## KENCOVE

## October 2003 WEB



Non-Electric Tight-Knot Woven Fence page 9 Ideal for Exotics, Sheep and Cattle !


Find electrical shorts
the easy way! PACE 27


## Horse Fence

PAGE 21
Safe and Low Maintenance with a Classy Look!

Has KENCOVE!!!
Hit (see Page 20)


Fence Planning

## INSTALL IT YOURSELF!

## HIGH-TENSILE

## FENCING

-IT'S STRONG
-IT'S ATTRACTIVE
-IT'S LONG-LASTING
SAVE MONEY!
You supply the posts, tools and labor and our 6-WIRE
HIGH-TENSILE FENCE will cost you just...

6 Wire Fence Plan, Subdivision, Packages Installation Instructions
High Tensile Fence
High Tensile Wire, Aluminum Clad, Galfan Tools - Spinning Jenny
Woven H-T Fence 9 Tightlock ${ }^{\circledR}$, SolidLock ${ }^{\circledR}$, Hingejoint , Horseman ${ }^{\text {TM }}$ Tools - Stretcher Bars, Wire Twister
Horse Safe Fence 18
Electrified - Rope, Ribbon, Hotcoat ${ }^{\circledR}$, Safe Fence ${ }^{\text {TM }}$ Coated - Rail, Kencoat, Kenrail
Electric Fence
Energizers - Mains, Battery, Portable - Stafix Insulators, Supplies - Switches, Gates
Portable Fence
34, 40
Electric Twine \& Tape, Step-In Posts,
Reels, Offsets, Netting
1-800-536-2683


## Kencove Index

page11 Cents Per Foot package
Battens \& Twist Sticks ..... 10
Brace Pins ..... 16
Chain Grab ..... 14
Crimping Tools ..... 17
Deer Net, Plastic ..... 10
Deer, Elk, Livestock \& Exotic Animal Fence ..... 9
Duckbill Earth Anchors ..... 11
Electrical Supplies ..... 26
Fence Chargers ..... 23
Fiberglass Posts, Spacers \& Accessories ..... 32
Gate Handles \& Electric Gates ..... 28
Gate Hooks \& Latches, Galvanized Tube Gates ..... 29, 38
Ground Rods \& Clamps ..... 27
High Tensile Fence Accessories \& packages ..... 5
High Tensile Steel Wire- Class 3 Galvanized ..... 6
High Tensile \& Soft Wire-Galfan Coated/Aluminum Clad ..... 7
Hotcote Wire - Horse ..... 20
Insulators, Corner Post ..... 31
Insulators, Line Post ..... 29
Netting, Electric ..... 40
Offset Insulators ..... 30, 36
Pasture Plate Meters ..... 36
Plastic Coated High Tensile Fence Wire - Horse ..... 20
Plastic Coated Rail High Tensile Fence - Horse ..... 21
Plastic Wire Cover - Horse ..... 19
Portable Fence Supplies ..... 34,40
Post Drivers ..... 12
Posts, Step Ins ..... 35
Posts, Wood-Pressure Treated ..... 10
Reels ..... 36
Ribbon Fence, Electrified - Horse ..... 18, 34
Rope Fence, Electrified - Horse ..... 17
Safe Horse Fence - Horse ..... 20
SPIDER Permanent Electric Fence ..... 37
Spinning Jennies ..... 8
Splicers ..... 15
Staples ..... 16
Tension Springs ..... 14
T-Posts, Hot Dip Galvanized ..... 10
Twine Fencing ..... 34
Underground Cable ..... 23
Warning Signs ..... 35
Water Valves \& Couplers ..... 38
Wedge-Loc T-Post Bracing ..... 37
Wire Cutters ..... 14
Wire Tighteners ..... 13
Order Form ..... page 39


The above pictures with wire spacings are only recommendations. The best configuration for you may be different animal size, temperament, etc.

by Charles Kendall March 2003 The six-wire fence is one of the more popular high-tensile fences. It should be electrified to make it really secure, but it will generally keep stock from escaping even if the electric is off for an extended period of time. The 60 inch high anti-deer fences, 48 to 54 inch high cattle or horse fences, and 42 inch high sheep fences are all examples of good six-wire electrical fence variations.

Compared to non-electric fences, you'll enjoy major savings by using wide post spacings ( 20 to 50 feet) and lighter end bracing. The six hightensile wires are not easy to get through, are almost impossible for animals to break, and often last for over forty years. This fence looks great and it works! Relax and enjoy the farm more with an affordable fence from Kencove.

Can you afford this fence? High-tensile fencing is very low in cost when compared to other options, especially when considering its long lifeexpectancy. You could put up the fence today and likely never need to replace it in your lifetime. While eleven cents per foot can cover the basic cost of wire and associated hardware for the 15 acre package listed, the most expensive parts of the fence are posts and labor. If you find a contractor who supplies the material and labor to build a six wire fence, the cost is likely to be over a dollar a foot. If you do not have the time, a contractor may be your best option. If you need a good contractor, check with us. We may know of a contractor in your area who is a Kencove customer. If not, Kencove can help advise a crew interested in learning how to build hightensile fences. We have helped start many independent fence builders.

If you do have the time, we believe you can really enjoy building this type of fence. Do you remember the thrill of challenge and the pride of accomplishment in your hobbies or past times? In our family my son, Don, has put together radio controlled airplanes; my daughter, Alice, has done fine needlepoint; and Phyllis, my wife, enjoys the challenge of writing computer programs as well as several crafts. Dairy farming was my big challenge until I got excited about high-tensile fencing. Just think of the pride you'll have in showing your neighbors the great looking, long lasting, highly effective high-tensile fence that you built.

Let's go through on paper, some of the steps required to build this fence. Decide what you are going to do about the main tools you need. You could try digging the post holes by hand, dispensing the wire without a jenny, and hand knotting the wire. Most people will not enjoy that big of a challenge if there is a lot of fence to install. I believe the spinning jenny is the most essential tool. High-tensile wire comes in about a 21 inch diameter coil with no spool. It is easily dispensed with a turn table (spinning jenny). You may want to build a plywood spool around the coil. Most people end up buying a
 Kencove Spinning jenny. Jsing nothing to dispense the wire is an easy way to end up with a tangled mess or injury.

The biggest labor-saving tool is a tractor mounted post driver. Posts are set very quickly and are tight. A tractor mounted driver can cost $\$ 1,900$ to $\$ 16,000$. If you have a lot of fence to build, it will pay for itself in labor savings alone. If you are lucky, you may find a neighbor willing to rent a post driver to you. Some contractors are willing to just drive the posts.

A post hole digger will work, but it will take more effort and time. The end and corner posts need to be placed four feet into the ground, and the lower $1 / 3$ of the hole should be concreted to keep the post from lifting out of the hole.

We recommend a crimping tool used with the
 proper number of crimping sleeves for your specific application. This will maintain the full strength of the wire, and also makes a neater connection. Even if you have an expert personally demonstrating the hand-knotting technique, it takes a while to learn how to tie the stiff $\mathrm{H}-\mathrm{T}$ wire properly. Expect to lose $1 / 3$ the breaking strength at an inline splice with the best knot.

In planning your new fence, the first thing to do is find the length of your fence. An easy and economical way to measure the footage to be fenced is to step off a known distance (such as the length of a barn) and calculate the length of your average step. Now draw a rough map of the fence, showing lengths, gates, ends, corners, and other special terrain considerations you may have in your pasture. This is an excellent visual aid and will go a long way toward keeping you organized as far as actual fence construction and materials lists are concerned.


We have included for your information a chart comparing approximate perimeter footage of fence lines compared to acreage.

Use this chart for educated guessing only. It is always the best practice to measure the fence line distance as accurately as possible in order to purchase the correct amount of materials. Remember when the fence around a square pasture is doubled in length, there is four times as much land inside. An easy way to remember the square footage in an acre is to remember there are 640 acre in a square mile ( $5280^{\prime} \times 5280^{\prime}$ divided by 640 acre $=43560 \mathrm{ft}^{2} /$ acre $)$. The materials list for our 15 acre, 3280 foot perimeter example fences have supplies for three corners and two ends. Since there is over a half mile of fence, there are two sets of in-line wire tighteners for each strand.

The first posts to install are the 5 to 6 inch diameter (measured at the small end) corner and end posts. It is best to lean the posts 2 to 4 inches away from the pull of the wire. This will help prevent uplift in the future. Lifting is the most common problem of end and corner posts.

Installing the guide wire is next. If you need to carry the coil of high-tensile wire any distance, set the wire flat on the ground and step into the center hole. The coil feels much lighter when you have two hands holding it, and the weight is centered on your feet. Now place the coil on the spinning jenny and pull out the starting end of 12.5 gauge wire. This normally will be the lowest strand of fence wire. Snap locking pliers onto the end of the wire and walk along the fence line, being careful to pull at a steady pace and gradually slow down to stop. You can pull around several corners without tying it off. In this example, you will pull the wire around one corner and do your permanent tie off (termination) at the next corner. When you get to this corner post, do your termination by crimping with two C23 sleeves or hand knotting.

6 WIRE: General Purpose


Go back to the end post near the spinning jenny and wire. Pull the slack out of the wire and cut it so you have enough to tie the line off at that end post and attach it, again using crimp sleeves or a hand-tied knot. When you cut $\mathrm{H}-\mathrm{T}$ wire, it is good to get into the habit of pushing the cut ends of wire into the ground. This keeps the wire from recoiling. Move to the frictional center of the line. Pull on the wire to get all the slack at that point. Cut the wire then thread two crimp sleeves onto one wire end. Put the wire through the hole in the strainer's strap, bend it around and insert the end through the other holes in the crimp sleeves and crimp them. A slight bend in the wire will facilitate insertion into the crimp sleeve. The other wire end goes into the hole on the strainer's spool. Don't crimp the wire into the hole of the spool or put the wire too far through the hole ( $1 / 4$ inch out of the other side is enough). Using your strainer handle, tighten the wire by turning the spool (try not to leave so much slack that the spool is too full.) This is your guide wire for setting the other posts, so try to make sure it is straight.

Go back to your spinning jenny and pull out your guide wire for the other half of the fence. Tie off each end and install the strainer in the same manner as before. You should now have a straight line of guide wire for line post placement. Install the remainder of the line posts about a half inch away from the guide wire. Normally these posts should be positioned so the animals push the wire toward the posts; the wire should be on the inside of the fence, closest to the animals. The only exceptions are on the corners, where the wires should be on the outside of the posts. The first brace post away from the end or corner posts should be carefully set into the ground so the top brace rail just fits between them. Remember, it is much easier to cut a post than to stretch it. Try to have the top rail at least $71 / 2$ feet long, 10 feet is better. Install the top rail centered between the top two wires. An easy way to do this is with a marked stick which is the length of your post after it is set in the ground. Mark your wire spacing on the stick. Then use this stick, and crayon or chalk, to mark the wire heights on all the end and corner posts. This will help in placing the top rail at the correct height. Your marked stick should also be used to mark your line posts with the planned wire spacing.

On the end or corner post, drill a $3 / 8$ inch hole two inches deep halfway between the marks for your top two wires and install the 4 inch brace pin. Drill a hole 2 inches into the center of one end of the top rail. Now drill a hole through the post supporting the other end of the brace rail. Push the brace rail onto the 4 inch pin and position the other end so you can drive the 9 inch pin into its center. Do not drive the pin flush. Leave an inch sticking out.

Two inches above the ground on the outside of the end post drive a staple for the brace wire. Leave one-half inch sticking out. Attach the wire to an in-line strainer and pull it off the jenny until you have two complete diagonal loops around the brace posts. These loops should


HELPING FARMERS SINCE 1980 Kencove Farm Fence Supplies
344 Kendall Rd, Blairsville, PA 15717-8707
the base of the end post and the inch-long stub of $3 / 8$ inch $\times 9$ " brace pin should be holding the brace wire up to the height of the brace rail on the second post. Cut the wire and take up the slack with the in-line wire tightener. You have now built your brace.

Begin pulling the second fence wire out, stopping along the way to install the brace wires for any corners and at the other end assembly. At the far end post, install a wraparound insulator before tying off. This wire will be tied off in the same manner as the guide wire (first wire.) Remember, this wire will have wraparounds on the corner posts and tube insulators on the line posts. Count the posts. Keep track of how many posts are on each side of each corner. This will be important when threading the tube insulators (one for each line post) and wraparounds (one for each corner post) onto your wire.

Cut the wire at the spinning jenny end post and thread the proper number of 4 inch tube insulators and wraparounds onto the wire in the order they will be used. (This was figured when counting posts between corners.) Include a few extra tubes in case they are needed at the brace wire on the end assemblies. They can be used to isolate your fence wire where it might touch any brace wires. Staple the bottom two wires to the posts. Be sure not to drive the staples tight against the wires. The staples should be placed over the tubes with the flat side against the post and the fins facing you. Drive the staples until they compress the fins slightly, but not so tight that they pinch the wire.

It is best to put staples horizontally above and below the wraparound insulator rather than straddling it. Finish installing wires, insulators and in-line wire tighteners. Wraparounds and tube insulators are only needed on the wires you will electrify.

It is common to put a tension indicator spring onto one or more of the wires at the in-line wire tighteners. Two hundred fifty pounds is the recommended tension on nonelectric style fences. The 1st notch on the heavy duty tension spring tug indicates about 150 pounds of tension. Tighten the wire until the end of the spring exposes 2 notches which equals about 250 pounds tension. If you know of a weak area in the fence, only tighten the wires enough to keep them from sagging. When you can't tighten to the full 250 pounds of tension, it becomes more important to keep the fence electrified. Wide line post spacing also requires the electric to be on more of the time.

This gives you a brief overview of building a basic six wire fence. Of course, these instructions can be adapted to fences of varying numbers of wire. If you want to use more than six wires, you should build double end and corner braces. Suggestions regarding installation or maintenance are only a phone call away.


Wire (pg 6)

## Do It Yourself Cost

5 Coils 12.5 Ga 180,000 PSI Wire 4000 FT FOB(WSA2) 48.00240 .00 Tighteners (pg 13)

| 20 | Hayes Style Wire Tighteners | (SAS-AL) | 1.50 | 30.00 |
| :---: | :---: | :---: | :---: | :---: |
| Connectors (pg 15) |  |  |  |  |
| 1 | Pack /100 Crimp Sleeves | (C23) | 9.00 | 9.00 |
| Springs (pg 14) |  |  |  |  |
| 2 | Heavy Duty Tension Indicator Springs FOB | (HTS-HD) | 4.50 | 9.00 |
| Corner Insulators (pg 31) |  |  |  |  |
| 2 | Packs/10 Wraparound Insulators | (140) | 7.00 | 14.00 |
| Line Insulators (pg 29) |  |  |  |  |
| 2 | Packs/200 4" Flat Back Tube Insulators | (153) | 7.75 | 15.50 |
| Staples (pg 16) |  |  |  |  |
| 1 | 10 Pound box 1 3/4 Inch Barbed Staples | FOB(HBS-10) | 11.00 | 11.00 |
| 5 | Pounds $13 / 4$ Inch Barbed Staples FOB | (HBS) | 1.25 | 6.25 |
| Brace Pins (pg 16) |  |  |  |  |
| 8 | 4 Inch Brace Pins | (H4PE) | . 25 | 2.00 |
| 8 | 9 Inch Brace Pins | (H9PE) | . 44 | 3.52 |

3280 FEET @ 10.4 cents/FOOT
\$340.27

Package listed above will do a 15 acre pasture (approximately 3280 feet perimeter) with a 16 foot gate opening at one corner, as in our sample diagram. Three wires are insulated for electric, with posts spaced at 25 foot centers. As with any packaged plan, measurements and materials are approximations. Your needs will vary. Price does not include labor, posts, spinning jenny, fencing tools or charger. Wire and staples will be shipped FOB, Blairsville in Southwestern Pennsylvania or Earl Park in Northwestern Indiana. All other components listed above for this project qualify for $\boldsymbol{F R E E}$ shipping. The posts which are listed below are FOB Kencove's PA yard. Posts are stocked at our IN yard but prices are different. Small quantities of wood posts are expensive to ship so it may be good to check on local post prices. Call for complete details.

SUBDIVISION


## What is PSI?

Minimum Pounds per Square Inch breaking strength can be calculated yourself by taking the cross-sectional area (in square inches) of the wire times the PSI. The result will be breaking strength.

## FORMULA:

Area $=1 / 2$ Diameter Squared $\times \mathrm{Pi}$ Minimum breaking strength $=$ Area $\times \mathrm{PSI}$

## EXAMPLE

$121 / 2$ gauge, 210 wire
Area $=(.5 \times .099 ") \times .0495 " \times 3.14=.0077$ square inches Minimum breaking strength $=.0077 \times 210,000 \mathrm{PSI}=1617$ pounds

Do not confuse our minimum PSI guarantee with other wire advertised as a maximum of 170,000 PSI. That minimum may be as low as 140,000 PSI. On a .099 inch diameter wire, this equals a 1078 pound minimum breaking strength. Some confusion occurs when comparing different types of galvanized coatings. Class 1 coatings, normally found on $12^{1 / 2}$ gauge barbed wire and common smooth or woven wire field fencing, has the lightest zinc coating and thus the shortest life expectancy. Class 3 coatings have over 250 percent heavier coatings of zinc than Class 1. This heavier coating will extend the time it takes for initial rust to appear by two to three times (six to thirty years versus two to eleven years). All the wire Kencove sells is Class 3 galvanized, except for our longer lasting Aluminum-Clad, Galfan coated, and Aluminum wire.

## strong - LONG LASting -ECONOMICAL

210 PST $121 / 2$ gauge wire is the highest quality. This electro-galvanized wire has very uniform and tight bonding of the zinc coating and extra high strength and resiliency. It can be wrapped tightly around its own diameter without breaking, and dispenses with less chance of tangles, if you use a spinning jenny. Even though you pay a bit more, many customers feel it is worth it. Odd length (shorts) coils are a normal by-product when high-tensile wire is being rewound into standard length coils. You can obtain this top quality wire at a lower price by ordering these shorts.
USA 210 12½ Gauge 210,000 PSI min = 1617 lb at .099 inch
2600 ft coil Can UPS 68 lb FOB
(WMU)
46.00
4000 ft coil Can UPS CWT 105 lb FOB (WM2)
65.00
Odd length coils per foot 38 feet per pound FOB (WM2FT)
1.5 ¢/ft

## 200 PSI $1_{121 / 2}$ Gauge wire is Kencove's farm supply store strength $H-T$ wire.

 This wire can give one of the lower cost, high strength fences with the class 3 galvanization life. This 200,000 PSI wire has nearly twice the breaking strength of standard two-ply barbed wire.NEW! Premium Grade Steel, Electro-Plated, Polished, $121 / 2$ Gauge, 200,000 PSI $\mathbf{m i n}=1540 \mathrm{lb}$ at .099 inch $12 ½$ Gauge " $K$ " Wire - GREAT VALUE!
4000 ft spin coil Electroplated 105 lb FOB (WK2) 56.25
Shorts Electro-Plated, Polished FOB (WK2FT) $1.2 \phi / \mathrm{ft}$

Shorts - hot dip galvanized 200,000 PSI wire FOB (WD2FT) $1.2 ¢ / \mathrm{ft}$

14 gauge wire is a popular electric high tensile fence wire in the northeastern USA. There is less weight to support yet it has a similar breaking strength and a springier feel than the 170,000 maximum PSI $121 / 2$ gauge $\mathrm{H}-\mathrm{T}$ wire. Even though this wire has a smaller diameter, it is able to be stretched to a higher tension and still retract to its original length. Normal breaking strength is 1100 pounds.
USA 21014 gauge $\mathbf{2 1 0 , 0 0 0}$ PSI min = 1004 lb at $\mathbf{~} 078$ inch 3800 ft coil

65 lb UPS FOB
5000 ft coil
86 lb FOB
Shorts
FOB
(WM4) 49.50
(WM45) 63.00
(WM4FT) $1.1 \phi / \mathrm{ft}$

| SAVE on |  |  |
| ---: | :---: | :---: |
| 4000 FOOT COILS |  |  |
| 5 Rolls |  |  |
| 10 Rolls |  |  |
| 20 Rolls |  |  |
| 50 Rolls |  |  |

180 PSI $12 /$ Cause wire with Class 3 galuanization and silghtyl lowertensile strength is an excellent choice for those of you who prefer the traditional hand-knotting methods. In New Zealand, 180,000 PSI wire is the standard used for both electric and non-electric fences. Kencove WSA2 wire has a minimum breaking strength of over 1350 pounds. The price and quality make this wire very popular. All of it is rewound on Kencove's new machines to give excellent wire payout.

WSA 180 12½ Gauge 180,000 PSI min = 1358 lb at .098 inch $\begin{array}{lrl}2600 \mathrm{ft} \text { spin coil Can UPS } 66 \mathrm{lb} \text { FOB } & \text { (WSAU) } & 33.80 \\ 4000 \mathrm{ft} \text { spin coil, } \mathbf{1 0} \text { coil } \$ \$ 47.00 \text { each } 100 \mathrm{lb} \text { FOB(WSA2) } & 49.00\end{array}$ Shorts 40 feet per pound FOB PA (WSAFT) $1 申 / \mathrm{ft}$

16 gauge high tensile wire makes it possible to build subdivision fences quickly at low cost. They will take over ten years of abuse with minimal maintenance. The end and corner posts don't need to be braced because this wire acts like a light weight rubber band. The wire can give more than the heavier gauges without transferring as much stress to the end posts. Since less weight is suspended, less tension is required.

Light $3 / 8$ or $1 / 2$ inch fiberglass rod posts can be used for the majority of the line posts. Rod diameters of $5 / 8^{\prime \prime}, 2 / 3$ " or $3 / 4$ " in either five or six foot lengths are ideal for end or corner posts. Lean the end post 20 degrees away from the wire's pull. Use a separate end post for each wire. This will allow each wire to be tightened without affecting the other wires' tension. Both the 3400 and 6340 foot coils fit a standard spinning jenny, which may also be used to rewind the wire. If rewinding, use the largest diameter on your jenny.
USA 21016 gauge 210,000 PSI min = 614 lb at $\mathbf{. 0 6 1}$ inch
3400 ft coil
36 lb UPS FOB

66 lb UPS FOB
96 feet per pound FOB
(WM6-K3) 36.00
(WM6-K) 63.40
(WM6FT) $0.9 ¢ / \mathrm{ft}$

## HIGH TENSILE WIRE - ALUMINUM CLAD

## GALFAN COATED


#### Abstract

GALFAN $12 ½$ Gauge $\mathbf{1 9 0 , 0 0 0}$ PSI minimum wire. 1433 pound minimum break at .098 inch. Galfan is a zinc alloy coating that offers performance advantages that go far beyond the limits of conventional galvanizing. Consisting of mainly zinc plus a little aluminum, the Galfan alloy coating provides as much as seven times the corrosion protection as traditional class 3 galvanized coatings. The Galfan coating provides this protection in two ways. The aluminum provides longevity of the coating and the zinc provides sacrificial cathode protection against corrosion where scratches may occur in the coating. Ideal for use where a stronger, longer lasting wire is desired. Over time the Galfan wire will turn a bit darker gray than our other wires. Galfan $12 ½$ Gauge 190,000 PSI $\mathbf{m i n}=1433 \mathrm{lb}$ at .098 inch. | 2160 ft spin coil | 56 lb UPS FOB | (WG19U) | 37.00 |
| :--- | ---: | ---: | ---: |
| 4000 ft spin coil | 105 lb FOB | (WG19) | 65.00 |
| Shorts -38 feet per pound | FOB | (WG19FT) | $1.4 ¢ / \mathrm{ft}$ |


## Kencove has SOFT WIRE options.

Although I have liked the strength of HT wire, many people still do not use it because it is stiff to bend. This is not farm store grade wire. Expect many of these wires to last 50 years. Although soft wire is easy to overstretch and break, it is also easy to repair and retighten.

| Galfan Soft 12.5 ga 2600 ft | FOB | (WGS99U) | 39.00 |
| :--- | :--- | ---: | ---: |
| Galfan Soft 13.3 ga 1650 ft | FOB | (WGS88) | 24.75 |
| Soft 12.5 gauge T3 galvanized 1000 ft | FOB | (WSS1) | 16.50 |
| Soft Steel 12.5g. galvanized 4000 ft | FOB | (WSS4) | 50.00 |
| Soft Steel 12.5g. galvanized steel / Ft | FOB | (WSS4FT) | .012 |
| Aluminum Wire .11" diameter 1000 ft | FOB | (WTT9) | 54.82 |
| Aluminum Wire .08 " diameter 1320 ft | FOB (WTT14XL) | 32.50 |  |
| Aluminum Wire .08 " diameter 5280 ft | FOB | (WTT12SF) | 100.00 |

FOB (WGS99U) 39.00
FOB (WGS88) 24.75
(WSS1) 16.50
(WSS4) 50.00
.012
54.82
32.50
00.00

## Aluminum Clad High-Tensile steel wire has

the potential to last up to five times longer in corrosive environments than galvanized wire. Visibility is good. Overall customer reaction has been very favorable.

