

## Energiser Installation Guide

### *For Battery Powered Energisers*

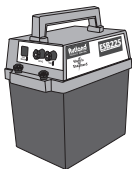
*Thank you for purchasing a Rutland battery powered electric fence energiser. We believe this unit is the best of its kind for ease of use, reliability and durability. This guide provides instruction to properly install, operate and maintain your unit, ensuring the most effective performance.*



**ESB57, ESB202**



**ESB275, ESB325, ESB375**



**ESB145, ESB225**

## Before You Start

### **Installation of Energiser and Fence**

Electric fences should be installed and operated so that they cause no danger to persons, animals or surroundings and as far as is reasonably practicable, they are out of reach of children and not subject to mechanical damage. Never connect more than one energiser to the same single or multi-wire fence. Any other fence systems powered by a different energiser should be at least 2.5 metres apart. If this gap is to be closed, use non-conductive material or an isolated metal barrier. Any electric fence or part thereof installed along a public road or pathway should be identified by warning signs at regular intervals. The warning sign should have a yellow background and be at least 100 mm x 200 mm.



The words "Caution Electric Fence" or symbol should appear in black, permanent marking on both sides of the sign and be at least 25mm in height.

- Barbed wire must not be electrified.
- If an electric fence has to be installed in the vicinity of overhead power lines it should not cross above it or run in parallel to it for any great distance. If it is necessary to pass under overhead powerlines it should be done at right angles and the vertical distance between any fence wire and the surface of the earth should not exceed two metres.
- If an electric fence has to be installed near any communication lines, the distance from the lines and the fence or any part of it should be more than two metres.
- If the energiser is installed in the vicinity of any building, care must be taken to ensure that the earth for the electric fence is more than 10 metres away from any domestic electricity board earth or telecommunications system earth.
- Follow the manufacturer's directions for proper earthing of your electric fence.
- Use insulated cable for connecting leads that run inside buildings or underground. Take care to avoid damage from animal hooves or vehicle tyres and use a conduit of insulating material if needed.
- Do not install connecting leads in the same conduit as the mains supply wiring, communication cables or data cables.
- Low output energisers provide satisfactory and safe performance for deterring birds, household pets and training animals such as cows.
- If the electric fence is intended to deter birds from roosting on buildings, do not connect the fence wire to the earth terminal. Use a warning sign at any point where a person may access the fence wire.

## **Manufacture Standard**

Built to Comply with CE, IPX4, EN60355-2-76

Health & Safety Standards EN55014, EMC

## **Safety**

- Keep combustible materials away from the connection to the fence energiser.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.

**Warning:** Avoid touching electric fence wires, especially with the head, neck or torso. Do not climb over, through or under multi-wire electric fence. Use a gate or a specially designed crossing point. Incorporate a non-electrified gate or crossing stile where an electric fence crosses a public pathway. At any such crossing the adjacent electric fence should carry warning signs.

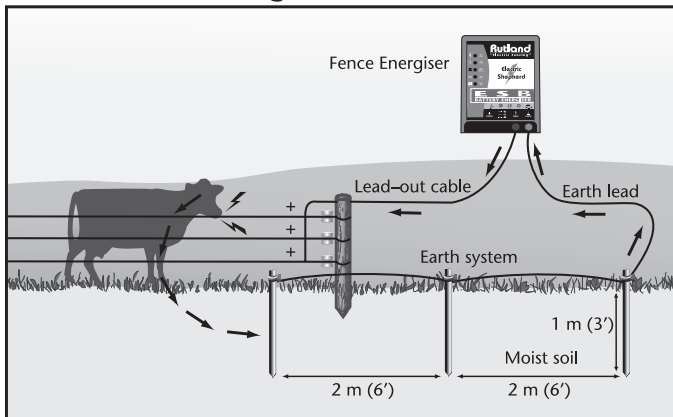
## **Tools Required**

- Adjustable spanner

## **Other Required Components**

- Earth stake(s) (part no. 18-179B; includes line clamp)

