

Rex's specialise in the supply, design and manufacture of new ignition and electrical items for a wide range of motorcycles. Our skilled experts can help and advise with electrical issues and have produced test guides that simplify and explain tests so the home mechanic can find faults that aren't obvious. We have many new stators, windings, rectifiers and regulators available so that skilled mechanics may change failed items without having to send parts to us for repair. Where new parts are not available we will look to offer a stator rewind to the highest standards.

Our stator rewind service has changed to improve quality and meet new market conditions. Please contact the technical team before sending parts. All workshop services are stated excluding VAT

- There is an inspection charge of £25 +return postage, +VAT where we inspect a stator to provide a quotation. This is charged where the customer does not proceed with work or the part is unsuitable for repair. This fee is waived where the go ahead is given.

#### Stator Rewind Service - Please Read Carefully

The overhaul of a stator represents a labour intensive and precision process which requires a high degree of skill and knowledge. We aim to achieve the same, or to exceed the quality of the OEM part so do not offer a rush service. We work to standards that are second to none and will only carry out repairs after an initial inspection of the part has ensured that it is suitable for repair and that winding will go on to prove reliable in service. If the part sent to us is not suitable for repair or the customer does not wish to have the work carried out as recommend by the technician only the assessment fee and/or return postage costs are due.

When we overhaul a stator we are quoting to work to the highest standard including, as applicable;

- Strip down and removal of old insulation.
- Cleaning and inspection of core parts & checking dimensions.
- Any engineering repairs to threads, straightening, welding etc.
- Application of new base insulation using UK or EU manufactured proprietary materials.
- New windings to modern specifications either hand built up, machine wound or entire new part.
- Resin consolidation of winding, as applicable.
- New wiring loom to ensure proper connection between new winding and motorcycle's electrics.
- Full QA testing & customer report.

"In the same way that putting new piston rings on an old piston and deglazing the bore is not an engine rebuild, putting a few turns of new copper on top of old insulation and reusing old wiring looms is not a stator overhaul."



**Newly manufactured stators** 



Service exchange, overhauled

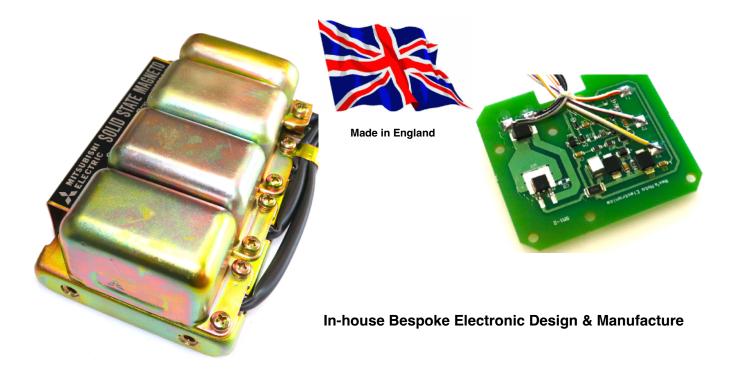
Our technicians will inspect your job before going ahead with any work. Please note we charge for our time to inspect all stators sent for repair. The stator inspection fee is fixed and will be waived where we are given the go ahead to complete the repair and the part is in a condition it can be repaired. All workshop services are stated excluding VAT for UK customers.

#### Sending Parts to Us. Please send your item to:

Rex's Speed Shop Unit 1, Russet Farm Redlands Lane Robertsbridge East Sussex TN32 5NG United Kingdom

- 1. When sending from overseas, IE the EU, USA or Australia, the value you declare or insure the parcel for will cause import duty and VAT to be applied. This is charged to you and is ADDED to any quoted price for the work. If you use a quality service such as FEDEX, DHL or UPS there is little need to insure.
- 2. Be realistic of the value of a failed, second hand unit! A value of \$10/€10 is reasonable for a failed stator or electrical parts and will ensure no tax is added. If you put a large value on the declaration form or insure it for a high value, you will receive a large import charge added on, in addition to the repair bill.
- 3. Include your contact details as well as a phone number or e-mail address. Delay will result if we are not able to contact the owner for authorisation to proceed with work.
- 4. Always include a concise explanation with the item you have sent. If you have e-mailed us, a copy of the e-mail in with the part is very helpful and will speed things up.
- 5. Do not strip parts out of a stator assembly and send them. Very often workshops will not work on windings that have been removed from the stator or have been partially striped.
- 6. Read item 1 to 5 again.

