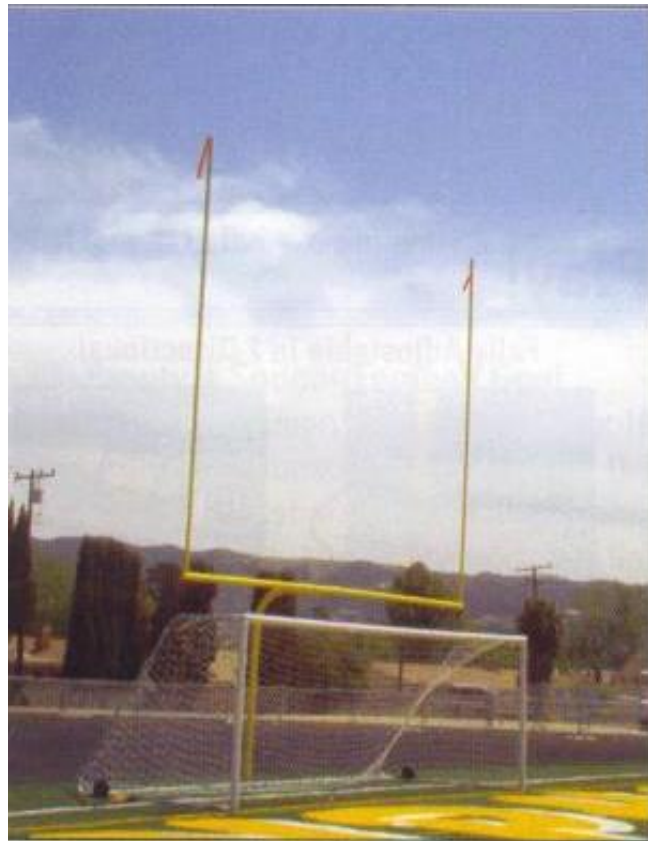




## ***Installing the Jaypro Max-1 Football Goal Posts***

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***Models FBGP-820/FBGP-520  
FBGP-830/FBGP-530  
FBGP-820C/FBGP-520C  
FBGP-830C/FBGP-530C***

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# 1 Introduction

This user guide describes how to install the Jaypro Max-1 football goal post models FBGP-820, FBGP-830, FBGP-820C, FBGP-830C, FBGP-520, FBGP-530, FBGP-520C and FBGP-530C. It also includes instructions on installing optional ground sleeves.

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 74" by 36" hole
- 20'-high scaffold (or scissor lift or boom)
- 10' (minimum) high step ladder
- Mechanic's tool set
- Level, 3' minimum
- 100' 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" lengths of 5/8" rebar

### 4 Check Components

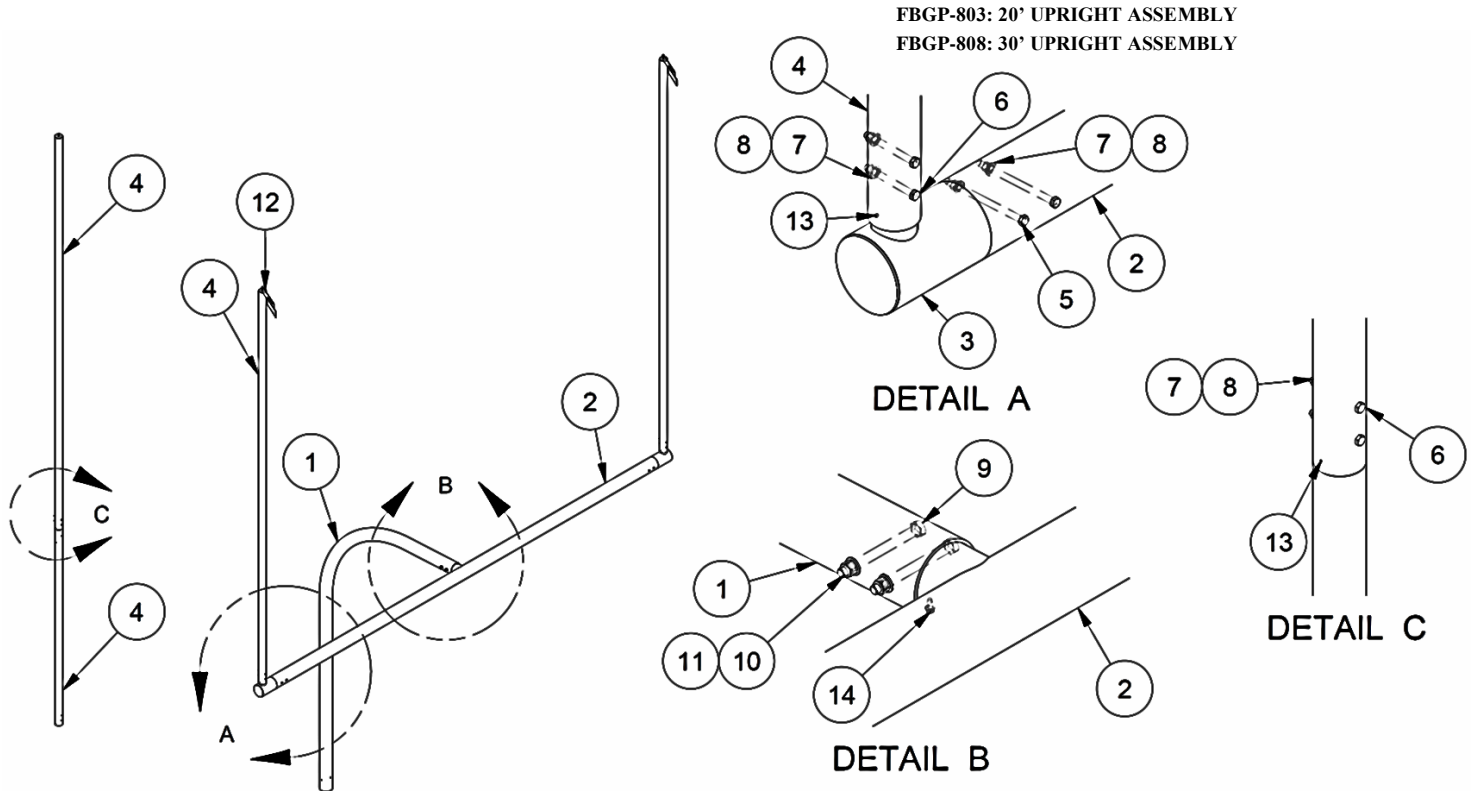
Goal posts are sold in pairs. Inspect your goal post shipment and ensure you received these parts:

- 2 Ground sleeves (absent for permanent installations)  
\*Verify that you have the correct style ground sleeve (see **Figure 2**)
- 2 Goosenecks
- 2 Crossbars
- 4 Twenty (or thirty)-foot uprights
- 4 Upright end fittings
- 4 Wind Streamers
- Yellow spray paint

Hardware (extra hardware for 30' upright seen in **Figures 1 & 10**):

- (4) 1/2"-13 x 8" hex head screws
- (4) 1/2"-13 x 5" hex head screws
- (8) 1/2"-13 nylon lock nuts
- (8) 1/2" flat washers
- (2) 5/8"-11 x 7 1/2" hex head bolts
- (2) 5/8" flat washers
- (2) 5/8"-11 nylon lock nuts
- (4) 1/4"-20 x 1/4" set screws
- (2) 3/8"-16 x 3/4" flanged hex head self-tapping screws

**Figure 1: FBGP-800 & FBGP-500 Included Components and Hardware.**

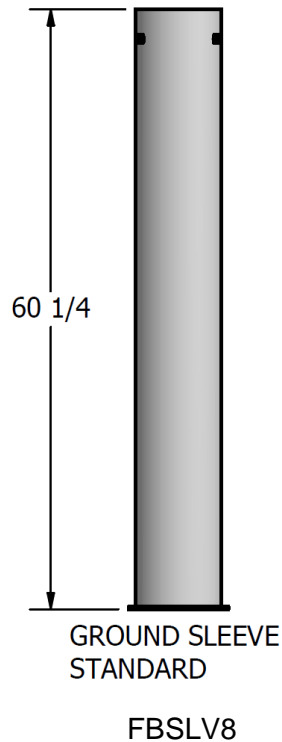


(Quantities given per goal post, \*Used only for 30' uprights, \*\*Used only for 500 Series)

FBGP-802: HIGH SCHOOL CROSSBAR ASSEMBLY (23'4" UPRIGHT SPACING)  
FBGP-802C: COLLEGE CROSSBAR ASSEMBLY (18'6" UPRIGHT SPACING)

1	1	FBGP-800US FBGP-500US	GOOSENECK 6 5/8" OD (100 3/8" Offset) GOOSENECK 6 5/8" OD (82-3/8" Offset)
2	1	FBGP-802 FBGP-802C	HIGH SCHOOL CROSSBAR ASSEMBLY COLLEGE CROSSBAR ASSEMBLY
3	2	FBGP-801	END FITTING
4	2	FBGP-803 FBGP-808	20' UPRIGHT ASSEMBLY 30 ' UPRIGHT ASSEMBLY
5	4 / 8*	HS5066	1/2-13 x 8" HEX HEAD SCREW, ZP
6	4**	HS5042	1/2-13 x 5" HEX HEAD SCREW, ZP
7	8 / 12*	HN2951	1/2-13 NYLON LOCK NUT, ZP
8	8 / 12*	HW2044	1/2" SAE FLAT WASHER, ZP
9	2**	HS5179	5/8-11 x 7 1/2" LONG HEX HEAD BOLT, ZP
10	2**	HW2043	5/8" FLAT WASHER
11	2**	HN2945	5/8-11 NYLON NUT
12	2	WS-42	STREAMER
13	4 / 8*	HS966	1/4-20 x 1/4" LONG SET SCREW
14	2	HS5194	3/8-16 x 3/4" FLANGE HEX HD SELF TAPPING

**Figure 2: Ground sleeve.**



## 5 Where to Install the Ground Sleeves and Goosenecks

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<sup>1,2</sup>. Follow these steps to locate each ground sleeve.

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-800 Series offset Goal Posts (82-3/8 inches for FBGP-500 Series offset)** in from the inside edge of the end zone at each end of the field (**Figure 3**).

