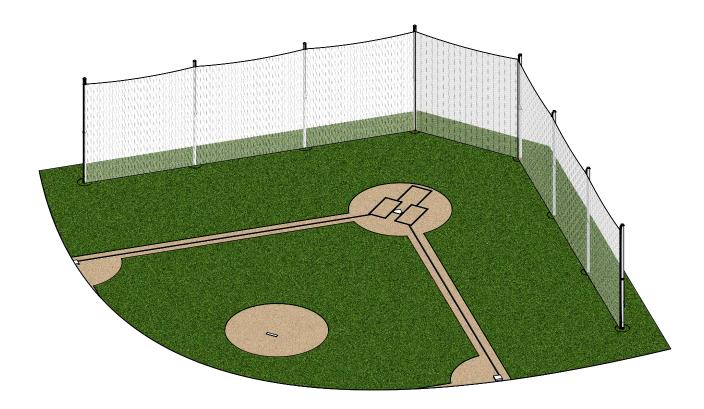
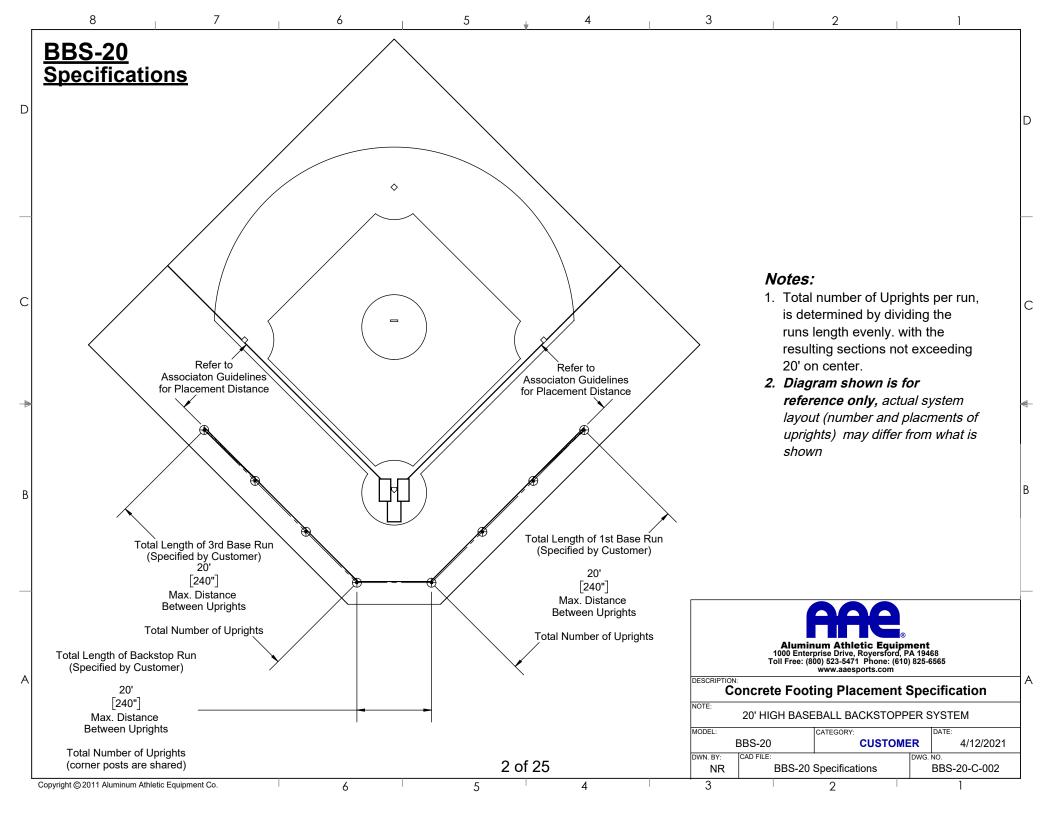
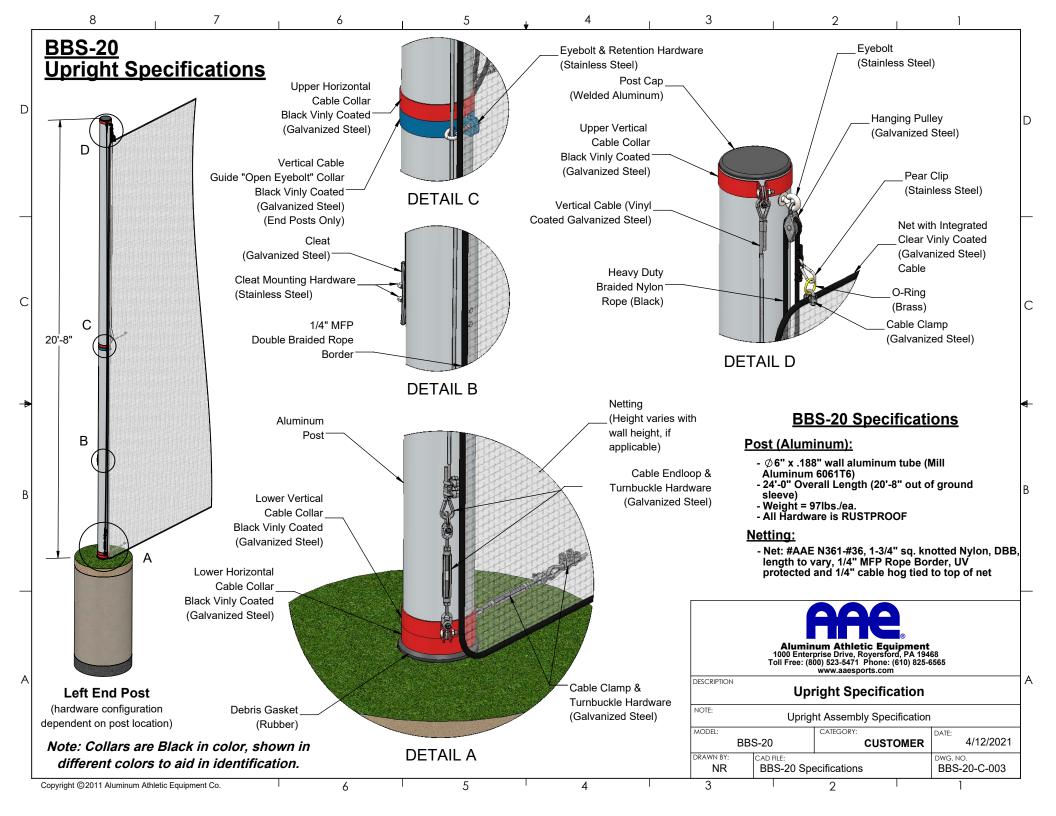
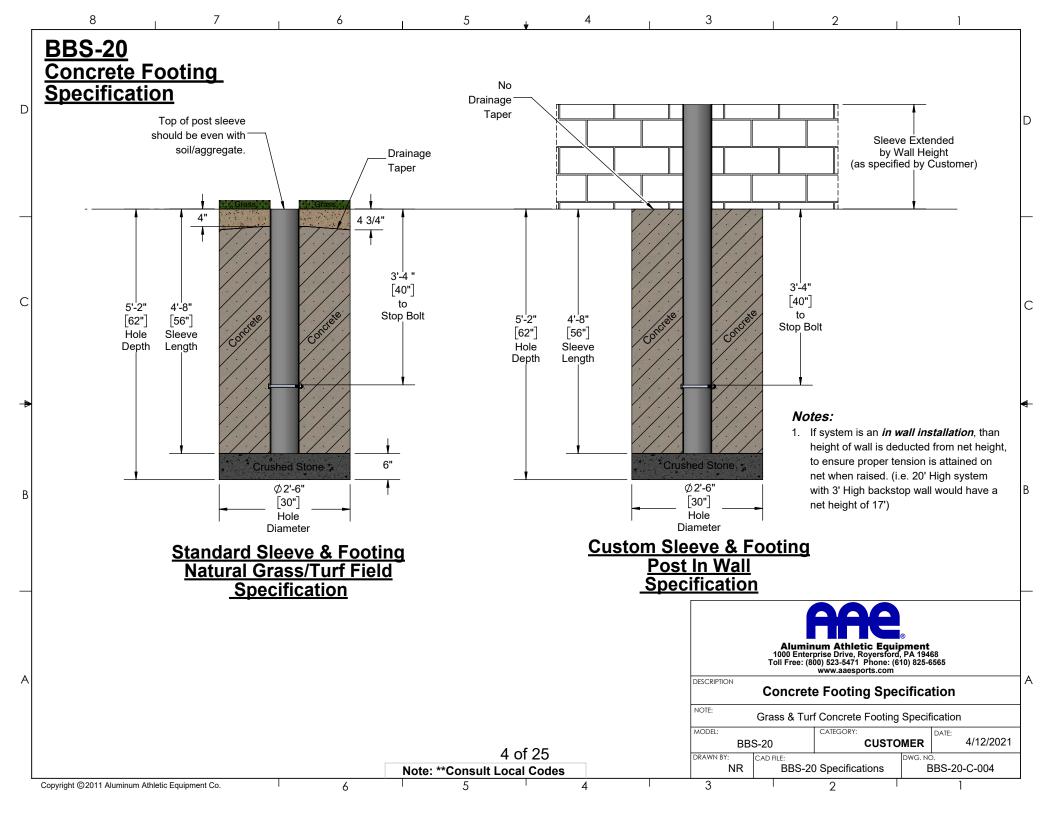
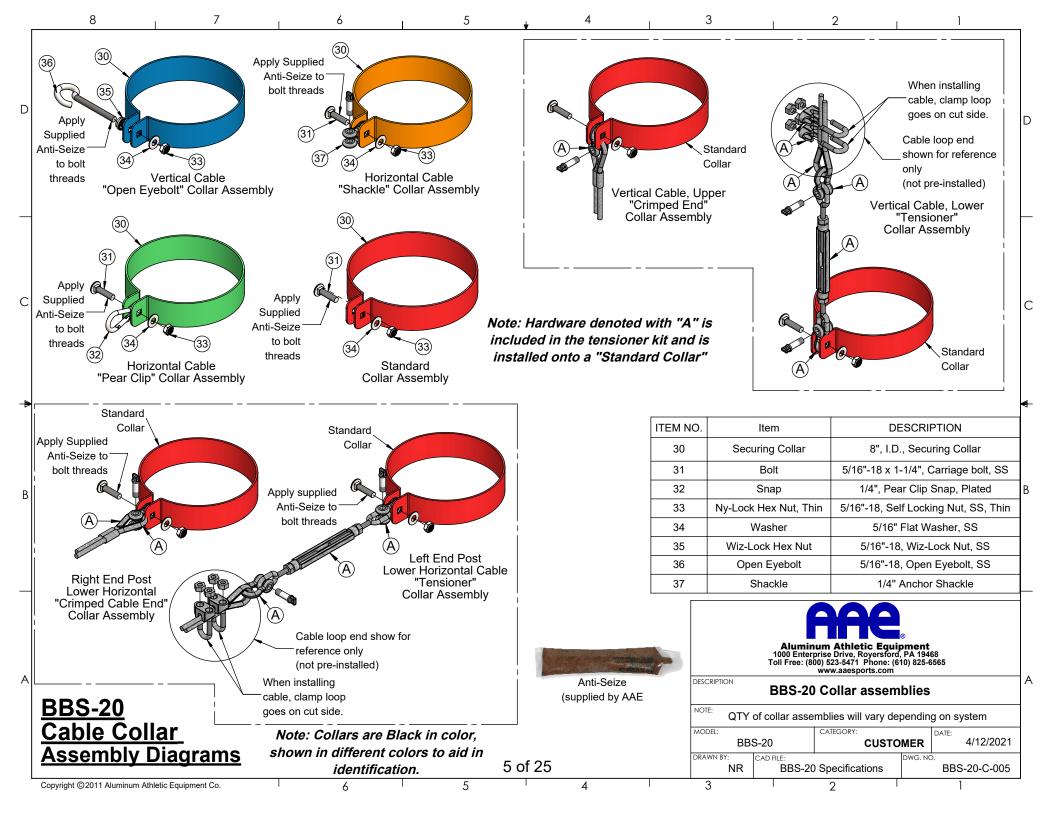
## BBS-20 20' High Baseball BackStopper System Specification

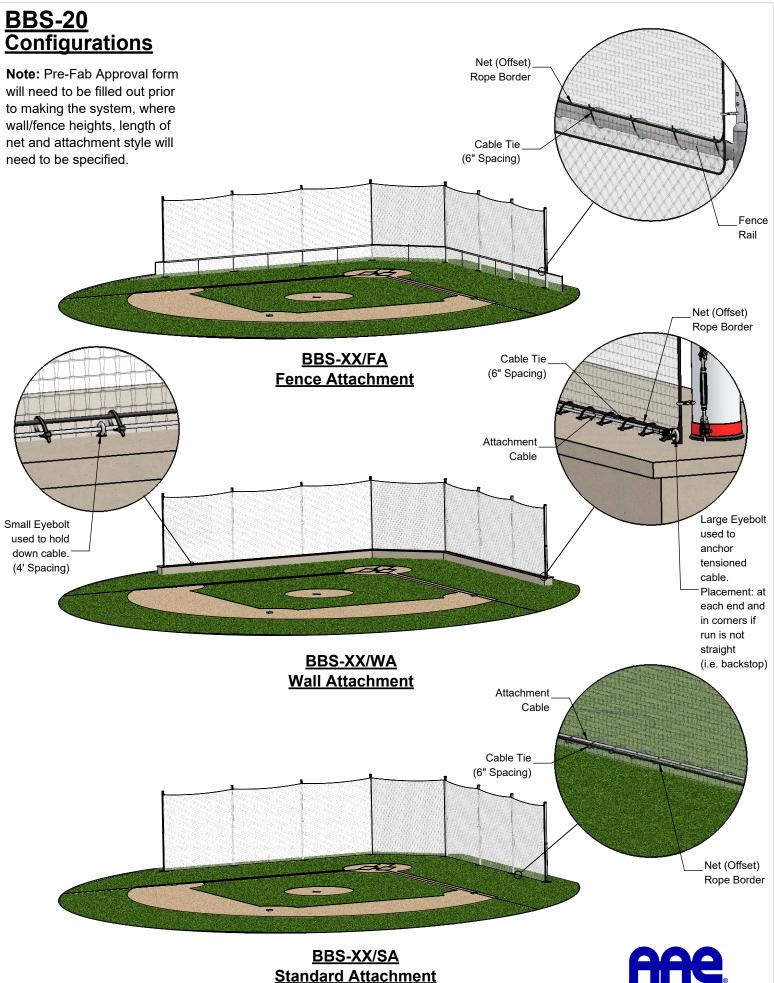












**Note:** XX equals specified system height (i.e. 20' height, wall attachment system = BBS-20/WA)

6 of 25

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## Model No. BBS-20/FA Parts List

		PARTS LIST	
Part List#	ltem	Description	Qty
1	Post	20' BBS System Posts w/ Cap	Ω
2	Ground Sleeve	56" Length Ground Sleeve, w/ Stop Bolt	Ω
Han	ging Rope & Pulley Syster	n (Pro-Assamblad)	
3	Hoist	Pre-assembled Hoist Rope/Pulley System	Ω
4	Washer	1/2" Flat Washer, SS	Σ
5	Hex Nut	1/2"-13 Hex Nut, Self Locking	Ω
	at & Hardware	T 101 1 01 1 101 1	
6	Cleat	Tapered Cleat, Glavanized Steel	Ω
7	Bolt	1/4"-20 x 7-1/2" Hex Bolt, SS	Σ
9	Hex Nut	1/4"-20 Hex Nut, SS, Self Locking	Σ
10	Cap Nut	1/4"-20 Cap Nut, SS,	Σ
Coll	ar Assemblies		
11	Standard Collar	6" I.D. Standard Collar Assembly	Ф