We do not charge UK sales tax (VAT) for overseas customers. Overseas customers will pay their own Country's taxes at local rates on import. All workshop services are stated excluding VAT.



## **Price Guide at a Glance**

Fixed Test Fee Applicable Electrical Items (Simple 'yes/no' check only)	Price (+ VAT)
Rectifier	
Regulator rectifier	
HT Coil	£10.00
Armature check with growler	
Handling fee (+ postage) to return items we are unable to test - check before sending part!	
Ignition Units - Bench Check	
CDi units - Check before sending!	
Rita units	£15.00
Pazon Ignition	
Tri-Spark - No Bench test possible, only full run up	-
Hondamatic CB400/450 models both CDi & Change over relay together	£25.00
Ignition units - Full Run up	
Rita, Pazon, Tri-Spark	£25.00
CDi units - Fixed fee does not apply to full run up due to complex test involved	From £50.00
Rewinds	
Fee to assess a stator. This is waived where the go ahead is given to repair	£25.00
Repair to a simple single winding - If this is applicable.	From £125.00
Radial stator Overhaul	From £250.00
Stator with axial windings. Price quoted is labour only, parts are additional	From £100.00

# For UK customers prices are +VAT. Note we charge a fee to assess stators for repair.



Radial stator - external flywheel



Stator with axial windings

#### **Honda Stators**

We specialise and give priority to the following Honda stators, please check that we are able to process your stator BEFORE sending it as we do charge handling fees to return items where no repair or overhaul has been carried out. All workshop services are stated excluding VAT.

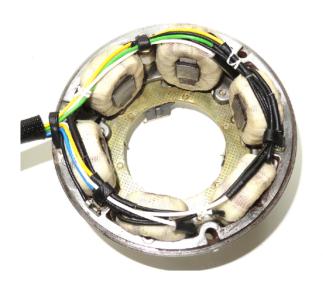
We hold the tooling to be able to repair these stators. Where we have to manufacture special tooling the cost for this is additional to the rewind price. Please check before sending parts in for repair.

Honda	Price Guide
Twin cylinder machines with internal rotors & wound bobbins (1960-70s)	£250.00
Twin cylinder machines with internal rotors & <b>fitted</b> bobbins 175cc - 500cc	£300.00
CB250 Superdream & CM variants. CB/CM 400/450cc Automatic variants	£300.00
CB400/450 Superdream	£300.00
CB400/450 low speed pick-up	£150.00
CB 400/450 High speed pick-up	£125.00
Field controlled generators (types with brush gear)	
CB750	£350.00
CB900	£350.00
Rotors for above - these often fail sooner than stators and cause low charging	£150.00
XL250/500 12V conversion as a rewind	£180.00

Due to the age of many stators we no longer carry out partial repairs. Insulation loses its resistive properties with age, old insulation will not prove reliable when new windings are put on top of it, therefore we only offer repairs where we are able to replace the insulation layer. This means the stator must be fully striped back to bare metal.







Internal rotor with fitted bobbins



Honda CB400 Superdream (and variants of) have a highly complex stator and system of pick-ups. Stators are stripped back to bare metal and the stator assessed for suitability for repair. Highly experienced experts produce precision made trigger windings which are checked at several stages during manufacture. The new windings are potted back in to OEM trigger housings. The finished part is tested and a report produced. Note that 400/450cc machines have two lighting coil configurations, derated and full power. We are able to advise which you have.

We manufacture many new parts including grommets and coil formers to replace old original internal components as very simply the originals will be degraded after over 30 years. The use of new components ensures maximum insulation strength and reliability.

### **Kawasaki Triples**

All classic 2-stroke triples are fully supported with an increasing range of CDi ignitions, voltage regulators, HT coils and restoration services as well as newly manufactured stators and electronics such as CDi units and voltage regulators. We are specialists based in the UK supplying high quality parts and services worldwide.