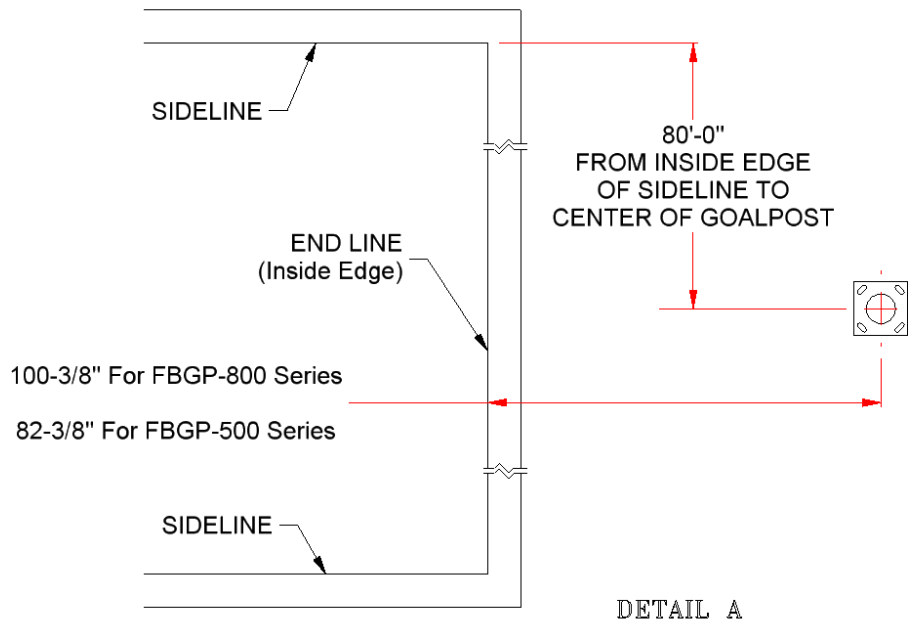
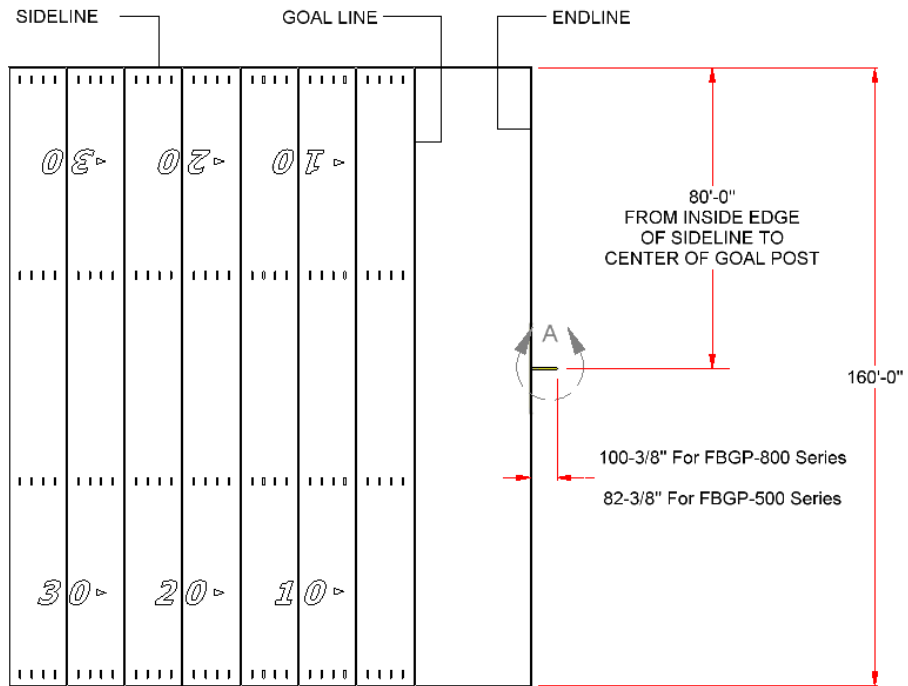
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<sup>1</sup> NFHS Football Rules Book, 2009

<sup>2</sup> NCAA Football Rules and Interpretations, 2002

**Figure 3: Location of the Center of the Ground Sleeve**

All measurements from field-side edges of lines.



## 6 Install the Ground Sleeve

Use of a ground sleeve allows the goalpost to be removed at a later date if necessary. The MAX-1 may be ordered with a 60-1/4" tall ground sleeve (**FBSLV8**).

**IMPORTANT:** MEASURE GROUND SLEEVE BEFORE CONTINUING WITH INSTALLATION TO ENSURE THAT YOU HAVE THE CORRECT MODEL FOR YOUR INSTALLATION (SEE **Figure 2**).

Alternatively, the MAX-1 may be permanently installed without a ground sleeve. For installation without a ground sleeve skip ahead to **Section 8**.

Key points you must remember when installing the ground sleeves:

- The top of the ground sleeve must be exactly 1-5/8" below the ground level to obtain the correct cross bar height.
- You must install the ground sleeves so they will center the goosenecks at the points determined in **Section 5**.
- Use the footing hole requirements as a guide. You should consult local codes and examine soil conditions to determine final depth and size. A 36" diameter footing hole is an absolute minimum and you should not use a smaller footing hole. Larger diameter footing holes are acceptable.
- Consider the turf to be the ground level.

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

### ***Installation Steps***

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

1. Excavate the footing hole:
  - a. Refer to **Figure 4** if you are installing the standard ground sleeve.
  - b. Skip ahead to **Section 8** if you are installing the gooseneck w/o ground sleeve.

