



Installing the Jaypro Max-1 Football Goal Posts



Models:

FBGP-420/FBGP-920 (High School with 20FT Uprights)

FBGP-430/FBGP-930 (High School with 30FT Uprights)

FBGP-420C/FBGP-920C (College with 20FT Uprights)

FBGP-430C/FBGP-930C (College with 30FT Uprights)

1 Introduction

This user guide describes how to install the Jaypro Max-1 football goal post models FBGP-920, FBGP-930, FBGP-920C, FBGP-930C, FBGP-420, FBGP-430, FBGP-420C and FBGP-430C.

IMPORTANT NOTICE: If installing a Goalpost Hinge Kit (FBHG-1) use instructions provided with hinge kit in lieu of these.

This user guide is written for experienced mechanical contractors. If you need additional information or support to install your Jaypro goal post, you can reach the Jaypro Sports customer support team, Monday through Friday, 8:00 A.M. to 5:00 P.M. Eastern Time at 1-800-243-0533.

IMPORTANT NOTICE

- It is the installer's responsibility to ensure that the goalpost, gooseneck, and crossbar are properly located and lined up with respect to the field. Proper location and alignment should be confirmed with each step.

- It is the installer's responsibility to ensure that the crossbar is level and the uprights are plumb.
 - All critical holes are to be drilled by the installer in an effort to help ensure that all components are square, plumb, and level.

 - Verify after every drilling operation that affected components are still square, plumb, and/or level. Correct as necessary.

 - It is recommended that drilled holes be piloted with a 3/16" drill bit, and opened up incrementally to the final size.

2 Safety

Some of the goal post components are heavy and require at least three people to maneuver into place. To maintain control and prevent injury when moving heavy components, ensure you have a sufficient number of technicians to support the components without dropping them.

3 Equipment and Materials

Gather the following user-supplied equipment and materials:

- Equipment to excavate a 72- by 36-inch hole

- 20-foot high scaffold (or scissor lift or boom)
- 10-foot (minimum) high step ladder
- Mechanic's tool set
- Level, 3' minimum
- 100-foot tape measure
- Electric Drill
- Drill Bits:
 - 5/16", 1/2", and 5/8" bits
- Rubber mallet

The following equipment is optional, but strongly recommended:

- 17/32", 21/32", and 11/16" transfer punches (highly recommended)
- 3/16", 3/8" drill bits to pilot holes (highly recommended)
- Heavy grease or white lithium grease
- Baling wire (if using rebar)
- (6), 54-inch lengths of 5/8-inch rebar

4 Check Components

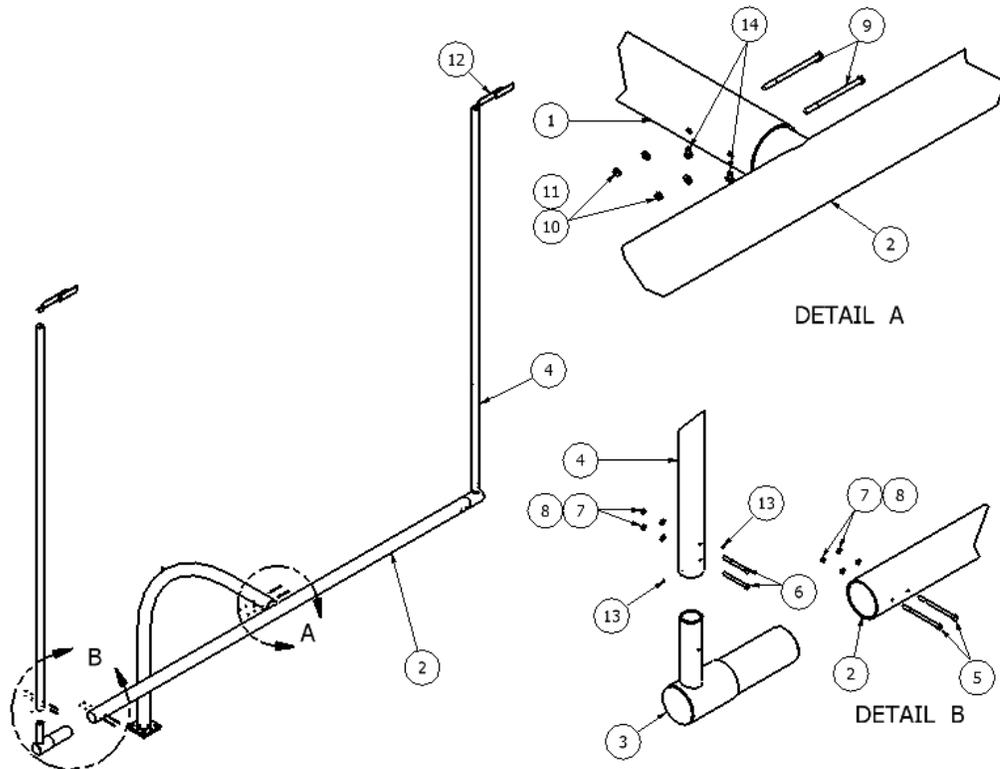
Goal posts are sold in pairs. Inspect your goal post shipment and ensure you received these parts:

Parts List

2 Goosenecks
2 Anchor Kits
2 Crossbars
4 Twenty (or thirty)-foot uprights
4 Upright end fittings
4 Wind socks
Yellow spray paint

Check Figure 1 to confirm that your Goal Post has shipped with all hardware. If any hardware or components are missing, contact the Jaypro Sports customer support team, Monday through Friday, 8:00 A.M. to 5:00 P.M. Eastern Time at 1-800-243-0533 for replacements.

Figure 1: FBGP-900 or FBGP-400 Included Components and Hardware.



(Quantities Given Per Goal Post)

1	1	FBGP-900US FBGP-400US	GOOSENECK 6 5/8 in OD (100 3/8 in Offset) GOOSENECK 6 5/8 in OD (82-3/8 in Offset)
2	1	FBGP-802 FBGP-802C	HIGH SCHOOLCROSSBAR ASSEMBLY COLLEGE CROSSBAR ASSEMBLY
3	2	FBGP-801	END FITTING
4	2	FBGP-803 FBGP-807	20' UPRIGHT ASSEMBLY 30' UPRIGHT ASSEMBLY
5	4	HS5066	1/2-13 x 8 in HEX HEAD SCREW, ZP
6	4	HS5042	1/2-13 x 5 in HEX HEAD SCREW, ZP
7	8	HN2951	1/2-13 NYLON LOCK NUT, ZP
8	8	HW2044	1/2 in SAE FLAT WAHSER, ZP
9	2	HS5179	5/8-11 x 7 1/2 in LONG HEX HEAD BOLT, ZP
10	2	HW2043	5/8" FLAT WASHER
11	2	HN2945	5/8-11 NYLOCK NUT
12	1	WS-42	STREAMER
13	4	HS966	1/4-20 x 1/4 in LONG SET SCREW
14	2	HS5194	3/8-16 x 3/4in FLANGE HEX HED SELF TAPPING

5 Where to Install the Foundation and Goosenecks

Installing the foundation and anchors in the proper location at each end of the field ensures that the gooseneck, cross bar, and uprights will be positioned according to high school and college football regulations. By rule, the front edge of the crossbar should be even with the inside edge (field side) of the end line, such that the crossbars measure 360 ft apart, inside to inside^{1,2}. Follow these steps to locate foundation.

1. From the field layout plan, determine and mark the location of the inside corners of the playing field including the end zone.
2. From the field layout plan or through consultation with the field contractor determine the final field elevation.
3. Using the corners as reference points, mark the points exactly 80 feet in from the inside edge of the sideline and **100-3/8 inches for FBGP 900 Series Goal Posts (82-3/8 inches for FBGP 400 Series)** in from the inside edge of the end zone at each end of the field (**Figure 2**).

