Football Goal Post Ball Safety System with 6" Diameter, Poles Installation Instructions

FSNS63040 (GPFSNS63040P), FSNS64040 (GPFSNS64040P), FSNS64050 (GPFSNS64050P), FSNS64540 (GPFSNS64540P), FSNS64550 (GPFSNS64550P)

A Football Goal Post Ball Safety System consists of one net held up by hardware at various pole locations such that the net is at a desired height.

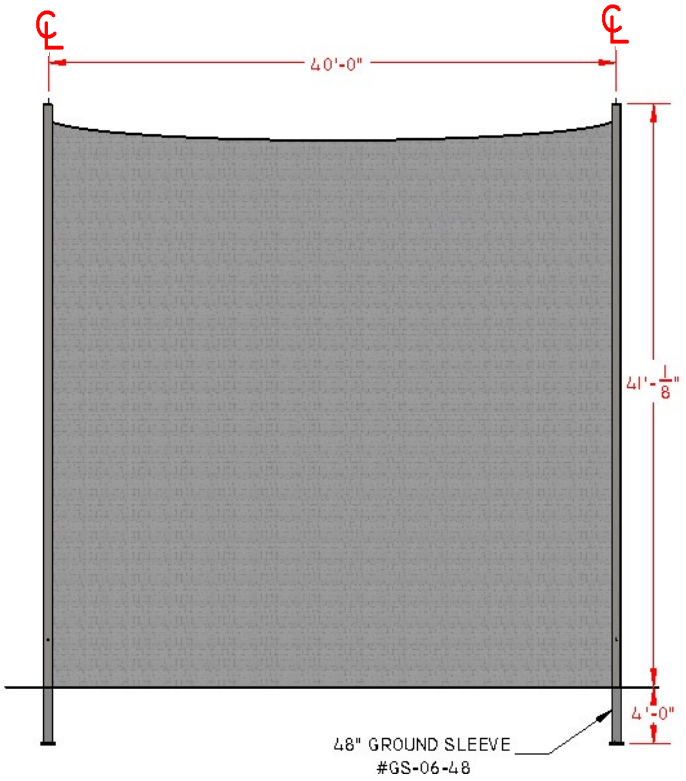


Figure 1 – Single Football Goal Post Ball Safety System (Sizes can be customized)

See Install Addendum ID-00145
at the end of this document
BEFORE starting Installation

GROUND SLEEVE & POLE INSTALL

The 6” diameter pole BSS are inserted into a ground sleeve. Each 48” ground sleeve comes with 1/2” x 8” long hex bolt and 1/2” nyloc nut as shown in ***figure 2***.

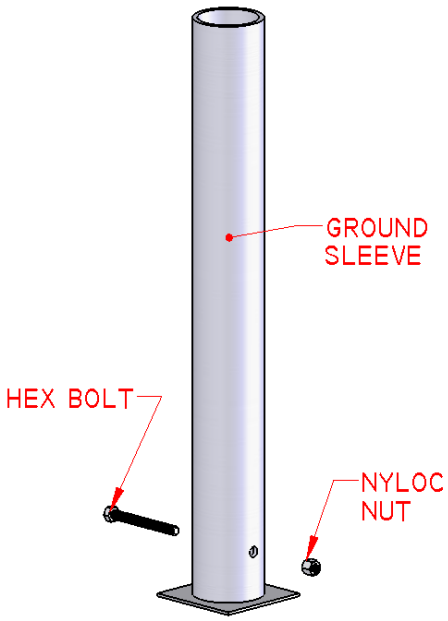


Figure 2 - Ground Sleeve

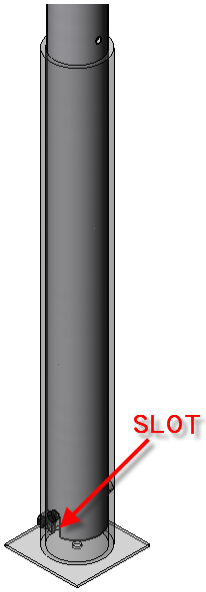


Figure 3 - Pole inside Ground Sleeve

1. Mark the locations of the ground sleeve on the field.

IMPORTANT: It is recommended that the distance between each pole should not exceed sixty (60) feet to reduce sagging of the net.

