



NEWSLETTER 17/01
January 2017

Why is My Fence Not Performing?

This is a question we have been asked over and over again, in particular during the past few weeks. Is it the energiser? Is it grass growing into the fences? To answer these and similar questions one has to look at the basics of electric fencing. The major parts of an electric fencing system are:

- ***Energiser***
- ***Earth System***
- ***Connections***
- ***Insulators***

- ***Energiser***

The size of the energiser has to be adequate to power the area it is meant to. As a rule of thumb

One Output Joule powers 10 km of 3-wired fence

- ***Earthing System***

The electric fencing system is only as good as your earthing system! The lack of a properly installed earthing system is one of the main reasons for the poor performance of electric fencing systems. This is particularly apparent in dry conditions. The conductivity in dry soil is much inferior than when the soil is moist.

A basic earthing system consists of one or more 6' galvanised, copper-plated or copper earth rods.

1. Select an earthing site that is moist and at least 10 meters away from any:

- *earth stake for another electrical system*
- *telephone or plumbing earth stake*
- *building with reinforcing steel in contact with the ground*

2. Do not use the same earthing system for more than one energiser!

3. The distance between individual earth stakes should be at least 3 - 5 meters

4. The earth stakes have to be connected with a continuous wire from the energiser to the last stake. We recommend insulated "Under Gate Cable".

To test your earthing system measure the voltage on the last earth stake the same way as if you measured the voltage on the fence. The voltage on the last earth stake should not exceed 500 V (0.5 kV). If it does, another earth stake is required. High output joule rated energisers require more earth stakes than lower rated ones. Do not use rusty or painted waratahs or rusty pipes!

- **Connections**

Make sure that any connection on the fence is properly and adequately clamped to avoid corrosion.

- **Insulators**

To make sure that your fence is adequately powered. Please check your insulators. Cracked or broken insulators may create shorts which lowers the power on the fence.

Red Snap'r offer the following Earth Stakes

- 6' Galvanised Earth Rod (RSA-21) \$ 32.40 inc GST**
- 6' Copper-plated Earth Rod (RSA-7) \$ 38.20 inc GST**
- 4 x 2' Sectional Copper Ground Rod Kit (RSGRSC8Z) \$ 75.00 inc GST**



Fence Doctor

A great tool to check your fences and find faults is our "Fence Doctor". This fault finder makes it easy to keep your fences under control. It is now also available with a pouch and a pair of short-out leads that allows you to repair your fences on the spot.



Fence Doctor \$ 179.60 inc. GST
Pouch and Short-Out Leads \$ 15.00 inc GST

Happy farming!

Your Red Snap'r Team