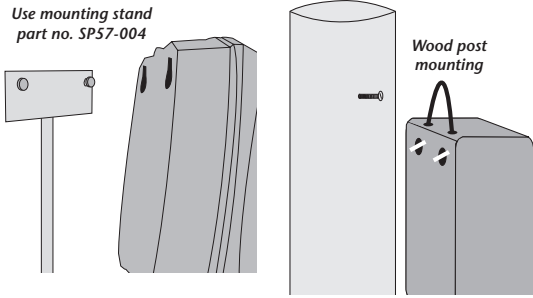
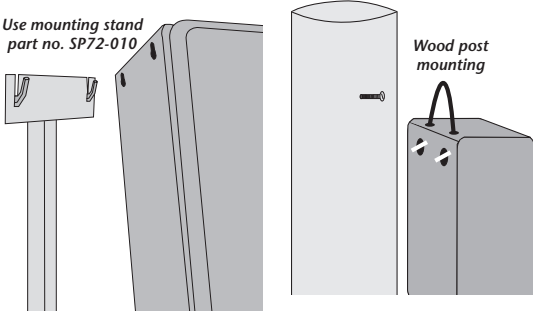
## **How Electric Fencing Works**



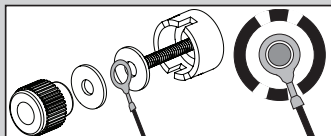
# Energiser Installation

## STEP 1: Mount Energiser

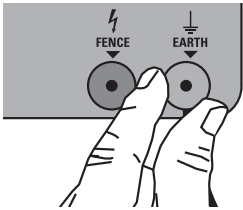
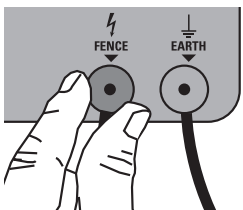
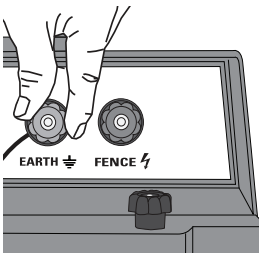
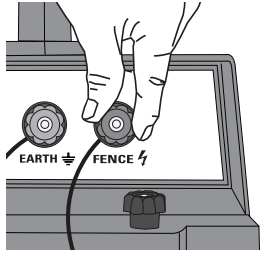
**IMPORTANT:** Energisers must be kept off ground, except ESB145 and ESB225

Model	Mounting Options
<b>ESB57</b> <b>ESB202</b>	<p data-bbox="284 393 450 445"><i>Use mounting stand part no. SP57-004</i></p>  <p data-bbox="751 437 844 482"><i>Wood post mounting</i></p>
<b>ESB275</b> <b>ESB325</b> <b>ESB375</b>	<p data-bbox="284 831 450 882"><i>Use mounting stand part no. SP72-010</i></p>  <p data-bbox="751 860 844 905"><i>Wood post mounting</i></p>
<b>ESB145</b> <b>ESB225</b>	<p data-bbox="331 1239 844 1298"><i>These models feature weatherproof casing, so they can be placed on the ground</i></p>

## STEP 2: Connect EARTH and FENCE Terminals



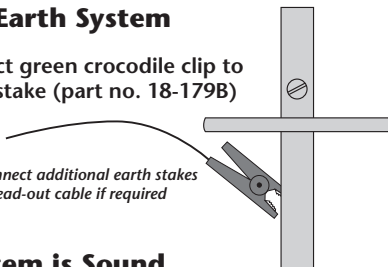
Place ring end of crocodile clip over terminal. Connect GREEN/YELLOW wire to EARTH terminal; connect RED wire to FENCE terminal.

Model	Connect EARTH	Connect FENCE
<b>ESB57</b> <b>ESB202</b> <b>ESB275</b> <b>ESB325</b> <b>ESB375</b>		
<b>ESB145</b> <b>ESB225</b>		

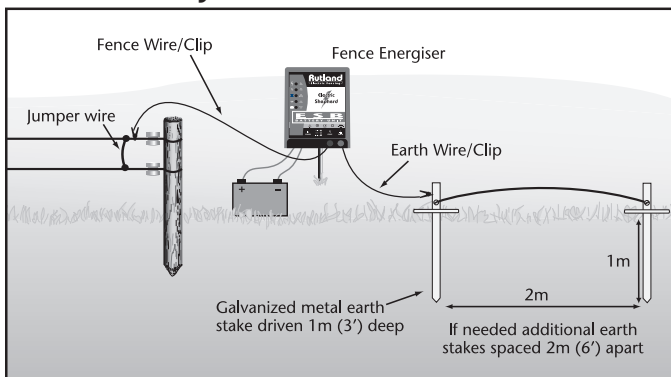
### STEP 3: Connect Earth System

Connect green crocodile clip to earth stake (part no. 18-179B)