Aluminum Clad Wire normally over 1500 lb break at .099 " FOB

| 4000 ft . Spin Coil 87 lb | FOB | (WAC4) | 80.00 |  |
| :--- | :--- | :--- | ---: | :--- |
| Shorts |  | FOB | (WACFT) | $1.75 \phi / \mathrm{ft}$ |

Kencove has several odd diameters of aluminum clad wire on wooden spools. You can buy the wire on the spool. This will save some money and possibly you will find dispensing easier. The 13 gauge is a great value for permanent electric fence wire. Sold by the pound.

Odd lengths on wooden spool $\quad$ FOB $\quad$ (YWC\#) $76 \not \subset / \mathrm{lb}$. Add $25 \%$ if you want it rewound. $\$ 25$ minimum order.
4000 ft . Coil 13 gauge 71 lb
FOB (WAC13) 65.25
3000 ft . Coil 11 gauge 94 lb
FOB (WAC13) 74.50

www.fence-electric.com
Secure Online Ordering
Color Pictures
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#### Abstract

GALFAN 141/2 Gauge 180,000 PSI minimum wire. This lighter gauge wire is excellent for electric divisional fences. Kencove's $14 \frac{1}{2}$ gauge Galfan wire offers a 16 percent heavier coating than traditional class 3 galvanized wires of the same size. This wire is much easier to work with when compared to $121 / 2$ gauge $\mathrm{H}-\mathrm{T}$ wire. The extra long life advantages of the Galfan coating are outlined above. These are especially important in the lighter gauge wires. Available in 2160 and 4000 ft coils. Galfan $14 ½$ Gauge $\mathbf{1 8 0 , 0 0 0}$ PSI min $=816 \mathrm{lb}$ at .076 inch | 2160 ft spin coil | 34 lb UPS | FOB | (WGFL) | 30.00 |
| :--- | ---: | ---: | ---: | ---: |
| 4000 ft spin coil | 62 lb UPS | FOB | (WGFL2) | 55.00 |
| Shorts |  |  | FOB | (WGFLFT) |


We have Aluminum Crimp Sleeves to use with the aluminum clad wire and nylon guy wire. Wire sized in the 14 to $12 \frac{1}{2}$ gauge will fit our C23AL crimp sleeve. It has the same size opening as the standard C23 sleeve but is slightly longer in length. They work well on wires in the 11 to 8 gauge range. These sleeves are now "gritted" for more holding strength.

Long Aluminum Crimp Sleeve $121 / 2$ ga smooth $100 / \mathrm{pk}$
(C2LAL)
17.50

Please check on page 15 for a complete line of crimping sleeves.


> The Klein Gripper is to be used in place of the regular jaws on your chain grab. This gripper gently grabs the wire between two slightly textured surfaces. As the wire is pulled, the gripper increases its hold on the wire but does little damage to the coating. A simple sliding action of the surfaces allows for easy on and off. When installing Aluminum-Clad wire, extra care must be taken to avoid damaging the coating when pulling the wire. A standard chain grab wirepuller jaw may scrape the aluminum coating off the wire.

Klein Gripper Best for Aluminum clad wire
(TAG)
79.50

1-800-536-2683
www.kencove.com Fast Friendly Service \& Expert Advice

## SPINNING JENNIES

If you do not use some sort of turntable to dispense the wire, the risk of tangles and personal injury, especially to the eyes, is greatly increased. Set up the jenny loaded with wire on the ground. You can walk away pulling the end of the wire and the jenny will spin, preventing your wire from tangling.

Smooth wire drags easily, especially downhill. Slow down gradually before stopping to prevent over spinning and tangling. A simple brake to reduce over-spin can be made by attaching a rubber flap under the jenny. If rewinding wire in the field, always use the outer most position of the arms, as the rewound coil will have a tendency to "shrink" in diameter when removed from the jenny.

Kencove Spinning Jenny w/ drive pin, base plate \& 3 arms FOB
(TSJ) $\quad \$ 67.00$
The Kencove jenny (TSJ) has been a very popular model. It is built to drive a pivot pin into the ground through a base plate. The wheel is then placed on this pin, and the wire is set onto the wheel.
 The wire is kept centered on the wheel by adjusting the three arms to fit the wire coil's diameter. There are three separate positions for the arms, which allow you to unwind many different diameter coils.

## Rewind Hoop and Crank Handle to fit

 onto the (TSJ-HH) Spinning Jenny FOB $\$ 35.00$

The Wire Winding / Unwinding Machine (TWWR) with hand crank is no longer in production. Kencove hopes to have a solution soon.


Imported Non Wheel Spinning
Jenny
$\mathrm{w} / \mathrm{pin} \& 4 \mathrm{arms} \quad$ FOB

## (TSJ-A) <br> $\$ 38.00$

The low cost (TSJ-A) Jenny pivots on a pin that has been driven into the ground. This jenny doesn't have the round wheel on the end of the 4 arms that carry the wire. This imported jenny ships unassembled in a fairly compact box.

## Robertson Quad Wire Jenny Assembly FOB

Unwind 4 coils of wire at one time! The top 3 coils swivel to the side for easy loading. This can easily be adapted to mount on a 3 point hitch, pickup truck, heavy duty ATV, or trailer for an ATV.


Spinning Jenny with spring brake \& stand FOB (TSJ-HH)
75.00

The braked (TSJHH) Jenny features an adjustable brake to control over-spin when you stop pulling the wire. This jenny may be placed flat on the ground or bolted to a cart or truck bed. The 4
 legs in the base give good stability. The 4 arms will adjust to fit many diameter coils.

Donalds Non Wheel Spinning Jenny, heavy duty FOB
(TSJD) $\$ 84.00$
Will adapt for unrolling coated wire \& rail. It has long L bolts so it can adjust to a much larger height and fuller coil. This jenny is easy to fold for storing or transporting. Three legs mean there is no wobble on the ground.


## NEW! Cam Lock Gate Latch

for tightening and latching
 flexible gates made from your woven fence wire. This latch is bolted to the post. Loop the wire to a pipe. This has 2 hooks that catch the pipe. Use the 60 inch unit for the 8 foot wire.
(GL60)
(GL36)
55.00 36" Cam Latch Gate FOB

## 3" STAY SPACING

Introducing the safest fence available! With 3 " between the verticle wires this product greatly improves predator control and livestock safety. Your high value livestock will be safe and secure surrounded by the Solidlock fence.
4 foot Solidlock/Tight 13/48/3 200 ft roll 234 lb FOB (WDN13-3) 218.95 5 foot Solidlock/Tight 15/61/3 200 ft roll 280 lb FOB (WDN15-3) 265.95


## $2 \times 4$ Horse Fence

 ,

Please phone for quotes on large orders and to be sure prices are current.
$\mathbf{5 \%}$ Off on 6 roll orders of same size; $\$ 15$ will be charged per pallet used to ship LTL.
$-5 \% 6$ roll; $\mathbf{- 1 0 \%} \mathbf{1 0 , 0 0 0} \mathrm{lb} . ;-12.5 \% ~ 20,000 \mathrm{lb} . ;-15 \% 45,000 \mathrm{lb} . ;$ FOB Blairsville, PA
10 foot LockedKnot 23/120/6 330 ft roll
492 lb . FOB
(WDN23-6)
435.95

8 foot LockedKnot 20/96/6 330 ft roll 393 lb . FOB 319.00
Special!: WDN20-6L low as $\mathbf{\$ 2 5 7 . 5 5}$ FOB AR plant; cash prepaid
8 foot Solidlock/Tight 20/96/12 330 ft roll
282 lb. FOB (WDN20-12)
234.00

8 foot Solidlock/Tight 20/96/12 660 ft roll 6 foot 3 inch Solidlock/Tight 17/75/6 330 ft roll

564 lb. FOB
(WDN20-12660) 468.00 6 foot 3 inch Solidlock/Tight17/75/12 330 ft roll 5 foot Solidlock/Tight 15/61/6 330 ft roll 5 foot Solidlock/Tight 10/60/12 660 ft roll 4 foot Solidlock/Tight 13/48/6 330 ft roll 4 foot Solidlock/Tight 9/49/6 330 ft roll 4 foot Solidlock/Tight 9/49/12 330 ft roll 4 foot Solidlock/Tight 9/49/12 660 ft roll 3.5 foot Solidlock/Tight $8 / 42 / 6 \quad 330 \mathrm{ft}$ roll

326 lb . FOB
$248 \mathrm{lb} . \mathrm{FOB}$
273 lb. FOB
287 lb FOB 216 lb. FOB
177 lb. FOB
126 lb. FOB
251 lb. FOB
$157 \mathrm{lb} . \mathrm{FOB}$
(WDN17-6)
(WDN17-12) 277.00
(WDN15-6) 270.00
(WDN10-12660) 275.00
(WDN13-6) 200.00
(WDN9-6) 176.00
(WDN9-12) 107.50
(WDN9-12660) 215.00
(WDN8-6) 158.00

Kencove has a number of clearance sizes at discount. Please phone to check stock. Here are some sizes: $8 / 42 / 12 \quad 8 / 42 / 12 / 660^{\prime} \quad 10 / 60 / 6 \quad 17 / 96 / 12 \quad 17 / 96 / 12 / 660^{\prime} \quad 17 / 96 / 6$
$\$ 97.29 \quad \$ 194.58 \quad \$ 201.25 \quad \$ 188.15 \quad \$ 376.30 \quad \$ 273.60$
HINGE JOINT WOVEN FENCE, Class 3 Galvanized MediumTensile Steel Wire

| HingeJt 12.5 ga MT T3 galv $10 / 47 / 6$ | 330 ft roll | 186 lb . FOB | (WH10-6-12.5) | 135.00 |
| :--- | :--- | :--- | ---: | ---: |
| HingeJt 14.5 ga MT T3 galv $10 / 47 / 6$ | 330 ft roll | 115 lb . FOB | (WH10-6-14.5) | 85.00 |
| HingeJt 12.5 ga MT T3 galv $8 / 32 / 6$ | 330 foot roll | 135 lb . FOB | (WH8-6) | 99.95 |
| HingeJt 12.5 ga MT T3 galv $7 / 26 / 6$ | 330 foot roll | 115 lb . FOB | (WH7-6) | 93.50 |

NEW! 2" X 4" WOVEN HORSE FENCE, Class 3 Galvanized Soft Steel Wire
(WH4) 109.50
(WH4-200) 218.95
(WH5) 135.50
(WH5-200) 265.95

A complete line of related products and tools for ease of installation is also available. These include steel strainer clamps (bars) for tensioning and chain grabs with 20 foot chains and hooks for pulling the strainer bars. These products will also do a superior job when working with regular woven wire fencing.

A video guide to installation (RWV) is available. This is a professionally filmed recording and has useful information if you will be installing woven wire fencing.

Kencove has recently started stocking medium high tensile, Class 3 galvanized woven wire to give you a lower cost option. This still has much longer life than standard woven wire. You can also put fence posts farther apart since the wire has more rebound.

## NEW

The Horseman ${ }^{\text {TM }}$ Fence, with a Class 3 galvanizing, has just come onto the market. The 2 " wide spacing on the vertical wires is held with a special "S" shaped knot wire. The vertical wires are uncut from top to bottom. Why waste future time and money with poorly galvanized wire?
$2 \times 4$ " Horse Fence sJt 12.5 ga T3 galv $48 " 100 \mathrm{ft} 122 \mathrm{lb}$. FOB
$2 \times 4$ " Horse Fence sJt 12.5 ga T3 galv $48^{\prime \prime} 200 \mathrm{ft} 244 \mathrm{lb}$. FOB
$2 \times 4$ " Horse Fence sJt 12.5 ga T3 galv $60 " 100 \mathrm{ft} 151 \mathrm{lb}$. FOB
$2 \times 4$ " Horse Fence sJt 12.5 ga T3 galv $60 " 200 \mathrm{ft} 302 \mathrm{lb}$. FOB


4 ft Wire Clamp with 5 wedges - For pulling woven wire FOB 5 ft Wire Clamp with 6 wedges - For pulling woven wire FOB 6 ft Wire Clamp with 7 wedges - For pulling woven wire FOB 8 ft Wire Clamp with 9 wedges - For pulling woven wire FOB 10 ft Wire Clamp with 11 wedges For pulling woven wire FOB Replacement Wedge - For the above wire clampsFOB Hayes Clamp Strainer Chain Grab with 20 ft chain Robertson Clamp Strainer Chain Grab Walker Hand WrapTool - extra short for the close spaced openings Power Wrap Tool - electric drill powered wire twister FOB Tightlock Introduction and Installation Video Free Shipping

1
(TSC-w)
(TSC-4)
(TSC-4) 110.00
(TSC-5) 117.50
(TSC-6)
125.00
(TSC-8)
135.00
(TSC-10)
175.00
(TSC-W)
8.50
(TCS) 115.00
(TCS-R) 105.00 (TWTL) $\quad 1.25$ (TWTG) 295.00 (RWV) 10.00

## PLASTIC DEER NET

A relatively easy way to keep deer out of gardens and shrubs is to hang our black stretched polypropylene netting (New smaller openings $-1.9^{\prime \prime} \times 1.9^{\prime \prime}$ mesh) on light and easy to install fiberglass or steel posts. Pound in the posts every 10 to 15 feet. Use nylon cable ties $\left(8^{\prime \prime}=\$ 6 / 100\right)$ to fasten the net to the post. If the ends and corners are strong, a high tensile steel wire at the top, middle and bottom of the fence will support the nylon net to allow wider post spacing with a neat appearance. If you have enough trees (no more than 35 feet apart), posts may not even be needed. If there are no trees at the ends and corners, a simple to install brace assembly using steel T posts can be used. Ground staples may be used every 12 feet to keep deer from pushing underneath. It is good to add visibility for the first month or two with fence flags (MFF) 4 foot high or white electric ribbon (RWR) 3 foot up. After this time the fence will be virtually invisible in vegetation. If you use peanut butter bait on an electric fence (wire, twine, or ribbon), that may be all the fence you need.

This net also is a good product to strengthen an electric 5 or 6 wire 5 foot deer fence. Since the net is not a conductor, just hog ring or nylon tie it right to the hightensile steel wires. These nets do not have a lot of strength. If a deer runs into the net, it may go through. Since it is plastic, this is a relatively short life product.

## HOT DIP GALVANIZED T-POSTS

## Kencove has several sizes of very affordable Hot Dip Galvanized

## "T" Posts. Eight

 foot game fence installation costs can be lower while maintaining long fence life. In good ground you can put $12^{\prime}$ wood posts up to $100^{\prime}$ apart with 4 galvanized "T" posts in between. With shorter high tensile woven fence it is possible to go even farther between posts. The life of galvanized wire will be shortened if you use a non galvanized "T" Post.
## T-POSTDRIVER/PULLER

- Pulls posts easier than traditional pullers
- Reverse hammer action breaks posts free
- Internal slide driver reduces injury.
- Hardened alloy steel surfaces for long life
- No damage to post or post top
- Ideal for tall posts - keeps posts straight

Steel T Post Driver/Puller (TPDP)
195.00

| Plastic deer net 5' 4" x 150' | FOB | (DN313A) | 59.00 |
| :---: | :---: | :---: | :---: |
| Plastic deer net 6' ${ }^{\prime \prime} \times$ x 300' | FOB | (DN313H) | 145.00 |
| Plastic deer net $8^{\prime} \times 150{ }^{\prime}$ | FOB | (DN313C) | 93.00 |
| Plastic deer net $8^{\prime} \times 300{ }^{\prime}$ | FOB | (DN313D) | 186.00 |
| Ground staples 11 gauge wire 6 " legs 250 ea | FOB | (DGS) | 17.50 |
| 8" Nylon Cable Ties, pk of 100 | FOB | (DN121G) | 6.00 |
| 8 gauge Nylon Wire, Black, per foot | FOB | (DW152) | . 16 |
| Gerrard Hog Rings, box of 1,000 | FOB | (CHR) | 19.00 |
| Gerrard Automatic Hog Ring Gun | FOB | (THG) | 98.00 |

## BATTENS \& TWIST STICKS

8 Foot Galv T Post with stabilizer plate
(PHDT8P) 5.60
10 Foot Galv T Post with stabilizer plate
(PHDT10) 7.00
1.33 pound/foot to 12 feet

10 Foot Galv T Post with stabilizer plate
(PHDT10P)
9.70

11 Foot Galv T Post with stabilizer plate
(PHDT11P)
11.10

12 Foot Galv T post no plate
(PHDT12)
12 Foot Galv T Post with stabilizer plate
(PHDT12P)
Steel T Post Clip, Priced Each, 25 per bag
(FTC)


Hollow grooved poly-battens are available through Kencove. Similar in design to the wooden multi-groove batten, these offer superior insulation and extra long life. Clips are needed for proper installation. The (PKD) has a rounded backside and takes a special clip.
Poly-Dropper Multi grooved 4 feet FOB $\quad$ (PKD) 2.95
Clips for (PKD) Poly-Dropper, pack of 100 FOB (FCPK) $\mathbf{6 . 5 0}$
Fiberglass rods (see page 32), which offer better insulation and are easier to ship and install, are recommended in place of wood battens. Kencove no longer stocks wood battens, but we do have some batten clips.
Wire Clips for Wood battens $1 \frac{1}{2}$ inch face $100 /$ pk (FC1)
6.75

Wire tighteners like the (SDS) can replace twist sticks. Another low cost alternative to the twist stick is to use a chain grab wire tightener to tighten the diagonal brace wire. Then use a wirelink, wirelok or your crimping tool and three sleeves to fasten the ends together.
Twist Stick CCA Wood FOB (PTA) . 80

## WARNING...WARNING...WARNING...WARNING

CCA and Creosote should be handled with care. Wash exposed skin areas thoroughly after contact, and before eating, drinking or using tobacco products. Toxic chemicals may be produced as part of the smoke or ashes when burning treated wood. Wear a dust mask, gloves, goggles, and hearing protection when driving or sawing treated wood posts. Launder work clothes that may have accumulated preservatives or treated sawdust before reuse; wash separately from other household clothing. Hazard warnings for untreated wood are similar to those for treated wood.
-Airborne wood dust can cause respiratory, eye and skin irritation.
-Breathing excessive amounts of treated or untreated wood dust has been associated $\mathrm{w} /$ nasal cancer in some industries.
-Handling may cause splinters.
-High levels of airborne wood dust may ignite and burn rapidly in the air if exposed to an ignition source.
-Some forms of components of the liquid preservative used to manufacture this product (arsenic and chromium)
have caused lung, skin and possibly other cancers in humans occupationally or environmentally overexposed.

# WOOD POSTS•PRESSURE TREATED SOUTHERN YELLOW PINE 

All non-electric style $\mathrm{H}-\mathrm{T}$ fence should be built with wooden brace and line posts because wire tension and fence abuse is higher without electric. Even with non-electric style fences, we recommend several electric strands for training and keeping animals off the fence. It is safer for the animals to be away from the fence in case of a lightning strike. Since Kencove's wire should last thirty years, you should build your fence with posts that also last thirty years.

Southern Yellow Pine Posts are relatively straight, making them easy to drive and attractive. Staple driving and penetration of treatment chemicals is better for Southern Yellow Pine than denser woods. Kencove fences normally are built with green colored CCA pressure treated posts because they can be painted and are much cleaner, lighter, and less toxic to animals and people than creosote. Some creosote posts are stocked at Indiana.

We recommend that end and corner posts be 6 inch $x 9$ feet ( 6 inch minimum diameter, 9 feet long) for five foot high fences and 5 or 6 inch $\times 8$ feet long for four foot high fences. All end and corner posts need to be four feet in the ground. A double H brace assembly is normally used for H-T fences with over 6 wires. Besides the six inch end posts, there should also be a 5 inch $\times 8$ foot and a 4 inch $x 8$ foot post in the ground, each eight feet apart. Between each brace post, a 4 inch x 8 foot horizontal brace post is normally held between the top two wires by $3 / 8$ inch diameter galvanized brace pins.

The most popular 12 $1 / 2$ gauge high-tensile fence being built for cattle in Kencove's area is the six wire. For six wires or less, a single $H$ brace assembly is common - consisting of a 5 inch $x 8$ foot end post and two 4 inch $x 8$ foot posts. Fence installers commonly cut the horizontal brace rail to properly fit between the vertical brace posts. Try not to cut the horizontal shorter than $71 / 2$ feet - the shorter the horizontal post, the greater the risk of the end post being lifted.

Line Posts are usually 3 to 5 inch $\times 61 / 2$ to $71 / 2$ feet spaced fifteen to thirty feet on center for eight wire fences. For electric six wire fences, 20 to 60 feet between the line posts is common. One to four wire spacers may be put between line posts on these fences. This allows for fairly good security if the electric is off for a few weeks. If spacer costs are higher compared to line post cost, having 15 to 25 feet between line posts is common. A smaller post, like the $31 / 2$ inch $\times 61 / 2$ foot post, can be used for these fences. Electric fences can be built with fewer and lighter line posts - fifty foot centers are common.

Although Kencove keeps several trailer loads of posts in stock, these are mainly picked up by more local customers, rather than shipped great distances. Kencove can ship a 40,000 pound load directly from the post treating plant, near Blairsville, to you. Line posts normally are 25 to 55 pounds each, while end posts range from 70 to 140 pounds each. Sometimes we can split a load between 2 customers. Generally, when buying a full truck load, there is a savings in the post cost plus substantial freight savings. Call for additional - information and price quotes if you need a large quantity of posts.


## CCA Treated POST PRICES



Prices are LOWER for Bundle and Truck Load quantities.
Prices are FOB Blairsville. Phone for quotes and delivery options.

## DUCKBILL EARTH ANCHORS

The DB68 is the most popular anchor. These anchors are easy to install using a $1 / 2$ or $5 / 8$ inch ground rod with either a pipe type steel post driver available from Kencove or a sledge hammer. Connect your guy wire to the anchor first. Then put the drive rod into the hole in the end of the duckbill and drive it into the ground at the angle from which it will normally be pulled. Remove the drive rod and pull up on the guy wire until the duckbill has turned 90 degrees at the bottom of the hole. You can tell it is in position when you are unable to pull it out by pulling on the guy wire. The rated hold is for normally firm soil; it can be less in soft ground.

A loop of Stainless Steel wire (DSC) spliced with an EZ-Daisy (SSD-N) tightener makes a nice non-rusting guy wire. Regular galvanized wire, while long lasting above ground, is not recommended for underground applications. Another option for guy wires is our plastic 8 gauge wire. With a rated breaking strength of 1130 pounds, it works especially well where electric wires may contact it. It also works well for landscaping applications. Crimping this nylon guy wire with our C52 aluminum sleeves or using the large Wire Link (CWL5064) will reduce breakage and create a clean appearance.


## DB-40 250 lb hold

DB-68 1100 lb hold
DB-88 3000 lb hold
Drive Rod for DB-68 removable
Drive Rod $1 / 4$ in x 2 ft for DB-40 removable Stainless Guy Wire sold by the foot, 11.3 gauge Stainless Guy Wire 10 foot coil 11.3 gauge Nylon Guy Wire 1130 lb break strength 8 gauge

| (DB4) | 1.95 |
| ---: | ---: |
| (DB6) | 3.80 |
| (DB8) | 9.40 |
| (DB6DR) | 7.95 |
| (DB4DR) | 2.00 |
| (DSC-FT) | $20 ¢ . / \mathrm{ft}$ |
| (DSC-10) | 2.00 |
| (DW152) | $16 ¢ . \mathrm{ft}$ |

## HELPING FARMERS SINCE 1980

 Kencove Farm Fence Supplies344 Kendall Rd, Blairsville, PA 15717-8707

1-800-536-2683 www.kencove.com Fast Friendly Service \& Expert Advice

E-mail : fence@kencove.com<br>Phone : 724 459-8991<br>Fax: 724 459-9148

## POST DRIVERS

This New Zealand made post driver will drive longer, twelve to fourteen foot posts with ease. Available with a folding beam, side slide shift, pilot auger and/or spike as options, this post driver can be adapted to all types of post pounding situations. Rear mount and a new skid-steer mount are available call for details and a delivered price. King Hitters ship from Waco TX or Southern VA.