12	Pear Clip Collar	6" I.D. Pear Clip Collar Assembly	π
13	Open Eyebolt Collar	6" I.D. Open Eyebolt Collar Assembly	λ
14	Shackle Collar	6" I.D. Shackle Collar Assembly	ф
15	Tensioner Kit	Ball Stoper Tensioner Kit	Δ
Net	& Hardware		
16	Net	#AAE N361, 1-3/4" sq. Mesh, Knotted Nylon	Ψ
17	Snap	1/4" Pear Clip Snap, Plated	4
18	Cable Tie	15" Cable Tie, 120 LB., Black	¥
19	Vertical Cable	3/16" Steel Cable with Clear Jacket, 1/4" O.D.	λ
	OP	TIONAL ACCESSORIES	
40	Debris Collar	TIONAL ACCESSORIES  Debris Collar, 6" Diameter	Ω
40	Debits Collai	Debits Collar, o Diameter	12
		vill vary depending on length fo system)	
		system height - customer provided fence height)	
		= (# ft. per system / 20 ft.) + 1	
		# ft. per system / 20 ft.) + 1 ] x 2	
		per system) + 2 per corner post	
		system / 20 ft.) -1] - (# of corner posts)}	
		per system) + 1 per corner post	
	λ	= 1 per Corner & End Post	
		h = 1 per Corner Post	
		ψ = # ft. net length 4 = (# ft. net height ) x 2	



## Model No. BBS-20/WA Parts List

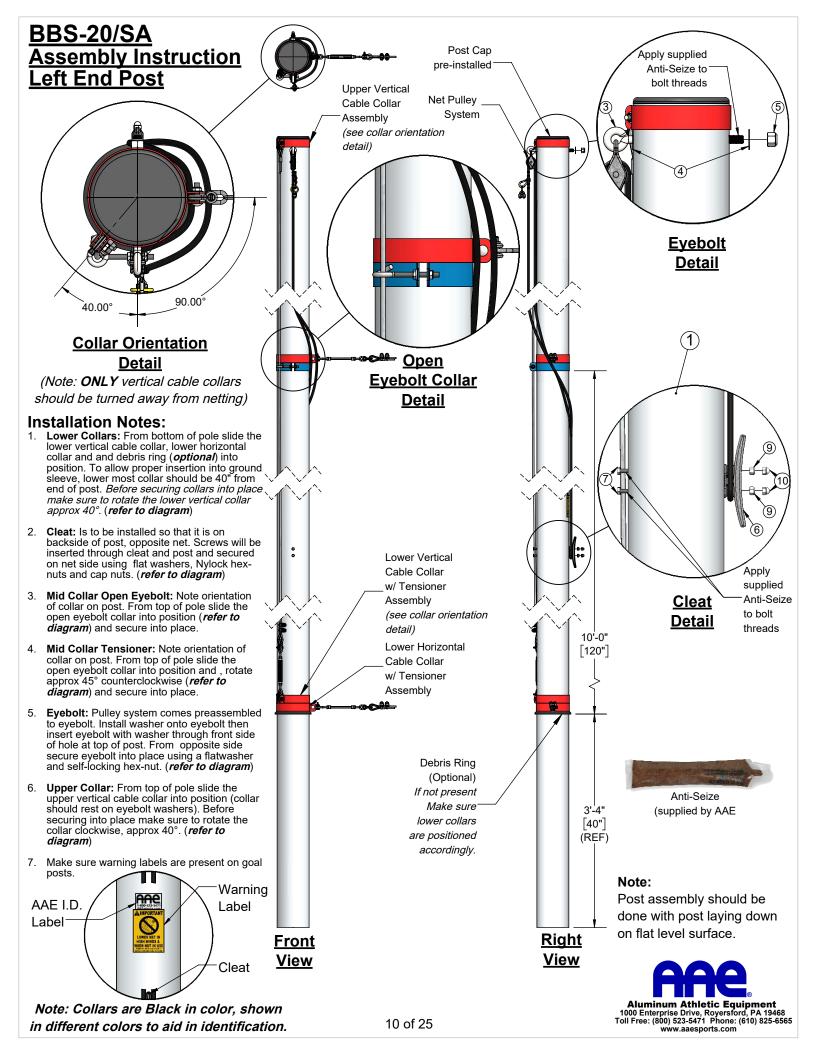
PARTS LIST						
Part List#	Item	Description	Qty.			
1	Post	20' BBS System Posts w/ Cap	Ω			