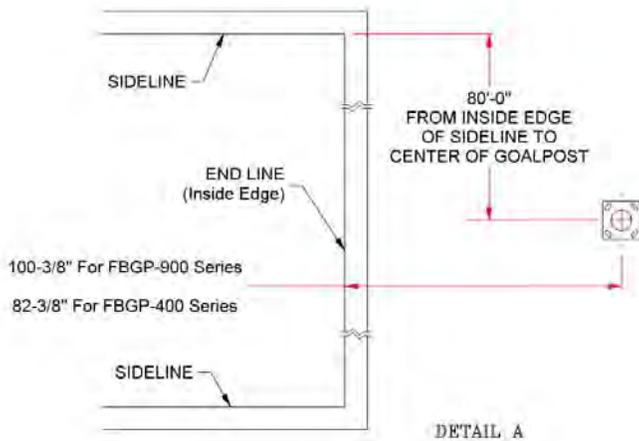
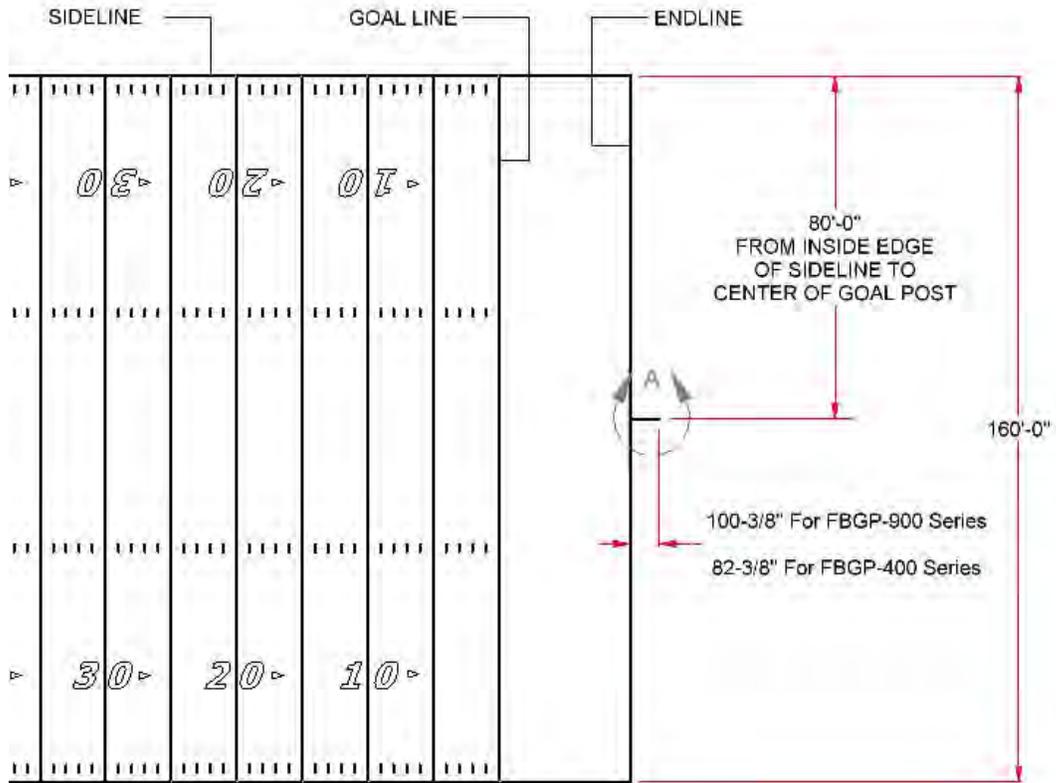
NOTE: The dimensions provided account for the deflection of the gooseneck under the weight of the crossbar and uprights.

¹ NFHS Football Rules Book, 2009

² NCAA Football Rules and Interpretations, 2002

Figure 2: Location of the Center of the Upright Footing

All measurements from field-side edges of lines.