A spring-loaded, tube-type T-Post pounder is a major improvement of the original version. This driver provides an easy way to set steel T-Posts and ground rods in virtually any type of soil. Once the up and down driving pattern is established (simply begin by pushing down repeatedly), the internal spring will "lift" the driver to the top position. Pulling down on the handles drives the post in and the spring again returns it to the top.
Spring Loaded T-Post Driver FOB
(TPD) 35.00

It is hard to believe how fast and easy installing fence posts can be until you have used a hydraulic post driver. Drive the small end of the post into the ground so it will wedge tightly. It is possible to drive railroad ties into the ground, without sharpening them, in normal moist soil. Please be careful and wear eye, ear and dust protection when operating a post driver.

Kencove sells several different contractor grade drivers designed to give many years of rugged service. The side shift 3 pt mount, truck mount and skid-steer units are very quick.

For those applications where higher fences are needed, Kencove offers KingHitter 16 ' high beam hydraulic cable operated drivers.

## Fairbrothers King Hitter

Postdriver Model \& Beam Length
Shipping Wt. Ibs.
Series I Fixed Legs, 450 lb . Hammer Weight 12'-6"
1050 Series II Deluxe, 4 Bank, 550 lb . Hammer Weight $12^{\prime}-6^{\prime \prime}$

2326 Series III Deluxe, 5 Bank, 550 lb . Hammer Weight $12^{\prime}-6^{\prime \prime}$ 2326 Series II Deluxe, 4 Bank, 550 lb . Hammer Weight High Beam 16'-0" 1738 Series III Deluxe, 5 Bank, 550 lb . Hammer Weight High Beam 16'-0" 2462
Extra valve banks when ordered with driver

## Accessory

Wt. Ibs
Skid Steer Mounting Plate (Series I or II)
Pilot Auger Kit NO Augers Included
175
4" Auger \& Tip ( to 2" @ \$361.00)
5" Auger \& Tip (to 10" @ \$527.00)
Hyd. Rock Spk. Kit (combo \$3743.00)
3.5" Rock Spike (2" - 160\# - \$380.00)

5" Rock Spike
Hyd. Power Pack (for independent PTO powered system)
Beam Hinge Kit (included in the 16' price)
Safety Guard
Replacement Parts
Post Caps: Std=30\#=\$177; HD=37\#=\$262; RockSpike=85\#=\$349; Wood=3\#=\$19; Poly=\$41 19 Meter Cable $16^{\prime}-0^{\prime \prime}$ Beam ( 15 Meter for $12^{\prime} 6^{\prime \prime}=\$ 118$ )

KingHitter Post Driver
Ask Charlie which post driver is right for you!

Check our Internet site for more post driver details and specs:
kencove.com/postdriver.htm


An easy to use T-Post puller will remove those old posts with little effort. This all steel unit has an easy to attach plate and a wide base. Post extraction is accomplished by lifting the handle to the up position and then slipping the plate around the post. Pushing down on the handle lifts the post out of the ground. Multiple lifts may be needed if the post is deep in the ground.

## T-Post Puller FOB (TTP) 35.00

The Post Hole Tamper is designed to pack the dirt and stone very tightly around the end and corner posts. This is made in New Zealand where hand set brace posts are common. They are built very strong in a large part due to hard tamping. A galvanized pipe is the handle coming off the cast base.
Post Hole Tamper FOB (TAMP)

Maximum post sizes: HPD-16 SHC: 7" ${ }^{\prime \prime}$ 9' HPD-20 SHC: 8.75" $\times 10^{\prime}$ HPD-24 SHC: 11" x 10'


The Shaver HD-8 and HD-10 Post Drivers can be front or rear mounted on a tractor. Shaver's HD-12 and Worksaver's HPD-16, HPD-20, HPD-24 are not designed for mounting onto the front of a tractor but normally can be skid steer or front end loader mounted. Manual or hydraulic tilt options are available. The crank tilt Worksaver HPD-16 / 20 \& Shaver HD-8 / 10 drivers are under $\$ 2,100 / \$ 3,000$
Shaver and Worksaver Post Drivers: HD-8 / HPD16,
HD-10 / HPD20, or HD-12 / HPD24
Please Phone for details and current pricing.
Kencove has special driver springs made to fit the Shaver, Worksaver and Kiwi drivers. We have had customers say our springs last much longer than the OME springs. The (T1S) and (TKS) have a soft plastic tube inside to dampen oscillations after the driver hits a post. Replacement spring to fit Shaver HD-8 and Worksaver HPD-16 (T8S) FOB 27.50 Replacement spring to fit Shaver HD-10 and Worksaver HPD-20 (T1S)FOB 52.50
Replacement spring to fit Kiwi Post Driver
(TKS)FOB
57.50

Replacement spring to fit HD-12 Post Driver; w/o ends
(T2S) $\mathrm{FOB} \quad \mathbf{6 8 . 0 0}$
Replacement spring end to fit HD-12/HPD-24 Post Driver
Sold each, use 2 per spring. (T2E)FOB 17.00

Many people think that high tensile fences are hard to tighten, but in-line strainers and/or chain grab wire tighteners make this job easy. Normal procedure is to fasten both ends of the fence and then install the permanent in-line tightener at the midpoint of the fence. If the wire is being pulled around several corners, it is best to be at the center of friction. Longer runs of fencing require additional tighteners. Generally we recommend using one tightener per strand for every 2600 feet of fence. The permanent in-line tighteners are left on the fence after doing the initial tightening. This allows you to maintain the wire tension in the future.

The following is a good technique for starting the wire onto the tightener: Snap a visegrip onto the spool axle just outside the bracket. Put the unbent wire through the hole in the spool until it is just out the other side. After cranking the spool nearly halfway around, pull the assembly so the wire moderately tightens. The wire should very naturally bend over to the opposite side of the spool from the hole.

Wind the wire around, being careful to go on top of the first section of wire. Now pull tighter and neatly wind across the spool towards the hole. By winding on top of the first section of wire, the stress is taken off the tight bend at the hole. When the wire approaches higher tensions, be careful. Wear leather gloves and use the proper tightening handle.

Hayes style strainers with permanently hinged, flipper type catches have become quite popular. The (SAS), (SAS-AL) \& (SASS) have a spring to hold the latch flipper tight against the cog spool. This makes tightening safer, but if you plan to loosen the wire, you may like the (SAT) better - same but with no spring.

Kencove now has four wire strainers available with a stainless steel strap. The (SASS) is a good imported clone of the (SAS) but it has a stainless steel strap and spring wire. Likewise for the (SATS) compared to the (SAT) tightener. Kencove has made stainless strainers with an imported aluminum spool (SSS). The catch is made with a stainless steel, spring action wire. We believe these strainers are virtually rustproof and will last a lifetime.

NEW! The (SAS-AL) tightener gives you the advantages of the SAS with a much lower price. The strap is hot dip galvanized and the spool is aluminum.

Kencove handles the original Hayes New Zealand strainer (SHY) with improved catch. The catch wire is now flattened on both ends and has a washer to prevent fallout. The (SHYI) insulator makes end insulation quick.

The Allflex-Donalds strainer (SDNZ) from New Zealand has a spring steel latch and a cog with a square end. This allows for tensioning with crescent, box or open end wrenches or vice grips.

The (SDS) is a stronger model strainer yet very similar in design to the Allflex-Donalds. This strainer will also hold more wire than the SDNZ. In pull testing the (SDS), we found that our USA 210 wire broke at 1750 pounds without damage to the spool. The (SDNZ) spool broke at 1350 pounds of tension. You really should try the new (SDS) stainless strap strainer! The $\$ 1.69$ price is a great value, even if it didn't have such a long life.

The Donalds Minitite (SD1-G) is our lowest cost H-T tightener. It is best suited for use on lower tension fences using 14 to 16 gauge wire. If it is latched properly, there should be no problem of breakage. However, the latch can be stripped by cranking at over 500 pounds. Backing off tension is difficult.

The hot-dipped galvanized Donald's No. 2 tightener (SD2) is a simple and inexpensive means of tightening your wire. It doesn't require special tools to tighten; a socket wrench, vise grips or crescent wrench will do the job. If necessary, the strainer can be loosened using a screwdriver and wrench.

The EZ-Daisy tightener (SSD-N) can be initially tightened with a $1 / 2$ inch drive ratchet. The EZ-Daisy can be installed without cutting the wire and can also splice wire.

To begin installation, place the wire into the slot on the side of the spool. Wind the wire onto the spool using the (TFD) handle or a $1 / 2$ inch square drive ratchet. When at the desired tension, put the wire clip through the appropriate two holes to keep it from unwinding. This type of tightener is best for electric fencing where wire will be under lower tension.

Unless you use the (TFD) handle, it is difficult for one person to install the latch pin while safely holding the tightener in position.

We have a smaller, more economical version of the original EZ-Daisy strainer. This strainer (SSD-E) has more holes on the sides for easier alignment of the catch.

The Robertson tighteners (SRP) \& (SRC) hold a bit more wire than most tighteners and are safer to use since the catch pin and spring clip can be operated from the outside of the galvanized bracket.

1-800-536-2683
www.kencove.com
Fast Friendly Service \& Expert Advice

## PRICING

## Hayes Style Strainers: <br> NEW! [buy 50 at $\$ 1.75$ each] Stainless Steel! (SASS)

1.85
[buy 50 at $\$ 1.95$ each] SAT with spring, HD galvanized (SAS) 2.05
NEW! [buy 50 at $\$ 1.72$ each] Stainless Steel! (SATS) 1.82
[buy 50 at $\$ 1.89$ each] hot dip galvanized (SAT) 1.99
NEW! Hayes Style hot dip galvanized, [50/ -\$.10] [500/-\$.19](SAS-AL) 1.50
Original Hayes Strainer, New Zealand [buy 50 at $\$ 1.95$ each] (SHY) 2.05
End Insulator to fit into (SHY) bracket (SHYI) 1.00
Stainless Steel Hayes Style, Kencove SS wire clip [50 at \$1.75 ea](SSS) 1.85
Handle to fit above Hayes style strainers (Required tool) (TFH) 4.25
Robertson Clip Strainer, [buy 50@\$2.10 or 500 @ \$2.01] (SRC) 2.20
Robertson Pin Strainer [buy 50 @ $\$ 2.10$ or $500 @ \$ 2.01$ ] (SRP) 2.20
Handle for above Strainers, also fits Hayes and Donalds (TFU) 6.75
PEL-Allflex-Donalds NZ $\quad$ (SDNZ) 2.19
NEW! Donalds style [buy 50 at $\$ 1.59$ each] Stainless Steel! (SDS) 1.69
Minitite Donald's No. 1 Hot dip galvanized (SD1-G) 1.25
Donald's No. 2 hot dipped galvanized (SD2)
1.50

EZ-Daisy Installs without cutting the wire [50 at \$1.89 each](SSD-N) 1.99
Handle to fit EZ-Daisy (TFD) 6.50
Economy EZ-Daisy (SSD-E) 1.39

(SAS) (SASS) (SAS-AL)

(SDS) (SDNZ)

(SD2)

(SAT)

(SRP)

(SSD-N)


(SHY)

(SRC)

(TFD)

(TFH)
E-mail : fence@kencove.com Phone : 724 459-8991 Fax: 724 459-9148

## TENSION SPRINGS - CHAIN GRABS - WIRE CUTTERS

Tension Springs are used for several purposes - to indicate the amount of tension on the wire, to act as a shock absorber and to make the fence tension more self maintained. When the slightly over 9 inch spring is compressed so that the 1 st notch in the drawbars is just exposed, it is under about 150 pounds tension, which is common for electric style fences. Non-electric style fences require more tension. When the second notch on the drawbar is exposed, there is about 250 pounds tension on the fence. If the tension is much higher, there will be more problems with pulling end, corner, bend and dip posts out of the ground. Usually only one spring is installed per set of in-line wire tighteners.

Compare the other wires to the spring wire by noting how hard it is to deflect each strand by pushing with one hand while pulling with the other hand. On long stretches the wire itself acts as a spring. If a tree falls on the fence, take the tree off and the wire should rebound back into place. For shorter fences, the wire doesn't have enough length to give it as much recoil so tension springs are needed on each wire if a fair amount of abuse is expected. If a lower strength wire is being used, the spring will be especially helpful.

If you like to do the "spring tie knot", the (HTS-L) has extra long tug links made of Galfan wire.
This spring can also be used on ends and corners with the (ICP-1) insulator. This insulator will fit on the end of the long tug and will insulate a hot wire from an end or corner post.


All of Kencove's springs now have been improved so they all have a galfan coating and stronger drawbars. The price of the heavy duty spring (HTS-HD) has been dropped to $\$ 4.50$ so the regular spring (HTS) has been eliminated. This HD spring has been "precompressed" flat at Kencove so it will hold its original length much better than other fence springs. This keeps the marks more accurate over time. The (HTS-HD) spring now has a normal holding strength of over $\mathbf{2 , 2 0 0}$ pounds before the drawbars pop through the spring. This is the highest strength and longest lasting spring in the fence market.

## (HTS-L)

Galfan Tension Spring H-D Tug 2 marks $150 \mathrm{lb} \& 250 \mathrm{lb}$ FOB (HTS-HD) $\mathbf{4 . 5 0}$ Long Tug Tension Spring for hand ties or ICP-1, 1100 lb FOB (HTS-L) 4.50
Plastic Insulator for HTS-L spring (ICP-1)

## CHAIN GRAB

This tool is often used to pull the excess slack out of long stretches before installing permanent in-line wire tighteners. It is equally handy for splicing cut wires or pulling to an end post. Damage to wire is minimal because of its smooth jaws. The chain walking principle is quick and easy.

Over the years the Hayes brand chain grab has been popular with many contractors because the cast claws tend to lock onto the chain better. The wire releases easier by just squeezing the grips. The Robertson (TCHR) has similar cast parts.

Kencove has been selling the Donalds (TCG), since 1982. It is made by stamping, forming and welding heavy gauge steel. It has been quite adequate for most people. In fact it will handle "slinging" onto an end post better than the Hayes model.

Hayes NZ Chain Grab Releases from wire easier Robertson NZ Chain Grab Releases from wire easier Donalds Chain Grab Wire Tightener

The NEW Wizard Chain Grab (TCGW) is a dual purpose tool. It has two smooth wire grippers like other chain grabs. This tool also works well for woven wire stretcher bars The chain also has a hook to allow easy attachment to end posts or stretcher bars. The handle is much longer. The grip on this part of the tool also has a $5 / 8$ inch hole for a locking ring to be used to attach to the second stretcher bar. The chain is much longer than the one on a standard Donald's Chain Grab (TCG).
Wizard Chain Grab
(TCGW) 65.00
(TCGW)


The Multi-Bob wire pulling tool moves on the wire itself instead of walking along link by link on the chain. This allows a more controlled tightening as the stretcher can move smaller increments at a time. It also is very quick to use since you don't have to catch chain links. It is best to have one side "walk" on heavier gauge soft wire while the other side grips the high tensile wire.
Donalds Multi-Bob Wire walker, *Clearance* (TMB) 44.00
Klein wire gripper (TAG) for working with aluminum clad wire. $\quad$ ( $\boldsymbol{T A G}$ ) $\quad 79.50 \quad$ See page 7

AK

## (TCTHD)

## WIRE CUTTERS

When you cut H-T wire with regular wire cutters, often they don't cut as well again. Our (TCTHD) nine inch cutter has more leverage, a strong jaw, and still fits in your pocket. The (TCT9) wire cutter looks and cuts much like the (TCTHD), but it is made in China. The jaws may be a bit loose, but for $121 / 2$ high tensile wire they cut great if the wire is put all the way back in the jaw. The Knipex cutter is the best long lasting cutter I have used for the hard wire.

Our fencing pliers (TFP) is a standard low cost fencing tool with multiple uses. It has a wire gripper, staple puller, awkward hammer head (it is really better to consider this to be the part to hit with a hammer when driving the point under a staple), wire cutter for soft wire, and can be used to hold staples to prevent bending while driving into hard wood (this is why we sell it). Put the staple completely inside the jaw. There is a slot for each leg of the staple.

| 9 inch Heavy Duty H-T Wire Cutter Japan |
| :--- |
| 9 inch H-T Wire Cutter China |
| 8 inch Heavy Duty H-T Wire Cutter, Knipex, German |
| (TFTHD) |

Kencove's Staple Driver is very simple to use and has no moving parts to damage. Just insert the staple into the slot and hammer on the pin.
Staple Driver
(TDSD)
$\$ 16.00$
Staple Driver for HD2W (for wide staple) (TDSDW) $\$ 16.00$

# Ways to fasten wires 

When crimping 14 or 16 gauge wire, Kencove has two options. The C12 sleeve is designed to work with these wire sizes. These sleeves are small and easy to work
 with. The C23 sleeve, while primarily used with $12 \frac{1}{2}$ gauge wire, will hold well with 14 and 16 gauge wire.
The C2SS sleeve is about half the length and price of the C23 sleeve. C 2 SS is great for electrical connections. If you find the crimping tool too hard to use on the C23 sleeve, use the C2SS - it is much easier. Use twice as many to get the needed holding strength.

When $12 \frac{1}{2}$ gauge wire is spliced in line, three Kencove C23 crimping sleeves are used to maintain the full strength of the wire. At end posts and in-line tightener brackets, two Kencove C23 sleeves are normal. When crimping the sleeve, put it into the tool slot marked 2-3 and compress it into a cylindrical shape. Do not split the sleeve into an ' 8 'shape.

The C2L sleeve is $70 \%$ longer than the C 23 and requires at least two side by side squeezes by the crimping tool to get full strength. It can be used in place of the C23 sleeve in many applications. The C2L works especially well on Solidlock, Tightlock and other woven wire style fences since these fences are normally tightened to lower tensions. Use of the C2L in these applications will save money since you need only one sleeve per line splice versus two of the C 23 size.

Other sleeves are available from Kencove. The C34 sleeve can be used for $101 / 2$ gauge smooth and high tensile barbed wire. The C45 sleeve works well with 9 gauge smooth and $12 \frac{1}{2}$ gauge barbed wire. Sleeves come packaged in resealable plastic bags or bottles. Keep sleeves dry prior to using for best results.

| Crimp Sleeve 14 or 16 ga smooth wire 100/pk | (C12) | 6.60 |
| :---: | :---: | :---: |
| Crimp Sleeve $121 / 2$ ga smooth wire Short 100/pk | (C2SS) | 3.50 |
| Crimp Sleeve $121 / 2$ ga smooth wire 100/pk | (C23) | 9.00 |
| Crimp Sleeve $12 \frac{1}{2}$ ga smooth wire-Bottle of 300 ea | (C23-300) | 27.00 |
| Crimp Sleeve $121 / 2$ ga smooth wire Long 100/pk | (C2L) | 15.00 |
| Crimp Sleeve $101 / 2$ ga smooth wire \& 14 ga barbed wire 50/pk | (C34) | 10.00 |
| Crimp Sleeve 9 ga smooth wire \& $121 / 2$ ga barbed wire $50 / \mathrm{pk}$ | (C45) | 12.50 |
| EZ Long Aluminum Crimp Sleeve $121 / 2$ ga smooth $100 / \mathrm{pk}$ | (C2LAL) | 17.50 |
| EZ Aluminum Crimp Sleeve 8 to 10 ga smooth 50/pk | (C45AL) | 13.50 |
| EZ Aluminum Crimp Sleeve Barbed wire 50/pk | (C45B) | 13.00 |

The Wirelink (CWL) and Wirevise (CWV) can fasten H-T wires without a tool. Merely insert the wires into the holes. The wires are gripped by spring-loaded clamps which tighten more securely as the wires are pulled harder, holding the wires at over $80 \%$ of the breaking strength of the wire itself.

The Wirelink is double sided for joining two ends of wire on in-line splices whereas the Wirevise is half of a Wirelink and is used for terminations at an end post. Each wire on a fence requires one Wirevise. A(TWR) wire release tool can be used to remove most 12.5 gauge Wirelinks from the fence wire. This allows the Wirelink to be reused if care is taken during both initial installation and later removal.

To use the Wirevise, drill a $3 / 8$ inch hole through the end post and pull the wire through the hole. Then put the Wirevise on the wire and tap it lightly into the hole. If final tensioning is to be done with the Wirevise, it is recommended to pull the wire to the end post with a chain grab, then push the slack through the hole and Wirevise. A special tightening tool (TVT) is also available for use with the Wirevise. It grabs the wire which has been threaded into the Wirevise and a simple prying action pulls the wire through the Wirevise to the desired tension.


Wirelink Splice $12^{1 ⁄ 2}$ gauge wire, splice w/o tool 5059 Wirelink for splicing 16 to 14 gauge wire each Wirelink 9 gauge
Wire Release Tool for most 12.5 gauge Wirelinks
Wirevise End Clamp for $121 / 2$ gauge wire 5058 V
Wirevise for end attachments 16-14 gauge wire each Wirevise 10 to 11 gauge
Wirevise 9 gauge wire
Tightening Tool For use with Wirevise
(CWL)
2.70
(CWL5057) 2.90
(CWL5065) 4.20
(TWR) 16.95
(CWV) 2.00
(CWV5056) 2.20
(CWV5062) 2.80
(CWV5064) $\quad 3.00$
FOB (TVT) 33.50

The open tap crimp sleeve (CT4) is good for making permanent electrical connections on $12 \frac{1}{2}$ and 14 gauge wire. Do not use it for connections requiring strength. The advantage of this sleeve is the open side that allows for installation onto existing H-T fence. A crimping tool is normally used to compress the open tap sleeve. Use the slot marked 3-4. Available by the piece or in convenient 25 or 100 piece packs. (Consider the Split Bolt Line Tap (CBTE) for removable connections.)


> HELPING FARMERS SINCE 1980 Kencove Farm Fence Supplies
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## SPLICERS CONTINUED - STAPLES - BRACE PINS

The Wrap Connector (CWC) is a preformed wire spiral with grit (similar to sandpaper) glued to the inside which contacts and holds the line wires. Two CWC's should be twisted onto the wire for in-line splices and have a holding strength equivalent to the full strength of the wire when used this way. This connector works very well to form tieback loops onto $12^{1 / 2}$ gauge wire for hooking electric gate handles upon when the gate is open. Twist the first third of the connector onto the fence wire. Bend the middle third into a loop and twist the last third of the connector back onto the fence wire beside the first part of the connector. Use two wrap connectors when they are used for tying off wire at end posts. Only wrap connectors which fit $12 \frac{1}{2}$ gauge wire are stocked.

## PRICE REDUCTION !

Wrap Connector, No tools required Removable
(CWC)
.50
The Wirelok (CLO) is a fast and convenient way of creating an in-line splice that is very close to the full strength of the wire itself. Our initial pull testing of a medium Gripple and the Wirelok resulted in the 12.5 gauge USA 210 breaking at 1125 pounds for the Gripple and 1580 pounds for the Wirelok. The Wirelink tested at 1645 pounds when its wire broke. The Wirelok is installed in very much the same manner as the Gripple. It is reusable, able to be retightened, and works well for ends and brace wires as well as regular splices.
Wirelok, this one size fits only 12.5 gauge wire
Save when you buy a full box of 50 @
(CLO) $\quad 1.75$ 1.60

Gripples are an easy way to join or tension wire. You simply push your wire or cable into the ends, leaving at least a two inch tail which will allow for easy adjustment or re-
 tensioning. Once in position, serrated rollers grip the wire as soon as any reverse tension is applied. To increase wire tension, simply pull the wire through even more. To remove the Gripple, cut the wire, pull the loose ends through, and you're ready to use the Gripple again. Three sizes are offered, allowing them to be used on smooth wire from 16 to $7 \frac{1}{2}$ gauge ranges as well as $15 \frac{1}{2}$ to $12 \frac{1}{2}$ gauge twin strand barbed wire. A tensioning tool is also available for applications where high tensions are required.