2	Ground Sleeve	56" + (Wall Height) Length Ground Sleeve, w/ Stop Bolt	Ω			
На	nging Rope & Pulley Syst	em (Pre-Assembled)				
3	Hoist	Pre-assembled Hoist Rope/Pulley System	Ω			
4	Washer	1/2" Flat Washer, SS	Σ			
5	Hex Nut	1/2"-13 Hex Nut, Self Locking	Ω			
Cle	eat & Hardware					
6	Cleat	Tapered Cleat, Glavanized Steel	Ω			
7	Bolt	1/4"-20 x 7-1/2" Hex Bolt, SS	Σ			
9	Hex Nut	1/4"-20 Hex Nut, SS, Self Locking	Σ			
10	Cap Nut	1/4"-20 Cap Nut, SS,	Σ			
_						
Co 11	llar Assemblies Standard Collar	6" I.D. Standard Collar Assembly	Ф			
12	Pear Clip Collar	6" I.D. Pear Clip Collar Assembly	Ф			
13	Open Eyebolt Collar	6" I.D. Open Eyebolt Collar Assembly	π			
14	Shackle Collar	6" I.D. Shackle Collar Assembly	Λ			
15	Tensioner Kit	Ball Stoper Tensioner Kit	Δ			
10	Tenoroner Titl	Buil Groper Tellerener Titl				
Ne	t & Hardware					
16	Net	#AAE N361, 1-3/4" sq. Mesh, Knotted Nylon	Ψ			
17	Snap	1/4" Pear Clip Snap, Plated	4			
18	Cable Tie	15" Cable Tie, 120 LB., Black	¥			
19	Vertical Cable	3/16" Steel Cable with Clear Jacket, 1/4" O.D.	λ			
Att	achment Cable & Hardwai	re				