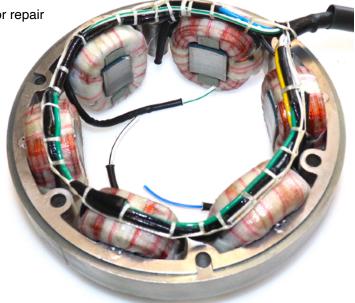
Kawasaki	Guide Price.
H1A Inverter CDi ignition - Currently under development	Not Available
H1D/H2 CDi Concours Restoration (4 box units)	£400.00
H1D/H2 CDi Supply and fit new electronics to ready plated cases	£300.00
H1E-H1F & KH500 Cdi Full Restoration	£275.00
H1E-H1F & KH500 Supply and fit new electronics to ready cases	£175.00
Plating for these CDi units	£75.00
KH400 Concours Restoration	£275.00
KH400 Supply & Fit new electronics to ready plated cases	£180.00
Plating for KH400 CDi unit	£50.00

Kawasaki Triple Alternators	
H1 Rotors	£150.00
H1 Stators	£300.00
H1E-H1F & KH500 Stator Rewind and Concours restoration	£475.00
H1E-H1F & KH500 Stator rewind & brush holder buildup - no plating	£400.00
H1E-H1F & KH500 Stator Straight rewind to stator only	£350.00
H2 Stator Concours Restoration with rewind to original stator	£500.00
H2 Stator Concours Restoration with new Rex H2 stator	£370.00
H2 Standard Replacement stator & build up (plus any parts, hardware etc)	£300.00
S1-3 Three phase stators	£350.00
Plating for stators (brush gear, points mounting plates etc)	£70.00
Voltage regulator	
Full restoration with plating, new electronic controller	£TBA
Regulator new electronic controller for fitting inside OEM case. 'Export' kit	£TBA
Plating	£25.00

**Important:** where a 'fit new electronics to ready plated cases' price is quoted, the box supplied must be totally free of all old electronics residue. The workshops may refuse to accept, or charge the concours rate to work on contaminated or dirty cases.

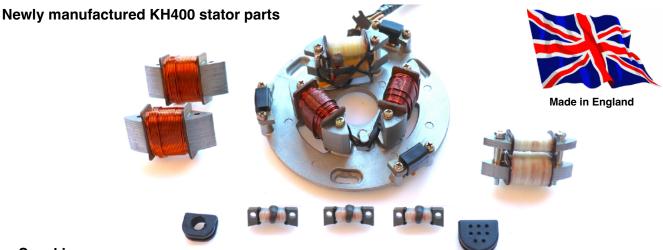
#### Brand new Kawasaki H2 stator

No need to send old part for repair





Made in England



#### Suzuki

All GT Models 185 - 750cc - We manufacture many parts for Suzuki stators and ignition systems so skilled mechanics can replace windings and CDi units without the need to send parts to us. We can also fit these to stators sent to us. See our website for full details.

TS185 - TS250cc models 1972 - 81. We manufacture individual parts so skilled mechanics can replace windings and CDi units without the need to send parts to us. We can also fit these to stators sent to us.

Suzuki	Price guide.
GT750 Stator	£350.00
Rotor GT750 - new slip ring mod required as the insulation is often low	£175.00
Voltage regulator - Full restoration with modern electronic controller	250.00
TS185 - TS250 - TS400. Strip and rebuild stator with production windings**	From £100 plus parts
GT250 X7 & GT500 Strip and rebuild stator with production windings**	From £100 plus parts
SP370/GN400	£200.00
RG250 stator	250.00

<sup>\*\*</sup> This price does not include any rewind. The charge is to fit pre-manufactured new parts & windings together to build up a serviceable stator.





