




FenceMaster

Energizer

Installation instructions

Gallagher Animal Management Systems
Private Bag 3026, Hamilton, New Zealand
Email sales@gallagher.co.nz www.gallagher.co.nz
3C4420-9/02

Service of double-insulated Appliances

In a double-insulated controller, two systems of insulation are provided instead of grounding. No equipment grounding means is provided in the supply cord of a double insulated controller, nor should a means for equipment grounding be added to the controller. Servicing a double insulated controller requires extreme care and knowledge of the system, and should be done only by qualified service personnel. Replacement parts for a double insulated controller must be identical to the parts they replace. A double-insulated controller is marked with the words "DOUBLE INSULATION" or "DOUBLE INSULATED". The symbol for double insulation  may also be marked on the appliance. To reduce the risk of electric shock, this fence controller has a polarised plug (one blade is wider than the other). This plug will fit in a polarised outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.



FenceMaster Energizer

Thank you for purchasing this FenceMaster Energizer. Your new Energizer incorporates the latest in electric fencing technology, ensuring powerful control.

If for any reason you are not happy with your purchase, please return the energizer to your dealer within 30 days of purchase and we will give you a full refund - Guaranteed.

TWO YEAR WARRANTY from date of purchase



POWERFENCE™

MODEL.....

ENERGIZER SERIAL NO

DATE PURCHASED DEALER

This Energizer is warranted against failure within two years of date of purchase. Gallagher will repair or replace at their option any faulty product returned to them or their Dealer within this time.

Warranty does not cover damage due to:

- Incorrect input voltage
- Physical mishandling
- Water immersion
- Contamination by battery acid
- Lightning strike
- Damage to external wiring

The Manufacturer and Distributor accept no responsibility for the misuse of this Energizer. NOTE: This Energizer complies with the necessary safety standards. Gallagher Group Ltd and their agents accept no responsibility for any accident caused subsequent to

AUSTRALIA

Gallagher Australia Pty Ltd,
A.C.N. 005 550 845
P.O. Box 122, Rydalmere,
Sydney, NSW 2116.

CANADA

Gallagher Power Fencing Systems Inc.,
P.O. Box 576, Owen Sound,
N4K 5R1 Ontario.

REPUBLIC OF IRELAND

Gallagher Power Fence Systems (IRL) Ltd,
Kinsale Road, Cork.

NORTHERN IRELAND

Sam Nelson & Son,
16 Lower Ballinderry Road,
Upper Ballinderry,
Lisburn, Co. Antrim BT28 2JB.

NEW ZEALAND

Gallagher Animal Management Systems,
Private Bag 3026, Hamilton.

SOUTH AFRICA

Gallagher Power Fence (S.A.) Pty Ltd,
6 Charlie Avenue, Hughes Extension 23,
Jetpark, Johannesburg.
P.O. Box 30074, Jetpark, Witfield 1469.

UNITED KINGDOM

Gallagher Power Fence (UK) Ltd,
Curriers Close (off Charter Avenue),
Canley, Coventry CV4 8AW.

UNITED STATES OF AMERICA

Gallagher Power Fence Inc. (USA),
18940 Redland Road, P.O. Box 708900,
San Antonio, Texas 78270-8900.

See "IMPORTANT SAFETY INFORMATION" section of enclosed Instructions.

READ INSTRUCTIONS BEFORE USE

Exchange Service Modules are available at your authorised dealer.
Gallagher - Manufacturers of electric fences since 1938.

KEEP THIS PAGE - IT'S YOUR PROOF OF WARRANTY

Save these instructions

FenceMaster complies with international safety regulations.

Gallagher reserves the right to make changes without notice to any product specification to improve reliability, function or design. E & OE.

