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

FSNS63040PL (GPFSNS63040PL), FSNS64040PL (GPFSNS64040PL)

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.

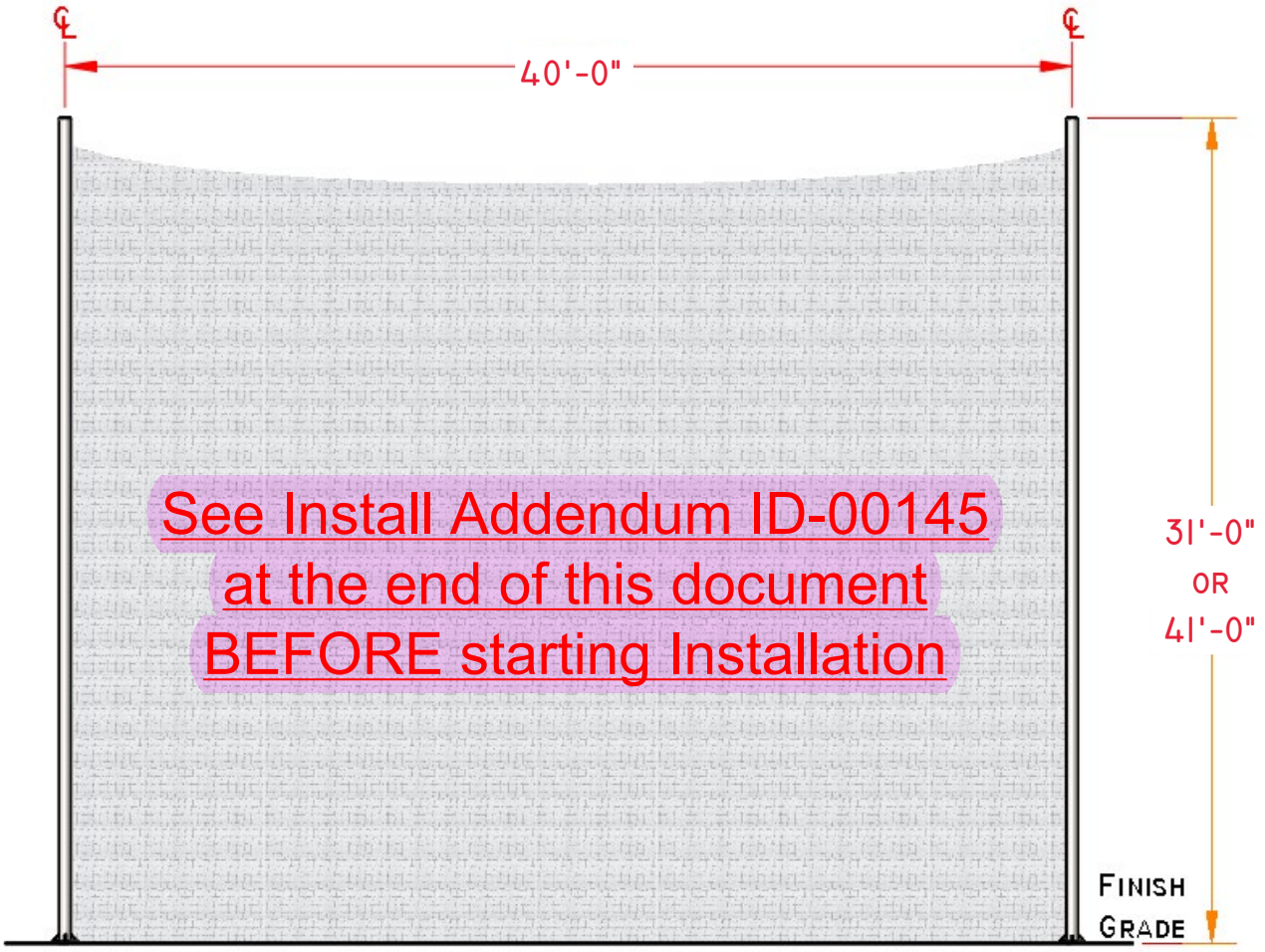


Figure 1 – Single Football Goal Post Ball Safety System (Sizes can be customized)

MOUNT PLATE & POLE INSTALL

1. Mark the locations of the football backstop poles on the field.

IMPORTANT: Do not exceed the center distance of the system purchased when installing the football backstop system.

