

DARE

ENFORCER SERIES



DE 20



DE 60



DE 80

**110 Volt Plug-In
Low Impedance
Electric Fence Energizer**

**EASY
INSTALLATION
MANUAL**

Congratulations for purchasing a Dare Electric Fence Energizer. Dare Products is the leader in electric fencing products and we are pleased to offer high quality Energizers to complete our product line. All our Electric Fence Energizers are ultra low-impedance and utilize the latest technology for maximum effectiveness and durability. Please keep in mind that any Electric Fence Energizer is only as good as the electric fence to which it is connected. For an effective electric fence follow the instructions in this manual.

WARNING:

IMPORTANT: IF YOU DO NOT INSTALL YOUR ELECTRIC FENCE ENERGIZER PROPERLY IT WILL NOT WORK.

VERY IMPORTANT: IF YOU DO NOT INSTALL A PROPER GROUND SYSTEM, YOUR ELECTRIC FENCE WILL NOT WORK.

THE TOOLS YOU WILL NEED:

1. Screwdriver to install Energizer and Cut-Off Switch and ground clamps
2. Pliers to cut wire and strip insulation
3. Post driver to install ground rods

RECOMMENDED ACCESSORIES

- * 1. One to three galvanized or copper ground rods—
minimum six feet in length & 1/2 inch in diameter (5/8" rods are best)
 - * 2. One to three Dare ground rod clamps
 - 3. Dare insulated underground & hook-up wire
 - 4. One Dare cut-off switch, if desired
 - 5. Dare line clamps/split bolts/fence taps
 - 6. Surge Protector
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- * The pulse energy of the DE 20, DE 60, or DE 80 is low enough where one ground rod may be all that is needed.

INSTALLING THE GROUND SYSTEM

When an animal touches an electric fence the electric pulse must travel through the animal to the soil, from there it travels to the ground rod and then through the ground wire back to the fence energizer. Only then does the animal feel the shock that keeps it from going through the fence. A good ground system is essential for an effective electric fence.

Step 1. Using a post driver, install the ground rod(s) ten feet apart. They can be installed in a straight line or a triangle.

Step 2. Attach the ground wire (12-14 ga.) to the ground rod(s) with ground clamps. You can use galvanized wire for the ground wire, but if you bury the ground wire use insulated cable made for high voltage electric fence.

Step 3. Attach the ground wire securely to the ground terminal on the Energizer.

GROUNDING DO'S & DONT'S

Do make sure there are no underground pipes or utility cables nearby. **Don't** use pipe, steel T-Posts or concrete reinforcing rod for ground rods. **Don't** locate the ground rods within 50 feet of any utility pole ground rods. (150+ feet is best)

Don't locate the ground rods within 50 feet of a metal sided building.

INSTALLING THE ENERGIZER

Your Dare Electric Fence Energizer is designed to give you years of dependable service if installed properly.

Step 1. Using wood screws install the energizer under shelter (except solar powered energizers), preferably in a building. Locate it at eye level for easy access and maintenance.

INSTALLING AN ELECTRIC FENCE

There are many different kinds of electric fence. Here are some important rules to follow when installing any type of electric fence.

Rule 1. Use only materials designed for electric fences. Dare Products is the leader in electric fencing accessories, refer to our color catalog for information on our products.

Rule 2. Make good connections using Dare line clamps or splicing taps and insulated hook-up wire.

Rule 3. Train your animals to electric fence before turning them out.

