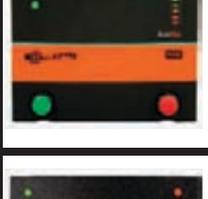


SELECTING YOUR ENERGIZER

ENERGIZER	ACRES	ANIMAL CONTROLLED
MR5000	2000	         
MBX2500	1000	         
MR2500	1000	         
M1800	420	         
M1000	250	       
M600	150	    
M300	85	   
M150	60	   
Wrangler	30	   
FM Jr.	8	   
B1200	400	         
B600	200	         
B280	110	       
B200	90	       
B180	90	    
B100	60	    
B80	55	   
B60	40	   
B11	6	   
S50	30	   
S20	14	   
S17	10	   

This table is a guide only. In dry country conditions, Energizers have proven to work effectively for more than twice the distance. In high vegetation growth areas, distances may need to be reduced.

All Gallagher Energizers carry a 2-Year Warranty in addition to a 30-day money back, customer satisfaction guarantee.

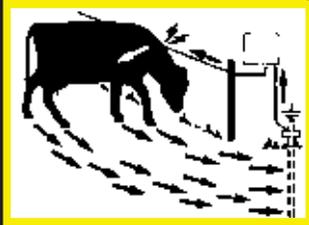


INSTALLATION INFORMATION

Two Ways An Electric Fence Works

1. All Hot System

Electrical current from the energizer is transmitted down the Hot (Live) Wire. The animal contacts the wire and the current is passed thru the animal thru the soil to the ground rods returning the current to the ground terminal. This completes the circuit and the animal is shocked.



Electric flow in damp areas in an All Hot System

2. Hot/Ground Wire Return System

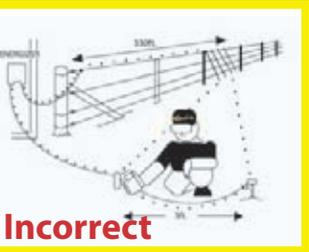
Electrical current from the energizer is transmitted down the Hot (Live) Wire. The animal contacts the Hot (Live) Wire in conjunction with the ground wire. The current is passed thru the animal returning to the ground terminal via the Ground Wire completing the circuit to shock the animal.



Electric flow in Hot / Ground Wire Return fence is used in dry areas.

Testing The Ground System

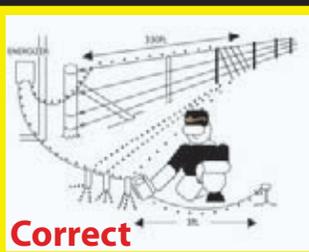
Before testing the ground system, you will need to place the fence system under a heavy load to simulate heavy vegetation growth. You can load the fence by placing several steel stakes between the live fence wires and the ground at least 330' from the Energizer. The fence voltage should be reduced to 2kV if possible.



Incorrect

Inadequate Ground System: If reading is greater than 200 volts.

Using a DVM, measure the voltage between the ground rod, which is connected to the Energizer ground terminal and an independent ground at least 3' away from any Energizer ground. The independent ground can be a metal rod over 8" long.



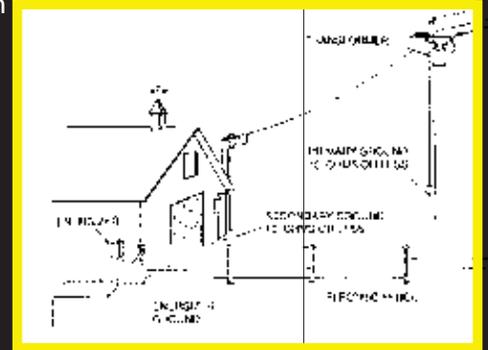
Correct

Adequate Ground System: Reading is 0-200 volts.

Proper Grounding Utility

Research indicates that 85% of all damaged electric fence Energizers have been damaged by electrical surges or lightning coming from the utility side, not the fence side. The problem is caused, in almost all cases, by inadequate grounding of either primary or secondary sources, resulting in surges seeking out the power fence grounding system and damaging the Energizer along the way. In addition to Gallagher's studies, some recent University research has shown inadequate grounding to also be the cause of some stray voltage problems.

Proper utility grounding may eliminate problems.



Lightning Protection From Fence Side

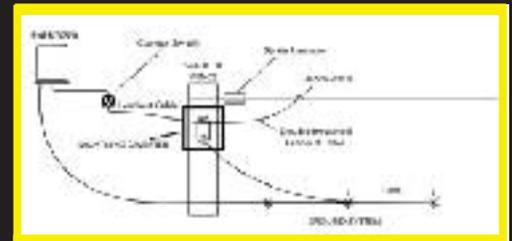
Ground Rule

1. One continuous wire to join ground rods.
2. Galvanized ground rods must be 6 feet long.
3. Minimum of three 6 foot ground rods.
4. Minimum of 10 feet between ground rods.

Lightning Diverter

The Lightning Diverter is necessary to minimize damage to an Energizer from lightning strikes that are received on the fence system. The use of a G648004 Adjustable Lightning Diverter also assures the two-year lightning warranty offered by Gallagher. The ground system for the Lightning Diverter should be connected to the center ground rod of the Energizer's ground system. This will offer the minimum amount of lightning protection to your Energizer.

For additional effectiveness, please consult the directions on the G648004 Adjustable Lightning Diverter.



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