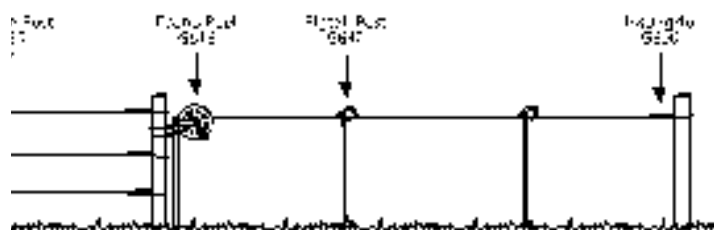
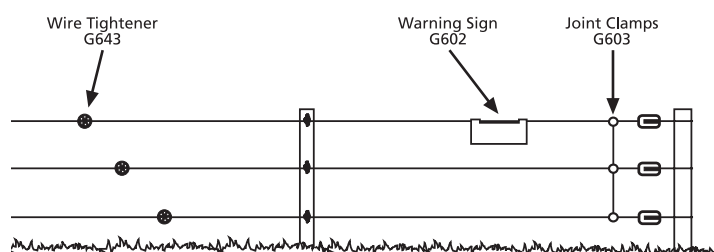
Important safety information

- **WARNING:** Read all instructions.
- Electric fences should be installed and operated so that they cause no electrical hazard to persons, animals or their surroundings.
- Electric fence constructions which are likely to lead to the entanglement of animals or persons should be avoided.
- In areas of public access, use an electric fence warning sign (G6020) every 10m (33ft) to identify the electrified wire(s).
- Check your local ordinance for specific regulations.
- Crossing with overhead powerlines should be avoided wherever possible. If such a crossing cannot be avoided, it should be made underneath the powerline and as nearly as possible to right angles.
- If connecting leads and electric fence wires are installed near an overhead power line, the clearances should be not less than those shown below:

Minimum Clearances from Power Lines	
Power Line Voltage V	Clearance M
< 1 000	3
> 1 000 & ≤ 33 000	4
> 33 000	8

- If connecting leads and electric fence wires are installed near an overhead power line, their height above the ground should not exceed 2m.
- This height applies either side of the orthogonal projection of the outermost conductors of the power line on the ground surface, for a distance of:
 - 2m for power lines operating at a nominal voltage not exceeding 1 000 V;
 - 15m for power lines operating at a nominal voltage exceeding 1 000 V.
- Fence wiring should be installed well away from any telephone or telegraph line or radio aerial.
- An electric fence should not be supplied from two different energizers or from independent fence circuits of the same energizer.
- For any two different electric fences, each supplied from a different energizer independently timed, the distance between the wires of the two electric fences should be at least 2m. If this gap is to be closed, this should be effected by means of electrically non-conductive material or an isolated metal barrier.
- Do not electrify barbed or razor wire in an electric fence.
- **WARNING:** Risk of Electric Shock. Do not connect the Energizer to a fence and to any other device such as a cattle trainer or a poultry trainer. Otherwise, lightning striking your fence will be conducted to all other devices.

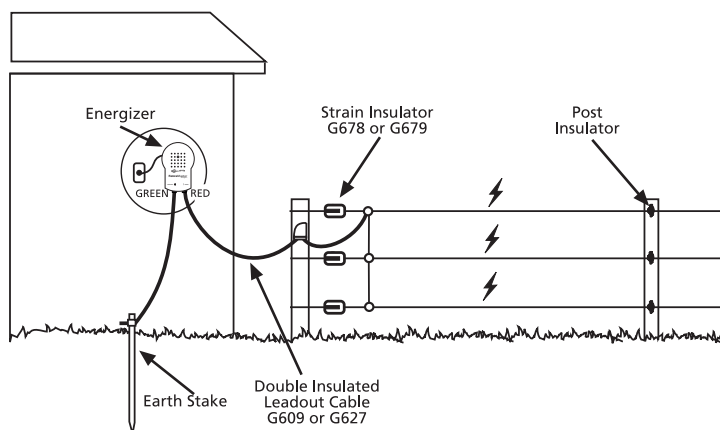
For fence specifications and design contact your Gallagher dealer.