*NOTE: Connect additional earth stakes with lead-out cable if required*

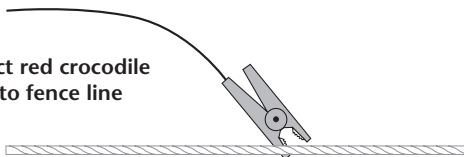


### Ensure Earth System is Sound



### STEP 4: Connect Fence Lead to Fence Line

Connect red crocodile clip to fence line

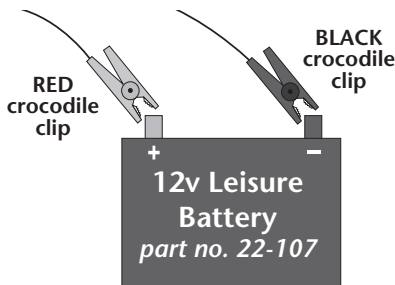
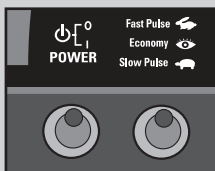


### Ensure Fence System is Sound

- Ensure all connection points such as joiners and insulators are sound and secure
- IMPROPER CONNECTION POINTS WILL AFFECT YOUR ENERGISER PERFORMANCE

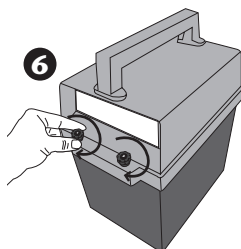
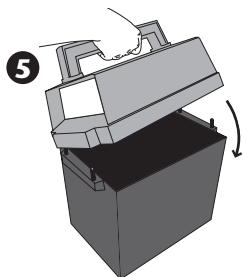
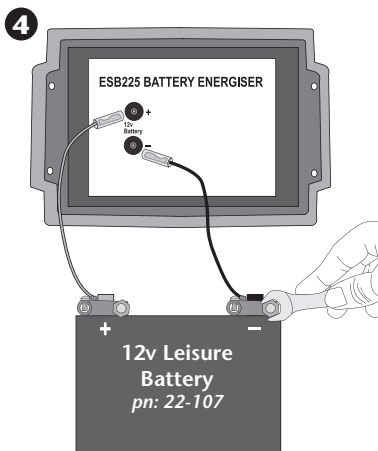
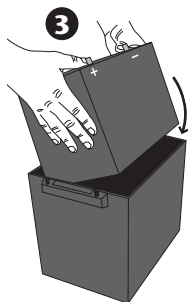
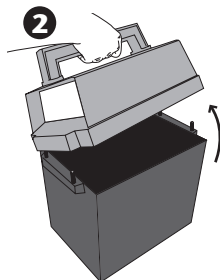
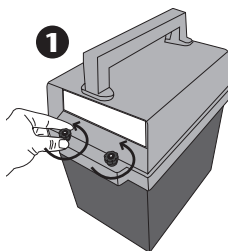
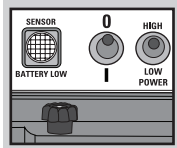
## STEP 5: Connect to Battery (Models ESB57, ESB202, ESB275, ESB325, and ESB375)

**NOTE:** Make sure power switch is in OFF (0) position (for models: ESB275, ESB325 and ESB375).



## STEP 5: Connect to Battery (Model ESB225)

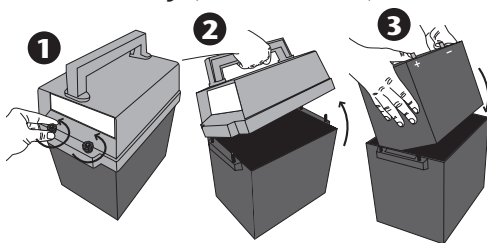
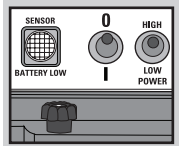
**NOTE:** Make sure power switch is in OFF (0) position.