Installation Steps

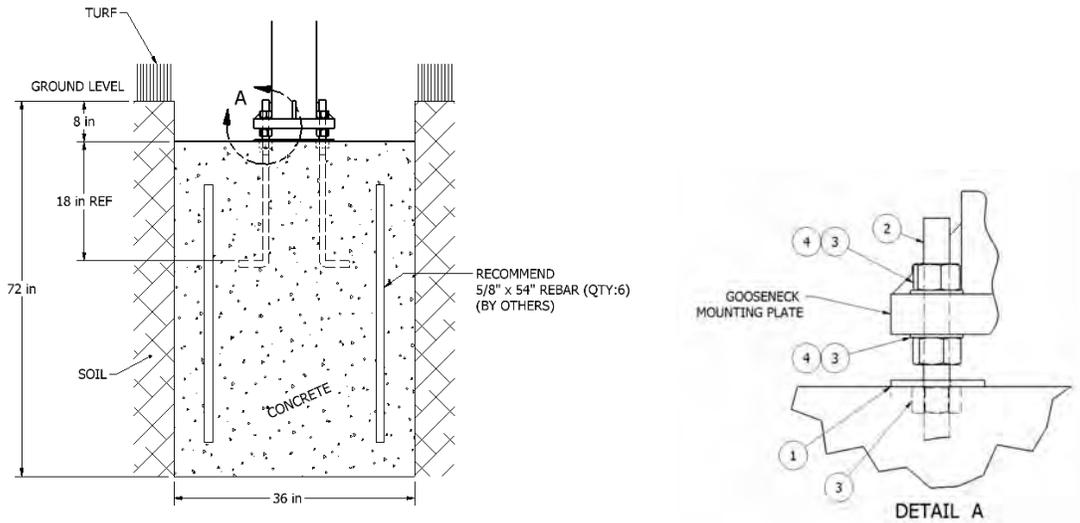
Follow these steps to install the foundation at each end of the playing field.

1. Excavate the footing hole; As shown in **Figure 3**.

NOTE: If installing a Goalpost Hinge Kit (FBHG-1) refer to Figure 4 and use installation instructions provided with the hinge kit goalpost assembly.

2. While not required, Jaypro recommends using 6 lengths of 5/8-inch rebar, 54 inches long, wired together into a 24-inch diameter basket and placed around the ground sleeve in the footer hole.
3. Fill the footing hole with 4,000 psi (minimum) concrete to 8 inches below ground level.
4. Assemble and install the anchor kit as shown.
5. Allow the concrete to cure for 48 hours before installing the gooseneck, crossbar and uprights.
6. Install gooseneck as shown. Note that the end of the gooseneck will deflect downwards approximately 1 1/2" after installing the crossbar and uprights.

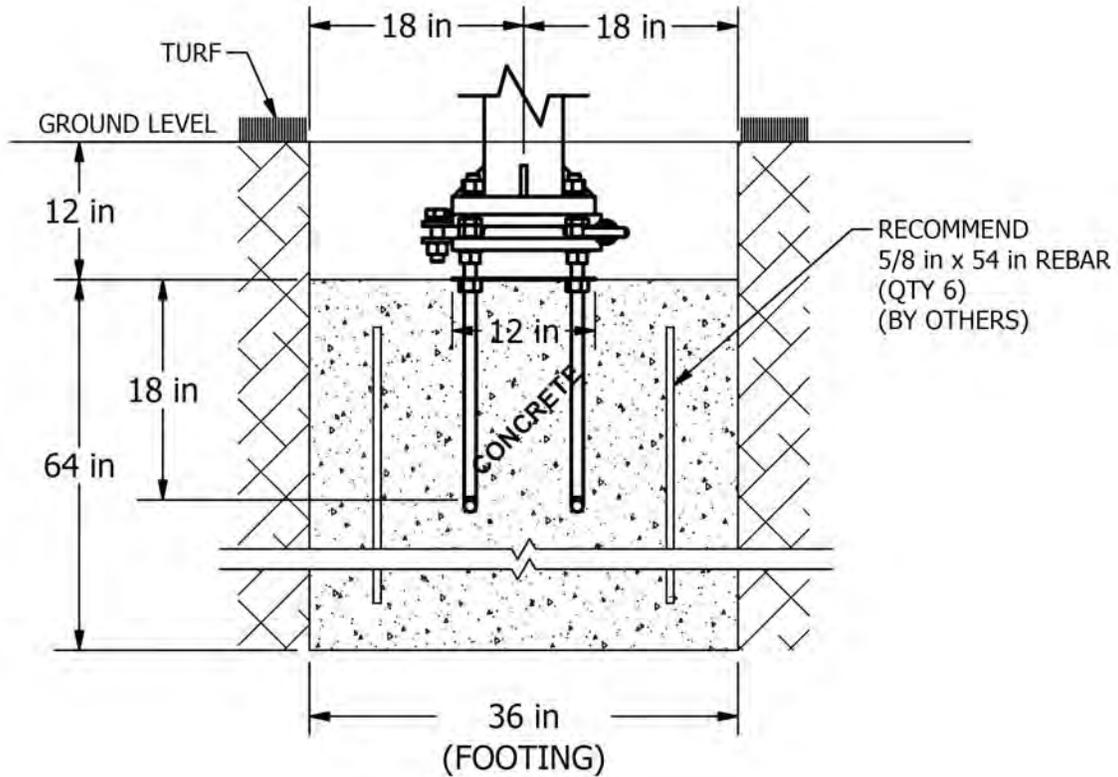
FIGURE 3 Footing Detail Surface Mounted Gooseneck