2. Excavate for footing and set the concrete forms. If the footing is not designed to local applicable codes and a site specific soils report, the Cut Sheet has a table listing the minimum axial, shear, torsion & moment forces the foundation shall be designed to withstand.

3. Center the ground sleeve in the form and secure it in a plumb and level position. The top of the ground sleeve should be flush with the finished grade.

IMPORTANT: The length of the hex bolt should run parallel to the length of the net so that it will line up accordingly with the slot at the bottom of the pole in ***figure 3***.

4. Pour concrete foundation and allow concrete to fully cure, and backfill.

5. Insert pole into the installed ground sleeve. The slot at the bottom of the pole should fit over the hex bolt to lock the pole in place.

6. Repeat procedures for all ground sleeves and poles.

NET PREPARATION

Each run of a ball safety system has one (1) net and each net has the following hardware:

Table 1 - NET HARDWARE

Quantity	Part Number	Description
1 lengths of wire rope that are "length of net plus 8 feet" long	PURCHP-0048 (113-VGACB187/250-0050)	Galvanized Wire Rope, Black Vinyl Coated
At least 2 times the "length of net"	CT8120B (113-6JU15)	8" Black Zip Ties
4	PURCHP-0596 (113-115-WRCDF0817)	3/16" Gal. Wire Rope Clip
2	PURCHP-0010 (113-211160)	1/4" HD Wire Rope Thimble

Figure 4 illustrates the use of the net hardware.