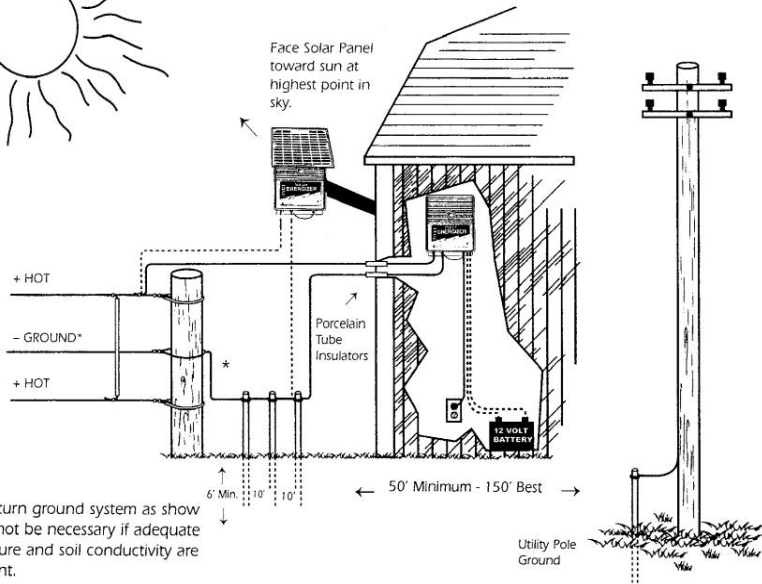
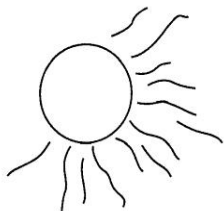
Rule 4. Check your electric fence regularly. Use a Dare digital volt meter or five-O-lite tester to measure the voltage on your fence.

Rule 5. Keep your electric fence clean of vegetation. Dare energizers will perform even in the toughest conditions when you install the proper size energizer.

For more information please refer to Dare's *High Tensile Fence System* Guide.

GROUND SYSTEM AND FENCE ENERGIZER INSTALLATION

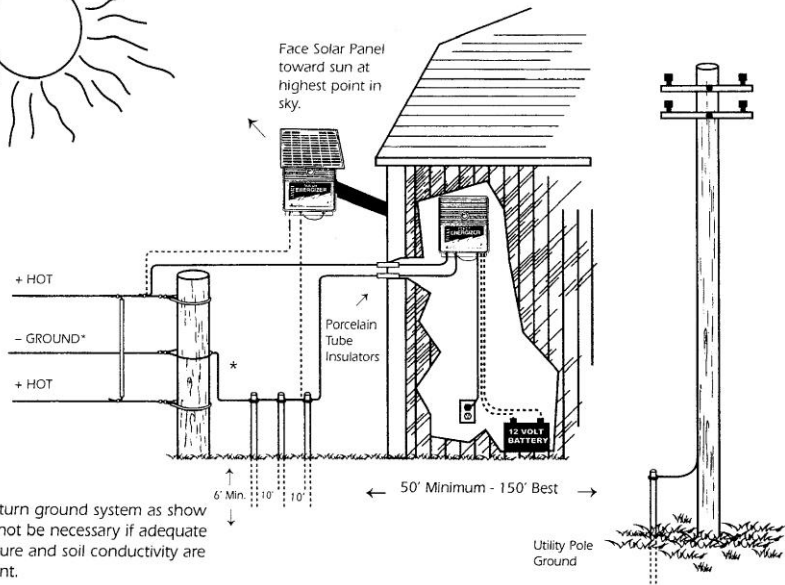
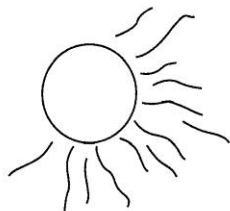
Refer to High Tensile Guide AD-1848 for specific fence designs.



*A return ground system as show may not be necessary if adequate moisture and soil conductivity are present.

GROUND SYSTEM AND FENCE ENERGIZER INSTALLATION

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TROUBLESHOOTING YOUR ELECTRIC FENCE

If your electric fence is not working, follow the steps below...

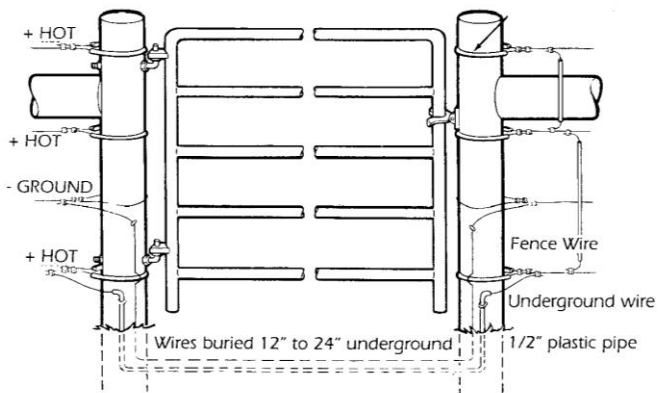
Step 1. Check the energizer. Disconnect it from the fence, make sure it is turned on and check the voltage with a Dade five-O-lite tester or digital volt meter. More than half the energizers returned to dealers are working perfectly, the problem is in the fence. If the energizer is working go to the next step...