## Sample of new parts supplied & manufactured for Suzuki models

GT250 - GT500 CDi unit

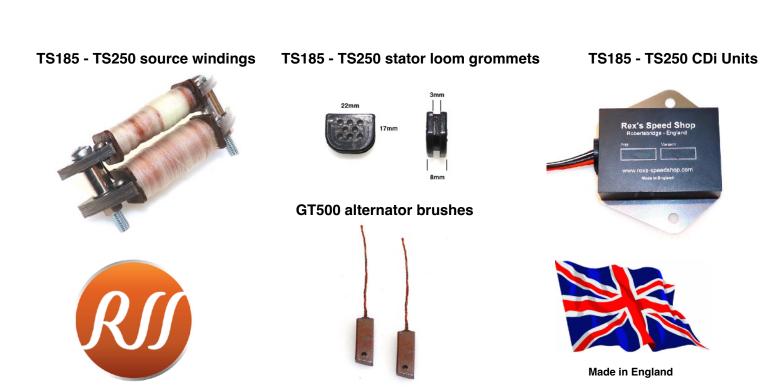
GT250 - GT500 CDi HT Coil

GT250 - T20 - T305 - T500 rectifier

GT500 Generator harness

GT500 Lighting coil

TS 185 TS 250 Lighting coil



Many more parts shown on our website

www.rexs-speedshop.com

Yamaha	Guide Price.
RD350/400 CDi ignition stators	£300.00
SR400/500 classic stators	£300.00
XT500 - Strip & rebuild stator with production windings, new loom etc**	From £100 plus parts
DT175 Strip & rebuild stator with rewound coils as required, new loom etc	£250.00
DT 250-400cc 1972-79 Strip & rebuild stator with production windings**	From £100 plus parts
TY175-250. Price may be a mix of pre-manufactured parts and rewinds	POA
XT550/600 stators	£300.00

<sup>\*\*</sup> This price does not include any rewind. The charge is to fit pre-manufactured new parts & windings together to build up a serviceable stator.

#### TZ Rewinds - MX Rewinds

We have many years experience with these early high performance systems and have built a vast data base of information. Many of these electronic ignition stators were hand built in the factories with little information available. We also manufacture brand new CDi units for many of the classic systems.

TZ & MX Stator Rewinds	Guide Price.
Early 125/250/350 Twins & Single cylinder MX	£300.00
250N 5F7-1 1981-84 including pick-up	£300.00
TZ500 £300 including pick-up	£300.00
TZ750 <b>Excludes</b> pick ups.	£300.00
TZ250 4DP. Stator has to be machined and a new collar manufactured	350.00
Other TZ models are welcome but we may need to price individually	



TZ250 4DP requires specialist repair collar

New CDi units manufactured for classic race bikes

## **Rotax**

CCM with Rotax 4-stroke engine

MT & Armstrong Military Motorcycles 350-600cc 4 stroke singles are price as per Classic Yamaha SR500 stators. Please do not mix parts as the Rotax system has different requirements.

## **Rewind of Trigger coils**

Generally it is not possible to rewind these, although there are some we have successfully been able to repair. These are intricate items that require a high degree of accuracy, often new coil formers have to be manufactured first before a rewind is possible. We charge by the hour and for both time doing the job, all research and tooling costs, all at our standard hourly rate.

## Our dedication to quality

Before any winding work can be done the old winding and insulation has to be removed and the laminate core cleaned up, this has to be done carefully to avoid destroying the magnetic properties of the core. The core can then be checked to ensure it is dimensionally correct and that the laminates are magnetically insulated from each other. Once the core has been found to be good, new base insulation is applied. Copper is then accurately added, by hand or machine. We only use proprietary materials that meet or exceed OEM specifications and are manufactured by UK or EU companies.

Where CDi ignition source coils and alternator windings are concerned the level of accuracy is critical. CDi units require precise inputs to function correctly. Poorly repaired, old or off specification windings can cause CDi



units to 'lock out' or give running issues. CDi windings must precisely match the OEM specification, within 5% or closer for best results. The closer to the specification the better the ignition will perform. Windings that are End of Life (old), poorly repaired or off specification could invalidate any warranty on CDi units where there are further problems.



When repairing alternators if the wire specification is altered the impedance of the winding is altered. Impedance is resistance to AC currents and is carefully calculated to limit and level off the alternator's output current, thus protect the alternator from overload and burnout. Wire size must be determined to a fraction of a mm, number of turns must be precisely calculated and added if the balance and safe running of your alternator is to be maintained. Changing these factors requires a lot of experience and calculation to get it right.

Testing of the finished winding is vitally important. The magnetic circuit and insulation strength is confirmed at this stage. If these checks pass the finished winding has the wiring loom connected then a final inspection report is produced for the customer's and our records.