Small Gripple 17 to 14 Ga smooth wire
Medium Gripple 14 to 10 Ga woven or $151 / 2$ barb
SAVE when you buy Large Gripple 12 to 8 Ga smooth 12 1/2 ga barbed Gripple tension tool

| (CGS) | 1.15 |
| :---: | ---: |
| $(\mathrm{CGM})$ | 1.25 |
|  | 1.20 |
| (CGL) | 1.77 |
| (TGT) | 99.00 |

## BRACE PINS

The $4,5,9,10$ and 12 inch galvanized Brace Pins make the $H$ style end or corner braces neat, strong, and simple to install. They are used to hold the top horizontal rail in place between the end post and next brace post in the ground.

The procedure is to mark the wire spacings on the vertical brace and end or corner posts. Half way between the top and second wire marks, drill a $3 / 8$ inch hole two inches into the end post and insert the four inch brace pin where the horizontal post will be. Drill a two inch deep hole into one end of the horizontal rail. Next drill a hole through the second vertical brace post for a nine or ten inch brace pin.

Put the horizontal post onto the stub of the four inch pin. The nine inch pin is then driven through the second post into the other end of the horizontal rail. Leave a two inch stub for the second rail on a double brace assembly. The nine inch pin stub can also be used for installing the diagonal brace wire by bending the wire around the pin and stapling it tight after removing all possible slack. Some fence builders prefer to use a five inch brace pin instead of a four inch pin. Several sizes are available from Kencove.

The twist stick may be used for the final tightening of the brace wire, but don't over wrap it. The diagonal brace wire can also be tightened with an in-line strainer, like the SDS. A third option for tightening the diagonal brace wire is to pull the wire tight with a chain grab. Then crimp the two ends together using your crimp tool and two or three sleeves. A wirelink or wirelok can also be used.

## PRICE REDUCTION :

4 inch x . 35 Brace Pin Hot dip galvanized
(\$18/100 FOB)
(H4PE)
5 inch x . 35 Brace Pin Hot dip galvanized $\quad(\$ 21 / 100 \mathrm{FOB})$
(H5PE)
9 inch x . 35 Brace Pin Hot dip galvanized ( $\$ 33 / 100 \mathrm{FOB})$
(H9PE)
10 inch x . 35 Brace Pin Hot dip galvanized ( $\$ 36 / 100$ FOB)
(H1PE)
12 inch x .35 Brace Pin Hot dip galvanized
(H12PE)


NEW! Double Strength Split Bolt Line Taps (CBTE), made out of zinc, are for ensuring electrically tight connections on galvanized wires. If the electric hookup wires are only hand wrapped, often poor electric contact will develop when the fence is heavily shorted. It is a good practice to join electrified fence wires with a Split Bolt Tap by bringing all hot wires at a fence end post into one tap. It will hold seven (was 5) or more wires at once, depending on the wire size. If the lower wires are making it difficult to maintain proper voltage on the fence, it is easy to disconnect wires as desired. Trouble shooting is simplified by isolating wires and testing with a voltmeter and portable fence charger. Split Bolt Electric Tap for $12 \frac{1}{2}$ ga. or smaller. 25
(CBTPK25) 16.25 Split Bolt Electric Tap, each


Stainless Steel Split Bolt electric tap has a larger slot and the highest strength. It holds Safe Fence Buckles
(CBTSSE)
.95
The 2 bolt Rope and Wire Clamp (CWBT) is mainly for rope connections. It is
 very strong. This allows it to be used as a splice in fences where occasionally an opening is needed, like at a utility right-of-way. Make a loop in each end of the wires. Put a loop on each of the 2 bolts in the clamp, then put on the $2^{\text {nd }}$ plate and tighten the bolts. To open again, only a bit of slack is needed. The wires also can be placed parallel in the clamp to allow quick low-tension joints for flood areas or safety. The clamp can be used for easy tension adjustments, especially if you use electric rope. It may even work as the "fuse" which opens before a gate handle is broken.
Two Bolt Rope and Wire Clamp
pack of 3
(CWBT)
1.80

## STAPLES

Staples should not be driven tight against the wire or tube insulators on line posts so the wire can freely move, utilizing the natural springiness of $\mathrm{H}-\mathrm{T}$ wire and to permit easy tightening and retightening of the line wire. The $1 \frac{1}{4}$ to 2 inch staples are class 3 galvanized and barbed to provide superior hold when compared to plain staples. All staples are available by the pound or in convenient 10 pound boxes. Most sizes are also stocked in 50 pound wooden boxes.
New! Wide 2 inch Staples for plastic coated high tensile wire. (HB2W)
11/4" Barbed Staple Class 3 galv. Batten staples FOB (HB1B) 1.25/lb
11/4" Barbed Staple Class 3 galvanized 88 staple/lbFOB (HB1) 1.25/lb
11/2" Barbed Staple Class 3 galvanized 62 staple/lbFOB (HBM) 1.25/lb
1 3/4" Barbed Staple Class 3 galv. 53 staple/lb FOB (HBS) 1.25/lb
2" Barbed Staple Class 3 galvanized 48 staple/lbFOB (HB2) 1.25/lb
Wide 2" Barbed Staple Class 3 galvanized 46 staple/lbFOB(HB2W) 1.25/lb
10 pound box, any size $\quad$ FOB $1.10 / l b \quad$ (???-10) $\$ 11.00$

| 50 pound box, any size | FOB | $.97 / l b$ | $(? . ?-50) \$ 48.50$ |
| :--- | :--- | :--- | :--- |
| 900 pound drum, any size | FOB | $.88 / l b$ | $(H B ?) \$ 792.00$ |

Blue handled 4-slot tool is Kencove's top line of the import tool. It has been in production for over 12 years. The machining is better than the China tool.
(TKC)
55.00

Red handled 4-slot tool is carefully inspected and guaranteed for five years of proper use. This is our biggest selling tool. A very small percentage of tools need repairs. Test pulls of crimp sleeves are done with these tools to be sure our inspections are giving you proper strength. With proper care these tools will last a lifetime.
(TFFG)
44.00

The original 4-slot tool is also available. It will crimp the full range of crimp sleeves offered by Kencove.
(TNC) 195.00

The New Zealand made EzePull 4-in-1 and Multi Slot Fencing Tools are lighter to carry than the above tools The (TEP) combines a wire cutter, crimper, wire gripper/ cable stripper and staple puller into one easy to use tool. It will only crimp the C2SS/C23/C2L sleeves and requires additional crimping actions on the C23 and C2L sleeves. The (TMP) has 2 different size slots to allow crimping the larger CTZ, C23-AL, and C45-AL sleeves

$$
\begin{array}{cc}
(T E P) & 104.00 \\
(T M P) & 104.00
\end{array}
$$

## $30 \rightarrow 1$ (TKC) (TNC) (TFFG) <br> Proper care and a few drops of oil will make these quality tools last a lifetime.


(TEP)
(TMP)

## ELECTRIC ROPE FENCE

This is an example material list to do the same 15 acre square pasture ( 3280 feet of fence) with 3 strands of electrified rope. There are three corners with the fourth corner being two ends making a gateway. End and corner wood posts ( 5 inch diameter) do not need to be braced, but they should be 3.5 to 4.5 foot in the ground and well tamped if they have not been driven. Wood, (plastic step-in posts can be used), will be figured at 32 foot spacing. To make a very strong connection, overlap 12 " of rope, then at the midpoint place both strands into one side of the CWBT clamp. The rope ends should then be bent 180 degrees around the bolts and placed on the opposite side of the clamp. The extra strength comes from clamping rope against rope. You may want to retighten the clamps after you have tensioned the fence. To get especially good electrical connections, melt the rope about 2 " from the ends, pull the plastic off, then twist the wires together from both ends and use a crimp sleeve or plastic wire nut.

To keep the horse safe from entanglement, you may prefer to have the clamp act as a fuse which will let loose at around 200 pounds. In this situation, just lay the ropes on each side of the clamp and snug it down. Placing posts at 10 foot spacing will also make the fence safer.

Rope makes an electric fence that is much more visible than wire or twine. It does not require braced end posts and it is easy to hand knot. Round rope doesn't wind whip as much as electric ribbons so post spacing can be wider and the higher breaking strength allows it to handle much more abuse. Rope works great for making electric gates. (RO4) is 4 times more conductive than (RO2) or 9 strand NZ twine since the stainless steel conductors are .4 mm diameter compared to .16 mm . If the fence is several miles long, the (ROU) rope with copper conductors may be helpful. We do not recommend copper conductors in most situations since stainless steel will handle much more abuse. The (RTT) Twist Tightener can be used for most situations, but it will release at about $1 / 4$ the rope strength. This may give a desired "fuse" safety effect. The (SSD) Daisy Tighteners can handle the full strength of the rope.


## Do It Yourself Cost

| 15 | 656' White 1/4" Rope 6x. 2 mm stainless steelFOB ......... (RO2) | 29.50 | 442.50 |
| :---: | :---: | :---: | :---: |
| 300 | Large White Claw Insulator - Rope to Wood Posts ....... (ICCW) | . 20 | 60.00 |
| 8 | Two Bolt Rope and Wire Clamp pack of 3 ............. (CWBT) | 1.80 | 14.40 |
| 18 | Economy Lag Corner Insulator .................................. (ILCE) | 0.75 | 13.50 |
| 3 | Economy EZ-Daisy ............................................... (SSD-E) | 1.39 | 4.17 |
| 1 | Handle to fit EZ-Daisy .............................................. (TFD) | 6.50 | 6.50 |
| 3 | Double Hook for Gate Handles, screw into wood ...... (GHUD) | . 75 | 2.25 |
| 3 | White Polycarbonate/Stainless Steel Gate Handle ........ (GPCS) | 4.50 | 13.50 |

Total for 3280 ' of 3 strand White Fence Rope (17 cents / foot) $\$ 556.82$ ROPE PRICES
$656^{\prime}$ White $1 / 4^{\prime \prime}$ Rope 6x. 2 ss, compare price to ribbon, 9 lb . 656' White 1/4" Rope 6x. 4 Stainless, approx.900\#, 10.5 lb . 656' White+green 1/4" Rope 6x. 3 Copper, approx 900\#, 10 lb .

FOB (RO2) 29.50
FOB (RO4) 46.75 FOB (ROU) 46.75

## Here is an example of a 15 acre pasture with 3 strands of electrified ribbon.

The perimeter of the fence is $3280^{\prime}$ with $820^{\prime}$ on each side of the square (Note: this is the same area used in our 11 cent per foot sample package using 6 strands of 12.5 gauge wire shown on page 3 . We have used the same area so that you can compare several types of fence).

Please refer to figure 1 in the explanation that follows. There are 3 corners labeled C1, C2, and C3. At the fourth corner there are 2 ends making a gateway (labeled E1 and E2). The first step is to install all your posts. End and corner posts should be 5 inch diameter. They do not need to be braced but should be 3.5 to 4.5 foot in the ground and well tamped if they have not been driven. The posts between the corners and ends - line posts - can be wood, but in our example we used 6 foot hot dip galvanized T posts. The line posts are figured at 15 foot spacing with 4.5 feet above ground. If you use wood posts and plan to paint them, it is best to do that before attaching the insulators.

The next step after all the posts have been installed is to attach the top insulators to the corner and end posts, as you unwind the top strand of ribbon. The line post insulators will be installed later. There will be 3 strands of ribbon which will be placed 16 inches apart, starting 4 inches from the top of the posts. So at each corner and end post, you will install a Black Box Insulator (JBB). The Black Box insulator (JBB) is 2 identical pieces that you can pull apart, insert a ribbon or buckle, and then snap back together. In our example we recommend putting the Black Box Insulator (JBB) 4 inches from the top on the inside of each of the corner posts. If you prefer the ribbon on the outside of the corner, install a full Black Box Insulator (JBB) at the back of the corner post and

(JBB) half of a JBB on either side of it.

Start at the end post (E1) by the gate. Attach a Connect Buckle (JBBC) to the end of a roll of ribbon, insert the buckle into a Black Box Insulator (JBB), then attach the (JBB) to the inside of the end post, 4 inches from the top. Put a rod through the hole in the ribbon spool and pull out the entire first roll, walking toward the first corner (C1). Attach the next roll to the first roll with a Ribbon Tightener (SET). Only tighten it enough to splice the ribbon from the 2 spools. As you unwind the next roll, you will reach the next corner (C1). At this corner, insert the ribbon into the Black Box Insulator (JBB) and then attach it on the inside of the corner post, 4 inches from the top. This ribbon can flow through the insulator. At the end of the second roll of ribbon, attach a Connect Buckle (JBBC). Attach the third roll to the other side of the buckle and unwind it until you get to the back corner post (C2). Cut the ribbon after you have pulled out most of the slack and attach it to a Connect Buckle (JBBC). Insert the buckle into a Black Box Insulator (JBB) and then install it 4 inches from the top of this corner post.

Now go back to the Ribbon Tightener (SET) and take out the slack. If you have rolling ground, be sure you can attach the ribbon to the rise and dip posts without too much tension. This is not to be a high tension fence. Take out the sags, but do not put much tension on it. Save the strength to allow for snow load or something hitting the fence. After tightening, go to the first corner (C1), and work the slack out of the back section (C1 to C2).

You are now ready to install the line post insulators and insert the ribbon. In our example we are using the White T-Post Insulator for Ribbon (JTPW), which should be installed 4 inches from the top of each line post. The second section of top ribbon should be installed in the same way as the first. The only difference will be at the end or gate post. Instead of a connect buckle, use an End Buckle (JBBE) which has an extra loop for hooking up the gate handle. The other stretches of ribbon should be put up like the first two. It is best to attach the electric wire from the charger to the ribbon at buckles. When there is a lot of growth on the bottom

## Do It Yourself Cost



[^0]
## WHY IS RIBBON FENCE SAFE?

1. It is easy for the horses to see so they are less likely to run into it.
2. Once they get a few electric shocks they stay away from the fence.
3. If an excited horse does run directly into a board fence, boards and horse are likely to be damaged. If a horse hits our ribbon hard, it may break, but the horse is very unlikely to get hurt.
4. If a leg gets between boards or wires, injury is more likely than with ribbon fence.


If ribbon will be used at the gate, install a length into the unused side of the connect buckle (JBBC) at the first end post (E1). At the handle side (E2), put the ribbon onto a Gate Buckle (GTB) and attach the buckle onto the Insulated Gate Handle (GPC). Adjust the buckle to the handle so the gate hooks snugly onto the End Buckle (JBBE) mounted to the other gatepost.

### 1.57" Wide Safe Electric Horse Ribbon

> 656' White 1.57 " Ribbon $4 \times .3+9 \times .2$ ss, 5.7 lb . FOB $\quad \$ 59.00$
$656^{\prime}$ Brown 1.57 " Ribbon $4 \times .3+9 \times .2$ ss, 5.4 lb . FOB (JGB) $\$ 59.00$

[^1](D) Portable Fence Post
(1) Fence Wire, Twine, Tape
(12) Gate Handle \& System
(13) Gate Handle Hoop-Up
(14) Electric Fence Sign
(18) Line Insulator - Wood Post
(16) Line Insulator - Steel T Post
(1) In-Line Wire Splicer
(18 In-Line Wire Tightener

## RIBBON FENCE ACCESSORIES



The above numbered picture may help you remember all the needed components. If you see a black dot number in other parts of this paper, it refers to this drawing. There are different items best suited for wide ribbon, rope, twine, or wire. Some parts work well with all the systems.


The JBB insulator is a very strong 2-piece insulator. Use it as a line post insulator, slide corner insulator, or hold several styles of end and corner buckles for 1.6 " ribbon.

The JEB can also be used without the buckles for a slide corner insulator.
Black Box Insulator for 1.6" Ribbon, strong corner insulator FOB (JBB) 1.40 Connect Buckle for $1.6^{\prime \prime}$ Ribbon Fits into JBB FOB (JBBC) 1.40 End Buckle \& Loop for 1.6" Ribbon Fits into JBB FOB (JBBE) 1.50 End \& Corner Insulator, 1 bolt, 2 buckles, for $1.6^{\prime \prime}$ Ribbon FOB (JEB) 1.50

It can be hard to tighten the ribbon through buckles. With clamps, there are 2 screws which can be tightened while the ribbon is being held tight

End Clamp / Tightener Block, Black FOB Clamp End / Tightener, White, Non-buckle type FOB
(JEEB)
(JEEW)
1.75
1.75

If you want to put on an insulator that allows a lot of options for future change, consider the Nail-On Universal Insulators. These use 2 nails and hold the ribbon about $7 / 8$ inch from the post. They can hold 1.7 inch or smaller electric ribbon, $1 / 4$ inch round rope, and high-tensile wire. Be careful to only open the (IWU) insulator as wide as needed to install the conductor.

If wind is whipping the ribbon, go back and put in $3 / 8$ " fiberglass posts with the (J3R) insulator to stabilize the ribbon.
White Universal 1.6" Insulator 25 per pack FOB Black Universal 1.6" Insulator 25 per pack FOB Nail-On Universal Insulator black 25 per pack Ring Insulator for " T " Post, pk of 10
(J16W) 5.75 (J16) 5.75 (IWU) 2.50 (IRT) 2.80 White Insulator for 1.6 " Ribbon to " T " Post, 25 FOB (JTPW) 6.35 White Insulator for $1.6^{\prime \prime}$ Ribbon to Wood Post, 25 FOB(JWPW) 5.95 White Insulator for 1.6" Ribbon to Rod Post, 25 FOB (JRPW) 8.10 Insulator for 1.6 " Ribbon to $3 / 8$ " Rod Post, FOB (J3R) . 45

## Kencove Wire Cover

Very visible white tube with a $3 / 8$ inch outside diameter. This has a slit running the 500 foot length so it can be installed on existing high tensile fence. Lengths can be cut to fit between posts. If you want a better look, remove the staple right ahead of the tube and then staple again over the tube. The EzePull Crimping tool (TEP) will make pulling staples simple. Your fence can have a whole new look without much cost. Electric is recommended on a bare wire near the covered wires.


Kencove Wire Cover, 3/8" diameter, slit
500 foot length FOB
(WWC500)

## KENCOVE PLASTIC COATED HIGH TENSILE FENCE WIRE

## KENCOAT

Kencove introduced Kencoat, a plastic coated wire, to the fencing market in 1992. This wire adds visibility, safety and good looks to any high tensile strength fence. Kencoat is made with our high strength USA $21012 \frac{1}{2}$ gauge wire as the core and is coated with high quality, UV resistant plastic. Overall thickness is about .3 inch, making it the most visible coated wire on the market. It is available in white, brown or black, in 1320 foot coils. White 1000 foot coils and shorts may be available. All non-bonded coated wire now sold by Kencove no longer has a warranty, but the price has been lowered. Bonded wire is strongly recommended.

Kencove's (WTW) coated wire has the wire glued to the plastic. This bonded Kencoat has a 12 year limited replacement warranty from the factory.

Coated wire should be put under tension before stapling. Do not pull this around corners - terminate each stretch. Kencoat makes an excellent sight wire on high-tensile fencing used for horses. Customer satisfaction has been very good. Staples are sold separately. Call today for more information.

> Kencoat Coated wire $\quad 1320 \mathrm{ft} \quad 81 \mathrm{lb} \quad$ FOB No Warranty (WM2CW)(WM2CB)
> Bonded w/ Warranty (WTBR)(WTBL)(WTW)
> 128.00
> 128.00
> Kencoat Coated wire 1320 ft 5 roll Special FOB
> No Warranty (WM2CW) (WM2CB) $\mathbf{1 2 1 . 6 0}$
> Bonded with 12 Year Limited Warranty (WTW) $\mathbf{1 2 1 . 6 0}$ Kencoat Coated wire Shorts FOB
> No Warranty (WM2CWFT) (WM2CBFT)
> $6.5 c / f t$.
> $6.5 \mathrm{c} / \mathrm{ft}$.
$(\mathbf{W T B R})=$ Brown; $(\mathbf{W T B L})=$ Black; $($ WTW $)=$ White

## HOTCOTE

Finally there is a plastic coated white wire, like the Kencoat, that can be electrified. It has been a long time in coming. The black plastic core is conductive and comes to the surface in 3 narrow lines. The rest of the surface is white UV resistant plastic. It looks white from 20 foot away. This wire adds electric, visibility, safety and good looks to any fence. HotCote is also made with our high strength USA $21012 \frac{1}{2}$ gauge wire as the core. It is available in white 1320 foot coils. Shorts may be available. HotCote is easier to strip to the wire than the WTW; it does have a 10 year limited factory warranty.

Coated wire should be put on insulators large enough to hold it like the ICC, ICCW, IWT (lag screw type) or IWRN (single nail type insulator). Do not pull this around corners. HotCote makes an excellent sight wire for electric horse fence.

HotCote Electric Coated wire, 10 Year Warranty 1320 ft 70 lb FOB

## NEW! LOWER PRICE!

White (5 @ 151.05) (WSWH) 159.00
Brown (5 @ 151.05) (WSWBR) 159.00 Black (5@151.05) (WSWBL) 159.00 4 " inch HotCote Insulator 100 (I4H4) 4.95 100' HotCoteTube White (I4HW) 12.75


## WHITE LIGHTNING ${ }^{\text {M }}$

Has
White Lightning ${ }^{\text {TM }}$ is a unique co-polymer coated 12.5 guage gakanized high-tensile steel wire. Similar to ordinary hightersile elestric fence wire, yet superiox in quality and safety due to its hosse-friendly co-polymer crating. White Lightning ${ }^{\text {TM }}$ incoxporates highly visible white polymer and highly charged black polymer in four shock points to help create the perfect fence for containing horses and other linestock.


White Lightning 1320' (\$166.25 ea.on 5 coils) FOB White Lightning 1000' ( $\$ 126.35$ on 7 coils) FOB White Lightnng 1320' Black ( $\$ 166.25$ ea.on 5 coils) FOB White Lightning 1000' Black ( $\$ 126.35$ on 7 coils) FOB
(WWL)
(WWL1)
(WWLB)
(WWLB1)
175.00
133.00
175.00
133.00

Tceal Ciamseter $300^{\circ}$ Min.Ereaking Strength 1400 lbs

Derfect as a stand alone or in combination wath osher fence types like wire, wood, polymer or rigid PVC. When your animak requile electric fencing, protect them and you wath White Lyphning ${ }^{\text {T }}$ The Hosse Friendly Fence".

By



825 ft . roll White 1.5 Inch wide Ribbon
825 ft . roll black 1.5 Inch wide Ribbon 200 ft . roll White 1.5 Inch wide Ribbon Universal wood post insulator 25 pack White Universal wood post insulator 25 pack T-Post Insulator 25 pack
Round rod post insulator 25 pack
Splicer Buckle, priced as one each
End Buckle+Insulator+Lag Screw, price per 1 each White End wood post Insulator, price per 1 Corner Buckles+Insulator+Lag Screw, price per 1 White Corner wood post Insulator, price per 1 each T-style Buckles+Insulator+Lag Screw, price per 1 White T-style wood post insulator, price per 1 each Wire Connector, priced as 4 per pack
White T Post Sleeve, vinyl, 52lb./25, price per 1 Wood $4 \times 4$ Sleeve, vinyl, $331 \mathrm{l} . / 4$, price per 1

Safe-Fence ${ }^{\mathbf{T M}}$ is a product designed to provide the most effective horse fencing possible, relative to the basic needs of the horse owner. Based on the electric fence concept, this lightweight poli-tape style fence is strong ( 750 pound breaking strength), safe and visible. The 1.5 inch wide ribbon has 15 stainless steel conductors and comes in both white and black. It has a 20 year limited factory warranty. Use steel "T" posts for quick installation and get a great look by slipping the white vinyl sleeves over them. Call for more information.


(WSSW) (WSRW)

## FOUR INCH PLASTIC RAIL

This system makes a very attractive, eye catching fence. The four inch rails replace painted boards, and the 12 1/2 gauge wires molded into the top and bottom of the rail provide resilient strength and allow for easy tightening. Kencove Farm Fence now has a New $4.25^{\prime \prime}$ wide rail with an improved look since it is wider and the wires are very straight. This long life fence requires very little maintenance and will handle abuse better than any other type of rail fence you can buy. Posts should be no more than 12 foot apart and the ends and corners must be braced well to handle the abuse this fence can take. Each rail has 2 strands of our top grade 210,000 minimum PSI heavy galvanized high tensile wire. Kencove stocks materials for several different options in brackets, splices and tighteners.