20	Hold-Down Cable	3/16" Steel Cable with Clear Jacket, 1/4" O.D.	v			
21	Large Eyebolt	3/8"-16 x 3" Closed Eyebolt, SS	λ			
22	Washer	3/8" x 1" O.D., Flat Washer, SS	λ			
23	Large Anchor	3/8"-16 Double Expansion Anchor	λ			
24	Small Eyebolt	1/4"-20 x 2" Closed Eyebolt, SS	χ			
25	Washer	1/4" x 5/8" O.D., Flat Washer, SS	χ			
26	Small Anchor	1/4"-20 Double Expansion Anchor	χ			
15	Tensioner Kit	Ball Stoper Tensioner Kit	Δ			
40		PTIONAL ACCESSORIES				
40	Debris Collar	Debris Collar, 6" Diameter	Ω			
	*Qty of posts	(will vary depending on length fo system)				
		ed system height - customer provided wall height)				
		= (# ft. per system / 20 ft.) + 1				
		[(# ft. per system / 20 ft.) + 1 ] x 2				
		(6 per system) + 2 per corner post				
		er system / 20 ft.) -1] - (# of comer posts)}				
		(4 per system) + 1 per corner post				
		λ = 1 per Corner & End Post				
		<sub>m</sub> = 1 per Corner Post ψ = # ft. net length				
	<b>4</b> = (#	ft. system height - wall height ) x 2				
		y = (# ft. net length) x 2				
		$\chi = (\# \text{ ft. net length}) / 4 \text{ ft.}$				
		v = (# ft. net length ) + 1ft.				