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. Assemble the Steel Mounting plate as shown in Figure 2. Allow 2" between the top of the anchor bolt to the top side of the steel mounting plate. Cover ends of anchor bolts with plastic caps to protect bolts from concrete.

ITEM NO.	QTY.	E2 PART NUMBER	SAP PART NUMBER	DESCRIPTION
1	1	4512	E-0003-0002	1/2" STEEL GROUND PLATE
2	4	PURCHP-0680	PURCHP-0680	3/4-10X24" ANCHOR BOLT, GALVANIZED
3	16	108-HXN3_4-10-A193-B7-GALV	108-HXN-0003	3/4-10 GALVANIZED HEX NUT
4	8	111-FLW3_4-GALV	111-FLW-0003	3/4 GALV. FLAT WASHER
5	4	111-SLW3_4-GALV	111-SLW-0003	3/4-10 GALVANIZED LOCK WASHER
6	4	114-9753K55	PURCHP-0282	CAP, THREAD PLASTIC

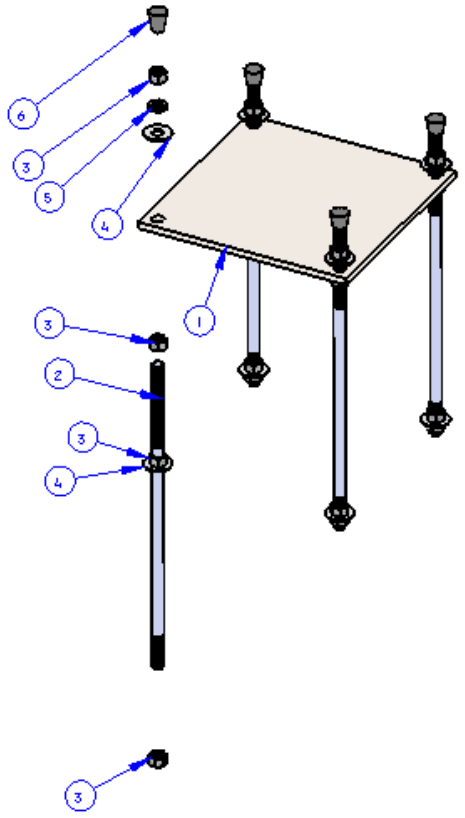


Figure 2 – Mounting Plate Assembly

4. After pouring concrete into the form, embed the mounting plate assembly into the concrete keeping the top surface of the steel plate flush with the top of the footing. Verify the steel plate is level and square to the End Zone line. Allow Concrete to cure.

5. Repeat for remaining mounting plates.

6. Insert the pole onto the previously installed mounting plate with 3/4-10 Hex Nuts, 3/4" Flat Washers, and 3/4" Lock Washers at each of the four (4) Anchor Bolts. Tighten all of the hardware, making sure pole remains plumb and level.

7. Repeat procedures for all remaining poles.

NET PREPARATION

Each run of a football backstop 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 3 illustrates the use of the net hardware.