Step 2. Check the voltage at the first cut-off switch to make sure voltage is getting that far. If OK, go to the next step...

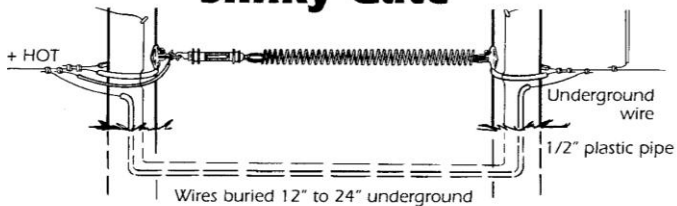
Step 3. Disconnect each section of fence where it goes under a gate or is attached to the main fence. Check the voltage to determine which section of fence is causing the problem, and then go to the next step...

Step 4. After determining the problem area or section, look for loose connections or broken insulators. Slide a stick along the bottom fence wire to knock off stray pieces of loose debris or weeds. Closely inspect gates and corners where most problems arise.

Steel Gate

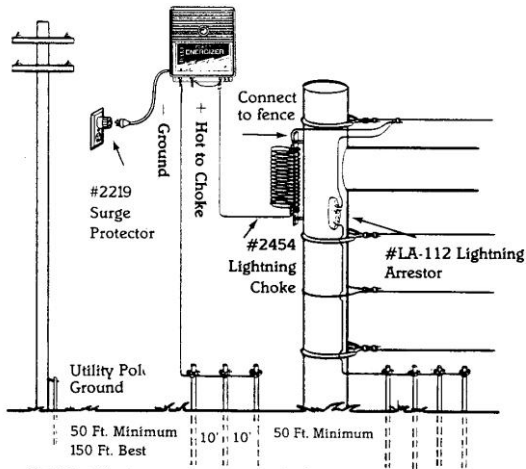


Slinky Gate



INSTALLATION HINTS

Lightning Protection



Lightning diverter ground system must be better than fence controller ground system.

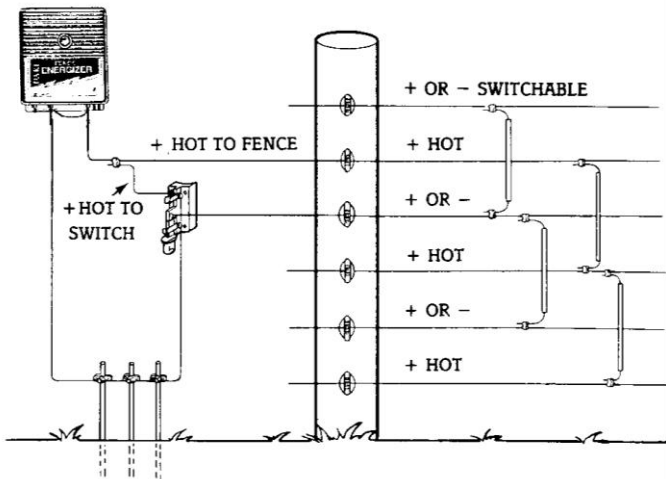
In severe lightning areas, installing a Lightning Arrester with ground rods every 1/4 mile of fence line is recommended.

Safety Switches

Change polarity of selected wires

To obtain the most effective electric fence according to climatic conditions. When the ground is moist all of the wires should be energized for maximum effectiveness. During a dry spell or if the ground is frozen, it is best to ground every other wire. System does not shut off entire fence.

#2199 Switch, double pole.
Handle up: All wires "ON" (hot).
Handle down: One-half of the wires "ON" (hot) and one-half of the wires "OFF" and grounded.