1	1	SR5402	FOOTING PLATE
2	4	SR5401	24" L-HOOK, GALV
3	12	HN274	1"-8 HEX NUT, GALV
4	8	HW5052	1" FALT WASHER, GALV
ITEM	QTY	PART #	DESCRIPTION

FIGURE 4 Footing Detail for Hinge Kit FBHG-1

NOTE: Footing Plate for Hinge is 12 in x 17 in note the orientation. Discard the footing plate supplied with the goalpost.



6 Install Gooseneck

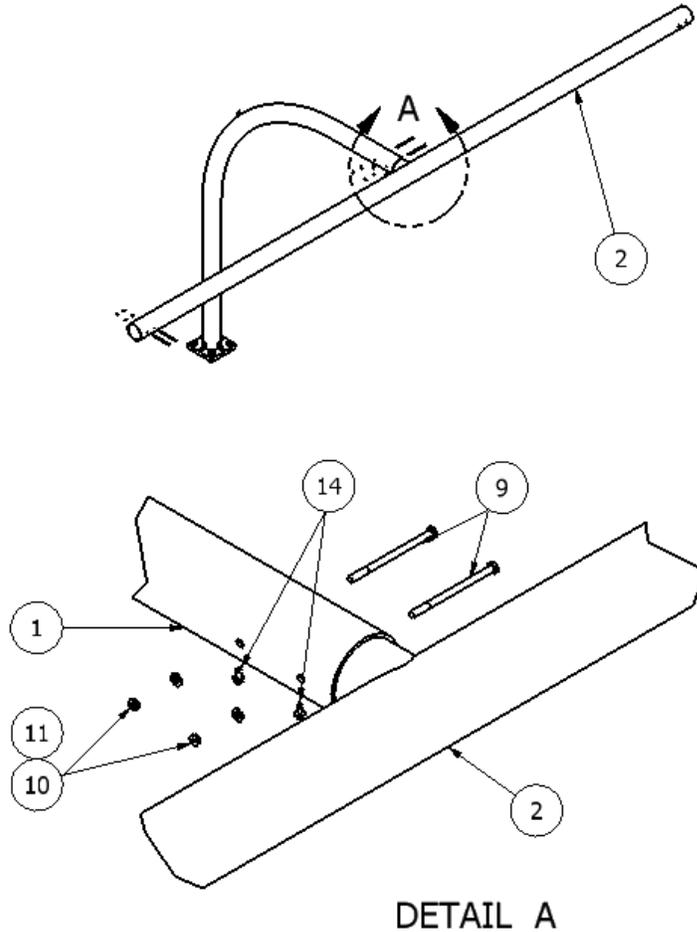
As shown in figure; plumb upright and make perpendicular to field. Note: The Gooseneck will deflect downward approximately 1 ½ inches due to the weight of the crossbar.