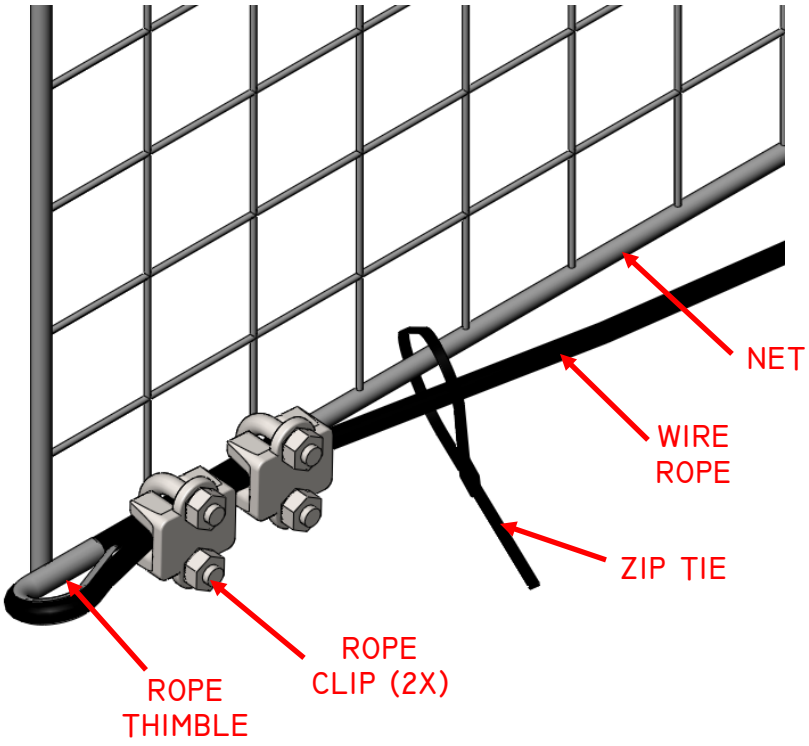


Figure 4 - Wire Rope to Bottom of Net Assembly

Wire Cable Clamping Do's and Dont's

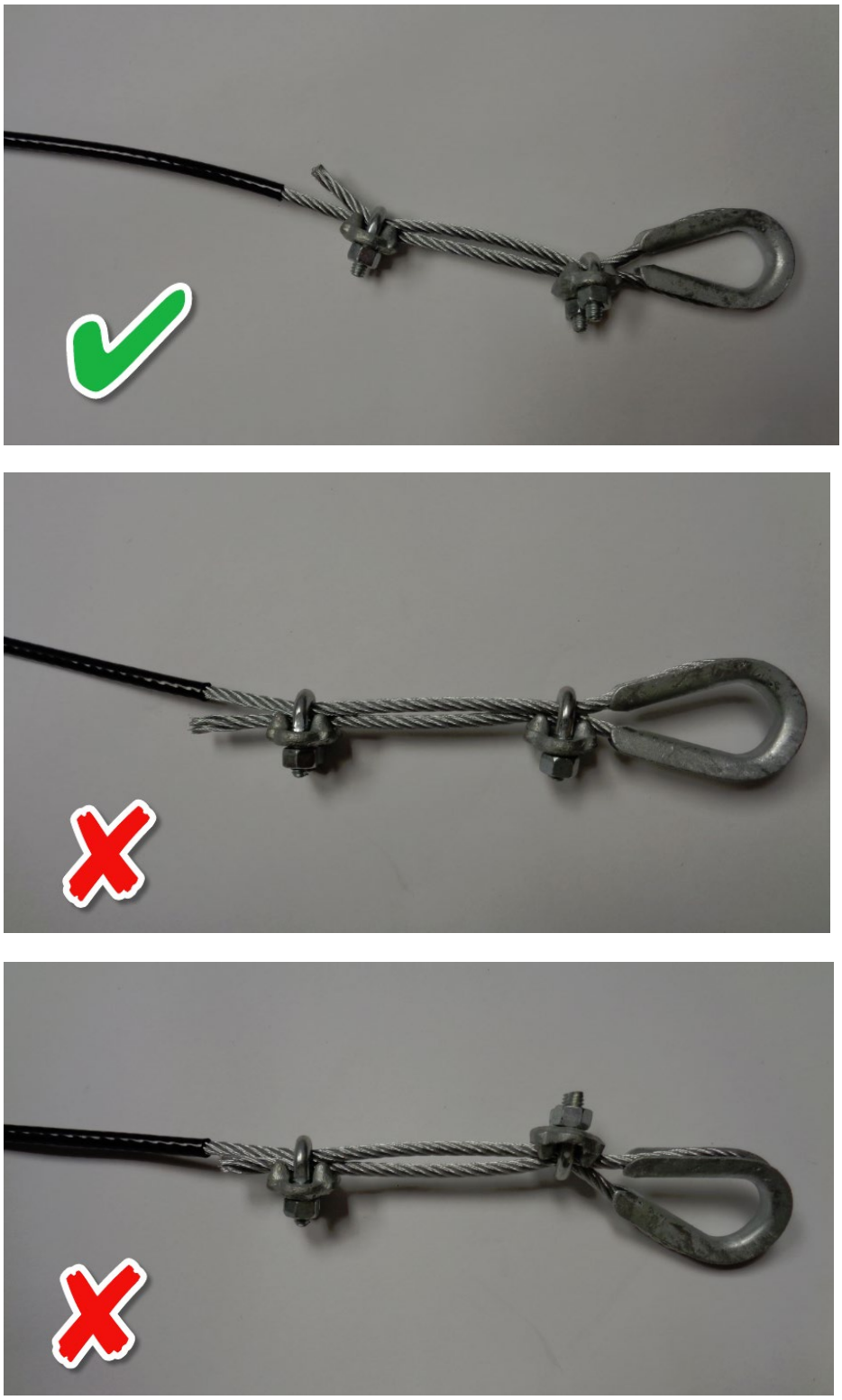


Figure 5 - Wire Rope, Thimble and Rope Clips Assembly

1. Gather the galvanized vinyl coated wire rope that is seen above in ***Table 1***.

2. At one end of the wire rope, make a loop (16" Stripped of vinyl) to tightly fit around the rope thimble as seen below in ***Figure 6***.