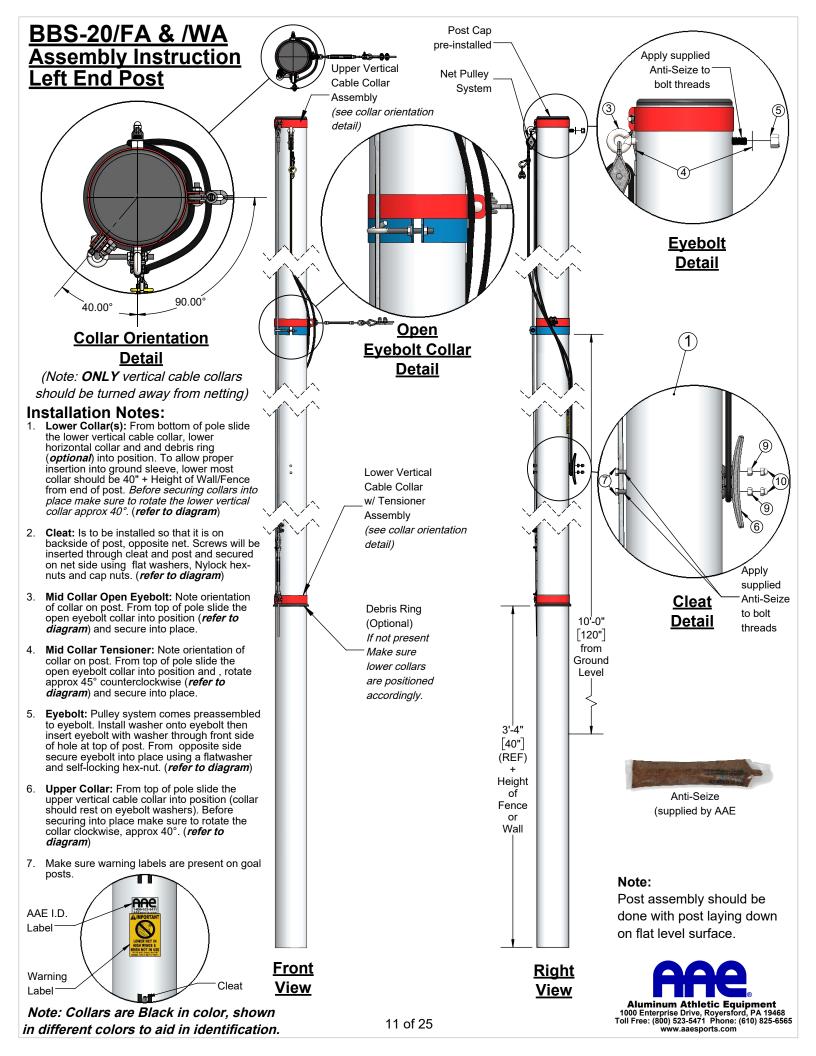


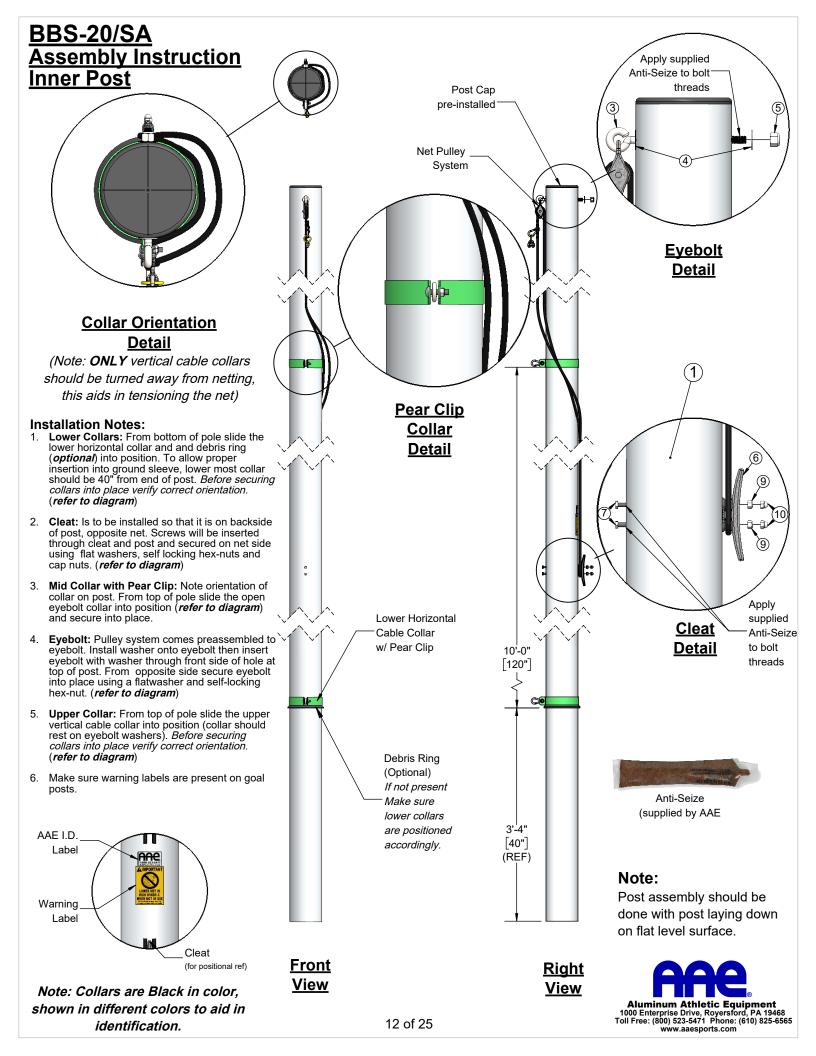
#### Model No. BBS-20/SA Parts List

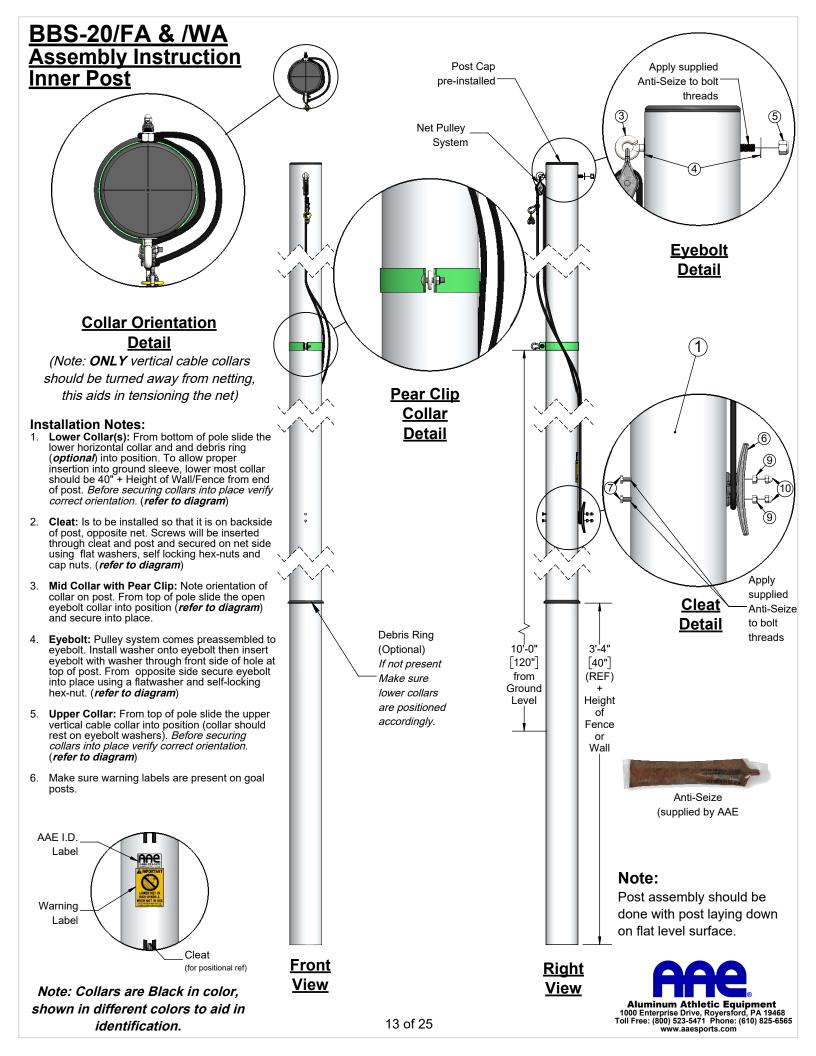
PARTS LIST						
art List#	Item	Description	Qty.			
1	Post	20' BBS System Posts w/ Cap	Ω			
2	Ground Sleeve	56" Length Ground Sleeve, w/ Stop Bolt	Ω			
	nging Rope & Pulley System					
3	Hoist	Pre-assembled Hoist Rope/Pulley System	Ω			
4	Washer	1/2" Flat Washer, SS	Σ			
5	Hex Nut	1/2"-13 Hex Nut, Self Locking	Ω			
Cle	eat & Hardware					
6	Cleat	Tapered Cleat, Glavanized Steel	Ω			
7	Bolt	1/4"-20 x 7-1/2" Hex Bolt, SS	Σ			
9	Hex Nut	1/4"-20 Hex Nut, SS, Self Locking	Σ			
10	Cap Nut	1/4"-20 Cap Nut, SS,	Σ			
	1	, ,				
Co	lar Assemblies					
11	Standard Collar	6" I.D. Standard Collar Assembly	Φ			
12	Pear Clip Collar	6" I.D. Pear Clip Collar Assembly	π			
13	Open Eyebolt Collar	6" I.D. Open Eyebolt Collar Assembly	λ			
14	Shackle Collar	6" I.D. Shackle Collar Assembly	Ψ			
15	Tensioner Kit	Ball Stoper Tensioner Kit	Δ			
Ne	t & Hardware					
16	Net	#AAE N361, 1-3/4" sq. Mesh, Knotted Nylon	Ψ			
17	Snap	1/4" Pear Clip Snap, Plated	4			
18	Cable Tie	15" Cable Tie, 120 LB., Black	¥			
19	Vertical Cable	3/16" Steel Cable with Clear Jacket, 1/4" O.D.	λ			