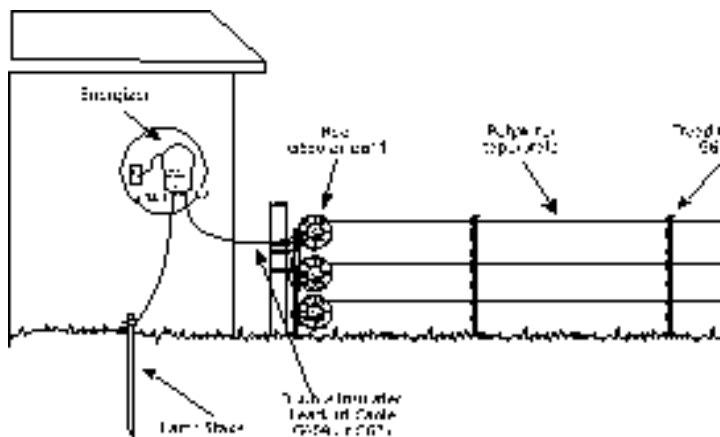
Materials and Tools

Gallagher dealers offer a complete range of products for your Power Fence.

Permanent Fence



Portable Fence



- Do not install an earth (ground) system for your Power Fence within 10m (33ft) of any utilities type ground system.
- Except for low output battery operated energizers, the energizer earth electrode should penetrate the ground to a depth of at least 1m.
- Use lead-out cable in buildings and where soil could corrode exposed galvanised wire. Do not use household electrical cable.
- Connecting leads that are run underground should be run in a conduit of insulating material or else insulated high voltage cable should be used. Care should be taken to avoid damage to the connecting leads due to the effects of animal hooves or tractor wheels sinking into the ground.
- Refer servicing to qualified Gallagher service personnel.
- Do not place combustible materials near the fence or Energizer connections. In times of extreme fire risk, disconnect Energizer.
- Train livestock to Power Fencing prior to entry into pastures. Allow livestock to approach a Power Fence for the first time without stress.
- Do not handle power cord if temperature is below +5°C.
- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or similarly qualified person in order to avoid a hazard.
- This appliance is not intended for use by young children or infirm persons without supervision.
Young children should be supervised to ensure they do not play with this appliance.
- Game Fencing: Power Fencing has been used widely throughout the world for game animals, deer, bears, elk and elephant. Power Fences are a psychological barrier and should not be considered a complete physical barrier fence. With any Power Fence occasional animal penetration may occur (as with any other type of fence). It is important for game fencing to have power on the fence the same day as the fence is constructed. Animals investigating the new obstruction will be shocked and will relate the shock to the new obstruction. If no power is on the fence and animals learn to walk through the fencing system with no electric shock, this causes major problems later on since they will not relate the electric shock to the fence after the power is turned on. A Power Fence is not recommended for animals under hunting pressure. For specific questions on game fencing contact your Gallagher dealer.
- Bird Deterrent: Where the Energizer is used to supply a system of conductors used for deterring birds from roosting on buildings, no conductor should be connected to earth. A switch should be installed to provide means of isolating the Energizer from all poles of the supply and clear warning signs should be fitted at every point where persons may have ready access to the conductors. The notice should bear the words "LIVE WIRES" in block letters not less than 13mm (1/2" high). The letters should be red on a white background. Each notice should be at least 62mm x 50mm (2" x 2").

How FenceMaster™ Works

The FenceMaster Energizer sends electrical pulses along the fence line, about one second apart. These pulses give the animal a short, sharp, but safe shock. The shock doesn't harm the animal. It is sufficiently memorable that the animal never forgets the shock, and will avoid the fence.

