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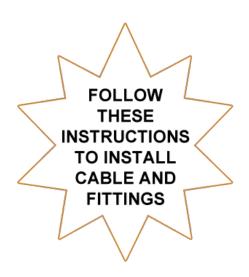
Washougal, WA 98671

FIELD ASSEMBLY INSTRUCTIONS

Choose STAINLESS CABLE & RAILING™ for all your fittings and cablerail assemblies!

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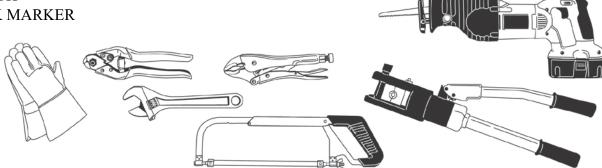
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Just follow these simple steps:

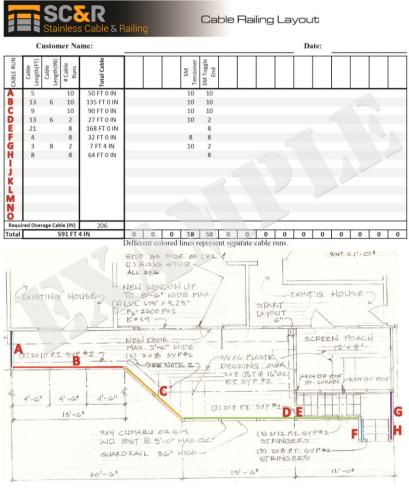
NECESSARY TOOLS

- 1. MEASURING TAPE
- 2. CABLE CRIMPERS
- 3. CABLE CUTTERS
- 4. RECIPROCATING SAW/GRINDER/HACKSAW
- 5. VICE-GRIP TM
- 6. LEATHER GLOVES
- 7. WRENCH
- 8. BLACK MARKER



2. LAYOUT

• Determine where the cable will start and stop (ie; Sections). Reference the color- coded layout sheet (Fig 1) if it was included with these instructions.

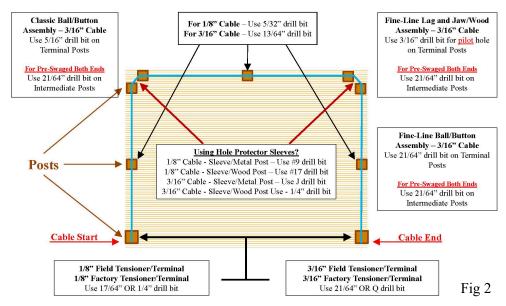


3. HOLE DRILLING

Fig 1

• Do you need to drill holes for the cables? (Fig 2).

Factory and Field Swage Drill Size Recommendations



4. MEASURE/CUT CABLE ASSEMBLY

4.1 Doing only one section at a time, measure (Fig. 3) overall length from outside face of the beginning post (AKA terminal/end post) to the outside face of your ending post face.

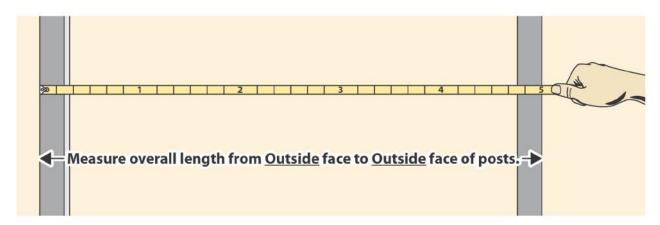
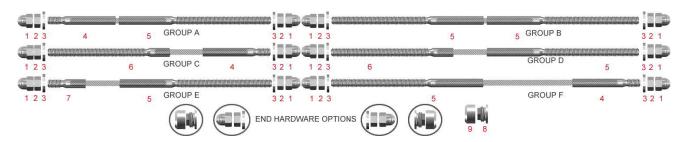


Fig. 3

4.2 Using this measurement, unroll enough cable from the spool to complete one cable assembly. Add an extra 3" to make sure the cable is long enough and to make it easier to work with. Cut to this length using the recommended Cable Cutters or a Hand Grinder.