## **Testing of Electrical Parts and Electronic Ignitions**

Sophisticated and high cost testing equipment is required to test electronic items fully and thoroughly, therefore a test fee is always applicable, unfortunately this fee is not waived even where new parts are purchased. We keep the fee as low as possible, and if we can we will also offer a fixed test fee so you are in control of costs.

Important: Before sending parts to us check to ensure we are able to test the item. There is a handling charge made for dealing with items we are not able to test or repair.

## Rex's 'RMK' Electronic Ignition Kits & CDi Units

We fully support our own electronic ignitions with a full spares and repair service for our 'RMK' series electronic ignition kits. Some of the the very early systems are no longer supported, however if we can get them going again for less than the cost of a new kit, we will try and save you money by doing so.

We also are able to fully check our own CDi units under real load conditions. Before returning CDi units please read the checking and troubleshooting guides as this will save you time and expense.





#### **Lucas Rita**

We have in-depth knowledge of these units and although we can test these under real load conditions, it is often far more cost effective to simply replace the old electronics inside the box. We have a simple drop in and pre-wired 'Rita Revival' repair system that can be done by a competent person, or you can ask our technicians to do it for you.

## **Pazon Sure Fire Ignitions**

We are able to fully run these under real load conditions. We will cover the warranty for 1 year from date of purchase, in the event of a problem the customer **must** produce proof of purchase. For warranty after 1 year, the kit has to be returned to Pazon in New Zealand. We will gladly look at systems purchased from other suppliers at our normal rates as shown.



We stock all parts for the 'Sure Fire' system and make them available separately.

### **Tri-spark Ignition systems**

We are able to fully run these under real load conditions

## Check before sending: Ignitech

Please check with us before sending. If we do not have adaptors there may be additional costs to test these. We can plug these in and re-program them. There is a 'per plug in' charge for these units.

## Finally - some advice if thinking of returning new electronics if you have a no fix situation.

A new item that was tested during and after manufacture is virtually never found to be faulty. We respectfully remind customers that it is **extremely** rare for new or repaired items to be faulty when installed properly in to a correctly functioning system. If the returned part is found to be functioning to its specification the sale of goods act is not in force and we do charge a testing fee plus return postage to cover our costs in dealing with the returned item. Please see our comprehensive CDi ignition testing guide, free to download from our 'Technical Support' page. This explains what goes wrong with old systems. Your statutory rights are not affected.

Caution: If electronic items purchased from us new are returned for rechecking - we charge the testing fee if the item is found without fault.

If you are not a trained electronics expert, electrical systems cause some confusing and difficult to understand problems, possibly you should defer the work to someone who has experience in electrical motorcycle systems. Swapping parts about does not always prove the motorcycle is OK, especially with CDi ignition.

We are electronics designers, unlike most outlets that are just parts retailers, we have specialist equipment that will give an accurate proof under real conditions which is often not possible just using a meter. Also we designed and manufactured many of our electronic items, so we know them really well!



New CDi units and windings can only be guaranteed to function as intended when the other parts of the system are to OEM specification and in good condition, this can only be said when they all pass exactly to specification and are less than ten years old, IE in the green zone.

Time since manufacture limitation for electronics and windings in CDi ignition systems.

0-10 Years	10-20 Years	20 Years and over
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Please see our CDi testing guide on the technical support page for full information on fault finding and old electronic components.

### **Estimates & Quotations**

Estimates are intended to be rough guides given without a full inspection of the actual part and only illustrate prices under ideal circumstances. They are completely non binding and subject to change once the part is inspected and without notice.

Quotations are provided after the part has been inspected. We will undertake to do the work at that price unless further defects are discovered on strip down or there are sudden market variations in costs of materials or some other unseen factor comes in to play.

#### Late payments.

When the work is complete the customer has two weeks in which to settle their invoice. After which time we add 5% to the invoice total.

## **MOFET Regulator Rectifiers**



**Classic Regulator Rectifiers** 



**Replacement Stators** 



**Classic Electronic Ignition** 

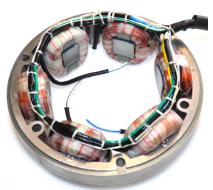


New Kawasaki H2 Stators

**Electronic Voltage Regulator Conversions** 









**Development & Manufacture Electronics for CDi Ignition Systems** 





**Voltage Regulators** 





**Lucas RITA Service & Revival Kits** 

