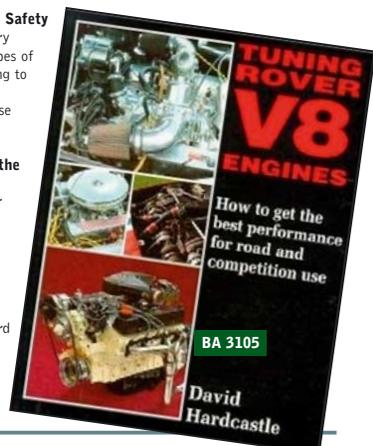
BA 3028

**BA 3062 - Winching in Safety**

The Land Rover Directory Describes the various types of winch approved for fitting to Land Rovers with clear instructions on how to use them safely. Paperback.

**BA 3028 - Working in the Wild**

Land Rover's Manual for Africa This paperback guide is designed to equip Land Rover users with the practical know-how to make the most of the vehicle's capacity for hard work in hostile conditions.



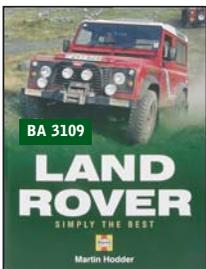
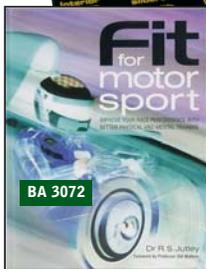
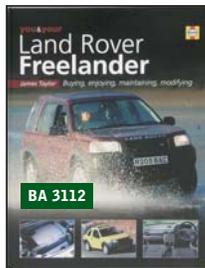
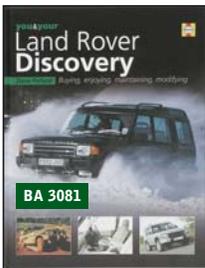
BA 3105

David Hardcastle



**HAYNES RESTORATION MANUALS (Range Rover / Land Rover series / Defender)**  
These manuals go a step further from their well renowned service manuals with advice on renovating bodywork and chassis, replacing interiors, overhauling electrics and improving performance - as well as advice on the pitfalls of buying a vehicle for restoration.

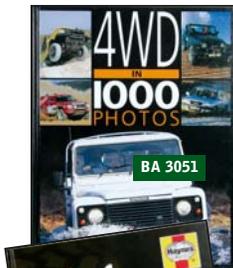
**YOU AND YOUR... (Range Rover / Freelander / Discovery)**  
This range of books looks at the evolution of the vehicles and offers excellent advice on buying, enjoying, maintaining and modifying your favourite vehicle.



**BA 3072 - FIT FOR MOTORSPORT**  
Clearly written and illustrated this book will help get you to Peak fitness for that competitive edge in . top motorsport. Recommended by Jimmy McRae - 5 times British Rally Champion.

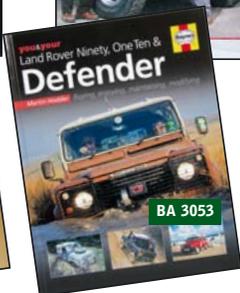
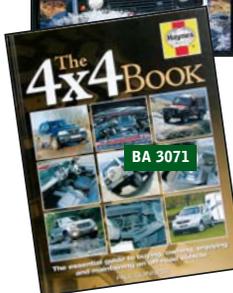
**BA 3083 - LAND ROVER RESTORATION**  
A handy paperback guide on DIY restoration covering everything you'll need to restore a Series 1 Land Rover.

**BA 3109 - LAND ROVER - SIMPLY THE BEST**  
A celebration of the world's most successful family off-road vehicles. Martin Hodder tells the fascinating inside story of the development of the marque since 1948.



**BA 3051 - 4WD in 1000 photos**  
From the world's first 4x4, the original Willys Jeep, to the hi-tech vehicles used to tackle the daunting Paris-Dakar Rally, this action-packed book contains 1,000 colour photographs of four-wheel-drive vehicles in action on- and off-road around the world. A visual feast for all 4x4 enthusiasts.

**BA 3052 - Buying and Selling Your Land Rover**  
By: Les Roberts. A comprehensive guide to buying and selling all Land Rover models, from a Series 1 to a Freelander, this comprehensively illustrated book provides advice to help the reader to locate and assess a vehicle that fits their requirements. This is an essential tool for anyone contemplating buying a Land Rover or wishing to make the best possible price on a sale.



**BA 3071 - Buying and Maintaining 4x4s**  
By: Paul Guinness. This is an introduction to the world of 4x4s, with practical advice on how to choose the most suitable vehicle, and what to expect when running it. Essential reading for anyone contemplating ownership of their first 4x4, and for existing owners who want to maximise their enjoyment of 4x4 ownership.

**BA 3053 - You and Your Land Rover 90**  
By: Martin Hodder. This volume covers the Ninety, One Ten & Defender models, from 1983 to 2000, with comprehensive information on using these cult vehicles for work or play. Aimed at the huge enthusiast market, it covers buying, owning, running and caring for the vehicles, driving on and off the tarmac, modifications, expedition planning and preparation.