Disconnect and ground entire fence

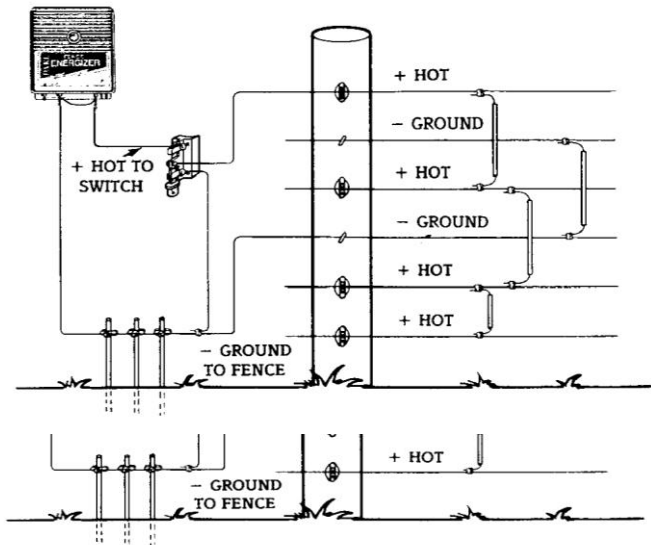
Schematic illustrates how to change hot wires to ground and shut of entire fence.

#2199 Switch, double pole.

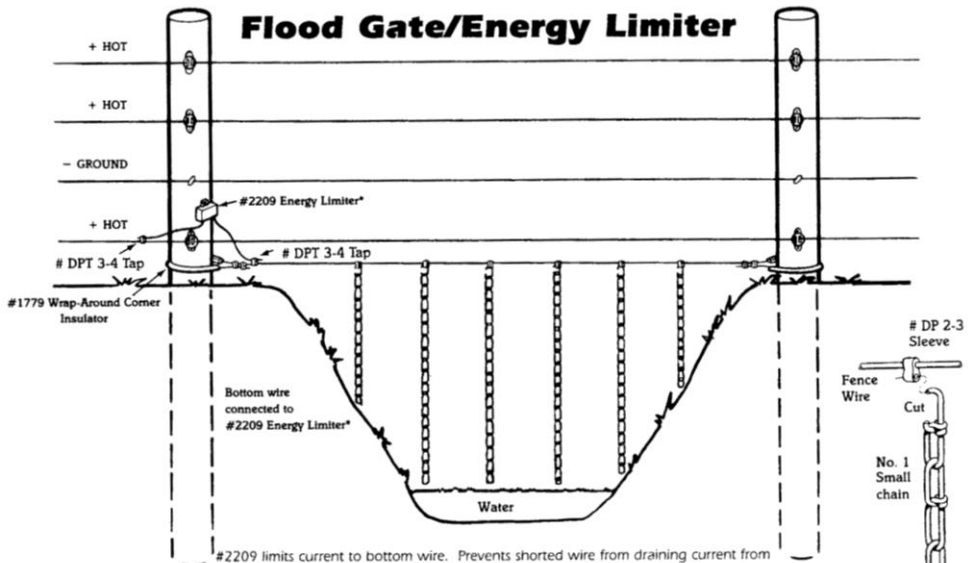
Handle up: All wires "ON" (hot).

Handle down: Fence wire "OFF" (grounded) and

entire fence grounded.



Flood Gate/Energy Limiter



#2209 limits current to bottom wire. Prevents shorted wire from draining current from upper wires. Energy Limiter should be used whenever bottom wire is 6 inches or less from soil. See page 8, Hog, Sheep, Goat and Predator Control Fence in High Tensile guidebook AD-1848.

IMPORTANT: Prior to returning the energizer, confirm that the problem is with the unit and not the fence. Disconnect the fence and test the output voltage of the energizer.

Return the energizer to the place of purchase, or send prepaid to: Dare Products, Inc., 860 Betterly Road, Battle Creek, MI 49037-8340. Include the original receipt.

The guarantee and warranty applies only to the original purchaser of this product.

The manufacturer and seller shall have no liability for damages, incidental or consequential, resulting from or caused by any failure, malfunction, or defect of any product.

No warranty other than the above mentioned is expressed or implied. Implied warranties of merchantability and fitness for a particular application which may arise are hereby disclaimed unless the law specifically precludes this disclaimer.

For questions or comments, call: 1-800-922-3273.

2 YEAR WARRANTY

MODELS DE20, DE60, AND DE80

If within 24 months of purchase you are not fully satisfied or have problems with your Dare Energizer, a replacement may be obtained by your dealer or by calling Dare Customer Service Department.

IMPORTANT! Keep your receipt for refund or exchange. You will be instructed how to receive your new Dare Energizer.

Call 1-800-922-3273.

This warranty covers defects in workmanship, materials, and damage caused by lightning and voltage spikes.



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