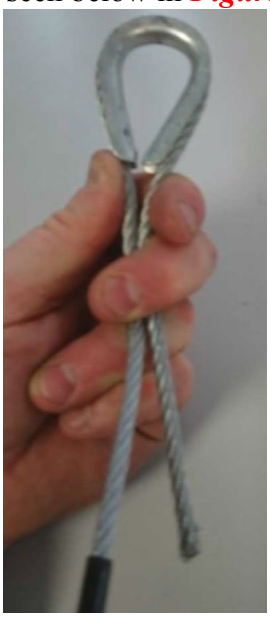


Figure 6 – Thimble and Rope Assembly

Figure 7 – Thimble, Rope and Rope Clips Assembly

3. Maintain the loop by clamping the wire rope with the two rope clips tightly so that the thimble does not fall out as shown in ***Figure 7***.

IMPORTANT: Tighten Rope Clip Nuts, Alternating Back and Forth 6X Each (Torque Spec…..)

4. Weave the cable through the square mesh at the bottom of the net approximately every 6-8".

5. Repeat steps 1 and 2 for the other end of the wire rope.

6. Using zip ties, fasten the wire cable to the net binding as seen below in ***Figure 8***. There are enough zip ties to fasten them approximately every foot along the net. The wire cable should run the entire length of the net and be pulled taut.

7. Once the net has the wire rope zip tied to the bottom binding of the net, the net is ready for attachment to the poles.

Figure 8 - Wire Rope to Bottom of Net Assembly

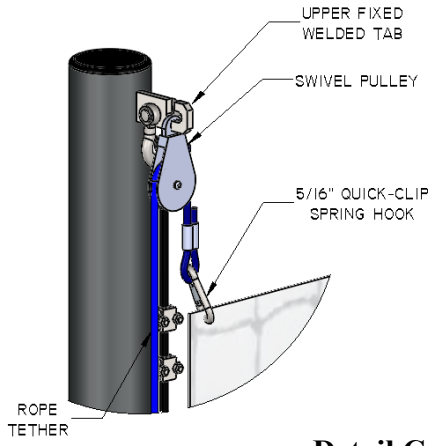
POLE HARDWARE

Although the number of poles vary depending on the size of the field, the quantity and type of hardware for each pole location is the same. The following table lists the hardware required at each pole location.

Table 2 - Pole Hardware

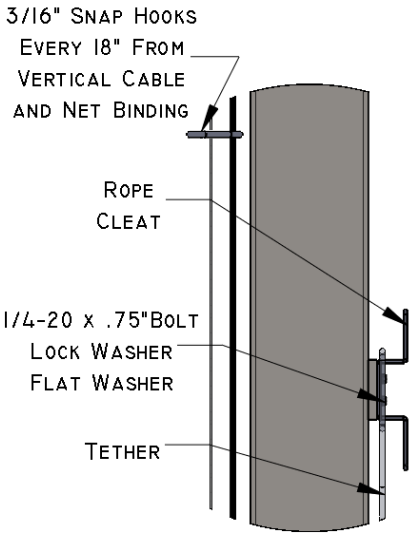
Item #	Part Number	Description	Qty. Per Pole
1	PURCHP-0048 (113-VGACB187/250-0050)	3/16", 7 x 19 Galvanized Wire Rope, Black Vinyl Coated to ¼" Length of each cable Height + 8'	1
2	PURCHP-0097 (114-116-304-SPHK2450-187N)	3/16" Spring Hook	1 per 18" Height
3	PURCHP-0009 (113-209860)	5/16" Spring Hooks	1
4	PURCHP-0026 (113-BLOCKWR300-02548)	1/4" Swivel Eye Wire Rope Block Pulley	1
5	E-1000-0013 (Rope Cleat)	Rope Cleat (In-house with 3/16" Material)	1
6	101-HHC-0017 (101-HHC1/4-20X.75-SS)	1/4-20 x .75" hex head bolt, SS	2
7	110-FLW-0002 (110-FLW1/4-SS)	1/4-20 flat washer, SS	2
8	110-SLW-0002 (110-SLW1/4-SS)	1/4-20 lock washer, SS	2
9	TETHER-65	Tether (2 x Height + 5')	1
10	PURCHP-0038 (113-TBJJ0375X06)	3/8"x6"L, HG Jaw & Jaw Turnbuckle.	1
11	110-FLW-0001 (110-FLW1/2-SS)	1/2-13 Flat Washer	2
12	110-SLW-0001 (110-SLW1/2-SS)	1/2-13 Split Lock Washer	2
13	102-UBOLT-0003 (102-UBOLT1/2-13X6.625X7)	Round Galv. U-Bolt 1/2-13x2"Thread, By 7"	1
14	E-0007-S038 (HD-06-LOWER)	Lower, 6" Clamp on Bracket	1
15	PURCHP-0654	1/4" Anchor Shackle HG, WLL .5T	1