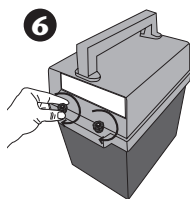
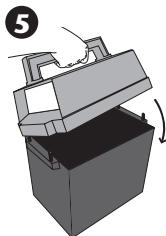
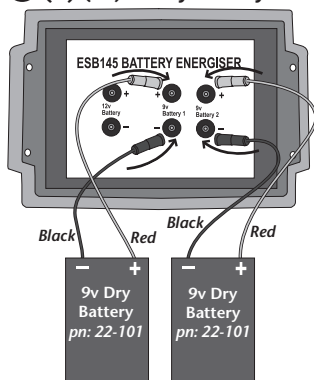
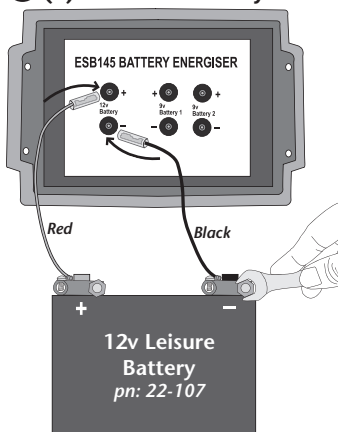


## STEP 5: Connect to Battery (Model ESB145)

**NOTE:** Make sure power switch is in OFF (0) position.

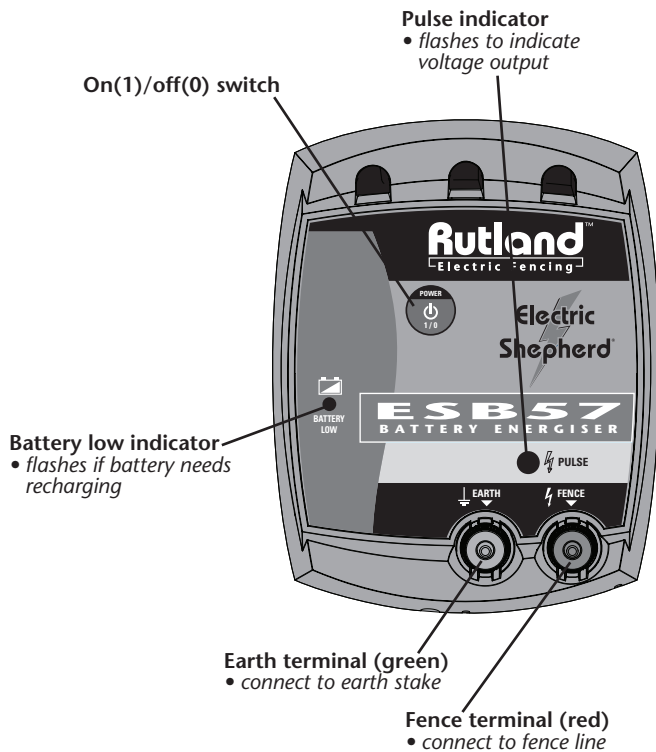