NOTE: Reference the layout sheet (Fig 1) to determine the fitting type and location.

POSSIBLE FITTING COMBINATIONS



1. Acorn Nut 2. Hex Nut 3. Washer 4. Field Threaded Terminal 5. Field Threaded Tensioner 6. Factory Threaded Tensioner 7. Factory Threaded Terminal (pre-attached) 8. Cable Quick Nut 9. Cable Quick Nut Cover

5. ATTACH FITTING ON ONE END

5.1 Attach either a Field Terminal (ref. #4) or Field Tensioner (ref. #5), depending on the design, to one end of the cable using the Cable Crimper.

NOTE: One fitting may be pre-attached.

CRIMPING INSTRUCTIONS

- a) Insert cable into fitting all the way
- b) Using a black marker, mark the cable to provide a visual reference that the cable remains fully seated down inside the fitting and does not slip out (Fig. 6).

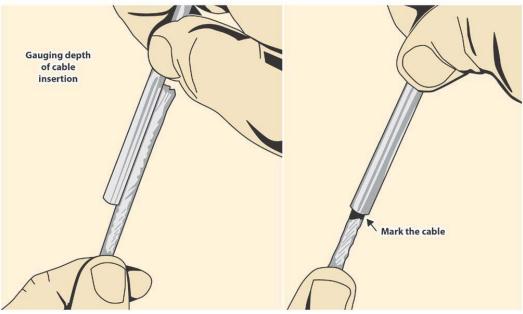


Fig 6

c) Turn the knob on the Cable Crimper counterclockwise to open the jaws (Fig 7). Position the jaws around the fitting, 1/8" from where the cable enters the fitting.

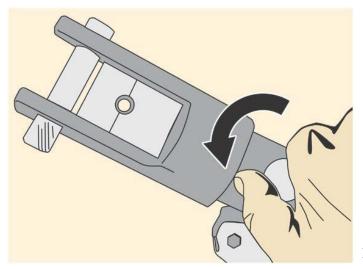


Fig 7

- d) Turn knob clockwise and pump the handle consecutive times until the two die halves nearly touch. **WARNING:** Only firm handle pressure is needed to close the die halves. Applying excessive force to the tool will result in damage.
- e) Reposition the dies 1/4" further along the fitting and rotate 45 degrees. Repeat the crimping process for a total of three crimps.
- f) Spray and wipe down the crimped fittings using CitriSurf® Passivator (available through our website) and a clean cloth, to repassivate the stainless steel.

Push the crimped fitting, with the now attached cable, through the drilled hole on the beginning post. The thread will be exposed on the outside face of the post.

NOTE: If using a Field Terminal (Group A, ref #4) or a pre-attached Factory Terminal (Group E, ref #7) at the **beginning** of the cable, screw on the washer/hex/acorn nut (ref #1, 2, 3) or Cable Quick Nut/Cover (ref #8, 9) combination at the end of the thread.

NOTE: If using a Field Tensioner (Group B & F, ref #5), or a pre-attached Factory Tensioner (Group C & D, ref #6) at the **beginning** of the cable, screw on the washer/hex/acorn nut (ref #1, 2, 3) or Cable Quick Nut/Cover (ref #8, 9) combination whereby only 3/4" of the thread is exposed on the outside of the post.

NOTE: Other fitting combinations are sometimes used. If you do not see your assembly type or need help, please call us at 888-686-7245.

NOTE: If using <u>Hole Protector Sleeves</u>, install these prior to lacing your cable through the intermediate posts. Reference (Fig. 2) for drill size recommendations.

6. CUT CABLE TO FINAL LENGTH

To determine where to cut the cable at the end post, push the raw cut end of the cable through the drilled hole and pull all the slack out of the cable. Mark the exit point, where the cable emerges on the outside face of the post. Remove cable from the hole and place on the deck surface or similar flat surface. Do not unlace from the intermediate posts.

Group A, B, D, E: Deduct 2 1/4" from the exit point mark and re-mark the new location. Make your cable cut here.

Group C & F: No deduction from the exit point mark. Make your cable cut here.