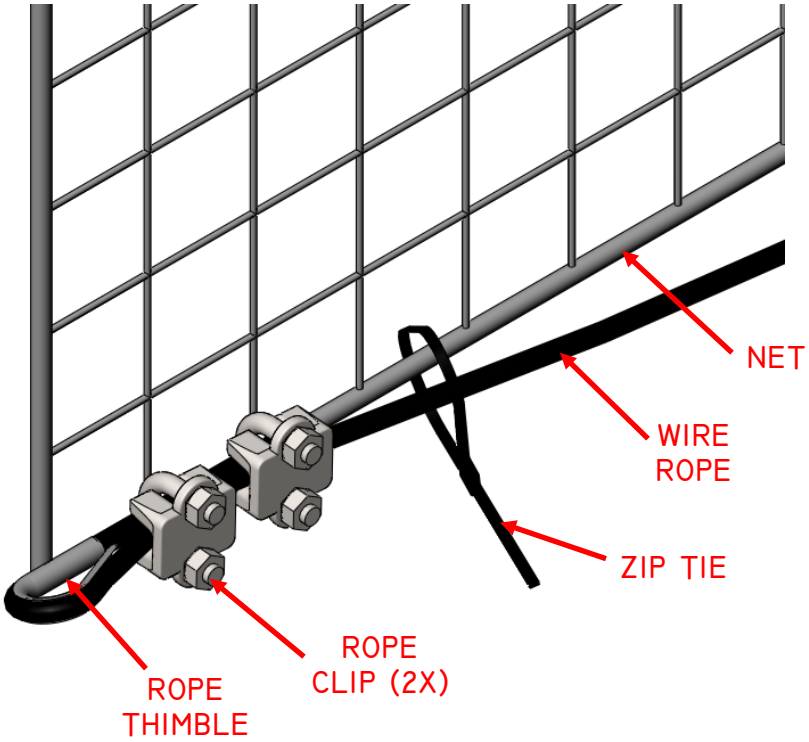


Figure 3 - Wire Rope to Bottom of Net Assembly

Wire Cable Clamping Do's and Dont's

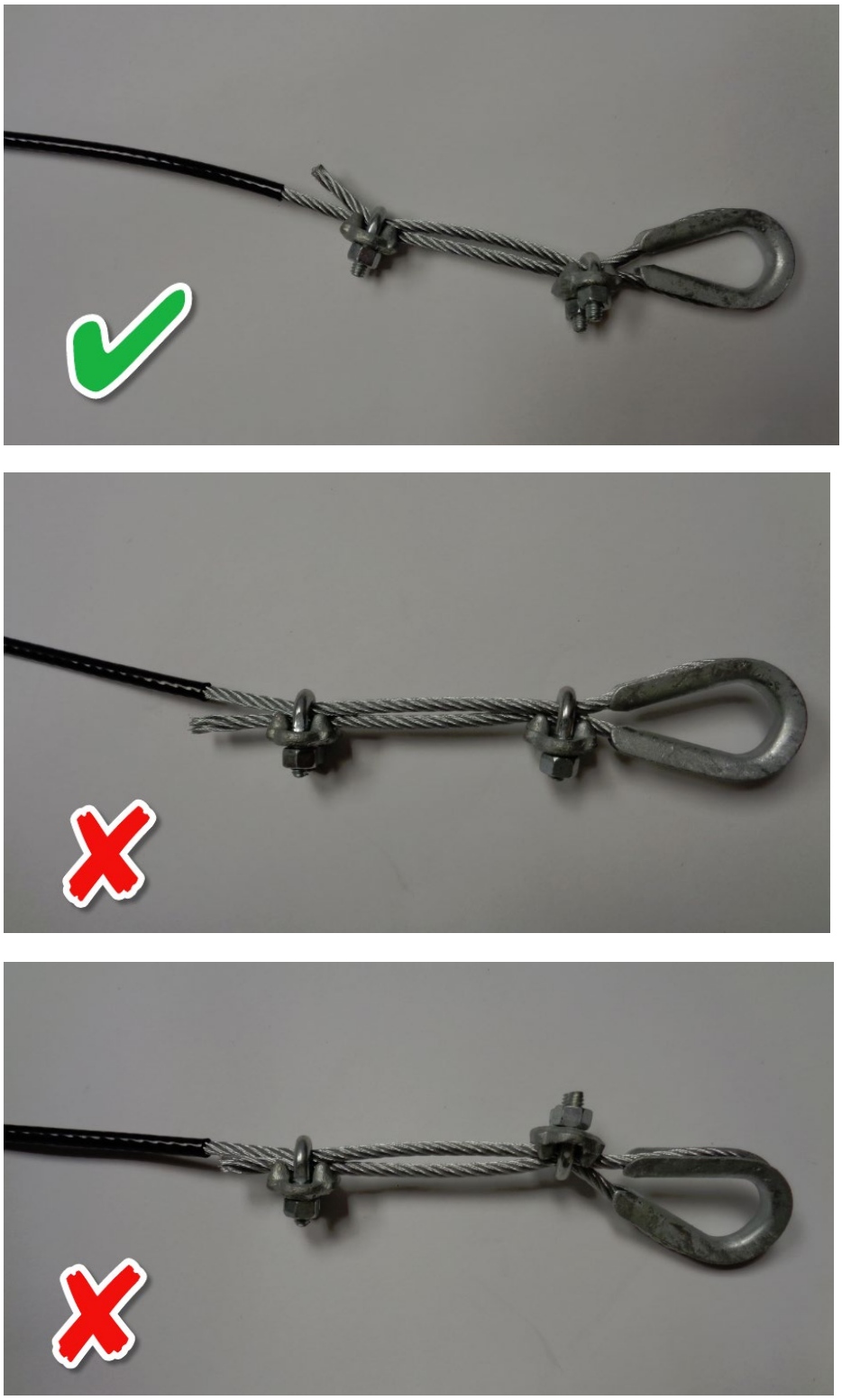


Figure 4 - Wire Rope, Thimble and Rope Clips Assembly

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 5***.

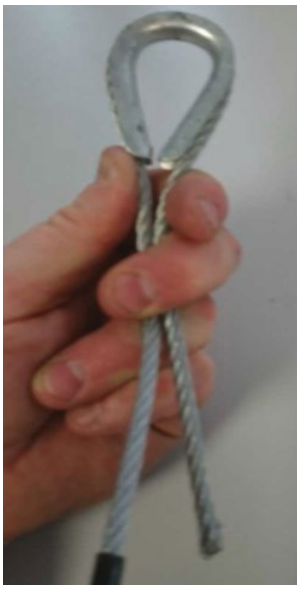


Figure 5 – Thimble and Rope Assembly