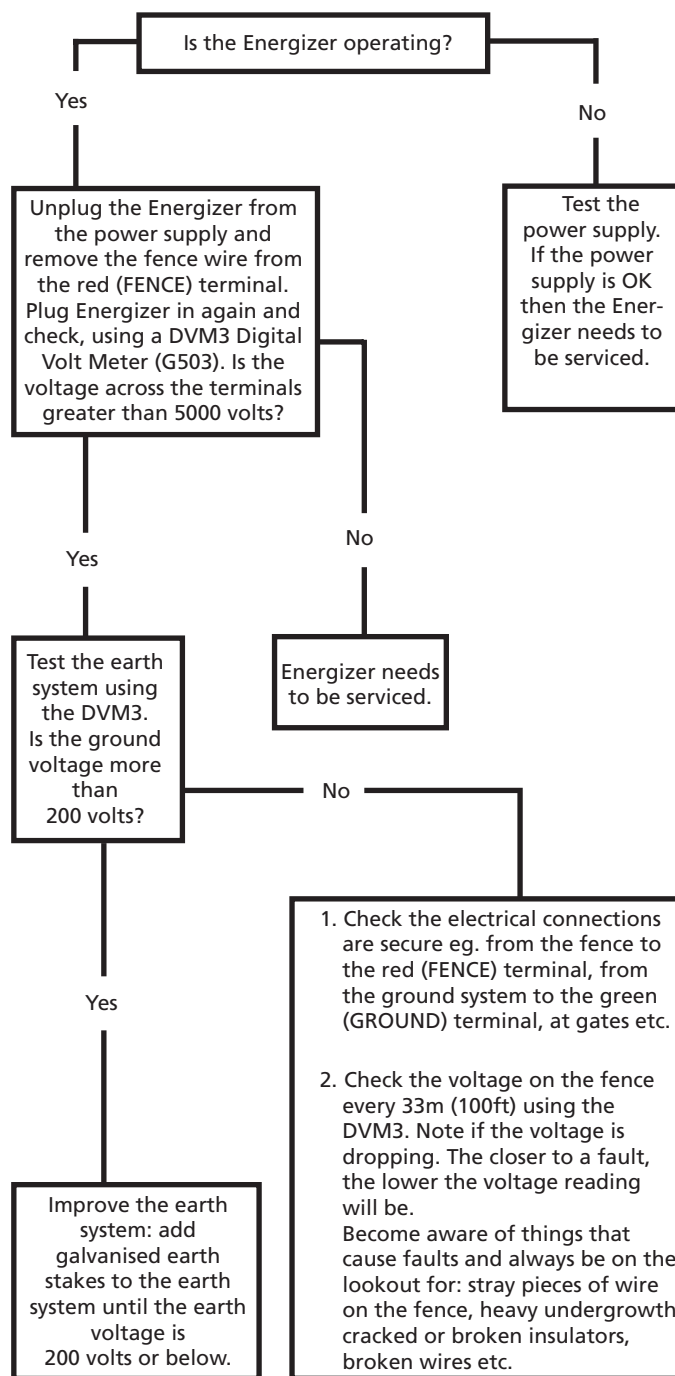
Why we recommend the 'pulsed' system

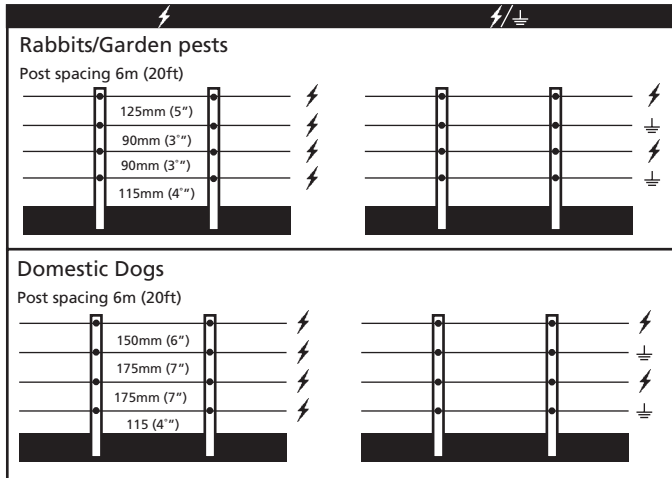
Unlike continuous current chargers on the market, the FenceMaster emits pulses, which are separated by a one second interval. This built-in safety factor means that, if you grip the FenceMaster fence, you can safely let go of the fence between pulses.