### 4 (a) 12v Leisure Battery – or – 4 (b) (2x) 9v Dry Battery



# Energiser Operation

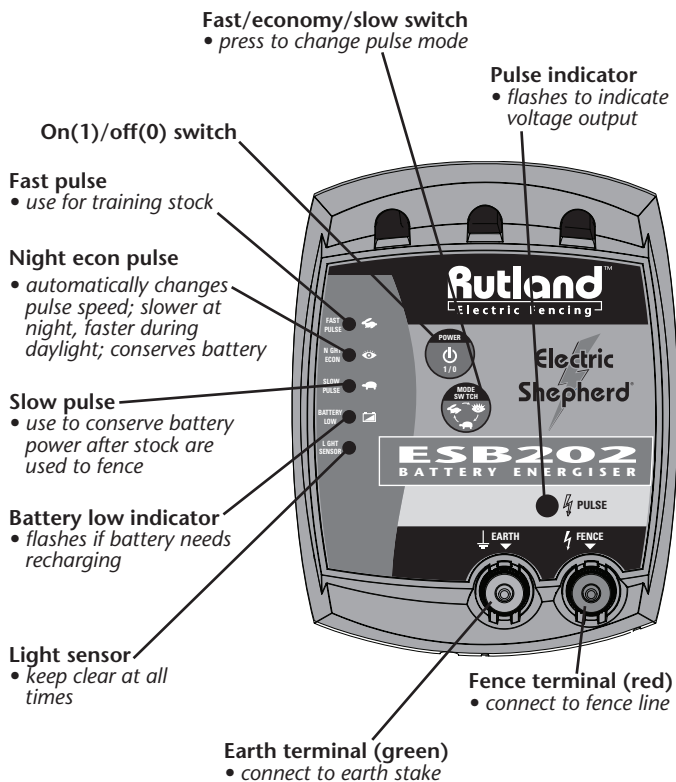
For Model: ESB57



Model	Approximate Battery Life
ESB57	144 days

# Energiser Operation

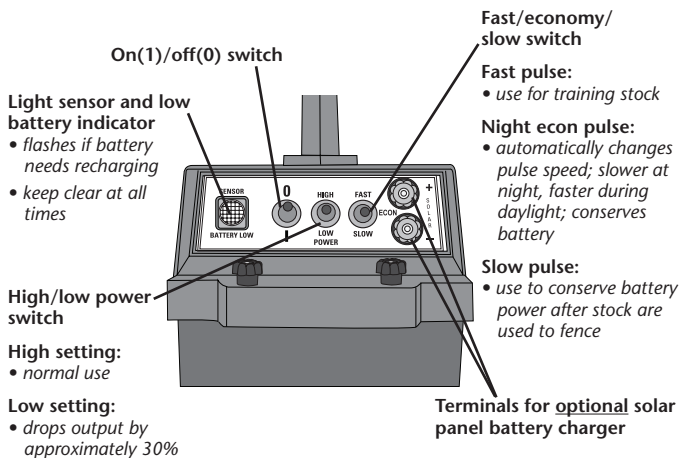
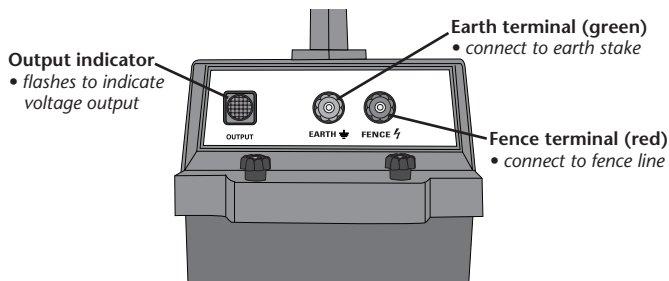
For Model: ESB202