Figure 6 – 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 6***.

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 7***. 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.

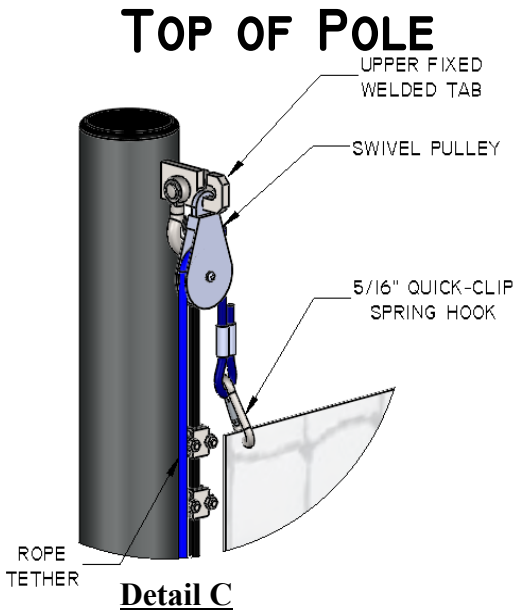
Figure 7 - Wire Rope to Bottom of Net Assembly

POLE HARDWARE

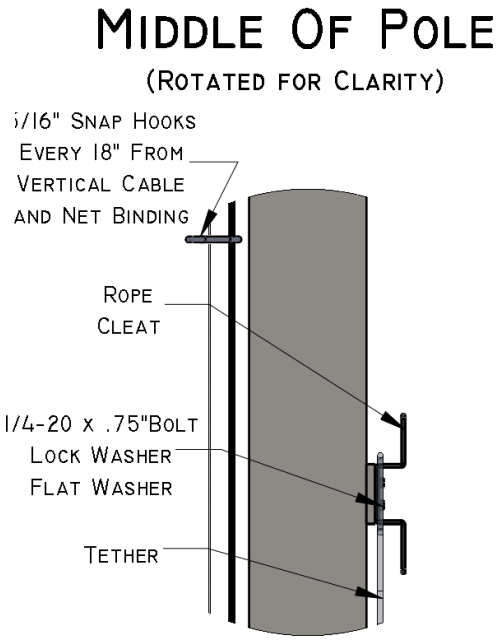
The following table lists the hardware required at each pole location.