## (WSBRW)

## Bracket, Round

 fence (inside curve),White
(C23)S USED TO SPLICE

(WSRW) OVER (WTW) COATED HIGH TENSILE WIRE
4.25 in. White or Black Rail, 660 ft coil, [brackets and tighteners should be bought separately] FOB(WSRW)(WSRB) 287.00 NEW! Brown Rail (WSRBR) is now in stock at the same price as the white and black Buy 25 roll for $\$ 257.40$ each 4.25 in . White Rail, 330 ft coil, [brackets and tighteners should be bought separately]

FOB (WSRW3) 165.00
4.25 in. painted HD galvanized, 4 hole steel Bracket, *Reg., *Top, *Round +*White, *Black, *BRown FOB (WSB**) . 75
4.25 in. Galfan coated wire Staple Bracket FOB (WSP- SB) . 24 Donalds No. 2 Wire Tightener, Hot Dip Galvanized, tighten with wrench on 1 side (SD2) 1.50 Stainless Steel Donalds Style Wire Tightener, tighten with wrench on 1 side [buy 50 at $\$ 1.59$ each] NEW! (SDS) 1.69 Stainless Steel Hayes Style Wire Tightener with spring flipper, requires (TFH) handle, [buy 50 at $\$ 1.75$ each] (SASS) 1.85

SPOOLER 3 - in -1 Tightener, Splicer, End Post Attachment for 4.25" Rail,*White, *Black, or *BRown, FOB (WSS*) 7.95
Wirelink, Splice $12 \frac{1}{2}$ gauge wire without tools
(CWL)
2.70

HELPING FARMERS SINCE 1980
Kencove Farm Fence Supplies
344 Kendall Rd, Blairsville, PA 15717-8707

1-800-536-2683
www.kencove.com Fast Friendly Service \& Expert Advice

E-mail : fence@kencove.com
Phone : 724 459-8991
Fax: 724-459-9148

DIAGONAL FENCE BRACE DETAIL
(No Brace Wire, Cable or Rods Required)


QEND POST - 7" Minimum OD Above Ground - Choice of $60^{\prime \prime}$, $54^{\prime \prime}$ or $48^{\prime \prime}$ Height Below Ground - 5 ' Maximum in Soft Soil 3' Minimum Driven In Rock or Concreted QBRACE
Use $4.5^{\prime \prime}$ x 10 ' Brace for 60 " End Post or $4 " \mathrm{x} 8$ " Brace for $54 "$ and 48 " End Posts Brace Post is Angle Cut to Fit at End Post, Stays Square at Guiderail Post
Brace Post is Attached Half Way Up the End Post (with 10" Galvanized Pin or Spike)
© GUIDERAIL POST
4" x 6" Galvanized (used)
54" Long if Driven in Soft Soil
12" Long When Concreted
Top of post to be at a min. of $4^{\prime \prime}$ from Surface

There are many ways to build strong braces. This diagonal brace has no brace wires, so it can be safer and quicker to build. To reduce the angle of uplift, do not attach the diagonal more than half way up the end post.

## How To Build a Kencove Horse-Rail Fence - DIY! (H Brace)

## The following is a list of instructions for building a 3 rail fence with single " H " brace ends.

The numbers match the drawing's sequence of construction.:
Dig or drive end post holes at least 4 foot deep. Dig the bottom $1 / 3$ of the hole wider like a bell. Keep the side of the hole that the post will be pulled against, straight and undisturbed for the upper $2 / 3$ of the hole.
2. Use 6 " to 7 " $\times$ 9' pressure treated round Wood End Posts. Skip steps 3 and 4 if you drive the posts.
3. Cut a treated wood $2^{\prime \prime} \times 4$ " $x 8^{\prime}$ into 8 " lengths. Attach 4 pieces 3 " from the bottom of the end posts with galvanized nails or lag bolts (will be put into the bottom of the hole).

Using concrete, quarry dust and/or rocks and clay, the ends must be anchored and tamped very well. The most common problem with high-tension fences is the end and corner posts may lift up over time. Lean the end posts a few inches away from the direction of the pull of the fence.
5. Set the 4 " to 5 " $x$ 8 ' round Wood Vertical Posts so the $10^{\prime}$ 'Horizontal Brace Posts snugly fits between it and the end post at the expected rail height. Tamp this post very well.
6. The line posts should be 2.5 to 3 foot deep. Except for dip and rise posts, theses do not require extra effort when tamping. Posts should be 8 to 12 feet apart.
7. You may want to position the 4 " to 5 " $\times 10^{\prime}$ treated round Wood Horizontal Brace Posts behind the top Horse Rail for a better look or put it halfway between the top 2 rails so it is easier to work on the ends of the horse rail.
8. At the planned horizontal brace post position, drill $2.5^{\prime \prime}$ into the end post. Also drill $2.5^{\prime \prime}$ ' into the center of one end of the $10^{\prime}$ top rail. Insert the 5 " brace pin into the hole in the end post.
9. Drill all the way through the $2^{\text {nd }}$ vertical brace post and drive the 10 " brace pin into the post from the fence side. Put the drilled end of the $10^{\prime}$ brace post onto the stub of the 5 " pin. Drive the $10^{\prime \prime}$ pin on through the $2^{\text {nd }}$ horizontal brace post into the other end of the horizontal brace post. Leave 1 " of the pin out to hold the diagonal brace wire up.
10. Cut 53 feet of the 210,000 PSI Brace Wire. At the middle of the wire make a 180 degree bend.
11. Put one strand of the wire through the hole in the bracket of the (SDS) Wire Tightener and slide the tightener down to the 180 degree bend. Lock the pliers onto the square lug of the tightener spool. Make a complete loop around the brace posts in a figure 8 shape. Put the 2 ends of wire into the holes in the spool of the wire tightener. Pull all the slack out by hand and turn the spool about 90 degrees so the wire is locked. Cut off the excess wire and wind the spool until the brace wire is snug.
12. Nail through the bracket hole in the Donalds Stainless Wire Tighteners onto the side of the end post. These are for attaching and tightening each of the 2 wires in the plastic rail. The square tightening lug should face out from the post.
13. Carefully unroll the $4.25^{\prime \prime}$ White Plastic Horse Rail on the ground or with the (TSJ-HH or TSJD) spinning jenny. To attach the rail to an end post, use a utility knife to cut the plastic off the top of the wire for 12 inches. Cut in 1 inch directly under that wire and snap on the locking pliers. Peel back the foot of bare wire. Wind each of the 2 wires of the $4 "$ rail onto separate tightener spools ( 2 revolutions). After the fence tightening has been finished, trim the stub of rail that extends beyond the tighteners. You may want it just reaching the post, halfway along the post or completely around the post.
14. Lightly staple the rail with the $4.3^{\prime \prime}$ Galfan coated wire Staple Bracket at rises and dips. It is better to keep a relatively straight look to the rail than to keep the exact same height from the ground on each post. After a rail has been tightened from the $2^{\text {nd }}$ end, the brackets should be set so the rail can freely move through the bracket.


Materials Needed For Building The Horse Rail Fence Yourself The following is a list of tools and materials to build up to 213 feet of 3 rail fence. This is numbered in the order of use to match the numbers on the drawing. Some things are best bought locally.


## Other ways to build:

7a. The brace post may be diagonal. Longer is better. It can come against an underground block, underground guardrail post or base of a line post. This requires the end to be anchored down especially well.
7 b . The sliding diagonal system allows the diagonal to slide on the surface of a block. Loops of wire or a rod from the base of the end post transfer much of the tension to the sidewall of the end posthole. The increased friction helps hold the post down.
11a. It is common to tighten the diagonal brace wire with an in-line strainer. Also a chain grab wire tightener can tighten the brace wire, then splice it with crimping sleeves, a wirelink, a wirelok or a wrap connector. 11b. The diagonal wire can be threaded through plastic pipe.
12 a . A stronger method of attaching the tighteners at the end is to use loops of high-tensile wire around the post rather than nails. A crimping tool and sleeves is best. Make up the loop with a wire tightener $1^{\text {st }}$, then slide it over the top of the end post. This will keep the strainer closer to the post.
12b. One end of a stretch can be terminated without tighteners.
A. Crimp a loop in each wire and attach with a lag or nail and washer.
B. Install a painted bracket on the fence side of the end post. Go around the post with the rail, overtop the bracket then through the bracket. Put 6 " of rail through the bracket. Clamp a $2^{\text {nd }}$ bracket over the double layer of rail right beside the $1^{\text {st }}$ bracket. Drive some barbed staples tight on the wires at the end of the rail.
C. Crimp loops of standard high tensile wire around the post in the normal method of fastening off $h$-t wire. Leave 2" of wire beyond the crimping sleeves. Crimp the wire of the rail onto this $2 "$ stub.
12 c . If there will be one corner with tighteners at both end posts, staple the wires tight at the corner to keep it from wearing.
12d. A $3-\mathrm{in}-1$ spooler is now out. It can be used for an end attachment as well as for joining and tightening the rail. The cost is $\$ 10.00$.
14a. The painted hot dip galvanized brackets are safer and stronger because they have 2 holes on the top and 2 holes on the bottom. These will handle barbed staples, screws or nails.


## KENRAIL-LITE

Kenrail-Lite is a very attractive and eye catching one inch rail. Keep the cost down while maintaining good appearance, safety and extra long life. This has a 12 year limited manufacturer's replacement warranty. To keep the tightener close to the post, loops should be crimped before hand and dropped over the end post. The other option is to use a case hardened pole barn nail to put the tightener onto the side of the post.

A staple driver should be used to install the wide staples. Do not drive them tightly against the plastic. The rail must be free to move under pressure.

White 1 inch Rail, 14 gauge core wires 750 ft FOB (WR4W) $\mathbf{1 2 5 . 0 0}$
White 1 inch Rail, 14 gauge core wires shorts

FOB (WR4WFT) 15c/ft
Black 1 inch Rail with 2 Galvanized 16 ga wires 750 ft .

FOB
(WR4B) $\mathbf{1 2 5 . 0 0}$
1 inch wide Staple, Class 3 galvanized (HRS) . 15
Staple Driver, a must to drive the 1 inch wide staple


FOB
(TRSD)
10.00

## UNDERGROUND CABLE

Burying insulated wire at gates is often better than running a wire overhead (which may not always be high enough) or using a removable electric gate wire (connections are poor for high power and the electric is off when the gate is open). Buried wire is only recommended if a high power charger with output voltage control
 is used.

Put the cable inside plastic water pipe to protect it from damage if the gateway becomes rutted. It is also advisable to seal the ends of the pipe with electrical putty to prevent water from entering or lying in the pipe. The pipe will also allow easier cable replacement if a short develops. The use of standard electrical wire is not recommended for use with fence chargers due to low voltage ratings. The $12 \frac{1}{2}$ gauge cable should last longer as well as conduct better than the 16 gauge. Lightning can damage underground lines; watch for problems here. We also stock a single insulated, $12 \frac{1}{2}$ gauge, heavy wall cable that is more economical than the double insulated variety. It is sold by the foot in $50,100,250,500$ and 660 foot lengths.
Double insulated cable 165 ft 16 gauge $F O B$ (G16) 22.00
Double insulated cable 330 ft 16 gauge $\quad$ FOB (G33) $\mathbf{4 0 . 0 0}$
Double insulated cable 165 ft 12½ gauge FOB (G65)
Double insulated cable $330 \mathrm{ft} 12 \frac{1}{2}$ gauge FOB (G32) 70.00

Insultube is designed for taking electrified wire under gates by putting the $\mathrm{H}-\mathrm{T}$ wire through the tube. It can also be used for insulating jumper wires between non-electric fence wires. Extra long tube insulators can be cut to length for stapling to wood posts or for insulating holes in wood posts when wire is threaded through them rather than stapled. Insultube is sold by the foot and is available in $50,100,250$ and 500 foot lengths. Insultube is not recommended for insulating around corner posts (see wraparounds).
Insultube . $\mathbf{1 6 " ~}^{\prime \prime} \mathrm{id}, . \mathbf{3 6}^{\prime \prime}$ od
$50,100,250$ or 500 foot coils (G05) (G10) (G25) (G50)

$$
12 \phi / \mathrm{ft}
$$

Kencove now has an extra thick walled insultube to give better protection for underground wire when using lower power fence chargers. It is still good to put this inside plastic water pipe and seal all the ends with electrical putty. Some people like to use wraparound insulators without the metal insert or flat side. This can be cut to the length needed for ends and bends. The diameter of I48 is about the same as it is for wraparounds .23 " ID, $.53^{\prime \prime}$ OD. This is also available in 6 inch lengths for use on line and bend posts.
Heavy Wall Tube, 100 foot (I48-100)
30.00

Double Lead-out Wire has 2 heavily insulated soft galvanized steel wires protected within a white sheath. Use this for putting the bottom insulated wire on a separate switch so when the grass is badly shorting that wire, it can be shut off at one spot rather than at each gate. The double lead-out wire can also be used in ground return and bi-polar fence systems. Designed for direct burial but it is better put in a plastic pipe.
Double Leadout Wire; FOB (GDFT) 30 cft
82 feet $\quad$ (GD82) $\quad 24.60$

330 feet (GD330) 99.00

12½ gauge Single Heavy wall insulated cable FOB:
50 foot single wall insulated cable FOB (GU50)
100 foot single wall insulated cable FOB 250 foot single wall insulated cable FOB
500 foot single wall insulated cable FOB
(GU100)
(GU250)
(GU500)


## ELECTRIC FENCE

 CHARGERSMany hours of fence checking and animal chasing can be saved with a good, high- power charger. It is hard to compare fence chargers. Joules were a common denominator for rating imported chargers eighteen years ago. However companies seem to be very innovative in determining joule ratings. Stored joules of a charger translate into fewer output joules. Kencove has always liked to test the products before believing fence charger claims. Incandescent light bulbs in a series connection across the ground and hot terminals is a good method (which users can do) to compare actual power stored on most chargers.

The Kencove 6 (EK6), six joule, is the most powerful American made charger Kencove sold before 1997. This charger makes the filaments of four 100 watt light bulbs glow dimly in a darkened room. The real power of the Kencove 6 shows up in large heavily weeded fences. Overall the components in this charger are heavier built than most American chargers. They have been doing very well on farms. A one year warranty covering lightning is standard. A storm guard comes free with the charger. This greatly improves lightning protection. It is required to be operational for the lightning warranty to be in effect. The storm guard itself is not guaranteed. A $2^{\text {nd }}$ year warranty, including lightning, is available at $\$ 30$ extra cost. The plastic case allows easy module replacement. Most American made chargers lack the output controls that the NZ chargers have. A spike in the already high voltage pulse can start a
 sparking problem at tube insulators and underground cables. The free Storm Guard included with the Kencove 6 charger will stop excess voltage problems and significantly improve lightning protection for the charger.

## Kencove 6

(EK6)
182.00

The Kencove 15 Wasp (EK12), fifteen output joule ( 20 stored joules), is the most powerful American made charger Kencove has sold. This charger makes the filaments of eight 100 watt light bulbs glow dimly in a darkened room. The real power shows up in large heavily weeded fences. These chargers have been doing very well. A one year warranty covering lightning is standard. A storm guard comes free with the charger. This greatly improves lightning protection. It is required to be operational for the lightning warranty to be in effect. The storm guard itself is not guaranteed. The plastic case allows easy module replacement.

$$
\text { Kencove } 15 \text { Wasp } \quad \text { (EK12) }
$$

364.00

The SE-3 charger (EM1) has a color coded meter built in to warn when the fence needs maintenance. The low price makes this powerful unit very easy to justify, especially considering the one year guarantee which even covers lightning damage. All units still under warranty and needing repairs can be returned to: Parker McCrory 2000 Forest Ave., Kansas City, MO 64108. Using our series light bulb test to compare chargers, we feel the SE- $\mathbf{3}$ has about two joules of power and the Mark 6 (EM4) has about one joule.

SE-3 charger
(EM1)
109.50

Mark 6
(EM4)
89.00

Dyna-Charge (two joule) (EC2) is a rugged medium size charger. This unit is manufactured by the same company that makes our Kencove 6 and comes in a plastic, weather resistant case. The EC2 has one of the best service records of the US built high-powered chargers. It is also easily serviced in the field with replacement components. The one year warranty includes lightning damage.

Dyna-Charge
(EC2)
117.00

NEW! The Kencove (EM6S) solar unit is handy to install or move because everything is together in one unit. The solar panel is mounted on top and the battery is inside the case. This is the most effective 6 volt solar charger made in the USA! It has .25 output joules, ( 33 stored joules). The (EM6S) has a new solar region setting switch for optimum performance and battery life. The digital timing is patent pending. This charger can operate up to 2 weeks with no sun.

6 volt Solar Charger Kencove (EM6S) $\quad \$ 189.00$

The Parmak Magnum 12 volt solar charger has been a
 very popular charger over the years. It has good power compared to many solar units. The meter on the front is handy to check the fence voltage. The steel case handles abuse well but it is a bit large to be moving frequently. Made in USA. Complete with battery.

$$
\begin{array}{lrr}
\text { Parmak } \mathbf{1 2} \text { volt Solar-Pak FOB (EMS) } & \mathbf{2 8 1 . 0 0} \\
\text { Battery for EMS FOB } & \text { (MB12) } & 54.95 \\
\text { Taper charger for EMS } & \text { (MTC12) } & 18.35 \\
\text { Battery for EM6S FOB } & \text { (MB6) } & 27.95 \\
\text { Taper charger for EM6S } & \text { (MTC6) } & 16.00
\end{array}
$$

Solar Powered fencers are not a magic relief from electric bills. The 120 volt chargers generally do not use enough power to see any difference on an electric bill. Most solar chargers cannot handle much weed load because they only have a small gel battery with a two to five watt solar panel.

After a few years it is common to need to replace the battery. If there is a problem on a new solar charger, be sure the panel is not in the shade and the panel is directly facing the sun at noon. Initially, allow the solar panel to charge the battery in the sun a couple days before use. In some winter seasons there is too little sun. A taper charger may need to be used overnight every 1 to 4 weeks.



## Wood Past

## EASY BATTERY ACCESS

NEW! The Stafix 12 volt gel cell Solar Charger (ESX) is made in New Zealand. It has a carry handle on the 3 watt solar panel. This 25 joule unit is ideal for frequent moving. "Auto-mode" software gives optimum output during periods of low sunlight. It has a night battery save option. LCD indicator shows output voltage and battery status. Two year warranty.

## Stafix SX Solar Energizer

(ESX)
249.00

## Map for winter use



Battery Powered Chargers are normally used where 120 volt is not convenient. They also look safer and are less likely to be hit by lightning. With 120 volt powered units, lightning often comes in on the utility power side. Since fence chargers generally have independent ground rods, lightning can damage a charger going to that ground rod.
Battery units generally cost more than the same power in 120 volt plus there are the extra costs of the battery, and often the solar panel also. The lower powered units are normally able to run a month or more on a set of D cells or 12 volt battery recharge. A solar panel is not generally needed for a 1 joule or smaller charger. Larger units can drain batteries rather quickly so solar panels and big marine batteries are normally recommended. Better insulators and using underground cable is good practice for all lower powered chargers.


Parmak's Magnum 12 UO is one of the better values in non-solar 12 volt fence chargers. It is low cost, has good battery life, and power output is relatively good.

The Yellow Jacket is made in the USA. It has a clamp on the back to allow it to be mounted directly to a ground rod / steel rod post while supporting the hot fence wire. Although this unit is a bit heavier than the New Zealand portables, it puts out up to .25 joule (with 12 volt input) which is better than most larger battery units made in the USA. Like the NZ portables, the Yellow Jacket can easily be hung from the electrified wire / twine. Lead sets for using 6 or 12 volt batteries are included with the (ECY) units.

Portable fence energizers are ideal for short installations

(less than one mile). They can be used on permanent high tensile or conventional electric fence. These chargers are especially handy for intensively managed grazing where the animals are moved frequently into different relatively small pastures. In this practice only small lengths of fence need to be hot and much of that is portable (using electric twine and plastic posts). Gardens, bee hives, dog confinement training, camping, stock prods, round bale storage and feeding, trouble shooting large electric fences, security - the list keeps going on - these portable chargers are really handy. Kencove's portable chargers have normal speed pulse settings for animal training. For extended battery life, the pulse speed can be slowed. Expect 3 or 4 weeks of battery life from flashlight batteries ("D" cells).
Magnum 12 UO USA Solid State 12 volt USA (EM2) ..... 75.00
Yellow Jacket fence charger, use 4 D cells, or a 6 or 12 volt USA(ECY) ..... 72.50
Stafix 1 Joule, 12 volt, New Zealand made ..... (ESB) 95.00
Sta-tite SBT 100 NZ 12 volt 1 joule, 2 year warranty NZ (ESB1) 95.00
New Zealand AN90 Portable charger, use 4 D cells or 12 volt NZ(EAN) 97.00New Zealand AN90 Portable mounted on a Stake, 6 or 12 volt(EANS) 109.00 STAFIX ENERGIZERS

## Kencove has a full line of the Stafix Energizers with CYCLIC WAVE ${ }^{\text {TM }}$ technology.

This clean effective single cycle pulse form rises to a very high peak providing maximum efficiency, shocking and stopping power. The 10 light voltage indicator shows only red lights (none of the 7 green lights) when the fence voltage is low and needs tending. All of Stafix's Energizers carry a 2 year warranty. Even lightning is covered if the charger and recommended lightning protection has been installed as instructed and provided the unit is deemed to be repairable by an authorized Stafix agent. The Stafix 36 is the world's most powerful energizer made. It automatically senses the input voltage so it can use either 120 volts or 240 volts.
If you have Internet service look at the Stafix manual on our site: www.kencove.com.

Stafix M1.5 CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER $\quad 1.5$ joule Stafix M3.2 NOTCYCLIC WAVETM ENERGIZER Stafix M6 CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER Stafix M12 CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER Stafix M18 CYCLIC WAVETM ENERGIZER Stafix M36 CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER Stafix M36 WITH REMOTE CONTROL SPEEDRITE 9800 Panther ENERGIZER New!
1.5 joule

6 joule
12 joule
18 joule 36 joule $120 \& 240$ volt 36 joule 120 \& 240 volt 9 joule $\quad 120$ volt

120 volt 120 volt 120 volt (EX6) 120 volt (EX12)
(EX12) (EX18) (EX36) (EX36R)
(ES98)
175.00
229.50
368.00
578.00
697.00
995.00

1,375.00
440.00


The 4 Stafix Battery powered CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZERS have Patent Pending technology which uses a microprocessor to automatically adjust the power required from the battery depending on the fence condition. It only draws as much power as is needed to maintain adequate fence voltage. The microprocessor also assists service personnel to diagnose problems. As far as we know, the Stafix B18 is the most powerful 12 volt energizer sold. These units are designed to be used on longer runs of fencing. They are a good value if you need high output power. However, high outputs require a lot of battery power. Do not use these units unless you have a good system for recharging the battery several times a week. Amish farms with battery recharging systems already in use do well with these units.

## 12 VOLT POWERED CYCLIC WAVETM ENERGIZERS

Stafix B1 NOT A CYCLIC WAVETM ENERGIZER, can use (MSP-13 = \$90) 13 watt solar panel 2 speed, New Model, NEW Low Price! 1 joule output (EXB1) 169.00 Stafix B1.5 CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER, use $13-46$ watt solar 1.5 joule output(EXB15) 210.00 Stafix B3 NOT A CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER, use 22-60 watt solar

New Model, NEW Low Price! 3 joule output (EXB3) 295.00 Stafix B6 CYCLIC WAVETM ENERGIZER, use 30-92 watt solar 6 joule output (EXB6) 488.00 Stafix B12 CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER, use $92-138$ watt solar 12 joule output(EXB12) 745.00 Stafix B18 CYCLIC WAVE ${ }^{\text {TM }}$ ENERGIZER, use138-210 watt solar 18 joule output(EXB18) 900.00


## Hi, I'm Charles Kendall.

In the late 1970 's, I needed a better fence for my dairy cattle. I tried the hightensile steel wire I had read about and was very impressed. It actually has solid advantages over any other fence I know of - low cost, rugged strength and long life. Phyllis and I started Kencove's fence business in 1980 because we feel the great advantages of the fence materials we sell should be known and available to everyone. We have been constantly improving our services and knowledge to help you, our customers. We have really enjoyed the many friends we have met through the business.

The help you have given us has allowed us to help others. Thank you!