Practical Hints_

- Check your local ordinance on fencing laws: local laws may require a permit before use.
- Periodically check that the Energizer is operating by checking that the indicator light is flashing.
- Check the fence periodically. Remove any fallen branches, weeds or shrubs because these will cause the fence to short out and will reduce animal control.
- All animals need time to learn to respect the fence. It may take several days to train the animal and the fence may require minor adjustments.
- Animals that are prone to jumping may be difficult to confine. You may need to try different fence heights to determine the best height.
- Use top quality insulators: low quality or cracked insulators and plastic tubing are not recommended because they will cause shorting.
- Use joint clamps (G603) on all steel wire connections to ensure a high quality circuit.
- This Energizer must be earthed using galvanised metal earth stakes (G879) to ensure the electric fence works correctly.
- Double Insulated Cable (G609 or G627) should be used in buildings, under gateways and where soil could corrode exposed galvanised wire. Never use household electrical cable. It is made for a maximum of 600 volts and will leak electricity.
- On permanent Power Fencing, use high tensile 12.5 gauge (2.5 mm) wire. On portable fences, Polywire, Polytape or light gauge wire may be used.

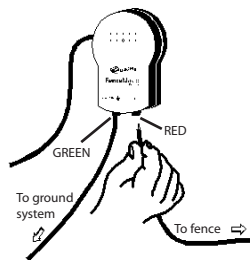
VOLTAGE CHECK LIST





STEP 4: Connect the fence

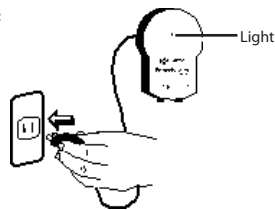
Connect the Energizer's red (FENCE) terminal to the fence using double insulated cable (G609 or G627). Remove 2" of plastic coating from one end of the cable. Press the green (EARTH) terminal button and insert the wire into the terminal. Attach the other end of the cable to the fence using a joint clamp (G603).



FenceMaster Kit:
Connect the Energizer's red (FENCE) terminal to the fence using the double insulated cable (G609 or G627) provided. Remove 2" of plastic coating from one end of the cable. Press the green (EARTH) terminal button and insert the wire into the terminal. Attach the other end of the cable to the fence using the joint clamp (G603) provided.

STEP 5. Plug the FenceMaster into a power outlet.

Check that the light on the front of the FenceMaster is flashing.

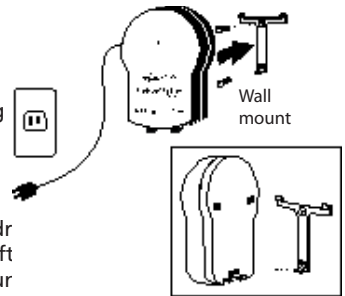


5-Step Installation Guide

STEP 1. Mount the FenceMaster

The FenceMaster is easy to install. Mount the FenceMaster on a wall, under cover, out of reach of children, adjacent to a power outlet. Install where there is no risk of the Energizer incurring fire or mechanical damage.

Using the 2 screws provided, screw the wall mount to the wall. Attach the FenceMaster to the wall mount by hooking the FenceMaster over the 2 prongs and snapping the bottom into place.



To remove: use slotted screwdriver release the bottom clip and lift FenceMaster off the wall mount

STEP 2. Install the earth system.

The most effective place for a earth system is in continuously damp soil (see figure (a) overleaf). For dry areas with poor earthing conditions, install the fence using figure (b) overleaf.

Install the earth system at least 33ft from any power supply earth peg, underground telephone or power cable. Drive one 6ft earth stake (G87900) into the ground, until only 5cm (2") remain above the ground.