Table 2 - Pole Hardware

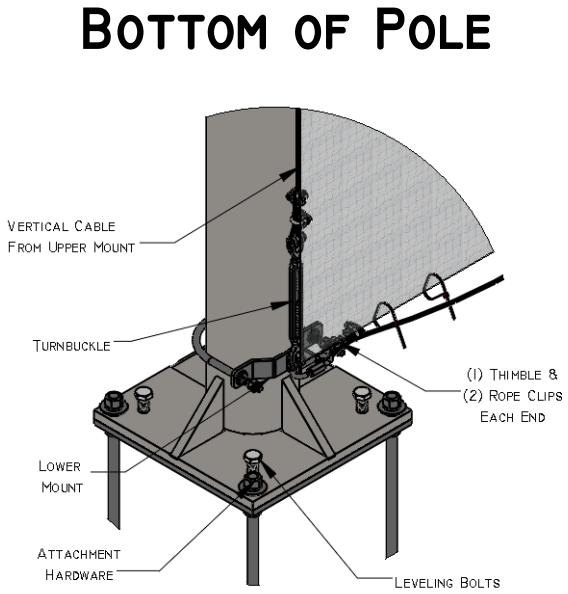
Item #	Part Number	Description	Qty. Per Pole
1	PURCHP-0048 (113-VGACB187/250-0050)	3/16", 7 x 19 Galvanized Wire Rope, Black Vinyl Coated to ¼" Length of each cable Height + 8'	1
2	PURCHP-0097 (114-116-304-SPHK2450-187N)	3/16" Spring Hook	1 per 18" Height
3	PURCHP-0009 (113-209860)	5/16" Spring Hooks	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