All of Kencove's chargers come with a 1 or 2 year warranty. Lightning damage may be covered if lightning protection is properly installed and operational at the time of the hit. Kencove has a full time charger repair shop.

A recommended lightning protection kit includes: (MWLA) choke coil and adjustable spark gap, lightning arrestor (MLA-I) on a more remote ground field, spark suppressor (MSS), and for 110 volt powered units, a power surge protector (MPS). Parts of the kit may be destroyed by lightning and are not guaranteed.

## CYCLIC WAVE ${ }^{\text {TM }}$ Technology

Stafix's Cyclic Wave patented technology provides more energy and power on your fence line through the delivery of clean effective pulses. The CYCLIC WAVE ${ }^{\text {TM }}$ is a single cycle wave form that maximizes the amount of energy that can travel down the fence wire. This provides a significant increase in performance with maximum efficiency, shocking and stopping power.
When there are problems with radio and telephone interference nearby, try one of these chargers. We have had customers see major improvements even when comparing to other New Zealand high power chargers.
Bipolar fence systems can be built with the 120 volt Cyclic Wave chargers. This puts positive charges on half the wires and negative charges on the wires between. Animals get full power at up to 8,000 volts when they contact both wires even if grounding is poor from dry conditions. All wires are hot, at about 4,000 volts, to the ground the animals are standing on. Twice the amperes are available from each wire to the ground, when heavy weed load needs to be wilted off the fence.


> HELPING FARMERS SINCE 1980 Kencove Farm Fence Supplies
> 344 Kendall Rd, Blairsville, PA 15717-8707

1-800-536-2683 www.kencove.com Fast Friendly Service \& Expert Advice

## ELECTRICAL SUPPLIES

If lightning hits the electric service supplying your 120 volt charger, the Power Surge Protector (MPS) will help protect the charger. Simply plug the protector into a grounded outlet and plug the charger into the protector. It is designed to provide economical protection from power spikes and surges up to 6000 volts. This has a 500 joule and faster than 1 nanosecond (nano $=10^{-9}$ ) rating. The (MPS) also has a red light that indicates it is working. If the light is out, it has probably done its job and needs to be replaced.

Sometimes it is difficult to change the fuses inside chargers. Replace the charger plug with a Fused Plug (MFP) and fuse replacement is simplified.

| Power Surge Suppressor | (MPS) | 5.75 |
| :--- | ---: | ---: |
| Fused Plug | (MFP) | 3.25 |
| Fuses- 1 amp, fit most USA made chargers, each | (AGC-1) | .40 |

The Porcelain Lightning Diverter (MLA) helps protect chargers from damage. Run a wire from the hot line of the fence to one terminal of the arrestor. Attach another wire to the second terminal on the arrestor and connect that to independent ground rods. Several diverters are recommended on large fences with expensive chargers. Mild hits do not normally hurt the arrestor. If you hear a clicking in the arrestor when the fencer is running, either the arrestor needs to be replaced or the charger's voltage is too high. Kencove also stocks the Koltec (MLA-I) Lightning Arrestor that is made of plastic and is totally enclosed to protect it from weather. It can be mounted directly on the hot fence wire with its split bolt on top or fastened to a post with the enclosed mounting bracket. Lightning diverters should have separate ground rods from the charger ground, and be at least forty feet away from existing utility or house grounds.
Lightning Arrestor - Twin Tower Porcelain
(MLA)
7.00
Koltec Weatherproof lightning arrestor
(MLA-I)
10.85

An Inductive Loop between the charger and lightning diverter can slow down lightning so that it will be more likely to go through the lightning arrestor instead of the charger. You can make your own with ten loops of insulated wire, ten to twelve inches in diameter, tied together. One end from the coil should go to the charger. The other end should go to the lightning diverter and the hot wires on the fence. Kencove has the insulated wire to construct this.

50 foot underground wire for lightning choke coil FOB
(GU50)
6.75

A Preassembled Choke Coil (MLC) is also available. It is normally attached to a fence post between the lightning diverter and the charger. Mounting instructions are included with each unit.

Lightning Choke Coil - Fiberglass support $\quad$ (MLC) $\mathbf{1 2 . 0 0}$
A Choke Coil and Lightning Diverter Combination (MWLA) is now available. As above, attach this to a fence post between the fence wire and the charger. The spark gap is adjustable and much larger to make it especially sensitive and effective.

Lightning Diverter and Choke Coil, steel support
(MWLA)
8.50

The Electronic Spark Suppressor (MSS) is intended to improve lightning protection and does the same job as the output board on the New Zealand power chargers. It takes out the extra high voltage spikes in the pulse which causes undesired sparking. Voltage over the normal fencer output voltage is shorted down. There should be no load on the charger at 5000 volts.

Hook one wire to the ground terminal and the other wire to the hot terminal of the charger. This unit is much easier and less expensive to replace than repairing the charger when lightning strikes. If you want to use this outdoors, the (MSW) is weatherproofed. This can be used like a lightning arrestor by hooking one wire to an independent ground rod and the other to the electrified fence wire. Kencove's (MSS) is similar to the Storm Guard (MSG). The Storm Guard is able to handle more power, but is only for indoor use.

| Electronic Spark Suppressor | (MSS) | $\mathbf{1 2 . 5 0}$ |
| :--- | ---: | :--- |
| Electronic Spark Suppressor | Weatherproof | (MSW) |
| Storm Guard lightning module for 120 v units over 1 joule | (MSG) | $\mathbf{2 4 . 5 0}$ |

With an Energy Limiter (Flood Gate Controller) (MEL) it is not necessary to switch the bottom wire off when vegetative growth makes it hard to keep the fence hot - it will automatically cut power while permitting the upper wires to stay hot. The wire will automatically become hot again when the short is sufficiently reduced.

| Energy Limiter Controls shorts | (MEL) | 9.50 |
| :--- | ---: | ---: |
| Galv Lock-Box for Charger \& Battery, $8 " \times 18 " \times 24 "$ FOB | (MLB) | 82.00 |



The Single Throw (MCC) switch has an aluminum knife with a handle which can be seen from a distance to show if the fence is turned on. It also has stainless steel contacts and split bolt connectors to make hookup easy. Be careful not to over tighten the center pivot bolt - the plastic or bolt can break. The Double Throw Switch (MCD) is used to easily change a fence from all hot wires to every other wire grounded. Kencove has designed a switch (MCD-HD) that uses the advantages of easy hook-up of the (CBT) Split Bolt Tap with the contacts which are independent of the knife pivot. The (MCD-HD) can easily be changed to a double throw switch. The Heavy-Duty (MCC-HD) cut out switch is a single throw switch with two sets of stainless contacts along the stainless steel knife. The pivot bolt for the knife is not an electrical contact. This allows easier movement of the knife. Some people prefer the PEL (MCP) switch. The knife as well as the contacts are stainless steel and spring tightened. When this switch is closed, the contacts are protected from adverse weather.

Cut Out Switch<br>Heavy Duty Cut Out Switch w/Stainless Steel Knife, can double throw<br>Heavy-Duty Cut Out Switch Stafix NZ<br>Cut Out Switch PEL NZ

(MCC)
(MCD)
(MCD-HD)
(MCC-HD)
(MCP)
7.50
9.50
5.50
9.50
8.00

The Power Connector (MPC) is a jumper wire with two large, well insulated, stainless steel spring clips. It can be used instead of a switch. We use it as the better way to connect electric twine to a permanent electric fence. NEW! (MPCS) has 3 feet of our bare 19 gauge stainless steel wire attached directly to 1 ss spring clip. Wrap the wire around a foot of the twine to get a better connection.
Power Connector w/ 2 insulated stainless steel clips (jumper) (MPC) 7.00 Power Connector w/ 1 insulated stainless clip \& 36" of ss wire (MPCS) 4.75 1 stainless clip; 36" of insulated wire and 1 terminal connector (MPCT) 4.75

Voltmeters determine if there is sufficient voltage on the fence to control the animals. If fence voltage is lower than 2000 volts, check ground rods, wire connections, and the fence for shorts. A more powerful charger may be needed. Our Digital Voltmeter (VSX) reads up to 9,900 volts on an easy to read LCD display using a nine volt battery (not included.) This is the most accurate fence meter we have tested.
If your budget cannot justify an expensive voltmeter, an economy version is also available. The Six Lite tester is a minimum requirement to maintain an electric fence properly. The NZ chargers may show a strong spark while under 100 volts is on line. A single bulb neon tester can light with less than 100 volts.

## NEW! The Electric Fence Probe (VPP) and Compass ${ }^{\text {TM }}$ (VPX) are ideal when saving time is

 important or for areas where the problem just can't be found. These instruments give a digital readout of the fence voltage, the amperage flow and even the direction of the short. No wires are used with these. If you professionally install electric fence, you need one. The Compass ${ }^{\mathrm{TM}}$ has a large backlit LCD screen and beeper.NZ Digital Voltmeter Up to 9900 volts
Six Lite Tester 6 voltage ranges
Electric Fence Probe indicates direction of fault, volts, current.
Stafix Electric Fence Compass ${ }^{\text {TM }}$ indicates direction of fault, vo
NEW! Stafix Fence Alert ${ }^{\text {TM }}$ flashes when fence voltage drops below 1 of 2 preset voltage levels. Easily clips to fence. The battery lasts up to 5 years in standby mode and runs the strobe light for over 2 weeks.
(VSX)
55.50
(V6L)
(VPP)
10.75
p(VPX)
98.00

The Kencove Night Light (MNL) is a fluorescent light that can be hung from an electrified fence wire or attached to a post. One Night Light wire (insulated galvanized steel) is attached to a hot fence wire with the included (CBT) tap and the other wire (stainless steel) goes to a ground rod (this ground rod does not have to be long - some people use a ten inch brace pin.) The light flashes with every pulse of the charger, making it easy to see if the fence is hot from a distance at night. It also warns animals to stay away from the fence. Our night light has been improved for better durability but it has no guarantee. If lightning hits the fence, at least remember Kencove's cost is much less than others.
Kencove Night Light
(MNL) $\quad 21.00$
Replacement Bulb, bare

> (ZZN003)
4.25


## (MFA) 16.95

## Grounded?

To utilize all the power available in Kencove's fence chargers, a good grounding system must be installed. A few feet of rod in the ground is not enough except for light portable chargers. If there are a lot of shorts on the fence and/or the ground is very dry, it is not uncommon to need more than three eight foot ground rods.

Ground rods should be ten feet apart and at least thirty feet from other existing grounds. Stay away from water pipes (especially those going to drinking areas) or buildings where the electric charge may affect livestock or people (like milking areas). The non-electrified wires on a fence can be connected to bring distant ground rods back to the ground terminal of the charger. Some installations have required over ten eight foot ground rods.

A pipe type steel post driver works well for installing ground rods. If you encounter shallow flat rock, try driving the rod in at an angle. When it hits the rock, hopefully, it will follow along the top of it.

Most ground rods listed from Kencove are hot dip galvanized, but we do stock some copper clad rods. Cut them in half if you can't drive them fully into the ground and install twice as many. Kencove's ground clamps are designed to work underground with stainless steel or copper ground wire. This may save some mower blades. Underground cable can also be used to connect ground rods but keep the connection (bare galvanized steel wire) above ground so it doesn't rust away quickly.

(MGC-U)


Right way to connect ground rods: rods are at least ten feet apart (or twice the length of each rod) and safely buried with bronze clamps connecting either copper or stainless steel wires to each rod.

| Ground Rod galvanized 1/2"x $3^{\prime}$ | FOB | (MG3) | 2.75 |
| :---: | :---: | :---: | :---: |
| Ground Rod galvanized $1 / 2^{\prime \prime} \times 58{ }^{\prime \prime}$ | FOB | (MG5) | 3.50 |
| Ground Rod galvanized $1 / 2^{\prime \prime} \times 6^{\prime}$ | FOB | (MG6) | 4.80 |
| Ground Rod galvanized $5 / 8^{\prime \prime} \times 8^{\prime}$ | FOB | (MG8-HD) | 6.80 |
| Ground Rod Stainless Steel Clad 5/8" x 6.5' | FOB (M | GSS6.5HD) | 11.75 |
| Ground Rod Copper Clad $5 / 8^{\prime \prime} \times 8$ ' | FOB Clearance | (MC8-HD-A) | 10.80 |
| Ground Rod Clamp Bronze 1/2" |  | (MGC-B2) | 1.25 |
| Ground Rod Clamp Bronze 5/8" |  | (MGC-B5) | 1.25 |
| Ground Rod Clamp Bronze 3/4" |  | (MGC-B3) | 2.00 |
| Ground Rod clamp Universal fits 1/4"-1 1/4" br | reaks easily | (MGC-U) | 2.00 |
| Copper Ground Wire, 6 gauge, bare, improve g | groundingFOB | (MGWFT) | . 30 / foot |
| Stainless Guy Wire sold by the foot, 11.3 gaug |  | (DSC-FT) | . 20 / foot |
| Stainless Guy Wire 10 foot coil 11.3 gauge |  | (DSC-10) | 2.00 |

## Stainless Steel Electric Gates


Kencove has a new line of rust-proof stainless steel electric gate items! The super strong polycarbonate insulated spring handle is white with all stainless metal parts. It has 2 stainless tension rods for extra strength. This handle is included in a stainless spring gate set for up to 14 foot and up to 24 foot gates. The spring gates come with a 3 handle hook-up set. The electric wire can be connected between the 2 nuts on the bolt or if you buy either a zinc or stainless split bolt tap, you don't need to bend the wire and several wires will fit into the same slot.

| White Polycarbonate \& Stainless Steel Gate Handle Only(GPCS) | $\mathbf{4 . 5 0}$ |  |
| :--- | ---: | ---: |
| Spring Gate Kit, Up to $\mathbf{1 4} \mathbf{~ f t , ~ S t a i n l e s s ~ S t e e l ~}$ | (GSSC) | $\mathbf{1 3 . 5 0}$ |
| Spring Gate Kit, Up to $\mathbf{2 4} \mathbf{~ f t , ~ S t a i n l e s s ~ S t e e l ~}$ | (GSSL) | $\mathbf{1 6 . 0 0}$ |
| Replacement Spring 14 ft Stainless Steel | (GSSC-S) | 8.50 |
| Replacement Spring 24 ft Stainless Steel | (GSSL-S) | 11.00 |
| Stainless Steel 3 Hole Handle Hookup Set w/black PinOn | (GHU3S) | 1.95 |

HANDLES
The black plastic Economy Handle (GPE) gives a lower cost option for temporary fencing projects. The way wire attaches to the handle is better than on many handles, especially with electric twine and ribbon.

Rubber Gate Handles (GRB) make inexpensive gates for electrified fences. Attach the insulated handle to a piece of wire stretched across the opening.


Polycarbonate Handle (GPC) has 2 steel rods inside the spring handle to give it excellent holding strength without stressing the insulating plastic. When we get new products at Kencove, we like to abuse test them. The handle wouldn't break from repeatedly throwing it onto concrete, so we drove on it with a forklift. It was still usable! It did become more breakable after that. We unexpectedly demonstrated that fact at the World Dairy Expo.

The HD Gate Handle (GHD) can take a lot of abuse. It is made from a piece of steel pipe and has a tough insulating grip. The spring inside the handle is also stronger and heavier.


The expansion spring on Kencove's NZ Gate Handle (GNC) has more tolerance for gate post movement when attaching the handle to the post hook.

The nonconductive Plastic Gate Handle (GPL) is intended for use with twine or ribbon. You can connect to a grounded or hot wire and not have the portable fence electrified until it is built. Use an MPC jumper lead at the far end of the twine to hookup the power.

| Economy Handle with compression spring | (GPE) | 1.39 |
| :--- | :--- | :--- |
| Rubber Gate Handle | (GRB) | 1.95 |
| Polycarbonate Handle, clear yellow | (GPC) | 2.40 |
| Heavy Duty "Ironsides" Gate Handle | (GHD) | 4.35 |
| New Zealand Gate Handle | (GNC) | 3.60 |
| Plastic Gate Handle No spring or conductor | (GPL) | 1.65 |

## GATES

Our Spring Gate has a large diameter spring (similar to a slinky) that expands to 14 or 24 feet, then retracts to two feet when the gate is open. The white coated spring is more visible and has corrosion protection. Visibility, easy installation, and the versatility of gate sizes make these a great value. Each gate comes complete with a nonslip handle, two end insulators and a hookup system for connecting to the electric wire. Replacement springs are available in both the 14 and 24 foot lengths.


The Tape Gate is better than the Spring Gate if higher visibility is desired. The 1.5 inch wide tape gates are available in either orange with two thin white stripes or all white. There are twelve stainless steel wires woven into the plastic tape. This allows the gate to be electrified to keep stock in place. Buckles at both ends permit plenty of adjustment. Each tape gate comes packaged with a spring handle, two end insulators, a hookup plate and a split bolt line tap for connecting the hot jumper wire.

| Tape Gate $1.5^{\prime \prime} \times 16^{\prime}$ Orange or White | (GTG-O) (GTG-W) | 12.00 |
| :--- | ---: | :--- |
| Tape Gate $1.5^{\prime \prime} \times 24^{\prime}$ White | (GTL-W) | 14.30 |

Custom Length Tape Gates can be made using our Tape Gate Tape (GTTO)(GTTW). A 165 foot roll of tape gate material can be cut to the desired length. These kits are available in either orange or white. A Tape Gate Handle Kit (GTK) is needed for each custom made gate. These kits include a handle, two pinlock insulators, two buckles, a three hole connecting plate \& a split-bolt line tap.


Tape Gate Tape 165 ft Orange or White Tape Gate Handle Kit
(GTT-O) (GTT-W)
22.50
(GTK)
7.50

Spring Loaded Drive-thru Electric Gate is ideal where it is hard for one person to drive through a gate without the animals getting out. It comes in two adjustable lengths and is electrified by jumping a hot wire from your fence to the base plate.

Just think: no more stopping the tractor, getting off, opening the gate, getting back on and driving through, stopping, getting off, closing the gate, getting back on and driving away and then repeating this over and over day after day. Save yourself time, aggravation, and money. For those times when you take your farm truck through these openings, the soft plastic ends should protect the finish fairly well.


Drive-Thru Electric Gate Adjusts 13 to 19 ft FOB (GDT-S)
110.00

Drive-Thru Electric Gate Adjusts 18 to 24 ft FOB (GDT-L)
120.00

The Handle Hookup Set is available separately to make wire gates with spring handles. The (GHU) contains a pinlock insulator, a three hole hook-up plate and a split-bolt line tap. The (GHD) handle does not fit into the (GHU).
Handle Hook Up Set Complete, NZ

Insulated Dble Loop Handle Hook w/lag screw, improved

## (GHU)


(GHUD)
.75
(The GHU3) allows Kencove's larger (CBT) split bolt to connect the wire to either outside hole and still have room for 2 gate handles

| 3 Hole Handle Hookup Set | (GHU3) | $\mathbf{1 . 2 0}$ |
| :--- | ---: | ---: |
| Stainless Steel 3 Hole Hookup Set | (GHU3S) | $\mathbf{1 . 9 5}$ |

New Zealand style chain gate hook, is a simple catch for standard steel
 or wooden gates. It consists of an oversize staple installed on a post and a spring locked loop of steel connected to the gate with a short piece of chain. The hook snaps onto the staple.

Chain Gate
(GNZL)
5.50

The Donalds Gate Hook is an animal proof latch which is simple to use. This galvanized gate catch is bolted to the end post and a 15 " chain from the gate hooks onto the pin.
Donalds Pin in the Ring Style Gate Hook
15" chain provided Clearance! (GDL) 15 " chain provided Clearance! (GDL)
3.50

## LINE POST INSULATORS

Kencove's Double Nail Pin On Insulators are probably the best wood post insulators sold. These insulators have a large spark flange around the base, and the wire is held further away from the post compared to other $\mathrm{H}-\mathrm{T}$ insulators. The wire is held in a slot by a removable pin with plenty of space for wire movement to keep line friction to a minimum. The wire can be removed from the insulator while it is still under high tension. This allows the wire to be easily dropped from about 4 posts to drive over it occasionally.

These insulators have two holes for either nails, wood screws or staples to make a strong attachment to the post. The plastic is very high quality - tough, not brittle, even after many years of weathering in sunlight. These insulators have the strongest designs and quality plastic needed for the abuse and life that the normal high-tensile fence is expected to handle.

| PEL Double Nail Pin On Insulator 25/pk; $\$ .27$ ea [500/24¢] | (I81) | 6.75 |
| :--- | ---: | ---: |
| White PEL Double Nail Pin On Insulator $25 / \mathrm{pk}$ | (I81W) | 7.25 |
| Black Double Nail Pin On Insulator 25/pk | (I8P) | 5.25 |
| White Double Nail Pin On Insulator $25 / \mathrm{pk}$ | (I8PW) | 5.50 |

The "Claw" Style Insulator is probably the best choice if you are putting temporary fence onto wood posts. The wire is installed by turning it about 80 degrees and sliding it into the slot of the insulator. It is not easy to remove the wire when it is under tension, but if you are installing slack twine it is much easier than pulling the pins of the pinlocks.

Kencove has several different double nail wood post insulators of this type. Normally as the price of insulators goes down, the strength and life also declines, but the (ICC) Claw Nail On Insulator is an exceptional value. It is a new heavy duty insulator made to handle the new HotCote plastic coated high tensile wire and electric rope. Since it has a larger opening it will also work better than most insulators for hot tape (electric ribbon).

$$
\begin{array}{lrr}
\text { Large Claw Nail On Insulator Black 25/pk, } \$ .20 \text { ea }[\mathbf{5 0 0} / \mathbf{1 8 ¢}] & \text { (ICCB) } & \mathbf{5 . 0 0} \\
\text { White Large Claw Nail On Insulator 25/pk, } \$ .20 \text { ea }[500 / 18 ¢] & \text { (ICCW) } & \mathbf{5 . 0 0} \\
\text { Stafix Green Claw Nail On Insulator NZ } 25 / \mathbf{p k}[500 / \mathbf{2 6} ¢] & \text { (ICW) } & \mathbf{7 . 0 0} \\
\text { PEL W Claw Nail On Insulator NZ 25/p } & \text { (I83) } & 3.95
\end{array}
$$

4 inch Screw-in Rope / HotCote Insulator holds the conductor about 1.6 inches from the post (even when there is 1.4 inches of heavy screw in the post). It has about a $3 / 8$ inch hole for holding rope, small ribbon, wire or twine. The 4 consecutive 90 degree bends in the wire catch allows for quick installation and removal without damage.

Screw-in Rope Insulator, 4 in. overall length, 10 per pack
(IWT)

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## LINE POST INSULATORS

Four Inch Tube Insulator is the lowest cost insulator for H-T fences. This makes it a popular insulator for many who only insulate a couple strands of a non-electric fence just in case the animals need a bit of training occasionally. Any fence will last longer if the animals do not constantly rub it.

The tube insulator is installed by sliding the appropriate number (corresponding to the number of line posts) onto the end of the wire. Push the group of insulators down the wire, and staple the tube closest to you onto each post as you proceed down the line. Take care to staple in far enough so that the tube cannot easily slide away from the post yet not so hard that the wire movement is restricted.

Our Flat Back (I53) four inch tube insulator has an improved design so the staple will anchor into the fins on the tube thus preventing it from sliding. The quality of plastic seems better for longer life and efficient insulation than in some other tubes. It is also available in a six inch length that works especially well on square posts.

For extra protection from shorts and a bit less in-line friction, the Heavy Wall Tube Insulator (I48) is a good strong option.


Snug Wood Post Insulator (ISW) is used for places where you do not need the strength of a high-tensile type insulator. You can easily hook or unhook twine or ribbon with this double hook (claw type) yellow insulator.

| Snug Wood Post Insulator w/nails 25/pk | (ISW) | 1.85 |
| :--- | ---: | ---: |
| Staple Fold Over Water Shed Insulator 100/pk | (IWS) | 10.95 |

Economy Nail-On Insulator is a new insulator of a radically different design. The tough and compact insulator uses one nail with the claw holding the high-tensile wire directly above it. If the posts are hard, this offers a good solution by using hardened pole barn nails. The nail puts a lot of strength under the wire to hold heavy snow loads.

$$
\text { Economy Nail-on Insulator black } 100 \text { per pack (IWN) }
$$

10.00

IWRN Nail-On Insulator holds rope or wire up to $5 / 16^{\prime \prime}$ diameter. This uses one nail like the above (IWN) but there is more electrical insulating distance between the post, wire, and nail head. These insulators are quick to install and very strong when hardened galvanized nails are used.