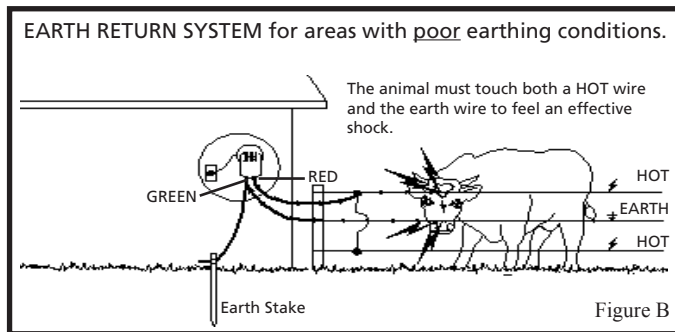
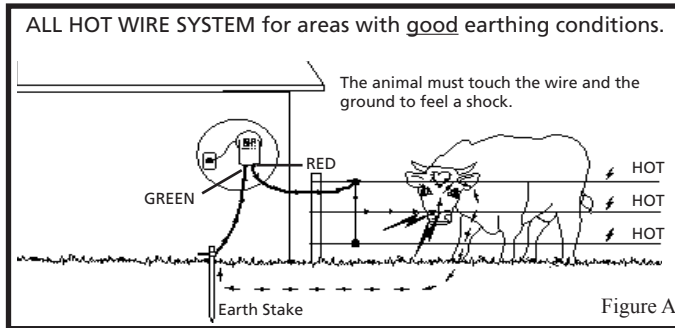
Using double insulated cable (G609 or G627), remove 2" of plastic coating from one end of the cable wire. Press the green (EARTH) terminal button and insert the wire into the terminal.

Lay out the cable down walls and out to the earth stake. Attach the cable to the earth stake by removing 10cm (4") of insulation from the cable at the earth stake, then clamp the exposed wire to the stake using an earth clamp. Tighten the clamp.

Note: Poor grounding can cause interference on telephone lines, radios and televisions. This can be recognised by a clicking sound on telephones.

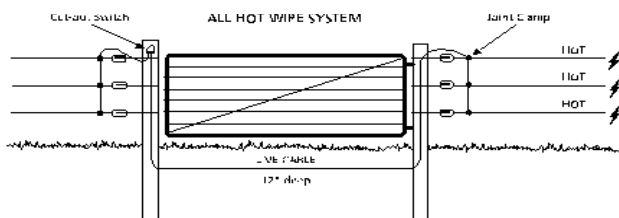
FenceMaster Kit:

- Using double insulated cable (G609 or G627), remove 2" of plastic coating from one end of the cable wire. Press the green (EARTH) terminal button and insert the wire into the terminal. Lay out the cable down walls and out to the earth stake. Attach the cable to the earth stake by removing 10cm (4") of insulation from the cable at the earth stake, then clamp the exposed wire to the stake using an earth clamp. Tighten the clamp.
- Using the 6m (18ft) wire provided, uncoil the wire to its full length and push another earth stake into the ground. Connect the end of the wire to the earth stake as (a) above.
- Push the third earth stake into the ground mid-way between the first two and connect to the wire as above.

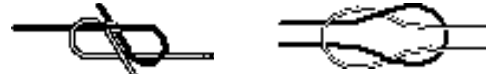


STEP 3. Install the fence

- Plan the fence line. Avoid rough, stony or steep areas if possible. For maximum fence length use multi-wire (at least 3 wires connected in parallel) fencing.
- Run out the bottom wire between the end posts.
- Tension wires until there is only a slight visible sag.
- Connect all live wires in parallel at the end of each fence section using joint clamps (G603).
- Conduct the fence system under gateways, rather than overhead. Do not use electric gates to get power across gateways. Install double insulated cable (G609 or G627) in a plastic pipe (for physical protection), 30cm (12") deep. Turn the ends of the pipe down to keep water out. Connect each end of the cable to the joint clamps (G603).
- Use cut-out switches (G607) to allow sections of the fence system to be switched off during fence maintenance. Put a switch at each gateway and at every major change in fence direction.



g. When joining wires under tension, use a figure eight or reef knot.



OFFSET FENCE

Existing non-electric fences can be protected to last for many more years simply by attaching offset brackets (G659 or G662) and an electrified wire on one or both sides of the non-electric fence. Use a single offset wire, positioned at two thirds the height of the animal (chest height) to be controlled.

OPTIONS FOR WIRE AND POST SPACINGS

These figures are guidelines only for flat country conditions.

Note: ⚡ Symbol indicates a live, pulse-carrying wire.
 ≡ Symbol indicates an earth wire.