Model	Approximate Battery Life
ESB202	28 days

# Energiser Operation

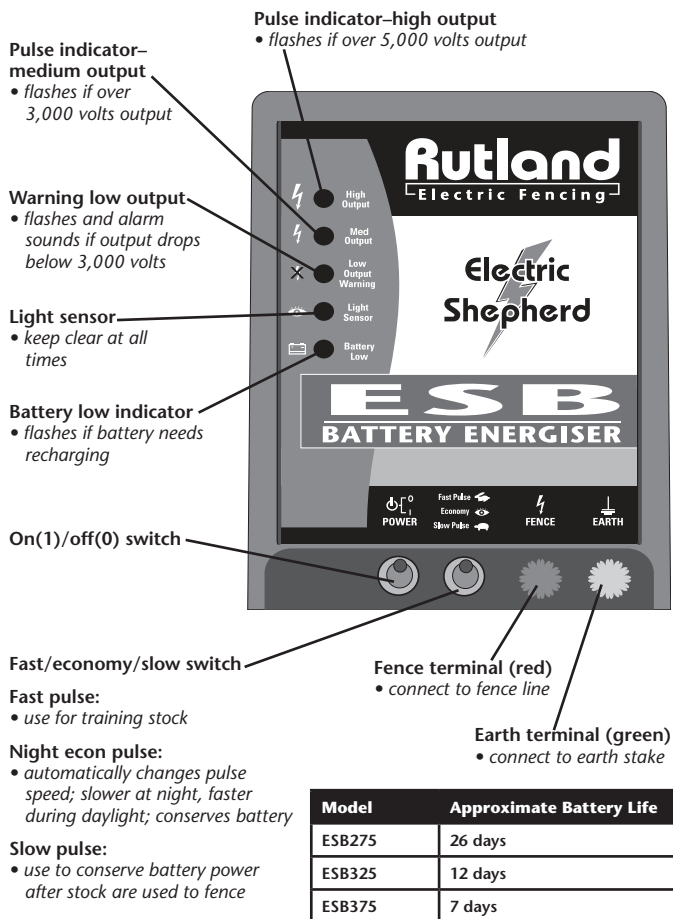
For Models: ESB145, ESB225



Model	Approximate Battery Life	Optional Solar Panel Part No.
ESB225	35 days	22-212 (3-watt) or 22-213 (6-watt)
ESB145	120 days (2x 9v 90Ah) 85 days (12v 75Ah)	22-213 (6-watt) or 22-219 (10-watt)

# Energiser Operation

For Models: ESB275, ESB325, ESB375



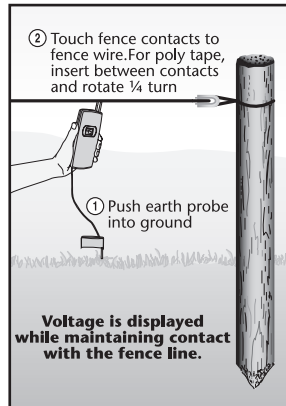
Model	Approximate Battery Life
ESB275	26 days
ESB325	12 days
ESB375	7 days

# Maintenance/Testing

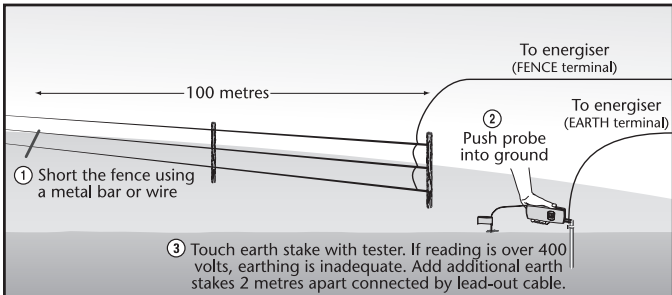
## Fence Line Maintenance

- Regularly test voltage at the furthest point on the fence line from the energiser – we recommend Rutland Digital Tester 14-172 or 8-Light Tester 14-173
- Routinely check all fence and earth connections to ensure they are sound
- For best performance, keep fence line free of vegetation
- Keep insulators free from dirt, dust and cobwebs