7 Install and Level the Crossbar

Follow these steps to install and level the crossbar (refer to **Figure 5 Installing and Leveling Crossbar**)

1. Carefully insert the crossbar nipple into the gooseneck.
 - a. Application of lubricant to crossbar and inside of gooseneck is strongly recommended.
2. Set the depth of the crossbar in the gooseneck such that the front edge of the crossbar is aligned with the inside (field side) edge of the end line. See **Figure 2**.
3. Level the crossbar.
 - a. It is recommended that you fasten a level to the crossbar to quickly and easily verify level after each step.
4. Drill a 5/8" hole in crossbar insert using either of the holes in the gooseneck as a guide.
 - a. Use of a 21/32" transfer punch is strongly recommended.
 - b. It is recommended that you pilot the hole with a 3/16" bit, step up to a 3/8" bit and finish with a 5/8" bit.
 - c. To ensure proper alignment of holes, do not try to drill all the way through both faces of crossbar at once. Instead drill from each side of crossbar and check for level after each drilling operation.
5. Insert a 5/8"-11 x 7.5-inch-long hex head bolt through the hole in the gooseneck and crossbar fitting. Install 5/8-inch washers and 5/8"-11 nuts on the bolts, tighten, and verify the depth and levelness of the crossbar.
6. Drill a second 5/8" hole in the same manner as the first.
7. Verify depth and levelness of crossbar and tighten both nuts as much as possible.
8. Drill two 5/16" holes in the bottom of the gooseneck through the gooseneck and crossbar insert. Drill the holes approximately 3 and 6 1/2-inches from the edge of the gooseneck (where the crossbar inserts).
 - a. Check level of crossbar after each drilling operation. If the crossbar has come out of level, re-level and drill a new hole ~1" away.
9. Thread the 3/8"-16 self-tapping screws into the drilled holes.

Figure 5: Installing and Leveling the Crossbar



(Quantities Given Per Goal Post)

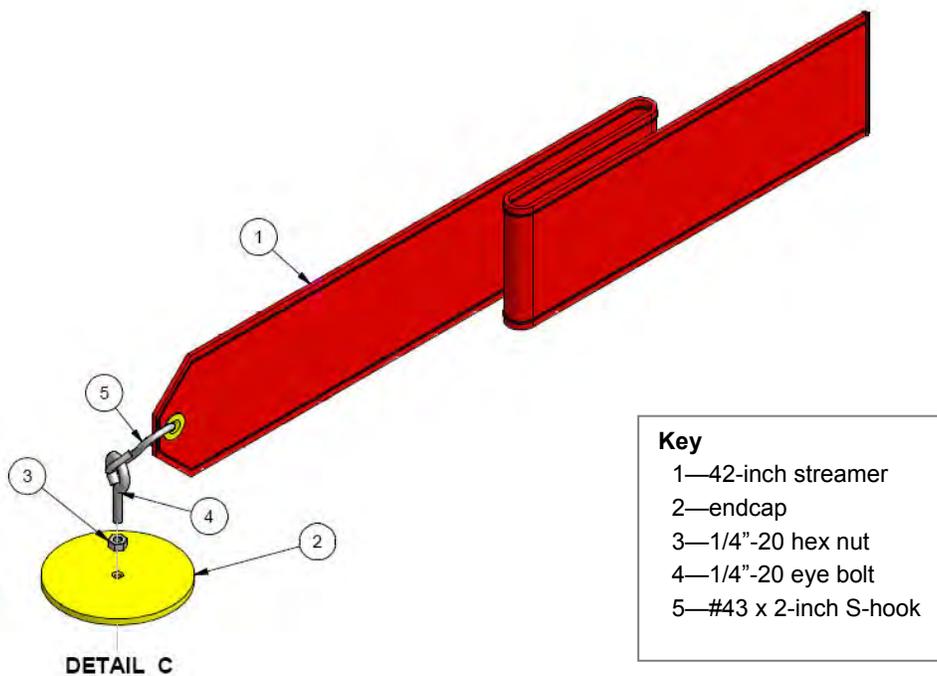
1	1	FBGP-900US FBGP-400US	A -	GOOSENECK 6 5/8 in OD 8ft EXT W/LEVELING PLATE GOOSENECK 6 5/8 in OD 6ft EXT W/LEVELING PLATE
2	1	FBGP-802C FBGP-802	C	COLLEGE CROSSBAR ASSEMBLY, 6-5/8" Sch 40 ALUMINUM H.S. CROSSBAR ASSEMBLY, 6-5/8" Sch 40 ALUMINUM
9	4	HS5179	-	5/8-11 x 7 1/2in LONG HX HEAD SCREW ZP
10	2	HW2043	-	5/8 FLAT WASHER ZP
11	2	HN2945	-	5/8-11 NYLOCK NUT
14	2	HS5194	-	3/8-16 x 3/4 in FLANGE HEX HD SELF TAPPING
ITEM	QTY	PART #	REV	DESCRIPTION