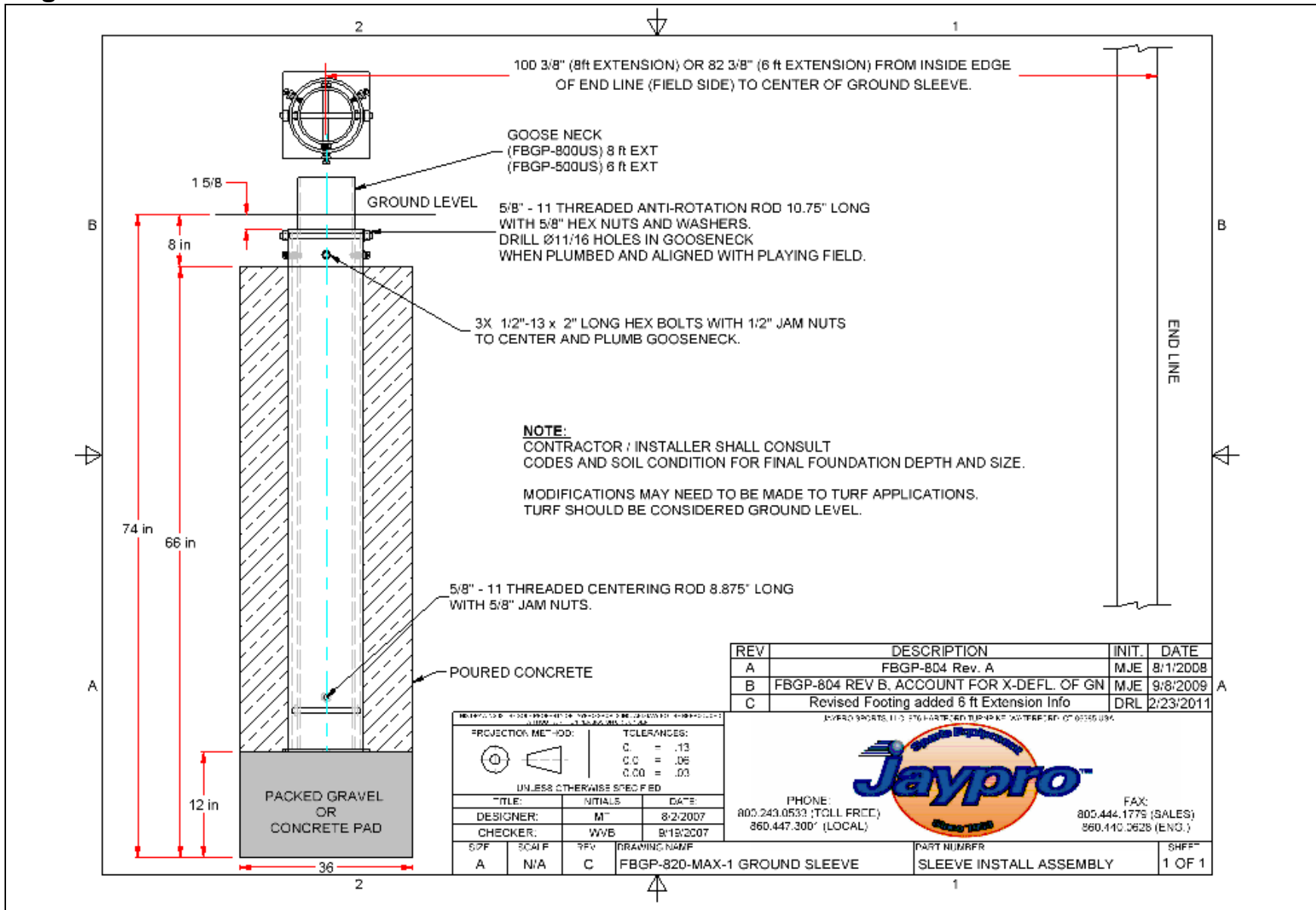
**Note:** If you are unable to excavate a clean hole due to soil conditions, excavate a wider hole, install a 36" diameter Sonotube, and backfill the Sonotube.

2. Pack the bottom of the footing hole with 12-1/4" of gravel or concrete block or pour a 12-1/4" deep concrete pad and allow the concrete pad to cure for 48 hours.



3. Lower the ground sleeve into the footing hole. The top of the ground sleeve should be exactly 1-5/8" below the ground level.
4. While not required, Jaypro recommends using 6 lengths of 5/8" rebar, 54" long, wired together into a 24" diameter basket and placed around the ground sleeve in the footer hole.
5. Ensure that the ground sleeve is plumb.
6. Ensure that the center of the ground sleeve opening is positioned exactly at the point determined in **Section 5**.
7. Support the ground sleeve so it will not move while pouring concrete.
8. Fill the footing hole with 4,000 psi (minimum) concrete to 6 inches below ground level.
9. Allow the concrete to cure for 48 hours before installing the crossbar and uprights.