Top of Pole



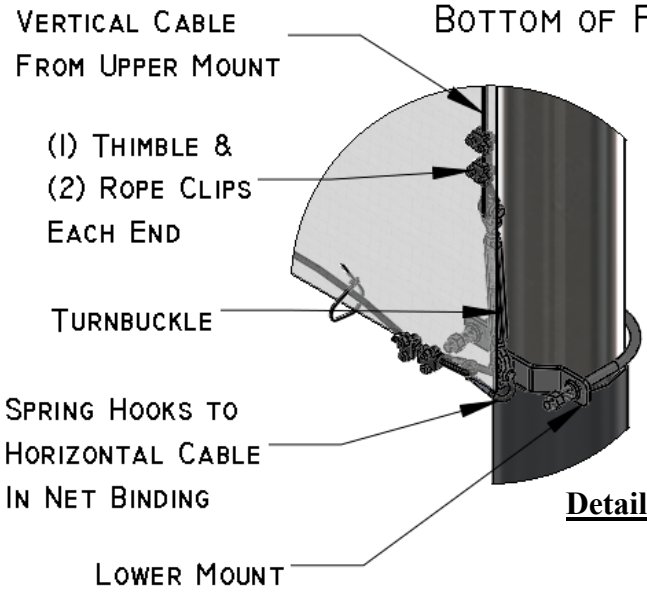
Detail C

Middle Of Pole
(Rotated for Clarity)



Detail B

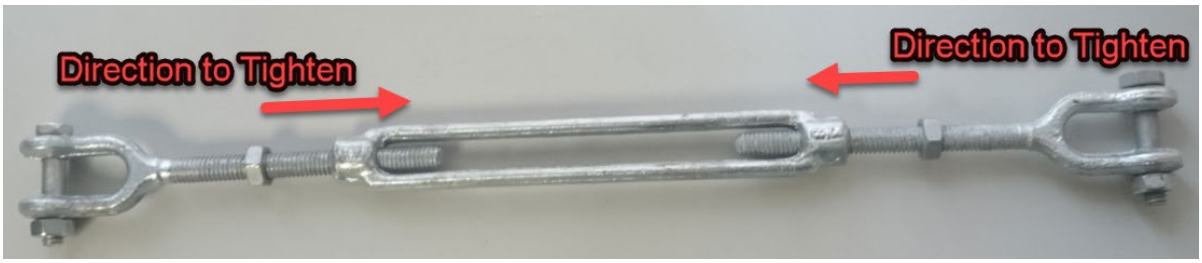
Bottom of Pole



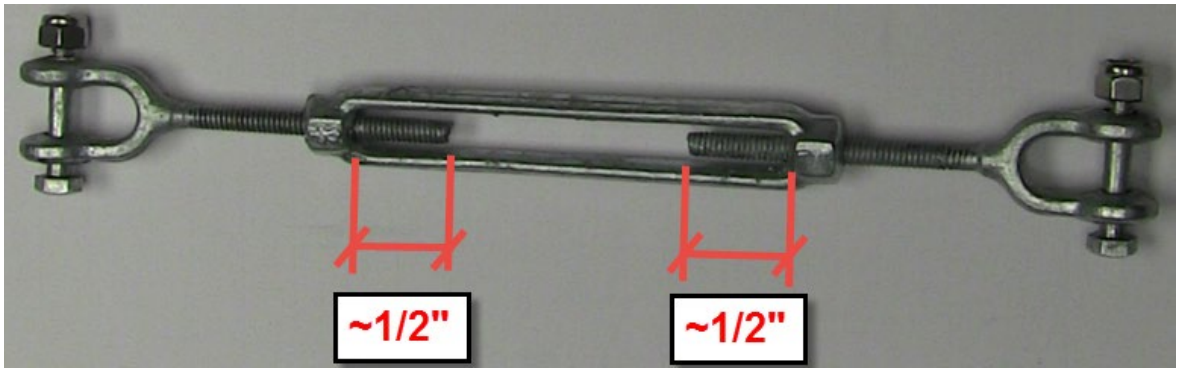
Detail A

1. Vertical cable needs to be assembled in the same manner as it was for Page 3-5 (Steps 2,3, & 5) and run from the turnbuckle at the bottom to the shackle that is to be attached to the upper welded tab's inner slot. ***(Detail A&C)***