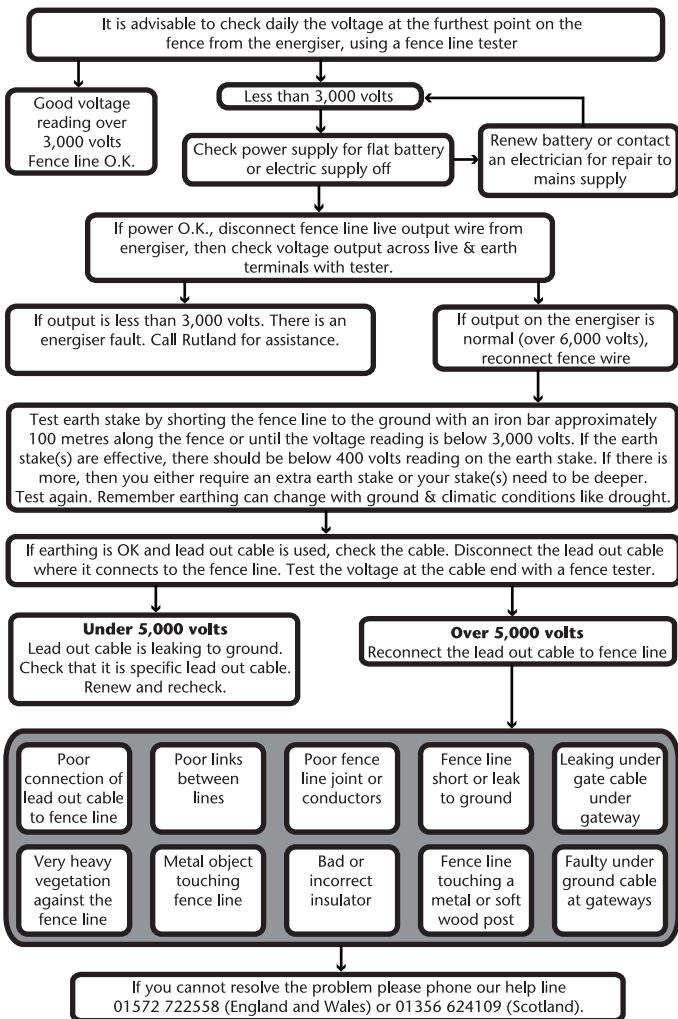
## How To Test Fence



## How To Test Earthing



## Energiser Troubleshooting



## Warranty

This energiser is warranted to be free from manufacturing defects for two years from the date of purchase by the end user. Proof of purchase is required for warranty consideration. If no sales receipt is available, the date of manufacture will be used to determine the warranty period.

The warranty does not apply to any defect in the product caused by improper installation, misuse, tampering, neglect, moisture or any other reason not related to defects in material or workmanship of the product.

Warranties are not assignable or transferable. It is for the benefit of and given only to the first consumer purchaser of the product, and shall not be for the benefit of nor given to any subsequent owners or any other user or to any person.

The obligation of Rutland Electric Fencing Co. Ltd. under warranty is limited only to repairing or replacing, at its discretion, any part of the product that is defective and is covered by the terms of this warranty. If any covered defect occurs during the warranty, return the product to the retailer for rectification who will either undertake the repair or forward the energiser to ourselves. In no case shall Rutland Electric Fencing Co. Ltd. be liable for incidental, consequential, third party, special or indirect damages of any kind.

## LIMITATION OF DAMAGES

The directions for use of this product should be followed carefully. It is impossible to eliminate all risk inherently associated with use of the product. The effectiveness of Rutland brands of fence energisers may depend on the effectiveness of connections, interruption of power source, accidental shorting of wires, weather conditions, or the manner of use or application, all of which are beyond the control of Rutland Electric Fencing Co. Ltd. or the seller. The buyer shall assume all such risks.

Rutland Electric Fencing Co. Ltd. warrants that this product is fit for the purposes for which it was designed and referred to in the directions for use, subject to the inherent risks referred to above. Rutland Electric Fencing Co. Ltd. makes no other expressed or implied warranty of fitness or merchantability or any other expressed or implied warranty. IN NO CASE SHALL RUTLAND ELECTRIC FENCING CO. LTD., OR THE SELLER, BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. RUTLAND ELECTRIC FENCING CO. LTD. AND THE RETAILER OFFER THIS PRODUCT, AND THE BUYER AND USER ACCEPT IT, SUBJECT TO THE FOREGOING CONDITIONS OF SALE AND WARRANTY WHICH MAY BE VARIED ONLY BY AGREEMENT IN WRITING SIGNED BY AN AUTHORIZED OFFICER OF RUTLAND ELECTRIC FENCING CO. LTD.

## SAVE THIS INSTALLATION AND USERS MANUAL



**WEEE (Waste Electrical & Electronic Equipment directive)** This instruction applies to any product which displays the bin symbol on it or its packaging. If your electrical product is beyond repair and you wish to dispose of it please **DO NOT** dispose of it with your normal household waste. Either return it to your point of purchase (retailer) for collection by Rutland Electric Fencing or take to any authorised recycling centre. Your local council/ authority will have information available. This notice refers only to products manufactured or distributed by Rutland Electric Fencing Co. Ltd.



*Please visit our website for further installation tips,  
product manuals and additional electric fencing information.*

**[www.Rutland-Electric-Fencing.co.uk](http://www.Rutland-Electric-Fencing.co.uk)**

**Rutland**<sup>TM</sup>  
Electric Fencing

**Rutland**<sup>TM</sup>  
Electric Fencing

To request a Rutland Electric Fencing Co Ltd. catalogue or for information on any Rutland product, please contact us at:

**Rutland Electric Fencing Co Ltd.**

Fencing House  
8 Lands End Way  
Oakham, Rutland  
LE15 6RF UK

Web: [www.Rutland-Electric-Fencing.co.uk](http://www.Rutland-Electric-Fencing.co.uk)

Email: [Enquiries@Rutland-Electric-Fencing.co.uk](mailto:Enquiries@Rutland-Electric-Fencing.co.uk)

Phone: (44) 0 1572 722558 – UK and EU

(44) 0 1356 624109 – Scotland

(44) 0 7817 396776 – N. Ireland