Detail C



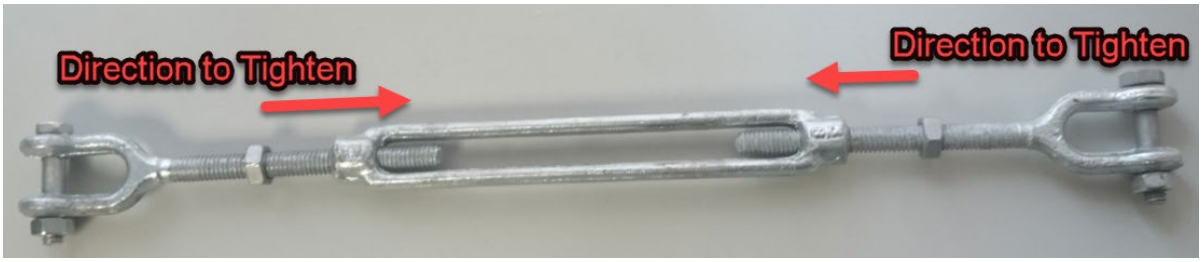
Detail B



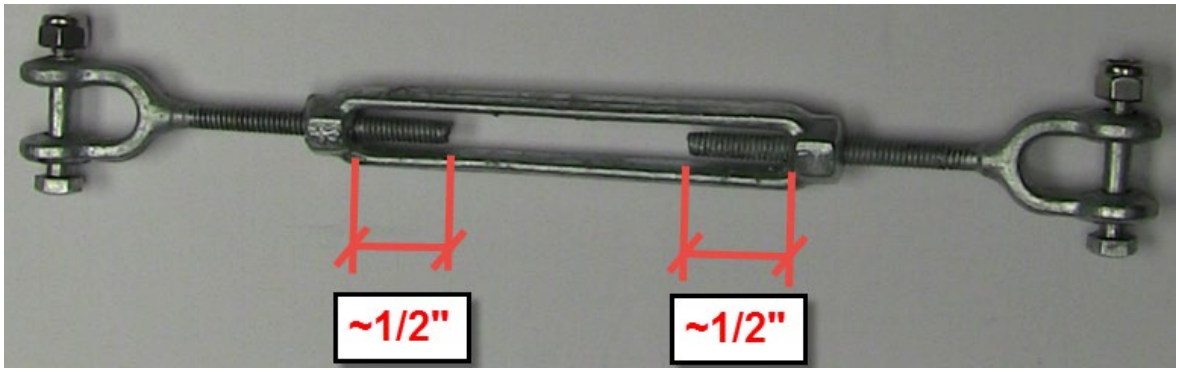
Detail A

1. Vertical cable needs to be assembled in the same manner as it was for Page 4-6 (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)***

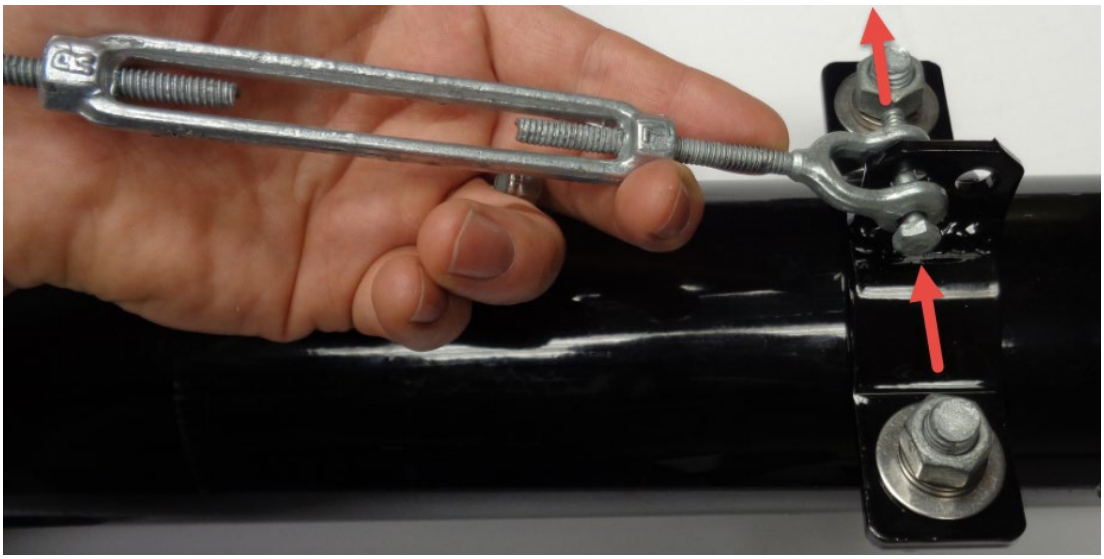
2. Turnbuckle assembly, with Jam Nuts:



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

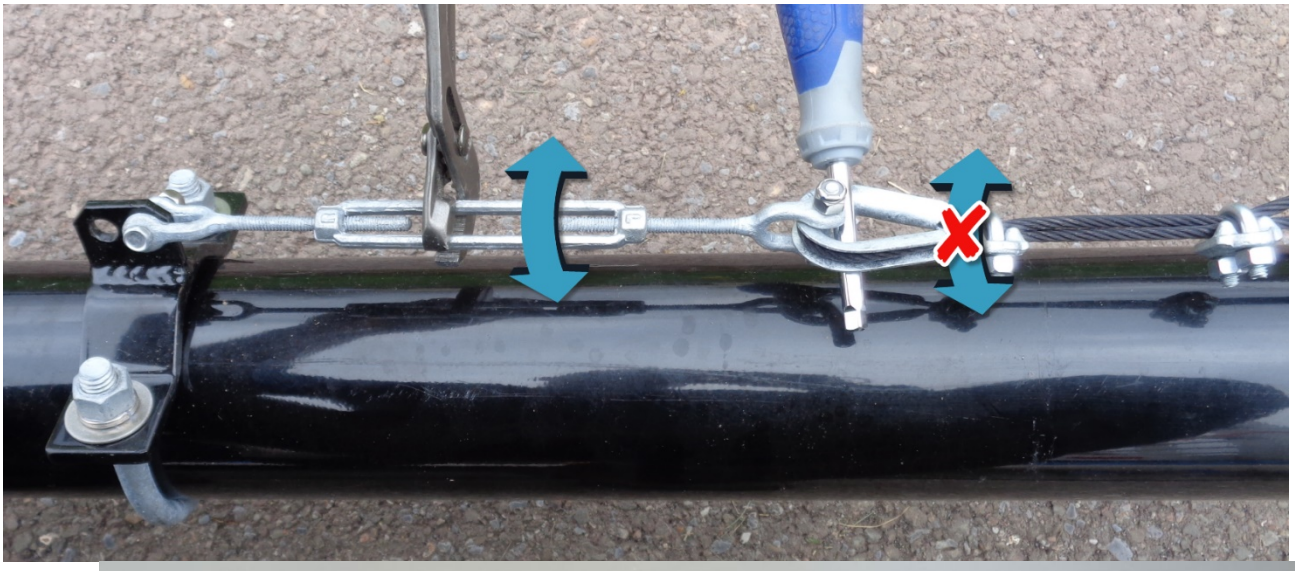


4. Attach one end of the turnbuckle to the top hole of bottom bracket tab:



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.

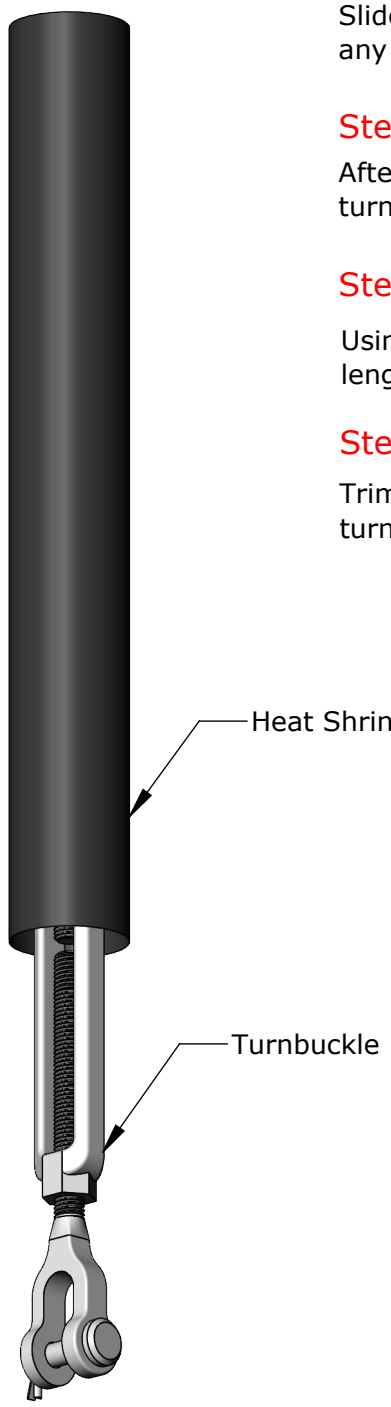
Step 3

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

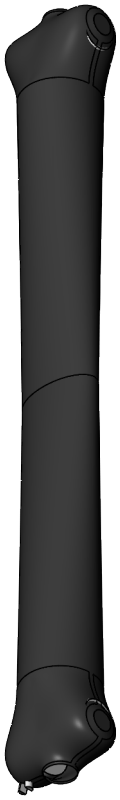
Step 4

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