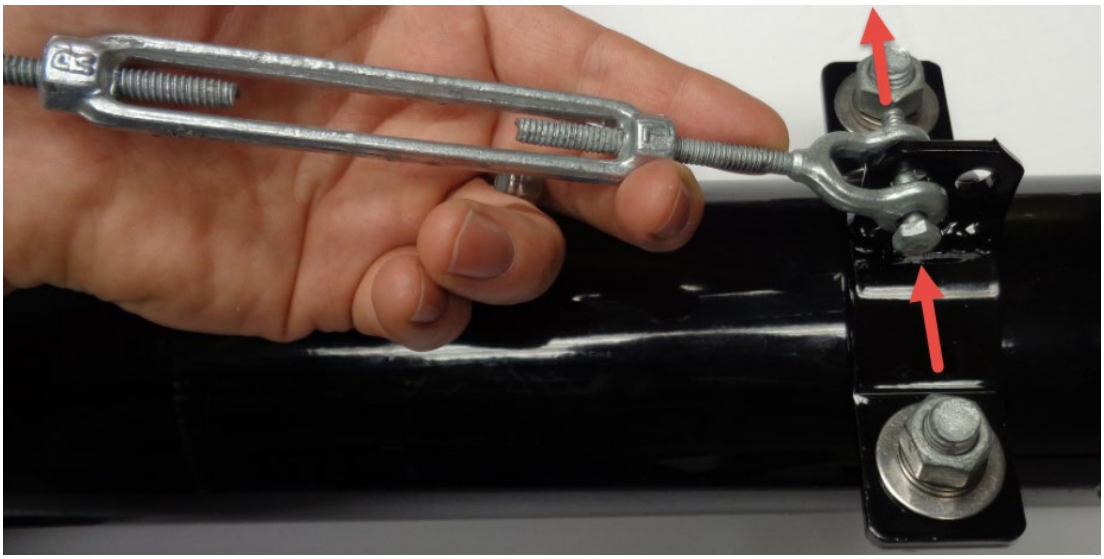
2. Turnbuckle assembly, with Jam Nuts:



3. Back out ends until ~ ½" of threads inside the turnbuckle body:

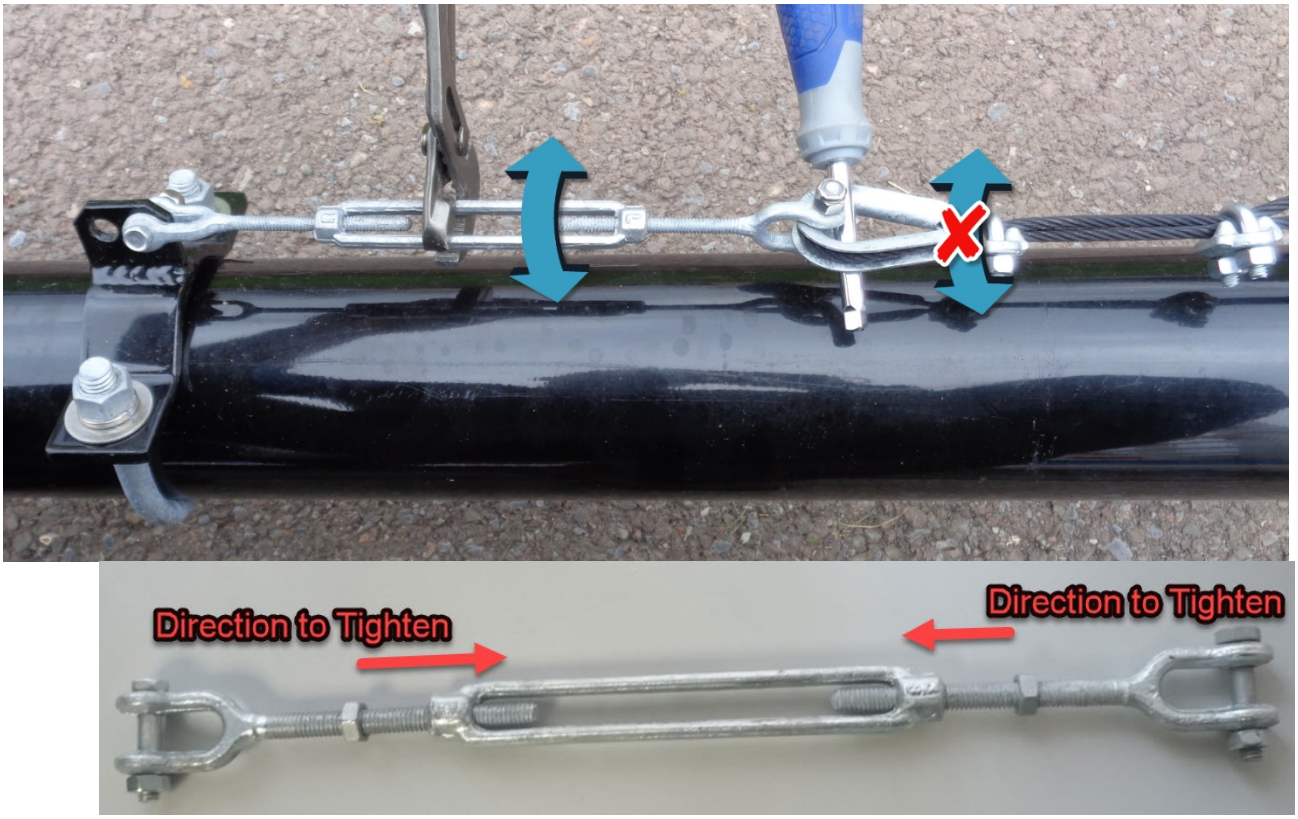


4. Attach one end of the turnbuckle to the top hole of bottom bracket tab:



5. Fully tighten nut, securing the bottom of the turnbuckle to bottom bracket.

6. Attach the shackle to the inner hole of the upper welded tab with the looped end of the vertical cable attached to the shackle. Run the cable down the pole and attach to the bottom bracket using the turnbuckle, looping this end the same way that you looped the top of the cable ***(See Detail A)***. Tension the vertical cables to 840 lbf. The preferred method to Accurately determine the cable tension is to check it with a tension meter. If a tension meter is not available, this tension can be approximated by first hand-tightening the turnbuckle and then tightening for 16 additional full rotations using a screwdriver and pliers. Verify that the cables have an adequate amount of tension by pushing, at the rope cleat height, with two fingers on the cable and ensuring that the cable cannot touch the pole without considerable effort:



7. After tensioning the cable, check and fully tighten all wire rope clips. (An impact drill with a nut driver is recommended, alternate back & forth to ensure both nuts of any single clip are tight). Tighten both jam nuts fully down towards the turnbuckle body to prevent it from working loose.

8. Insert the eye of the pulley into the outer slot at the upper welded tab. ***(Detail C)***

9. Attach the rope cleat by inserting the two (2) ¼" hex bolts with lock and flat washers, inserted through the cleat and tightened to the pole. ***(Detail B)***

10. Insert the non-looped end of the tether into the pulley and pull the tether until the looped end is even within a few inches from the non-looped end. Clip the 5/16" spring hook through the looped part of the tether rope. Clip the 5/16" spring clip around the corner of the net and binding. ***(Detail C)***

11. Pull on the tether to raise the net to the desired height.

12. Space the 3/16" spring hooks equally every 18" along the pole. Maintain the spring hook locations by clipping the spring hook around the vertical cable and the square mesh of the net as it is raised into position.

13. Wrap excess tether around rope cleat and tie off.

14. Once the net is raised, hang provided laminated warning sign at both ends of netting using (4) Zip Ties on each sign.