**Figure 4: Installation of the Standard 60-1/4-inch Ground Sleeve**



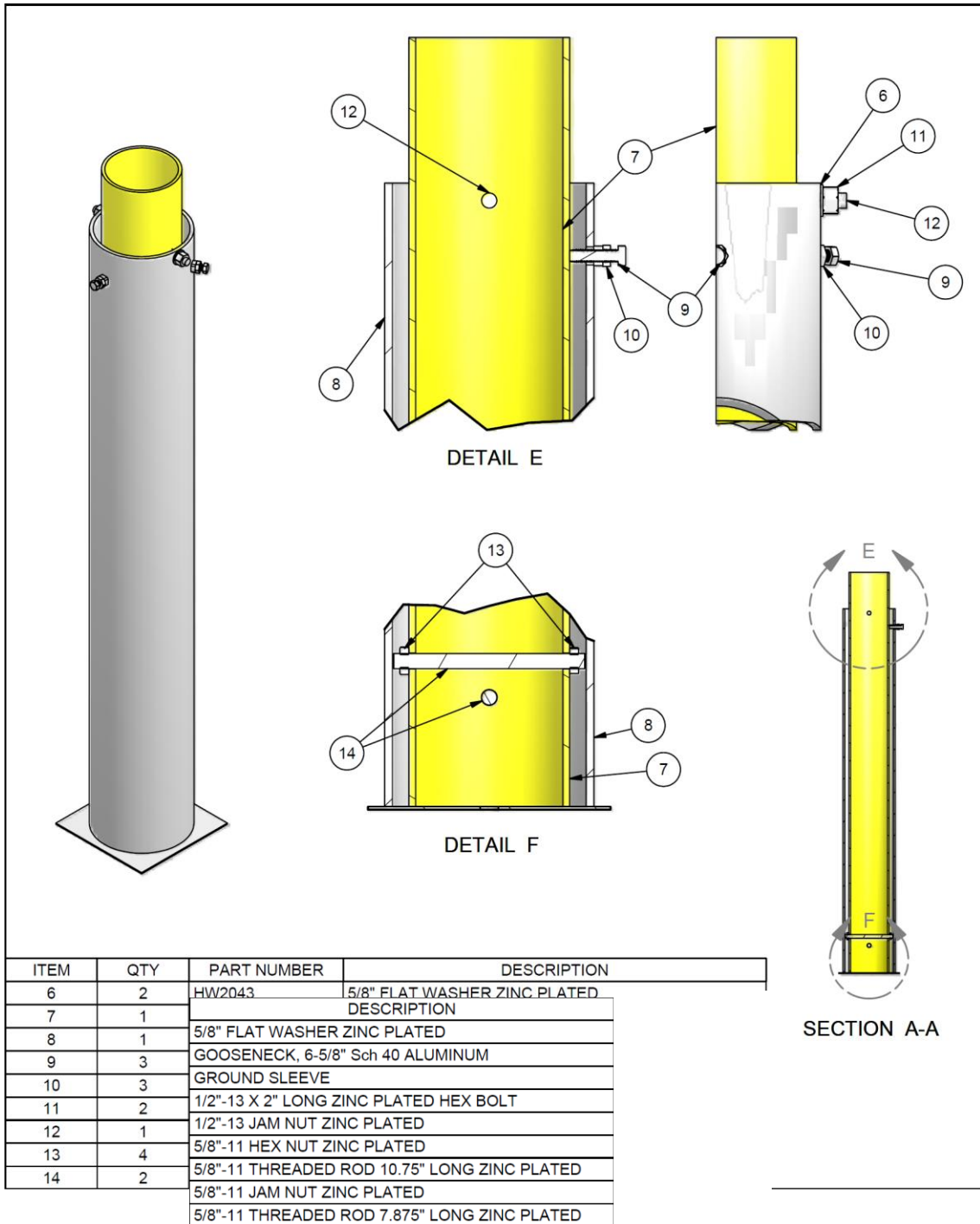
## 7 Install the Gooseneck

The procedure below describes the installation of the gooseneck into the ground sleeve; see **Figure 4** and **Figure 5** for details. If you are installing the gooseneck without a ground sleeve, skip ahead to **Section 8**.

The gooseneck slides into the non-adjustable ground sleeve and is centered within the sleeve using centering rods installed at the bottom of the gooseneck and centering/plumbing hex bolts and jam nuts at the top of the ground sleeve.

1. Install the three 1/2"-13 hex bolts into the three 1/2"-13 nuts welded into the top of the ground sleeve.
2. Thread all three 1/2"-13 jam nuts all the way onto the three 1/2"-13 x 2" long hex bolts.
3. Lift the gooseneck and slide it into the ground sleeve. Align the gooseneck overhang so it is exactly perpendicular to the goal line.
4. Plumb and center the gooseneck (with respect to the ground sleeve) and ensure that the gooseneck is properly aligned with the field of play.
5. Tighten the three hex bolts as much as possible to lock it in position.
  - a. Once all three bolts are pressed against the gooseneck, tighten each bolt in sequence a quarter-turn at-a-time to ensure that the alignment is not altered when tightening bolts.
  - b. Tighten the 1/2"-13 jam nuts against the ground sleeve.
6. Confirm that the gooseneck is till plumb and correctly aligned.
7. Drill two 5/8" holes in the gooseneck using the pre-drilled holes in the ground sleeve for location and alignment.
  - a. It is strongly recommend that an 11/16" transfer punch be used to locate the holes to ensure correct alignment of the holes.
8. Install a 5/8"-11 x 10-3/4"-long threaded anti-rotation rod through the holes in the ground sleeve (and through the holes drilled in Step 7, above).
9. Install two 5/8" washers and two 5/8"-11 nuts on the ends of the anti-rotation rods.

**Figure 5: Installation of the Gooseneck in the Ground Sleeve**



## 8 Install the Gooseneck Without Ground Sleeve

### *Installation Steps*

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

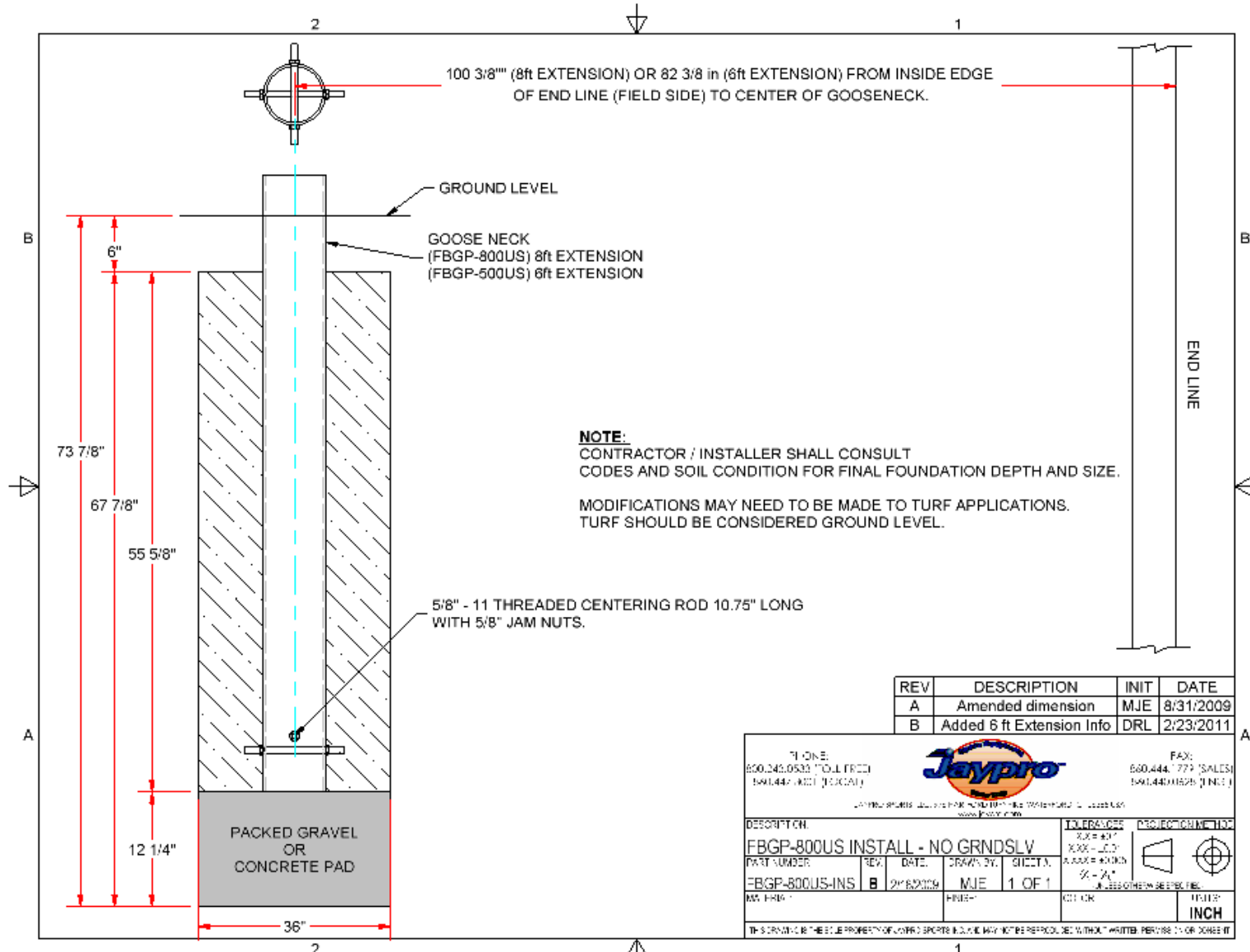
Excavate a footing hole using the dimensions shown in **Figure 6**.