High Quality Nail-On Rope / HotCote Insulator black 25 per pack
(IWRN)
5.00

Ring Insulator is made with a heavy screw as its base. This gives it the strength to hold itself in those cracks of the old locust posts or in the soft wood of old telephone poles - and most anywhere in between. The wire, which is held either 2,6 or 7.5 inches away from the post, is easy to install and remove but is unlikely to come off at other times. To offset an electric wire 5 inches from a wood post with more strength than other ring insulators, use the (IWR6) lag screw offset insulator. The rod has a 90 degree bend down then has a 180 degree bend up. The weight of the wire is resting on top of the end of the bent rod to give better strength and electrical insulation.

| Screw-in Ring Insulator each, $3^{\prime \prime}$ total length | (IRI2) | .20 |
| :--- | ---: | ---: |
| Offset Screw-in Ring Insulator each, $7.5^{\prime \prime}$ total length (longer) | (IRI6) | .45 |
| Gooseneck Offset Screw-in Ring Insulator 9 " total length, 10/pk. | (IWR6) | 5.50 |
| Twist-On Ring Insulator, fits oval shaped posts $1 / 4 " x 1 / 2 "$ | (YIWO) | $8 ¢$ ea |
| Ring Insulator Installation Tool, use electric drill for quick installation | (TIRI) | 4.50 |
| T Post Ring Insulator, handle electric rope and wire, strong, good fit, 10/pk | (IRT) | 2.80 |

Steel posts have not been encouraged for electric at Kencove. Although they are better for lightning protection, they also increase the chances of having hard to find electrical shorts. The price of the different steel post insulators gives a good indication of expected life. The pinlock and new ringlock are generally stronger.

PEL (I73) from New Zealand is a pinlock style insulator which wraps around the edges of the T-post. It has a "handle" for ease in installation and is backed by PEL's 10 year guarantee. The (I73) will fit most sizes of T-posts.

The (I71) Double Pinlock Insulator is designed for posts sold in NZ. Holes are punched along the length of these posts. Some US farmers have situations where this design is handy.

The low cost Snug Metal T Post insulator (IS1) may deteriorate more quickly in sunlight.

| Pinlock T Post Insulator, also used on wood posts - 2 nail holes, 1.32" face each | (ITE) | . 15 |
| :---: | :---: | :---: |
| Stafix Green Pinlock T Post Insulator, NZ, 1.33", 25/pk | (IPT-L) | 7.75 |
| PEL Pinlock T Post Insulator, black, 1.35", NZ, 25/pk | (I73) | 7.50 |
| PEL 2 Pin Y Post Insulator for New Zealand style pin-on steel Y posts, each | (I71) | . 50 |
| Snug Metal T Post Insulator, black, 1.4", 25/pk | (IS1B) | 2.80 |
| Back-Side Metal T Post Insulator, black 25/pk | (IBS) | 8.00 |

The Cap'R Insulator is designed to either nail onto the top of wood posts or fit onto steel T posts. It will hold wire rope and up to $1.6^{\prime \prime}$ wide ribbon. This insulator will also add safety and the white color adds visibility.

The Yellow T post Top'R Insulator is designed only for steel posts and only for wire, not ribbon. The cost is lower and it still adds safety and visibility.

Our Chain-link Offset-Insulator (ICL-OFFSET) is a versatile insulator which attaches on existing chain-link fences in order to support an electrified wire about three inches away from the fence. It also can be used on T-posts or U-posts.

Cap'R Insulator, top wood / steel posts, for rope, 1.5 ", White, 10/pk [ ITPC-B = Black ] (ITPC) 6.00
Top'R Insulator, steel posts, for electric wire, safety, Yellow, 10 (ITPT) 5.10
$\begin{array}{llll}\text { Chain-link / U Post Offset Insulator w/ metal strap, } 10 / \mathrm{pk} & \text { (ICL-OFFSET) } & 6.80\end{array}$
Plastic Insulator for HTS-L spring (ICP-1) . 27

Yellow Western Screw Tight Rod Post Insulator (RPY) is priced low and is convenient to use. It is possible to carefully pick up a hot wire with the insulator and install it on a rod post. If you want to drive a vehicle over a temporary fence, just loosen the plastic screws and slide the insulators and their wires to the bottoms of the posts.
Western Screw Tight Rod Post Insulator, Yellow 25/pk
(RPY)
3.45
(I14RP) is another type of screw on insulator for round rod posts. This sturdy, three piece insulator is made from high quality black plastic. It will fit round posts with $3 / 8,1 / 2$, or $3 / 4$ inch diameters.

| Rod Post Insulator, screw on, black each | (II4RP) | .32 |
| :--- | :--- | :--- |
| Stafix Twine Insulator for 3/8 inch rod, black, each | (RPI-S) | .33 |

## CORNER POST INSULATORS

End and corner insulators for H-T fences should be stronger than the fence wire. Wires can be taken around a corner on either the inside or the outside of the corner post without tying off. If the fence is a mixture of electric and non-electric wires, it is normal to take all the wires around the outside of the corner post. Insultube should not be used as a high strain insulator.

Wraparound Insulator 20 inch $10 / \mathrm{pk}$
Wraparound Insulator 24 inch each
Wraparound Insulator 30 inch each
Wraparound Insulator 100 ft coil

The Wraparound Insulator (I40) is popular for this. It is one of the simplest end or corner insulators to install because the extra loop of wire and splices needed with the Double $U$ are eliminated. Insultube should not be used as a high strain corner insulator. The wraparound insulator has a metal insert to keep the wire from cutting through the plastic. They must be slid onto the end of the wire when the line post insulators are placed on the wire.
Be careful not to staple too tight. The plastic eventually cracks and causes a short in the electricity. A staple placed above and another below the wraparound is safer. Tap the staple so it bends to hold the wraparound in place. A wraparound may be prone to minor shorts because of the slight distance from the electric wire to the post. Kencove believes our wraparounds have the most insulating distance between the wire and post. Twenty inch wraparounds come in packs of ten. Wraparounds are also available in 24 and 30 inch lengths, as well as in 100 foot coils that can be cut to the desired length.


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Double "U" Insulators (I46) are also used on end and corner posts. The electrified wires go on the inside of the corner posts. It is used like a porcelain donut where a loop of non-electrified wire holds the insulator to the post. However, they are much stronger than the porcelain donut. They work best when crimping sleeves are installed in the wire loop to bring the wire together near the insulators. Metal is embedded in the plastic to keep the wire from cutting through.

| Double "U" Insulator NZ, pack of 10 | (I46) | 6.00 |
| :--- | ---: | ---: |
| Bull Nose End Insulator, each | (IUUW) | .70 |

Lag Corner Insulator (ILC) is a plastic insulator mounted to a lag screw bent into an L shape. This insulator has often been used on trees. The doughnut insulator can act as a pulley for electric
 rope, twine or ribbon at corners. Check the ILC insulators if you have problems with electrical shorts. There is not a lot of distance between the wire and the bolt.
The ILCE insulator is smaller but there is more insulating distance between the steel screw and the outside of the pulley type insulator
Lag Corner Insulators (ILC) 1.30
Economy Lag Corner Insulator (ILCE) . 75

Porcelain Insulators (IPD) normally are not recommended for ends on the higher tension fences. They have a tendency to break before the wire. There are a number of special applications where porcelain is used, including a lag screw holding a porcelain donut to a sharp dip or rise post. A set of donuts bolted between strips can be tied to an anchor in a sharp dip to eliminate a dip post.
Porcelain Donut China
(IPD)
.27



## FIBERGLASS POSTS AND SPACERS

Fiberglass Rod Posts work very well with portable as well as permanent fencing. However, we recommend that gloves be worn when handling older rods. The economy $3 / 8$ inch rods are lightweight ( 20 posts, 4 feet long, weigh only 7.3 pounds) strong, flexible, and are perfect insulators. These economy rods are available in four or five foot lengths and come packaged twenty to a bundle. Each bundle of SunGuard ${ }^{\text {TM }}$ posts includes a plastic drive cap. For extra wire support, the $1 / 2$ inch rod is a fair amount more rigid. More wet snow can be supported, longer distances between rod posts are possible and/or fewer big posts are needed when the $1 / 2$ inch rods are used. The $3 / 8$ inch and $1 / 2$ inch rods are also available with SunGuard ${ }^{\mathrm{TM}}$ coating in both the four and five foot lengths.

The $5 / 8$ inch to $1 \frac{1}{4}$ inch rod posts are commonly used on permanent electric fences at wide spacings (like 200 feet on center) with $3 / 8$ inch or $1 / 2$ inch posts in between at 25 to 50 foot spacings. The larger posts give greater strength in line, especially at stress points such as rises, dips and slight bends.

Economy 3/8 inch Fiber Rod 4 ft, 5 ft, or 6 ft

| FOB | (F38-4E) | .89 |
| :--- | :--- | ---: |
| FOB | (F38-5E) | 1.09 |
| FOB | (F38-6E) | 1.31 |

SunGuard ${ }^{\text {TM }} 3 / 8$ inch Fiber Rod 4 or 5 ft
FOB (F38-4SG) 1.15
FOB (F38-5SG) 1.46
Half inch Fiber Rod pointed $\mathbf{4} \mathrm{ft}$, $\mathbf{5} \mathbf{f t}$, or $\mathbf{6} \mathbf{f t}$
(F38SE) with
FOB (F12-4E) 1.35
FOB (F12-5E) 1.80
FOB (F12-6E) $\quad 1.98$
SunGuard ${ }^{\text {TM }} 1 / 2$ inch Fiber Rod 4 or 5 ft
FOB (F12-4SG) 1.60
FOB (F12-5SG) 2.05
3/8" Fiberglass Rod Step-In Posts 4 ft, w 3 clips
Economy FOB (F38SE) 1.56
SunGuard ${ }^{\text {TM }} \mathrm{FOB}$ (F38SSG) 1.86

The long life SunGuard ${ }^{\text {TM }} 5 / 8$ inch and economical $2 / 3$ inch fiberglass rods work well as end and corner posts for electrified twine, ribbon and electric $\mathrm{H}-\mathrm{T}$ fences. Lean the post when installing so the tension of the $\mathrm{H}-\mathrm{T}$ wire pulls it into a bit of a bow. To be sure that the clip remains fastened to the post when something hits the fence, use a pair of Vise-Grip ${ }^{\mathrm{TM}}$ pliers to lock the clip tight. These rods act as springs. The spring action will be especially good if separate end rods are installed for each strand on multi-wire electric fences. This will keep one wire from loosening while you are tightening another. Heavier rods can be used for higher tensions and taller fences. We carry the 1.2 to 1.25 inch used fiberglass sucker rod as well as $5 / 8^{\prime \prime}, 2 / 3^{\prime \prime}, 3 / 4^{\prime \prime}, 11 / 2^{\prime \prime}, 13 / 4^{\prime \prime}$, and 2 inch diameter B grade rods for these applications. The larger B grade rods are mostly whitish. Call for length availability.

Often the fiberglass end and corner rods are guyed using stainless steel wire (DSC-FT) or nylon wire (DW152) on a Duckbill Anchor (DB6 or DB8). If you twist the larger posts with locking pliers while lifting, removal generally is not difficult.

5/8 inch Fiberglass Rod Post, 5', $6^{\prime}$ or $7^{\prime}$ B grade
SunGuard $2 / \mathbf{3}$ inch Fiberglass Rod, 5 foot
SunGuard ${ }^{\text {TM }} \mathbf{2} / \mathbf{3}$ inch Fiberglass Rod, 6 foot
2/3 inch Fiberglass Rod, 6 foot, drilled 2" OC
$2 / 3$ inch Fiberglass Rod, 7 foot, drilled 2" OC $2 / 3$ inch $\mathrm{x} 5^{\prime}, 6^{\prime}$ or $7^{\prime}$ lengths Rod Post - B grade 3/4 inch Fiberglass Rod Post - B grade
$1.3 "$ to 2" Fiberglass Rod Post - B grade Clearance

| FOB | $(F 58-? B)$ | $.50 / f t$ |
| :--- | :--- | :--- |
| FOB | $(F 23-5 S G)$ | 3.75 each |
| FOB | $(F 23-6 S G)$ | 4.50 each |
|  |  |  |
| FOB | $(F 23-6 D)$ | 4.60 each |
| FOB | $(F 23-7 D)$ | 5.25 each |
| FOB | $(F 23-? B)$ | $.50 / f t$ |
| FOB | $(F 34-? B)$ | $.66 / f t$ |
|  |  |  |
| FOB | $(Y F G 134 ?)$ | $1.15 / f t$ |
| FOB | $\left(F 1 R-?^{\prime}\right)$ | $1.01 / f t$ |
| FOB | $\left(F 1 Q-?^{\prime}\right)$ | $1.15 / f t$ |

Kencove's Fiberglass "T" Posts can be used to extend spacing between wood posts by putting the " T " posts into the ground or just hanging them on the wire and using clips to keep the wires at the proper spacing. With fiberglass it is possible to keep a high voltage with a lower powered charger than when using wood spacers. The "T" posts are notched every two inches. The Heavy Duty Fiberglass T measures 1.2 inch in each direction. The Light Duty Fiberglass " T " measures 5/8 inch by 4 ft ., 5 ft ., or 6 ft ., and makes an excellent spacer.
LD Fiberglass T Post $5 / 8$ inch $x 4,5$ or 6 ft FOB (FL1-4) (FL1-5) (FL1-6)
.30/ft
HD Fiberglass T Post 1.2 k 4 ft ., 1.33 lb each white

The Spring Grip Clip must be expanded to slide it onto the rod. Squeeze the loop
 with the post when relocating the fence - unlike T-Posts which use a clip that is often lost while moving the fence. If a more permanent installation is needed, the stainless steel clip can be made to grip the post much tighter. Using a pair of locking pliers, bend the long tail around the rod and bend it around the short tail of the same clip. A slide-on plastic insulator (RPI-S), designed for electric twine, is also available to fit $3 / 8$ inch fiberglass posts.


Spring Steel $3 / 8$ in Rod Clip Light galv. [(F3CPK100)\$13.00] (F3CPK50)
Stainless Steel 3/8 in Rod Clip 1 loop long tail [(F3SPK100) \$15.00] (F3S)
.17
Stainless Steel $1 / 2$ in Rod Clip 1 loop long tail
(F2S) Stainless Steel 5/8 in Rod Clip 1 loop long tail Stainless Steel $2 / 3$ in Rod Clip 1 loop long tail
(F5S)
(F23S) Stainless Steel 3/4 in Rod Clip 1 loop long tail Stainless Steel 7/8 in Rod Clip 1 loop long tail (F34S)
(F7S)
(F1S)
(F1C)
(RPI-S)
(RPY)
.33 Stainless Steel 1 inch Rod Clip 1 loop long tail
(I14RP)

| Stafix Twine Insulator for $3 / 8$ inch rod, Black plastic | (RPI-S) | .33 |
| :--- | ---: | ---: | ---: |
| Western Rod Post Insulator for $3 / 8$ " to $5 / 8$ " rod and LD "T", 25 | (RPY) | 3.45 |
| Rod Post Insulator fits $3 / 8 ", 1 / 2 "$ ", and $3 / 4 "$ diameter Each | (I14RP) | .26 |



The stainless steel Tight Grip Clip (F3T) binds the fence wire tightly to the $3 / 8$ inch rod. This keeps a dropper rod that is not pushed into the ground, at the correct location. Only the top and bottom wires need to have this clip so the rod does not slide horizontally on the line wires toward the permanent posts. Use regular F3S clips for the middle wires. If the bottom wire is high enough off the ground, short suspended spacer rods make mowing under the fence much easier by allowing long distances between posts.
Tight Grip 3/8 inch Rod Clip Stainless Permanent (F3T) . 17


The Nylon Drive Caps for $3 / 8^{\prime \prime}, 1 / 2^{\prime \prime}, 5 / 8^{\prime \prime}, 2 / 3^{\prime \prime}$, and $3 / 4^{\prime \prime}$ inch fiberglass rods prevent splintering of the fiberglass ends when hammering rods into the ground or offsets into wood posts. The cap is also handy when pushing rods into the ground with your hands. If you are installing a large number of fiberglass posts, the $3 / 8$ inch hand-held post pounder makes the job easier.

The (TP3) Post Driver for $3 / 8^{\prime \prime}$ rod posts is handy because it does not damage the post top and is relatively easy to carry and pound. The $3^{\prime}$ steel tube keeps the post from flexing and is a good indicator of how far the post is in the ground.

| Drive Cap Fits $3 / 8$ inch fiberglass rod | (F3N) | 4.85 |
| :--- | ---: | ---: |
| Drive Cap Fits $1 / 2$ inch fiberglass rod | (F2N) | 4.85 |
| Drive Cap Fits $5 / 8$ inch \& $2 / 3$ inch fiberglass rod | (F5N) | 4.85 |
| Drive Cap Fits 3/4 inch fiberglass rod | (F34N) | 4.85 |
| Post Pounder, hand held, for 3/8 inch rods | FOB(TP3) | 29.00 |
| T-Post Pounder, Spring Loaded | FOB(TPD) | 35.00 |



The Wire Twisting Tool (TWT) makes wrapping wire simple. This tool is especially helpful for bending preformed clips onto Multi-groove Wood or Poly Battens, or Fiberglass T-Posts. The end hole allows a looser bend where smooth wire is to slide past the batten or post. The Twisting Tool is not needed for splicing smooth high tensile wire if the proper techniques are used. The flat (TWTL) is used for woven wire where a short tool is better in small openings.

Wire Twisting Tool, rod type for bending clips Kencove Short Flat Steel Wire Twisting Tool, for tight spaces Wire Clips for HD T Posts $100 / \mathrm{pk}$ Wire Clips for LD T Posts 100/pk Wire Clips for Wood battens $11 / 2$ inch face $100 / \mathrm{pk}$ Clips for PKD rounded Poly-Droppers 100/pk Steel T Post Clip, in bags of 25 but Sold as Each (FHC) (FLC) (FC1) (FCPK)
(FTC)
3.00
1.25
4.00
4.00
6.75
6.50
. 04

(FHC)


Cotter Pins are an economical way to fasten the wire to line posts or spacer battens. Holes must first be drilled in the fiberglass rods or wood. Clip the pin onto the wire, put the 2 legs of the pin through the hole and bend the ends back to the fence wire.

Cotter Pin, Round Head, 5½", 100/pk
(FCPCR)
5.00

Cotter Pin, Heart Head, 5½", 100/pk
(FCPCH)
5.00

## PORTABLE ELECTRIC RIBBON OR TWINE FENCING

Even though much of the material in this publication is about very permanent $12 \frac{1}{2}$ gauge HT fencing, very portable twine and/or ribbon may be more important to many grazers. These easy to use tools of grazers allow the animal's meal territory to be clean and new as often as several times per day. The previous day's forage is allowed to regrow to its prime nutritional value without being trampled and sampled before the proper time.

Intensively managed grazing of pastures can greatly improve the land's yield and quality. The basic idea is to concentrate the animals in a small enough area that they will harvest everything, even the less tasty growth, quickly. Then move them to other small areas and let the eaten areas replenish without animal disturbance. After waiting for the proper maturity of the desired plants, the area is grazed again. Organic fertilizer (manure) is evenly distributed with no effort. Higher gains come from the pasture because the plants have time to recover and animals can be fed better. The need for expensive machinery and material inputs are reduced, allowing profits to jump.

To do this much animal moving, the fencing must be effective and easy to use. A quick system is to open and shut gates to a permanently divided pasture, but most people do not have enough permanent divisional fences. Taking out excess growth in the spring can be a problem in very small fields. A setup with long narrow pastures allows twine to be put up across the narrow width rather quickly.

It is even possible to use Batt Latches (\$250+) to automatically release Spring Gates at preset times. This allows the animals to go back to new pasture at more frequent intervals. They will generally eat more and waste less if they are moved frequently.

The simplest and most economical way to increase the number of pastures is to use portable fences.

Electric twine, fiberglass rod and/or plastic step-in posts, convenient rewind reels, and portable chargers work together to make an excellent portable fencing system.


Electric Twine is significantly easier to handle than heavy solid wire. Three, six or nine strands of stainless steel conductive wires are interwoven in plastic twine. Distances of over half a mile are possible if the twine is well insulated at posts and is kept clear of growth. Visibility is greatly improved with the white Hot Ribbon that has six or nine stainless steel conductors and is about $1 / 2$ inch wide. White seems to give the best contrast for visibility both during the day and at night. Don't use weed-burner type fence chargers with these materials as the risk of melting the plastic twine increases greatly.


> Stafix White Twine $\mathrm{w} / 6$ stainless wires 656 ft
> Stafix Orange Twine $\mathrm{w} / 6$ stainless wires 656 ft
> Stafix White Twine $\mathrm{w} / 6$ stainless wires 1640 ft
> Stafix Orange Twine $\mathrm{w} / 6$ stainless wires 1640 ft
> Stafix White Twine $\mathrm{w} / 9$ stainless wires $1312 \mathrm{ft}, 3.74 \mathrm{lb}$.
> Stafix Orange Twine $\mathrm{w} / 9$ stainless wires 1312 ft

| (R2W) | 15.00 |
| ---: | ---: |
| (R2D) | 15.00 |
| (R5W) | 39.75 |
| (R5D) | 39.75 |
| (R49-W) | 37.75 |
| (R49-O) | 37.75 |

The NZ Stafix Twines and Ribbons have been made of 16 mm diameter stainless steel wires. The newer Top Line twines and ribbons have larger conductors. Even though R56 only has 6 conductors, there is $50 \%$ more stainless steel in the roll compared to R5W. If you need to go a long distance, R46CU is rated
 for over 6 miles while the same literature rates R56 at $1 / 2$ mile. If the fence is clean, the electric charge can go farther than suggested here. Multiple strands can also allow longer lengths. Although copper and aluminum wires are more conductive, they do not give near as long of life as stainless steel. You may have been encouraged to buy higher priced ribbon or twine because of the extra conductivity of copper. Be sure you need this feature. You may be giving up the valuable ruggedness of stainless steel. Compared to aluminum or copper, stainless steel can be bent many more times without breaking. It also has a higher tensile strength. Often twine or ribbon is used for a short stretch of frequently moved fencing. In this situation conductivity is very unlikely to be the weak link. If you are putting up miles of easy to build, highly visible fence using twine, ribbon or rope, conductivity may be more important, especially for the main line(s) from the charger. Be aware that it probably will not last as long as fence using stainless steel conductors.

| White 656 ft . Twine $\mathbf{3}$ strands of stainless steel | (R23) | 11.75 |
| :---: | :---: | :---: |
| White 1640 ft . Twine $\mathbf{6}$ strands of .2 mm stainless steel, 3.76 lb . | (R56) | 29.95 |
| White $\mathrm{w} / \mathrm{a}$ green strand, 1312 ft . Twine 6 strands of .25 mm Copper | (R46CU) | 38.00 |
| White 1312 ft . Twine 9 strands of .2 mm stainless steel, very visible 4.6 lb . | (R49) | 35.50 |
| Stafix Orange Hot Ribbon 6 stainless steel wires $1 / 2$ " wide $\mathbf{6 5 6 ~ f t . ~} 2.1 \mathrm{lb}$. | (RHR) | 26.00 |
| Stafix White Hot Ribbon 6 stainless steel wires $1 / 2^{\prime \prime}$ " wide 656 ft . | (RWR) | 26.00 |
| Stafix Orange Hot Ribbon 6 stainless steel wires 1/2" wide 1312 ft . | (RH4) | 49.50 |
| Stafix White Hot Ribbon $\mathbf{6}$ stainless steel wires $1 / 2$ " wide $\mathbf{1 3 1 2 ~ f t . ~} 4.2 \mathrm{lb}$. | (RW4) | 49.50 |
| 656'White .5" Ribbon 5x . 3 Stainless; 3x more stainless steel than RWR, 3.2 lb | (RWRG) | 21.00 |
| 1312'White .5" Ribbon 5x . 3 Stainless; 3x more stainless steel than RWR, 6.4 lb | (RW4G) | 39.50 |
| 656'White .79" Ribbon 2 x .3 mm stainless steel wires $+4 \times .2 \mathrm{~mm}$ stainless steel wires 3.3 | (JAW) | 28.50 |
| $\mathbf{8 2 0}$ Feet Yellow + Orange .4" Ribbon 4 x .16 stainless steel, 2.14 lb . | (RYO) | 30.00 |
| Splicer Buckle for $1 / 2$ " ribbon | (RSB) | 52 |
| 656' White $1 / 4$ " Rope 6 stainless .2 mm wires, 9 lb . [see page 17 for copper] FOB | (RO2) | 29.50 |
| 656' White $1 / 4$ " Rope 6 stainless .4 mm wires, about 900 lb . strength, 10.5 lb .FOB | (RO4) | 46.75 |

The 19 gauge Stainless Steel Wire (RSS) has excellent life at a low cost. It is not hard to bend and can be rewound onto the portable plastic reels. Visibility is not great with this wire, but the wire is much stronger and a better conductor than twine. This is often used for offset wires and as the lower strands on electric ribbon and twine fences in temporary or moveable systems.
Stainless Steel Wire 19 gauge $\mathbf{4 0 0 0} \mathrm{ft} 18 \mathrm{lb}$ FOB (RSS) 59.75 Stainless Steel Wire 19 g, FOB (RSSFT) up to $350^{\prime}=5 \not \subset / \mathrm{ft}, 1000^{\prime}$ stocked $=\$ 20.00$ Stainless Steel Wire prewound, odd length short FOB
(RSSFT)
$2 \phi / \mathrm{ft}$


## PORTABLEFENCINGSUPPLIES-STEP INPOSTS/SIGNS

Also available is our Twist-Tight Tensioner that is excellent for taking up the slack on light gauge wire, twine and ribbon fences. The tightener can be put onto twine that is already installed and twisted to take up slack without cutting the twine. It is easy to readjust the tension in the future.
Twist-Tight Tensioner, durable plastic, pack of 6
(RTT) $\quad 3.00$

STEP-IN POSTS
The HD Step-In plastic post (RRP) has a solid " $H$ " section for rigidity with eight spacing options for poliwire or .5 inch electric ribbon on one side and four spacings on the opposite side that will hold up to $1.6^{\prime \prime}$ wide ribbons. The steel pin on the bottom and the step to push it into the ground with your foot allow for easy installation. The (RPP) style posts from Europe are better reinforced and have a longer steel pin. These features allow them to have a 5 foot long post. The (RPPL) has an angle brace welded to the pin to strengthen the step. All of the step-ins are nearly unbreakable.