NOTE: Recommended deductions can be adjusted +/- to achieve desired fitting positions. Verify fitting position prior to cutting the cable.

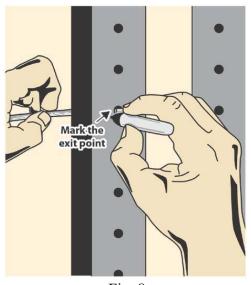


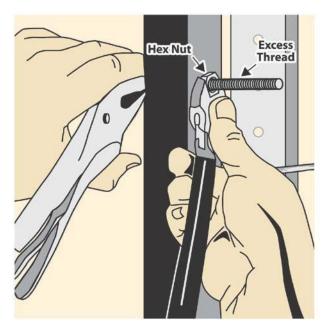
Fig. 8

7. ATTACH FITTINGS ON OTHER END

Follow the directions for step 5 of this instruction sheet for this step.

8. TENSION THE CABLES

Apply a small amount of the supplied anti-seize lubricant to the threads and tighten with a wrench until taut. Use Vise-GripsTM and a piece of leather to protect the cable/fitting and to keep it from spinning. Start with tightening the middle cable first, then tighten cables above and below in an alternating sequence until all cables have been tensioned (Fig 10).



Recommended Tensioning
Sequence

Fig. 9

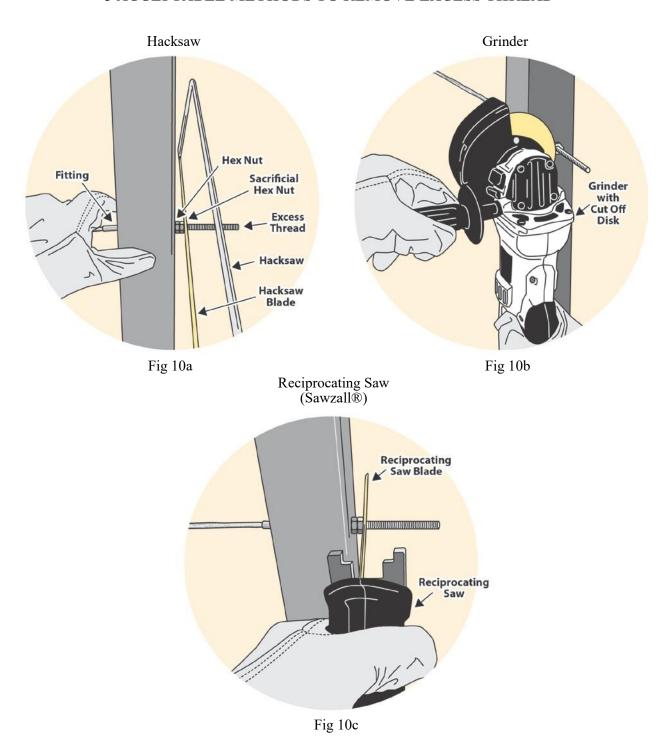
Fig. 10

9. REMOVE EXCESS THREADS

After tensioning, excess threads must be removed. If using the Washer/Hex Nut/Acorn Nut combination, to protect the fitting during the cut, screw another sacrificial hex nut right after the installed tensioned hex nut, from which you may saw or grind up against. Use a reciprocating saw, grinder or hacksaw to make the cut. When completed you should have no exposed threads.

Now remove the sacrificial grinding nut exposing the ½" threads that the acorn nut is threaded onto, then screw on the acorn nut. If using the Cable Quick Nut/Cover combination, the sacrificial hex nut is not required, just cut or grind excess thread and screw on the cover.

3 ACCEPTABLE METHODS TO REMOVE EXCESS THREAD



Spray and wipe down all cables and exposed end fittings with CitriSurf® Passivator to make sure all stainless steel is passivated and will properly resist corrosion. Then apply Rust Rescue to reinforce and prolong the passivation. Read the "Marine Grade Stainless Steel Maintenance and Cleaning Procedures" that follow for additional information and instructions.