**Note:** If you are unable to excavate a clean hole due to soil conditions, excavate a wider hole, install a Sonotube, and backfill the Sonotube.

1. Pack the bottom of the footing hole with 12-1/4" of gravel or concrete block, or pour 12-1/4" deep concrete pad and allow the concrete pad to cure for 48 hours.
2. Install 2 lengths of 5/8"-11 x 10-3/4" threaded rod into holes in bottom of gooseneck.
  - a. The unit ships with two different lengths of 5/8"-11 threaded rod (2 pcs each). Be sure to use the longer 10-3/4" lengths and not the 8-7/8" lengths.
3. Center threaded rod and fasten with 5/8" washers and nuts.
4. Lower the gooseneck into the footing hole.
5. While not required, Jaypro recommends using 6 lengths of 5/8" rebar, 54" long, wired together into a 24" diameter basket and placed around the ground sleeve in the footer hole.
6. Ensure that the gooseneck is plumb and that the overhang is perpendicular to the goal line.
7. Ensure that the center of the gooseneck is positioned exactly at the point determined in **Section 5**.
8. Support the gooseneck such that it remains plumb and its alignment is maintained as the concrete is poured. Do not remove supports until concrete has cured.
9. Fill the footing hole with 4,000 psi concrete (minimum) to 6" below ground level.
10. Allow the concrete to cure for 48 hours before installing the crossbar and uprights.

**Figure 6: Installation of the Gooseneck Without Ground Sleeve**

See Figure and **Error! Reference source not found.** for installation with ground sleeve.

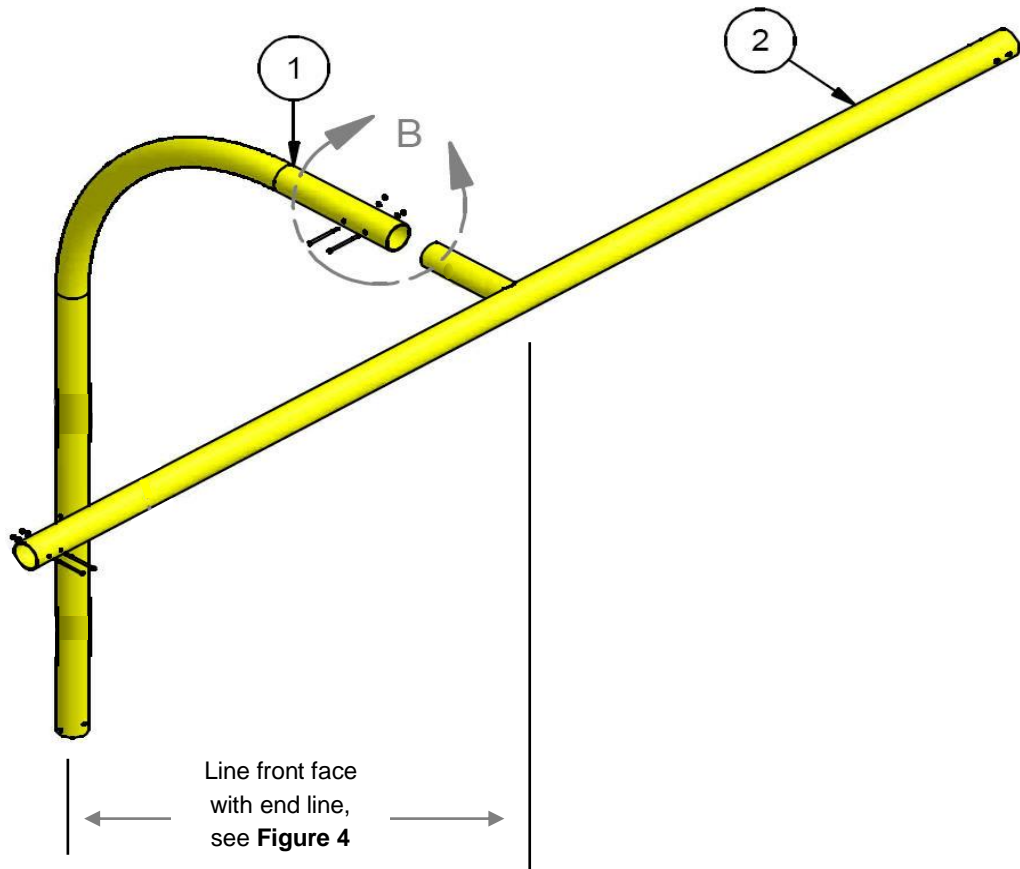


## 9 Install and Level the Crossbar

Follow these steps to install and level the crossbar (refer to **Figure 7**):