8 Install the Wind Streamers

Before installing the uprights, install the wind streamer following these steps (see **Figure 6**).

1. Hook one end of the #43, 2-inch S hook into the streamer eyelet and crimp the hook with pliers .
2. Hook the other end of the S hook into the 1/4"-20 eye-bolt and crimp the hook with pliers.
3. Thread the 1/4"-20 jam nut onto the eye-bolt, and thread the eye-bolt into the upright cap.
4. Tighten the jam nut against the end cap.
5. Repeat the above steps for the other wind streamers.

Figure 6: Installing the Wind Streamers



9 Install the End Fittings & Uprights

Follow the steps below to install the end fittings and uprights. (See **Figure 7**)

9.1 Preliminary Installation of First Upright and End Fitting

1. Insert one end fitting into one end of the crossbar.
 - a. It is recommended that you lubricate the end fitting and the inside of the crossbar.
2. Rotate end fitting such that the upright insert is pointing downward at about a 45-degree angle.
3. Lift one upright over the upright insert on the end fitting.
4. Install a 1/2"-13 x 5-inch bolt, a 1/2" washer and 1/2"-13 nut in through the upright and pre-drilled hole in the upright insert.
5. Rotate the end fitting until the upright is vertical.
6. Verify that end fitting is completely inserted into crossbar.
 - a. Use a rubber mallet if necessary to ensure that the end fitting is inserted completely.
7. Plumb the upright/end fitting in two directions: front to back (perpendicular to goal line) and side to side (parallel to goal line).
 - a. Use the two set screws in the upright to adjust and maintain the plumb of the upright in the direction parallel to the goal line (DO NOT DRILL HOLE IN UPRIGHT INSERT YET).
8. Drill a 1/2" hole in end fitting using the hole in the crossbar closest to the gooseneck as a guide.
 - a. Use of a 17/32" transfer punch to center hole is strongly recommended.
 - b. It is recommended that you pilot the hole with a 3/16" bit, step up to a 3/8" bit and finish with a 1/2" bit.
 - c. To ensure proper alignment of holes, do not try to drill all the way through both faces of end fitting at once. Instead drill from each side of end fitting and check for plumb after each drilling operation.
9. Insert a 1/2"-13 x 7.5-inch-long hex head bolt through the hole in the crossbar and end fitting. Install two 1/2-inch washers and 1/2"-13 nut and tighten.