Heavy Duty step-in post NZ [box of 50 ] each FOB (RRP)

42" Step-In Plastic Post, 7 clip has large steel pins FOB (RPP) 1.65 5 foot Step-In Plastic Post with steel reinforced step FOB (RPPL) 3.00

3/8" Fiberglass Rod Step-In Posts 4 ft, w 3 clips (Pictured on Page 32 )

Economy FOB (F38SE) 1.56 SunGuard ${ }^{\text {TM }}$ FOB (F38SSG) 1.86


A slide on plastic insulator (RPI-S), designed for twine, is available to fit the $3 / 8$ inch fiberglass posts
Insulator Stafix Fits $\mathbf{3 / 8}$ inch rod post black


The Mini-Spring for twine, ribbon, stainless steel 19 gauge or aluminum wire works like the larger springs for the $\mathrm{H}-\mathrm{T}$ wire, only it is designed for low tension, light temporary or permanent fences. Total length is 7.5 inches.


## WARNING...WARNING...WARNING...WARNING...WARNING

There is a choice between 3 different electric fence warning signs. The Stafix has plastic clips for attaching onto the fence wire and also has 5 holes for different attachment methods. The other sign is a bit smaller - four by eight inches with two holes on the top for hanging or nailing. Both signs are printed "ELECTRIC FENCE" on both sides and are made of yellow plastic. Use the stainless steel spring type K-Clips for secure hanging of the signs. The clips will keep the sign from sliding down the smooth wire.


Electric Fe Sign Plastic Clip-on type
Kencove Electric Fence Sign Plastic (Actual color is yellow)
Electric Fence Warning Decals to stick onto Fence Flags ${ }^{\text {TM }}$, posts, buildings, wire 12/pack K-Clips ${ }^{\mathrm{TM}}$ grip the wire with spring action, stainless steel $50 / \mathrm{pk}$

For those fence lines that need to be made more visible to livestock, wildlife or humans, consider using our FENCE FLAG ${ }^{\text {TM }}$ warning device. Designed to flutter with the slightest breeze, these molded, bright white, oval shaped flags are suspended on a stainless steel, spring temper K-CLIP ${ }^{\text {TM }}$ that securely attaches with finger tip application to any style wire or twine fence line. They are packed in bags containing 12 stainless steel K-CLIPS and 12 molded flags. Quickly and easily installed!

Fence Flag ${ }^{\text {TM }}$ 12/pack with K-Clips White

| (MFS) | $\mathbf{3 . 9 5}$ |
| ---: | ---: |
| (MFS-D) | .95 |
| (MFS-P) | .65 |
| (MFFD) | $\mathbf{1 . 9 5}$ |
| (MFC) | $\mathbf{8 . 0 0}$ |


(MFF)
3.65

HELPING FARMERS SINCE 1980 Kencove Farm Fence Supplies
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Phone : 724 459-8991
Fax: 724 459-9148

## PORTABLE FENCING SUPPLIES - OFFSETS

Temporary electric fence systems are not really handy unless a REEL is used to keep the twine tight and make rewinding fast and easy. The Stafix (RRS) and O'Briens geared (RRSG) reels come complete with carry handle, rewind crank, ratchet lock and rugged steel and plastic construction. The carry handle has a hook on the reel frame for attaching it to a fence wire. They are designed to hold 1640 feet of twine or 656 feet of hot ribbon.

The Super (RRX) reel holds 400 meters ( 1312 feet) of hot ribbon. The large O'Briens geared (RRXG) reel also holds 1312 feet of ribbon. Geared reels have a Three to One ratio. This means that for each turn of the handle, the bobbin spins three times. When rewinding long lengths of twine or ribbon, the extra cost of the geared reel is a worthwhile, timesaving investment. Replacement bobbins for the Stafix reels are available but they are not designed for quick replacement. Go fly a kite and try one of these reels.

| Stafix Reel Insulated For twine or ribbon | (RRS) | $\mathbf{3 0 . 0 0}$ |
| :--- | ---: | ---: |
| Stafix Super Reel Holds 1312 foot of ribbon | (RRX) | $\mathbf{3 9 . 0 0}$ |
| Stafix Steel mounting post $\mathbf{3}$ reel capacity FOB | (RSM) | 20.00 |
| O'Briens Geared Reel, includes twine guide, Small | (RRSG) | $\mathbf{4 7 . 0 0}$ |
| O'Briens Geared Mega Reel Large | (RRXG) | $\mathbf{5 4 . 0 0}$ |
| Replacement Stafix Bobbins Small | (RRS-B) | 10.00 |
| Replacement Stafix Bobbins Large | (RRX-B) |  |

The Three-in-One self insulated reel (RR3) is a portable sheep fence on one reel. It is prewound with three rolls of six strand, 660 foot polywire. Pick up your portable fence posts and a three-in-one reel and you can set up a grazing area anywhere on the farm. Use one of Kencove's portable chargers for complete stock control!
Stafix Three-in-One Reel Complete
(RR3)
136.00

## More Reels

The new improved mini-reel has a stronger latch. This latch allows the excess twine to be stored on the reel while tensioning the twine or wire on the temporary electric fence. The reel uses a lynch pin that allows the spool to be replaced without tools in less than a minute. The low cost and compact size makes this reel ideal for trail rides, garden and shrub pest control fence and short grazing fences. Many other uses are possible from kite string to speaker wire.
Mini Reel, well designed reel, handy for short lengths (RMINI)
12.50 Replacement Spool for Mini Reel
(RMINI-B) 5.00

The Rod Post Reel and the Neck Strap Reel have much greater capacity than the NZ reels. This makes them especially good for all electric rope and ribbon sizes. The bobbins on these 2 models can be changed in less than a minute by just pulling a spring locking pin. You may be able to repair 2 reels with one replacement bobbin since each half of the bobbin is held together with a hollow plastic bolt and nut.

The (RPR) reel includes a hand carry handle, rewind knob, and double hooks to
 give good stability when it is hung from fence wire. It is made with a square tube that can slide over rod posts up to $3 / 4^{\prime \prime}$ diameter. It can be locked at any height on the rod post. The bobbin is locked from spinning with a spring loaded pin. A simple twisting action on the lever of the pin latches it so the bobbin will freely turn for unwinding.

Rod Post Reel attaches to end posts up to 3/4" diameter (RPR)
23.50 Replacement Bobbin for (RNR) \& (RPR)
(RPR-B)
11.00


The Neck Strap Reel can give you a spare hand so the posts and fencing materials are easier to deal with. A strap that goes around your neck holds the reel. The bottom of the frame will rest against you at about belt height. This has a positive spring loaded latch pin. The replacement bobbin is very easy to install without tools. This is ideal for large or small temporary pastures.
Neck Strap Reel
(RNR)
19.00

The 14 inch Offset Bracket (I6X) is easy to attach with a screw driver onto 2 separate lines of either smooth or woven wire. The double pin insulator gives very good insulation from the bracket wire and holds the electric wire with little chance of accidental release.


Offset Bracket
(I6X)
1.60

Offset Insulated Brackets are designed to put an insulated electric wire about eight inches away from a permanent fence. The wire bracket is normally twisted onto two different non-electric strands of a woven, barbed, or H-T fence. The large loop is insulated with a tough plastic tubing which permits the wire to move through it with a minimum of friction. These offsets connect easily to your perimeter wire and flex if hit by stock.
Offset Insulated Bracket Short Tail
(I62)
Offset Insulated Bracket Long Tail
(I61)
1.35

One of the lower cost Offset Insulators is (IOR). The pencil pointed fiberglass rod can be driven directly into trees or freshly treated posts. A drive cap should always be used to install these. In harder posts a $5 / 16$ inch pilot hole should be drilled. The fiberglass is a great insulator and much stronger than plastic nail-on offset insulators which often break in the first winter. A spring clip (F3S) is required to support the wire in the offset and is sold separately. Larger diameter fiberglass offset rods are also available.
Fiberglass Offset Rod 3/8" x 12" Pointed
(IOR)
.50

## Pasture Plate Meter

The Rising Plate Meter is an intensive grazing tool for farmers to measure the amount of grass or dry matter in a particular pasture or paddock. This allows the farmer to plan the grazing schedule for pastures and animals to produce maximum results.

The Electronic Rising Plate Meter will take all your pasture readings and automatically average them as you go. You can see the number of readings, the average calculated height and the calculated dry matter on the pasture.
Electronic Pasture Plate Meter FOB
(RPM) 500.00
The Jenquip Fillips Folding Pasture Plate Meter is a more affordable unit that can be easier to maintain than the electronic model. The Fillips meter quickly folds in half and a bike bracket is included to easily haul the plate. All Fillips Meters are calibrated to give the same readings so research comparisons are accurate. Cut and dry is the only more accurate system. Do samples to calibrate the meter for different types of forage.

The Fillips Meter has two counters. The lower counter is operated by the rising plate every time a measurement is taken. It continually adds the measurements. A top mounted counter is pushed once, by hand, each time a sample is made. Divide the total of the measured heights by the number of samples to get the average height of the pasture growth.
Mechanical Counter Type Pasture Plate Meter FOB (RPMM) $\mathbf{2 5 0 . 0 0}$


## SPIDER PERMANENT ELECTRIC FENCE

The SPIDER permanent electric fence concept has remarkable resiliency and strength. The ability of the SPIDER fence to "flex rather than break" permits the use of very compact, lightweight, and economical components.

## WIRE SPECIFICATIONS:

## TOLERANCE BAND

SPIDER fence is a complete system that uses ten millimeter (slightly larger than 3/ 8 inch) footed fiberglass posts for dips, plain fiberglass line posts and lightweight 16 gauge high tensile wire. The double wedge clips allow you to vary the wire heights. Since all components (except for the wire) are fiberglass or plastic, no additional insulators are needed. Wood posts are used at ends and at the top of steep rises. SPIDER "G-Springs" provide additional spring to the wire and are used both for tensioning and as gate handles. This system is not designed to be a physical barrier. A high powered charger is recommended. Call for further information and item prices.


## WEDGE-LOC T-POST BRACING

Hudson ${ }^{\mathrm{TM}}$ and Jobe ${ }^{\mathrm{TM}}$ water valves maintain water levels in various situations. They replace ball float valves and other simple watering valves that start slowly and often never do allow fast water flow. As the fluid level rises, a float closes the outlet to the diaphragm chamber, which then expands to stop incoming flow. This gives a quick and complete water shut-off. When the fluid level drops, the diaphragm escape is opened. The diaphragm retracts and allows a full flow of water to refill the tank. This fast refill means the valve is less likely to be damaged and a smaller tank can handle more animals.

The Hudson valve body is durable glass fiber nylon and is vented to eliminate siphoning. Internal parts are ABS plastic, ethylene propylene rubber and stainless steel. This valve is resistant to damage when frozen and is fully guaranteed for two years when used under normal circumstances for the control of water in stock tanks and troughs. Two mounting brackets are available. The economy

bracket quickly mounts the Hudson Valve to portable tanks and troughs at the end of a 3/ 4 inch hose. The Heavy duty solid steel bracket mounts to round or flat sided tanks and troughs using standard J-Bolts. All mounting hardware is included with each bracket.

Hudson Water Valve for top mounting, 1" thread, 2-90 PSI.
(VHV)
27.95

Economy Mounting Bracket for Hudson Valve - $3 / 4$ " hose end
(VBBE) 12.25 Heavy Duty Mounting Bracket for (VHD) - 3/4" hose end (VBBHD) 20.50 Low Pressure Diaphragm for Hudson Valve (VHVLD) 5.00 Hudson Valve Repair Kit
(VHVR) 9.50 Jobe Valve for bottom or side mounting, 3/4" NZ, \$29.70 ea. for 14 (VJV) 33.00 Repair Kit for Jobe Valve, New Zealand (VJVM) 9.00 Jobe Topaz Valve, also Top mounts, anti-freeze option, 3/4" NZ (VJT) 45.75 NEW! Jobe Topaz anti-freeze valve for (VJT) (VJTFP) 13.50 RoJo Valve low flow, bottom, side or top mounting, 0-150 PSI, 3/4" (VJR) $\mathbf{2 3 . 0 0}$ Ask Kencove to quote plastic water pipe and fittings delivered to your grazing group. When there are large shipments, delivered prices are very good.


Plasson Quick- Coupler Valves allow you to hook up a full flow valve as quickly and easily as opening a door. When the $3 / 4^{\prime \prime}$ male riser (VCR) section is pushed into the female valve it easily snaps in place and opens the valve fully. A simple squeeze on the snap arm of the riser releases the connection and automatically shuts off the valve. The valve has a highly visible, hinged yellow cover to keep the dirt out when not in use. This valve can be used for above ground or buried water systems. If going with a buried system, it is common to use about an $8^{\prime \prime}$ PVC pipe with a cap to keep the connector from freezing. Here are several ideas to keep the above ground section from freezing. Put a drain line to the watering areas, then keep the water flowing a bit in freezing weather. A thermostatic water valve is available for automatic protection but not stocked. Putting 4 inches of sawdust on top of the pipe helps immensely. If two pipes are installed in the ground and connected together with a tee at the portable water trough valve and also at the barn, a small circulating pump should heat the exposed section of pipe with ground heat.


Quick Coupler/Valve with yellow hinged cap: 3/4" male pipe (VC34) 11.00 Riser $-3 / 4$ " required male part of the above quick coupler valve
(VCR)

(GR6)

(GR8)

4 foot $\left(3^{\prime} 6^{\prime \prime}\right) 2^{\prime \prime}$ tube, 50", 6 bar, w/ hinges \& chain latch 48 pound FOB PA (actual Rohn was $\$ 92.00$ )
(GR4)
6 foot $\left(5^{\prime} 6^{\prime \prime}\right) 2^{\prime \prime}$ tube, 6 bar, w/ hinges \& chain latch 66 pound FOB PA (actual Rohn was $\$ 105.00$ )
(GR6)

$$
67.75
$$

8 foot $\left(7^{\prime} 6^{\prime \prime}\right) 2^{\prime \prime}$ tube, 6 bar, w/ hinges \& chain latch 87 pound FOB PA
(GR8)

10 foot ( $9^{\prime} 6^{\prime \prime}$ ) 2" tube, 6 bar, w/ hinges \& chain latch 106 pound FOB PA (actual Rohn was $\$ 143.00$ )
12 foot ( $11^{\prime} 6^{\prime \prime}$ ) $2^{\prime \prime}$ tube, 6 bar, w/ hinges \& chain latch 128 pound FOB PA (actual Rohn was $\$ 172.00$ )
(GR12)
118.45

14 foot ( $13^{\prime} 6^{\prime \prime}$ ) $2^{\prime \prime}$ tube, 6 bar, w/ hinges \& chain latch 145 pound FOB PA (actual Rohn was $\$ 188.00$ )
(GR14)
126.00

16 foot $\left(15^{\prime} 6^{\prime \prime}\right) 2^{\prime \prime}$ tube, 6 bar, w/ hinges \& chain latch 162 pound FOB PA (actual Rohn was $\$ 207.00$ ) (GR16)
149.95

## Heavy Duty Tube Gate Hinges

Bolt on Hinge Clamp for $1.5^{\prime \prime}$ HD Tube Gate, fits .8" hinge pinFOB(GH15)
Bolt on Hinge Clamp for 2" HD Tube Gate, fits .8" diameter pinFOB(GH2)
2.95

12 inch long Gate Hinge Bolt. 3/4" diameter bolt and hinge pin,with 2 nuts and washers to allow easy adjustment of the gate, FOB (GHB)
4.85

(GHB)

(GW2)

A gate wheel helps take the work out of opening and shutting heavy gates. The end post is not stressed with having to support the weight of the gate.
Gate Wheel, bolts onto $15 / 8^{\prime \prime}$ to $2^{\prime \prime}$ round tube gates, FOB
(GW2)
19.50

The Sure-Latch gate latch (GLL) is also available from Kencove. This high quality two-way livestock gate latch will fit all tube gates with $1-5 / 8$ to 2 inch outside diameters. This durable latch will help prevent gate ends from sagging and allow the gate to open in either direction. Simple to install and easily operated with one hand, even from horseback or with gloves on. NEW! This can be padlocked.

Sure-Latch Gate Latch FOB
(GLL)
22.50

Check the top of page 29 for several other gate hooks: $(G N Z L)=\$ 5.50$ and $(G D L)=\$ 3.50$

## ORDERING INFORMATION

## Kencove Locations UPS Shipping Times

## Earl Park, IN 47942



MAIL-IN ORDER FORM (Phone Orders are most common)

Send this form with your payment to:
KENCOVE Farm Fence, Inc 344 Kendall Road Blairsville, PA 15717
Fairsille, PA 15717 , Fax orders with credit card number, signature and expiration date to: Date:
For Toll-Free phone orders: 1-800-KENCOVE order@kencove.com 1-800-536-2683 www.kencove.com Phone: (724) 459-8991 Name:

Ship to: Fax: (724) 459-9148

Address: $\qquad$ Address: $\qquad$

| Zip: |  |  | Zip: |  |
| :---: | :---: | :---: | :---: | :---: |
| Quantity | Item Code | Description | Price Each | Item total |
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Order Sub-Total:
PA, OH, KY and IN residents add your state's Sales Tax. Sales Tax: $\qquad$
Please call us for shipping amount on any FOB items. Shipping: $\qquad$
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Cardholder's Signature:
Please make checks payable to: Kencove Farm Fence, Inc
Thank You for Your Order. We Look Forward to Serving You Again!
Business hours: Monday - Friday, 8am to 5pm, Saturday 8am to 12pm, EasternTime Zone.

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## Electric Netting Options from Kencove

Electric net fence gives great protection from predators. Originally it was designed to hold sheep. Now it is used with goats, poultry, geese, dogs, rabbits, deer, calves, gardens, shrubbery and more. You will be surprised how quickly this can be put up and then taken down.

Kencove's Electric Net Fencing is made from 3 stainless steel strand electric twine that is attached together to make woven fence ranging in height from 28 inches up to 48 inches. Originally the vertical stays were made only of twine. Kencove now also has netting with SEMI-RIGID VERTICAL STAYS EVERY 3.5 OR 7 INCHES. The semi-rigid stays help keep the net from drooping and shorting the lower strands. This is closer spaced than other netting that uses molded plastic vertical stays every 12 inches. The stainless steel conductors mean these nets are expected to last several times longer than copper conductor nets. Conductivity is rarely a problem with electric nets. Don't use weed-burner type fence chargers with any electric twine material.

Kencove's new electric netting is $10 \%$ longer ( 164 feet) than most nets that have been sold in the USA. This normally will give you $\mathbf{1 0 \%}$ extra net FREE!

Plastic posts with steel spikes are built into the netting. The $\mathbf{2}$ pin options have a second bent pin attached to the main pin. This gives a step for easy installation and more stability after it is in the ground. The 150 foot nets have knotted joints. Our 164 foot nets include a repair kit. This fence works best for small enclosures that need tighter control. Mow the back yard with a goat. Give your dog some new space with a portable pen.


To dismantle the fence:

1. Untie the green strings on the posts.
2. Lift each post as you walk down the line.
3. The fence will fold into loops as you proceed. 4. Lay the fence flat on the ground and ROLL the LOOSE ENDS to the POSTS.
This ensures that the posts and strings are always on the outside ready for reuse.
When not in use, store on a wall or beam to prevent vermin from nesting in the rolls Up to 30 rolls can be run from a high power charger. No more than 5 rolls should be run from small battery powered chargers.


## Instructions for use of Kencove's New Electric Net Fencing

1. Untie the green strings.
2. Hold posts and drop out the fence.
3. Start by inserting the post with the green strings into the ground at your starting point.
4. Tie this post to a stronger post. (Do not allow any metal to touch the electric twines.)
5. Pick up the remaining posts and walk across the field, releasing each post in turn.
6. At the end, pull the last post to tension the fence and insert the post.
7. Walk along the fence and push in all remaining posts.

black. These nets have green twine with black struts and posts, and blend beautifully into the landscape. When ordering, just ask for your favorite Supernets ${ }^{\circledR}$ in green.

To join rolls for continuity:
Untie the next roll of fence.
Using the post with the strings, insert it beside the last post of the previous roll and tie together. Be sure to connect the aluminum connectors. Continue as in previous instructions.
Any post can be used as a corner post.
Simply attach the guy line and peg for all directional changes.
The entire fence must be erected.
Any surplus must be doubled back along itself. Your fence charger should be put in the middle of a run of nets.
Connect the power lead to the aluminum clip.
Be sure the unit has a good ground rod installed. ALWAYS keep the fence well ELECTRIFIED.


## 344 Kendall Road

Blairsville, PA 15717-8707

## 1-800-536-2683

FOB
FOB
FOB (NGS) \$98.50
FOB (NP7) \$106.00
FOB (NP7X) \$118.35
FOB (NPC) \$141.30
FOB (NPX) \$156.60
FOB (NPD) \$123.75
нов
(ND7) $\$ 98.00$
FOB (NR7) $\$ 88.20$
FOB
FOB
(NRC) \$126.00
(NRS) \$62.94
FOB (NRX) \$138.60
Rabbit - Garden Net, 10 / $28^{\prime \prime}$ / 7" semi-rigid stay, 164', Dbl Pin, 15 Posts, Pos - Neg
FOB (NSGP) $\$ 4.2$
Replacement post for (NSG) \& (NSG12X) Sheep \& Goat Net
Replacement post for (NPC), (NP7), (NPX), (NP7X) \& (ND7) Poultry \& Deer Net
FOB (NPP)
$\$ 4.20$
$\$ 4.20$


[^0]:    The package listed above will do a 15 acre pasture (approximately 3280 feet perimeter) with a gate opening at one corner, as in our sample diagram. Three wires are insulated for electric, with posts spaced at 15 foot centers. Measurements and materials are approximations. Your needs will vary. Price does not include labor, posts, fencing tools or electric fence charger.

[^1]:    THE LIST!
    Fence Charger
    Ground Wire
    Ground Rods \& Clamps
    Lightning Protection
    Underground Wire
    Corner / End Post
    Cut Out Switch
    8. Corner / End Insulators
    9. Wire Electric Connectors