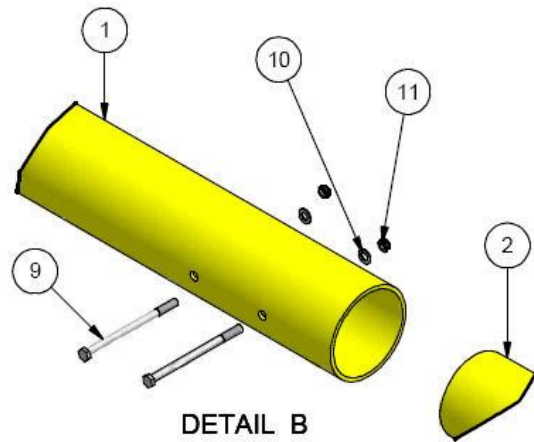
1. Carefully insert the crossbar nipple into the gooseneck.
  - a. Application of lubricant to crossbar and inside of gooseneck is strongly recommended.
2. Set the depth of the crossbar in the gooseneck such that the front edge of the crossbar is aligned with the inside (field side) edge of the end line.
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 1/2" long hex head bolt through the hole in the gooseneck and crossbar fitting. Install 5/8" 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" 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 7: Installing and leveling the crossbar**



**Key**

- 1—gooseneck
- 2—crossbar
- 9—5/8"-11 x 7.5" bolt
- 10—5/8" washer
- 11—5/8"-11 nut



Note: 800 Series will use 3/4" size hardware.

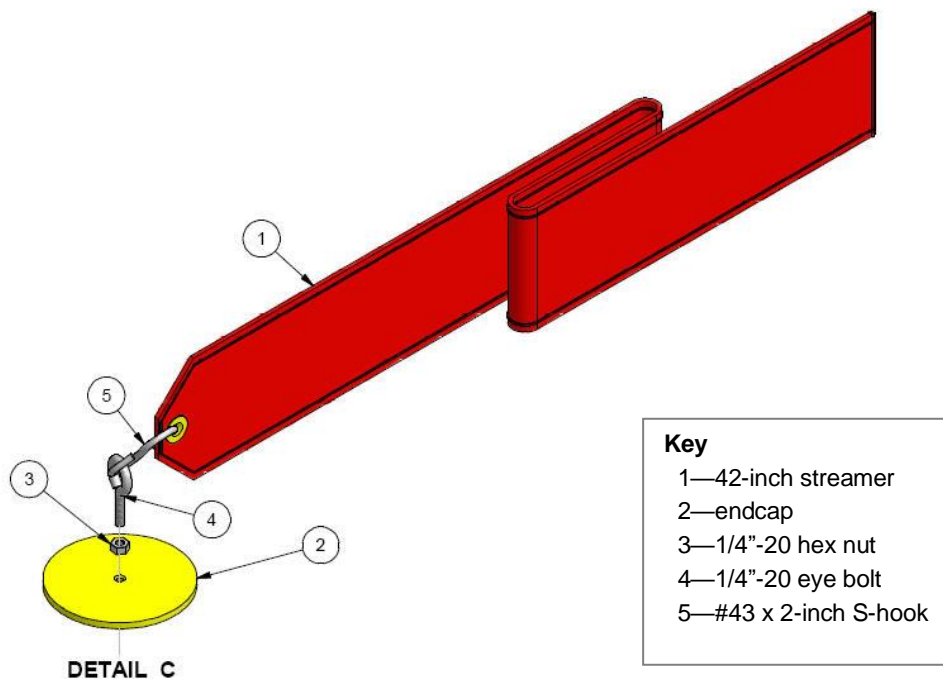


## 10 Install the Wind Streamers

Before installing the uprights, install the wind streamer following these steps (see **Figure 8**):