The net must be lowered to the ground when the wind speed is forecast to exceed 60 mph and/or prior to any extreme wind events. Sportsfield Specialties, Inc. strongly recommends the removal of the net prior to exposure to winter weather, including snow and/or ice storms. Removal/Lowering of the net will mitigate any unforeseen damage to the poles, net and/or attachment hardware. Storing the net in a dry, pest free location will help extend the life of the net. Sportsfield Specialties, Inc. will not be held liable or assume responsibility for any damage to the net, poles and/or corresponding attachment hardware if the net is not removed/lowered prior to the above described wind and/or weather events.

REPLACEMENT PARTS

Contact Sportsfield Specialties Customer Service at 1-888-975-3343 for replacement hardware.

Sportsfield Specialties, Inc.
P.O. Box 231
41155 State Highway 10
Delhi, N.Y. 13753
Phone: 888-975-3343
Fax: 607-746-8911
Website: www.sportsfieldspecialties.com

Heat shrink tubing is provided at turnbuckle locations
to prevent paint damage on poles and/or netting tears in high winds

Step 1

Slide the heat shrink tubing over the turnbuckle **PRIOR** to completing any cable assembly.

Step 2

After all cables are tensioned, center the heat shrink tubing over the turnbuckle.

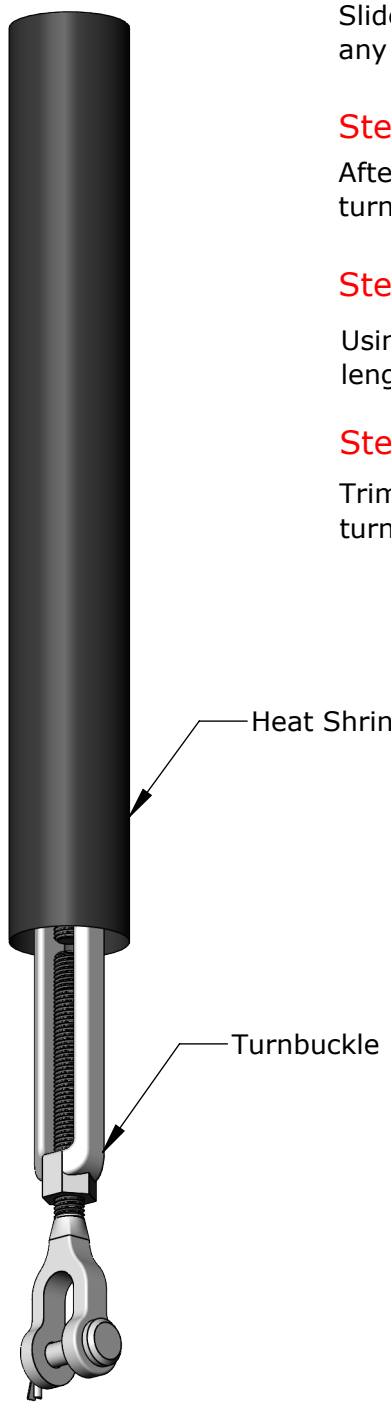
Step 3

Using a heat gun or suitable heat source, evenly apply heat over the entire length of tubing.

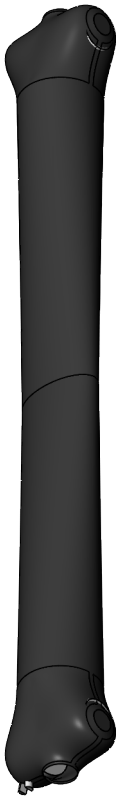
Step 4

Trim any excess length of heat shrink tubing beyond the end of the turnbuckle.

CAUTION: Avoid overheating the heat shrink tubing or it may become brittle or charred.



BEFORE HEATING



AFTER HEATING

Turnbuckle Size	Heat Shrink Tubing Required
3/8" Turnbuckle	PURCHP-0884: 1-1/2" OD Tubing
1/2" Turnbuckle	PURCHP-0885: 2" OD Tubing

TITLE: Heat Shrink Tubing Application

DWG NO: ID-00145

SHEET 1 OF 1