Marine Grade Stainless Steel Maintenance and Cleaning Procedures

Stainless Cable & Railing Inc. offers Marine-Grade Stainless Steel railing frames and cable infill that boast high resilience with little maintenance. The material is in and of itself corrosion resistant thanks to a thin "passive layer" of alloying elements that forms on the surface of stainless steel. While this protective layer is strong enough to withstand typical wear and tear, it's not impervious.

We want our customers to get the most out of their cable railing and encourage periodic maintenance to keep cable infill clean, beautiful, and strong for years to come. This is especially important for exterior applications, particularly those in harsh outdoor environments exposed to salt water, industrial pollutants, de-icing salt spray, atmospheric dirt, traffic film, etc.

Perform the following procedures to keep your railing clean and preserve your warranty. You can purchase the necessary supplies through our store individually or together in a kit. Make sure to read the "WARNINGS & TIPS" on the second page.

Initial / Periodic Cleaning:

Follow this procedure immediately after installing your railing.

- 1. Spray CitriSurf® onto your frames and/or cables and wipe down using a clean, soft cloth.
- 2. Once all stainless surfaces have been cleaned and passivated using the CitriSurf® prepare Rust Rescue 200 by shaking or stirring the mixture.
- 3. Using a clean, soft cloth, sprayer, brush, or roller, apply Rust Rescue to your stainless steel frame and/or cables. Wear gloves while handling Rust Rescue (during steps 3-4), as it can cause skin irritation for some people.
- 4. Wait 2-3 minutes, then wipe off excess.
- 5. Allow the remaining solution to dry completely. A hot air oven, hair dryer, or other drying medium may be used to accelerate this process.

Repeat this procedure on a regular basis as needed to keep your stainless steel bright and shiny. For coastal applications, we recommend this be done every 2-3 months or so, depending on necessity.

General Cleaning:

Remove finger prints and other marks generated from daily use as needed. Apply mild soap and water or glass cleaner to area using a clean cotton cloth or chamois. Rinse clean with water and dry completely.

Oil, Grease, and Residue Cleaning:

Remove oil, grease, or residue left from other cleaning materials (such as floor cleaner or polishing detergents) as soon as possible. Apply alcohol-based products (including methylated spirit and isopropyl alcohol) or other solvents (such as acetone) several times using a clean, non-scratching cotton cloth until all traces have been removed. Use Aluminum Oxide Scotch Brite if necessary. Rinse clean with water and dry completely.

Paint and Graffiti Cleaning:

Remove as needed using proprietary alkaline or solvent-based paint strippers. Apply chosen cleaning solvent several times with a clean, non-scratching cotton cloth until all traces of paint have been removed. Use Scotch Brite if necessary. Rinse clean with water and dry completely.

Salt Film and Environmental Deposit Cleaning:

Perform cleaning regularly in consideration of environmental conditions and the rate of deposit build up. Use a clean cotton cloth with CitriSurf® solution (available in our store) to remove contamination. Apply cleaner evenly across cables to avoid a patchy appearance. Rinse clean with water and dry completely. Follow up with the Rust Rescue application procedure detailed in "Initial / Periodic Cleaning" on the previous page. Use Aluminum Oxide Scotch Brite if necessary.

WARNINGS & TIPS

- Avoid use of the following products, as they will harm your cables:
 - o Chloride-containing cleansers
 - o Hypochlorite bleaches. Should accidental contact occur, rinse off immediately with copious amounts of fresh water.
 - o Muriatic acid (commonly used to clean up tile/concrete installations)
 - o Silver-cleaners
 - o Scouring powders
 - Hard scrapers or knives
 - o Non-stainless steel-based scouring pads, cleaning wool, or wire brushes
 - O Any cleaning utensils that have been used on "ordinary" (carbon) steel, as this may result in iron particle "cross-contamination"
- Do not leave stainless cables or fittings in contact with steel, iron, or any other metals, as this will cause rusting due to free-iron transfer. If your frame is made of a material other than stainless steel, use protective grommets or sleeves (which can be found in our store) to keep the metals from coming into contact.

Please follow these procedures to get the most out of your stainless steel frames and cable infill by Stainless Cable & Railing Inc.

If you have any questions, call us any time at 1-888-686-7245.

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