1. Hook one end of the #43, 2" 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 8: Installing the wind streamers**

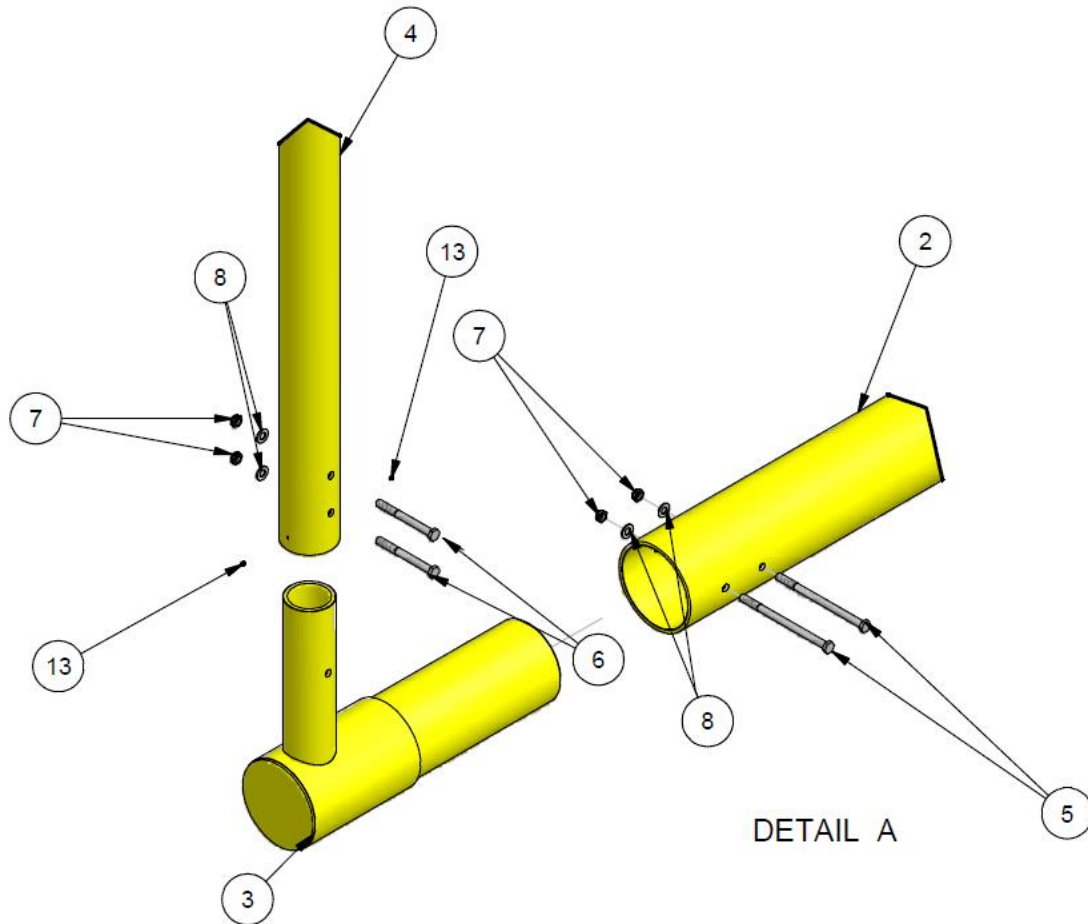


## 11 Install the End Fittings & Uprights

Follow the steps below to install the end fittings and uprights (See **Figure 9**). Confirm level of crossbar and plumbness of both uprights throughout:

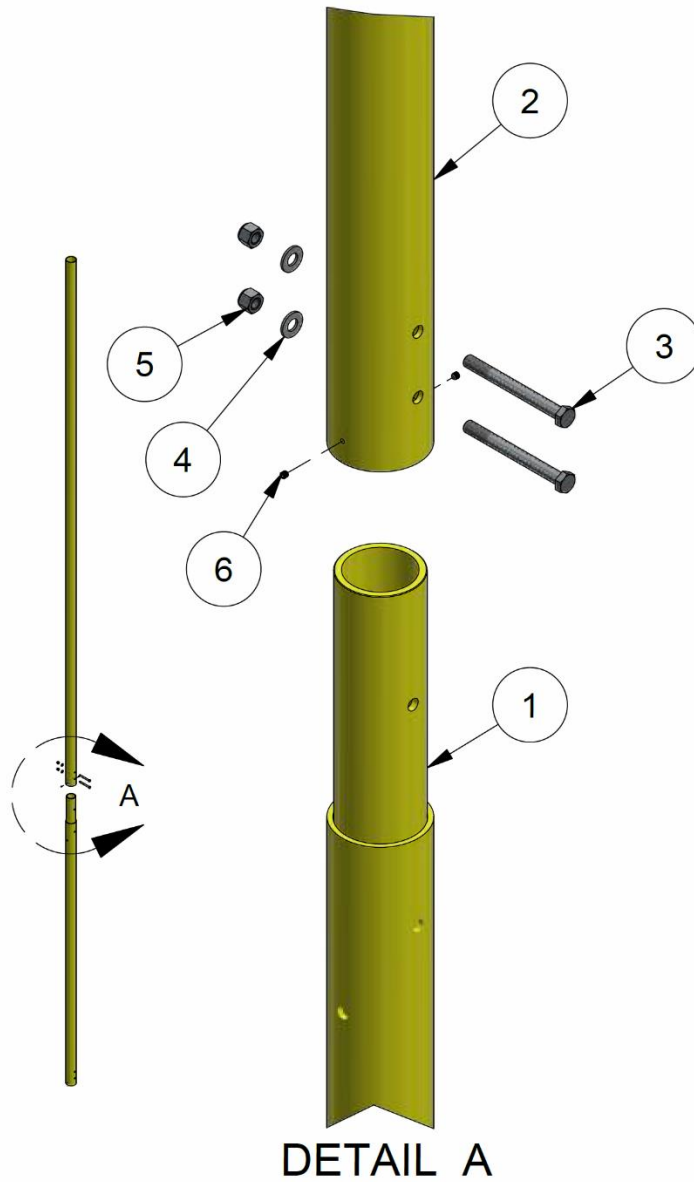
1. Insert one end fitting into one end of the crossbar. Use lubrication if needed.
2. Plumb the end fitting from front to back (perpendicular to goal line) and side to side (parallel to goal line).
3. Mark hole locations on the end fitting through the holes on the crossbar. Use of a 17/32" transfer punch to center hole is strongly recommended. Remove the end fitting from the crossbar.
4. Drill two 1/2" holes at the marked locations. Start with a 3/16" bit, then a 3/8" bit, and finish with a 1/2" bit.
  - a. To ensure proper alignment of holes, do not try to drill all the way through both faces at once. Instead drill from each side and check for plumb after each drilling operation.
5. Replace the end fitting on the crossbar and install the 1/2"-13 x 8" hex head bolts, 1/2" washers and 1/2"-13 nuts through the two holes.
6. Lift an upright onto the upright insert on the end fitting. If using the 30' upright, install the 20' piece onto the 10' piece before lifting using the same methods described in steps 7 through 9 below with **Figure 10**.
7. Loosely install a 1/2"-13 x 5" bolt, 1/2" washer and 1/2"-13 nut through the upright and pre-drilled hole in the upright insert. Use the two set screws in the upright to adjust and maintain the plumb of the uprights in the side to side direction
8. Drill a second hole in the upright insert in the manner described in Step 4.
9. Install a 1/2"-13 x 5" hex bolt into the hole and tighten all hardware completely.
10. Repeat steps 1-9 above for the other side.

**Figure 9: 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

**Figure 10: Installing 30' FT Upright On Splice Uprights**



**DETAIL A**

ITEM	QTY	PART #	DESCRIPTION
1	1	FBGP-808	10 FT BOTTOM UPRIGHT FOR 30 FT
2	1	FBGP-803	20FT UPRIGHT WELDMENT
3	2	HS5062	1/2-13 x 5 HEX CAP SCREW-ZP-GrNC
4	2	HW2044	1/2 SAE WASHER-ZP-GrNC
5	2	HN2951	1/2-13 UNC-Nylon Lock Nut-ZP-GrNC
6	2	HS966	1/4- 20 x 1/4 SET SCREW CUP POINT SS