

## **Installation Instructions:**

### **REQUIRED TOOLS:**

Phillips head screw driver,  $\frac{3}{4}$ " and  $\frac{9}{16}$ " combination wrench and socket wrench.

### **MOUNTING HARDWARE NEEDED:**

$\frac{1}{2}$ " bolts with STD threads, zinc coated and low carbon.

Length is approx. 1.5" longer than the depth of the mounting surface for the ESS3, ESS3-SS and ESS3SA.

Bolts should be 2" longer for the ESS4 and ESS4-SS.

Also, .5" flat washers and nylon inserted locking nuts.

Four  $\frac{1}{2}$ " bolts for the ESS3.

Six  $\frac{1}{2}$ " bolts for the ESS3SA and ESS4 models.

These may be purchased at a Home or Hardware store.

### **TELESCOPING HANDRAIL INSTRUCTIONS:**

The lower and upper hand rail parts are held together by two split collars with  $\frac{3}{8}$ " holes drilled in them and these  $\frac{3}{8}$ " holes are spaced on one and one half inch centers for a total adjustment of 12" up or down.

The split collars are held in place by 4ea. round headed set screws for the top hand rail and 4ea. rounded head set crews for the bottom hand rail.

This allows you to adjust the handrail to adapt to your stature and various bow heights.

The min. height setting will be approximately 60" to a maximum approx. 74" depending on your requirements.

In the 60" setting, it should allow clearance to go under a standard 7' garage door opening. Check to make sure!

After assembling the hand rail, place it over the square  $\frac{7}{8}$ " x  $\frac{7}{8}$ " x 7" high bar stock on the top bracket assembly, and tighten the two set screws firmly in place.

**NEXT:** Secure the top and bottom brackets to the tongue frame or starboard side frame rail with the .5" bolts, flat washers and locking nuts.

**NEXT:** For the fixed 3 and 4 steps models, secure the step frame (1.25" tubing) to the top bracket with the starboard side saddle with two  $\frac{3}{8}$ " holes drilled in them and secure the two saddles and frame with the two  $\frac{3}{8}$ " bolts and locking nuts supplied. Note the steps can be adjusted 2" up or down to suit your preference.

**NEXT:** Apply mid grade Loctite (to prevent set screws, bolts, and nut from becoming loose due to road vibration) and tighten firmly. In approx. 10 minute the Loctite will set. To remove in the future, heat the treated screws and nuts with a portable propane torch to release the bonding agent allowing you to remove the screws and or nuts.