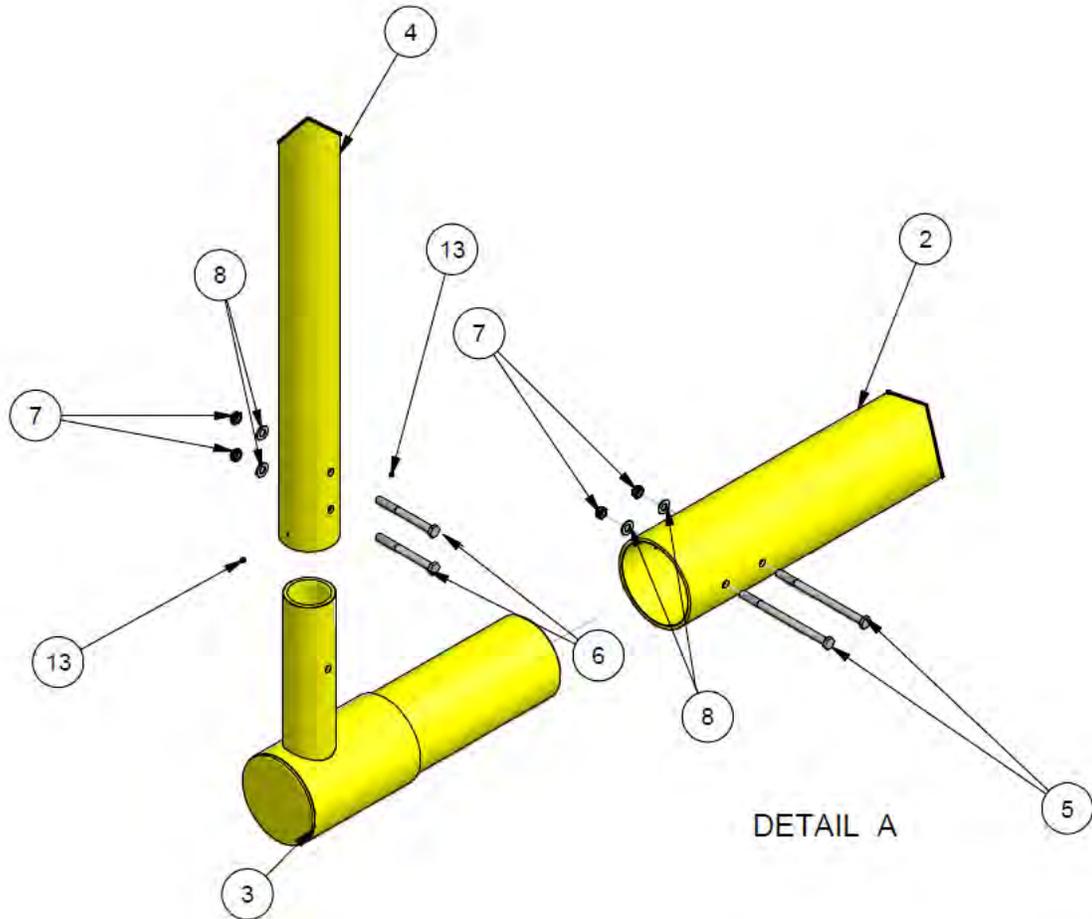
9.2 Installation of Second Upright and End Fitting

1. Repeat steps 1 through 9 of section 9.1 above for the other end fitting and upright.
2. Confirm level of crossbar and plumbness of both uprights, adjust as necessary.
3. Drill second hole in end fitting in manner described above, using the other hole in crossbar as a guide.
4. Install 1/2"-13 x 7-1/2" hex bolt, washers, and nut.
5. Confirm level of crossbar and plumbness of both uprights, adjust as necessary.
6. Drill second hole in upright insert in manner described above, using the remaining hole in upright as a guide.
7. Install 1/2"-13 x 5" hex bolt into hole.

9.3 Complete Installation of First Upright and End Fitting

1. Confirm level of crossbar and plumbness of both uprights, adjust as necessary.
2. Repeat steps 1 through 7 in section 9.2 above for other upright and end fitting.
3. Tighten all bolts in end fittings and uprights as much as possible.

Figure 7: Installing End Fittings and Uprights



ITEM	QTY	DESCRIPTION
2	1	H.S./COLLEGE CROSSBAR ASSEMBLY, 6-5/8" Sch 40 ALUMINUM
3	2	END FITTING
4	2	20'/30' UPRIGHT ASSEMBLY, 4" OD, ALUMINUM
5	4	1/2" - 13 x 8" HX HD SCREW ZINC PLATED
6	4	1/2" - 13 x 5 HX HD SCREW ZINC PLATED
7	8	1/2" - 13 NYLOCK NUT ZINC PLATED
8	8	1/2" FLAT WASHER ZINC PLATED
13	4	1/4"-20 x 1/4" LONG SET SCREW



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