	achment Cable & Hardware					
20	Hold-Down Cable	3/16" Steel Cable with Clear Jacket, 1/4" O.D.	V			
16	Tensioner Kit	Ball Stoper Tensioner Kit	Δ			
	OPT	TIONAL ACCESSORIES				
40	Debris Collar	Debris Collar, 6" Diameter	0			
70	Debris Collai	Deblis Collar, o Diameter	Ω			
	*Qty of posts (w	ill vary depending on length fo system)				
		ight = (specified system height)				
		(# ft. per system / 20 ft.) + 1				
		ft. per system / 20 ft.) + 1 ] x 2				
		per system) + 2 per corner post				
		rstem / 20 ft.) -1] - (# of corner posts)} x 2				
		per system) + 1 per corner post				
	λ:	= 1 per Corner & End Post				
		h = 2 per Corner Post				
	, = /# #	ψ = # ft. net length system height - wall height ) x 2				
	· · · · · · · · · · · · · · · · · · ·	¥ = (# ft. net length ) x 2				
		+ - (# 16 116119ul / X Z				







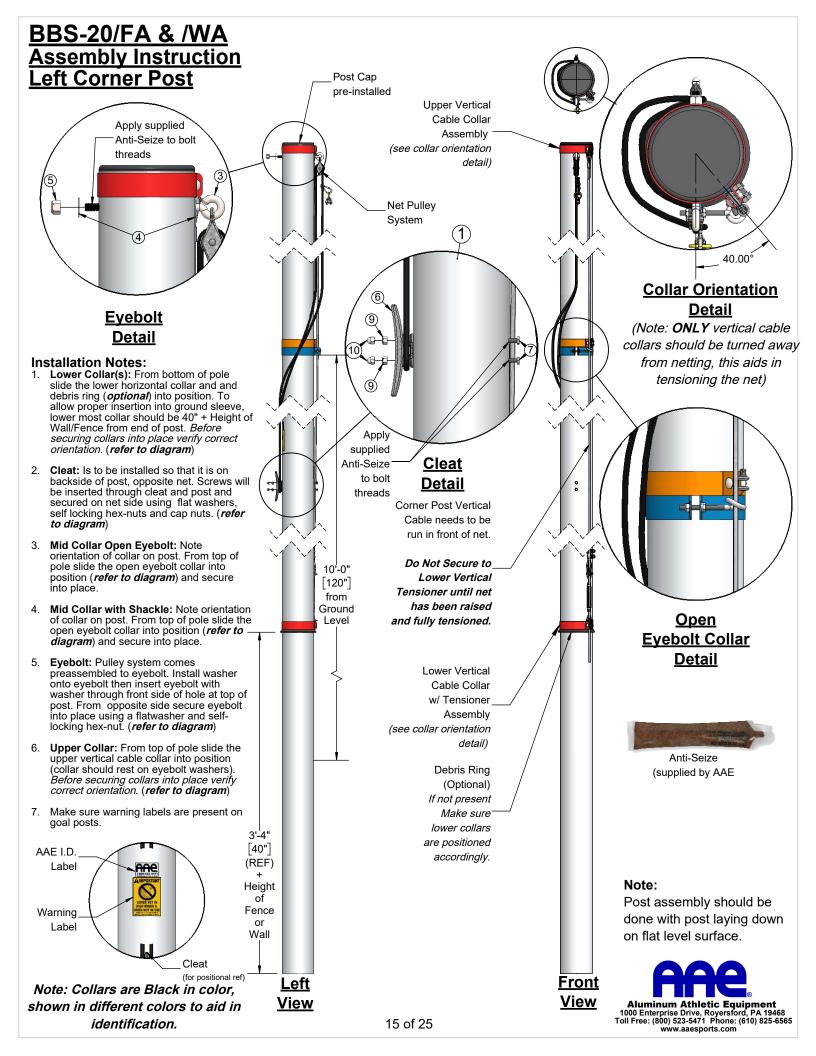


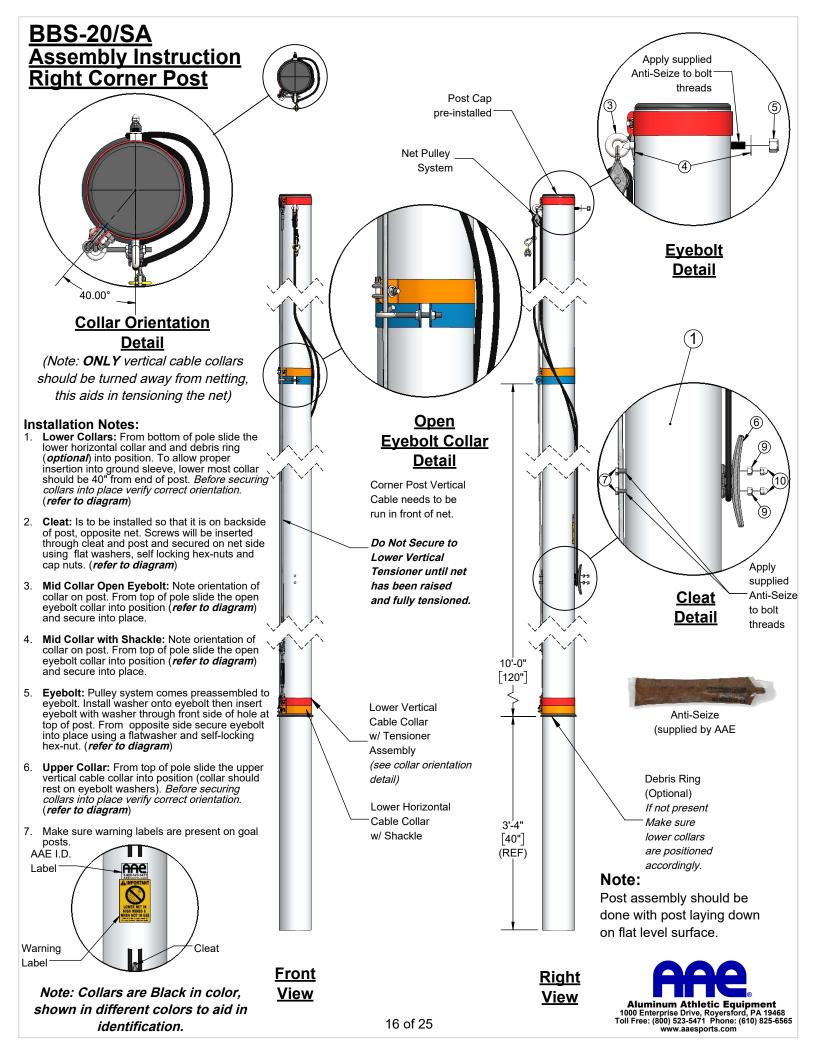


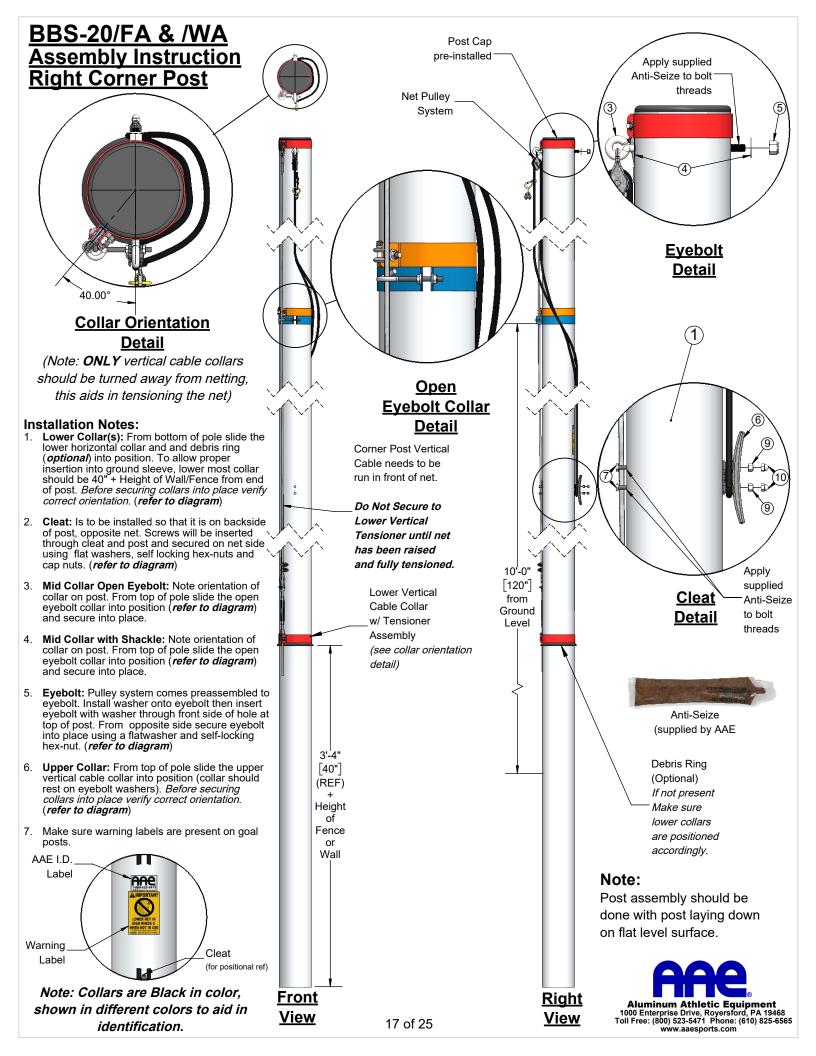
#### **BBS-20/SA** Assembly Instruction Left Corner Post Post Cap Upper Vertical pre-installed Cable Collar Apply supplied Assembly Anti-Seize to bolt (see collar orientation threads detail) **Net Pulley** System Apply supplied Anti-Seize to bolt threads 40.00° **Collar Orientation** Detail **Eyebolt** (Note: ONLY vertical cable **Detail** collars should be turned away **Installation Notes:** from netting, this aids in Lower Collars: From bottom of pole slide the lower Lollars: From bottom of pole slide the lower horizontal collar and and debris ring (optional) into position. To allow proper insertion into ground sleeve, lower most collar should be 40" from end of post. Before securing collars into place verify correct orientation (refer to diagram) tensioning the net) correct orientation. (refer to diagram) Cleat: Is to be installed so that it is on Cleat backside of post, opposite net. Screws will be inserted through cleat and post and **Detail** secured on net side using flat washers self locking hex-nuts and cap nuts. (refer to diagram) Mid Collar Open Eyebolt: Note orientation of collar on post. From top of Corner Post Vertical pole slide the open eyebolt collar into Cable needs to be position (refer to diagram) and secure into placè. run in front of net. Mid Collar with Shackle: Note orientation Do Not Secure to of collar on post. From top of pole slide the open eyebolt collar into position (refer to **Open** Lower Vertical diagram) and secure into place. Tensioner until net **Evebolt Collar Eyebolt:** Pulley system comes preassembled to eyebolt. Install washer has been raised Detail and fully tensioned. onto eyebolt then insert eyebolt with 10'-0" washer through front side of hole at top of [120"] Lower Vertical post. From opposite side secure eyebolt Cable Collar into place using a flatwasher and self-locking hex-nut. (*refer to diagram*) w/ Tensioner Assembly **Upper Collar:** From top of pole slide the upper vertical cable collar into position (see collar orientation Anti-Seize (collar should rest on eyebolt washers). detail) Before securing collars into place verify (supplied by AAE correct orientation (refer to diagram) Debris Ring Make sure warning labels are present on Lower Horizontal goal posts. (Optional) Cable Collar If not present w/ Anchor Shackle Make sure AAE I.D. [40"] lower collars (REF) Label are positioned Note: accordingly. Post assembly should be Warning done with post laying down Label on flat level surface. Cleat Left <u>Front</u> (for positional ref) <u>View</u> View Note: Collars are Black in color. **Aluminum Athletic Equipment** shown in different colors to aid in 1000 Enterprise Drive, Royersford, PA 19468 Toll Free: (800) 523-5471 Phone: (610) 825-6565 www.aaesports.com

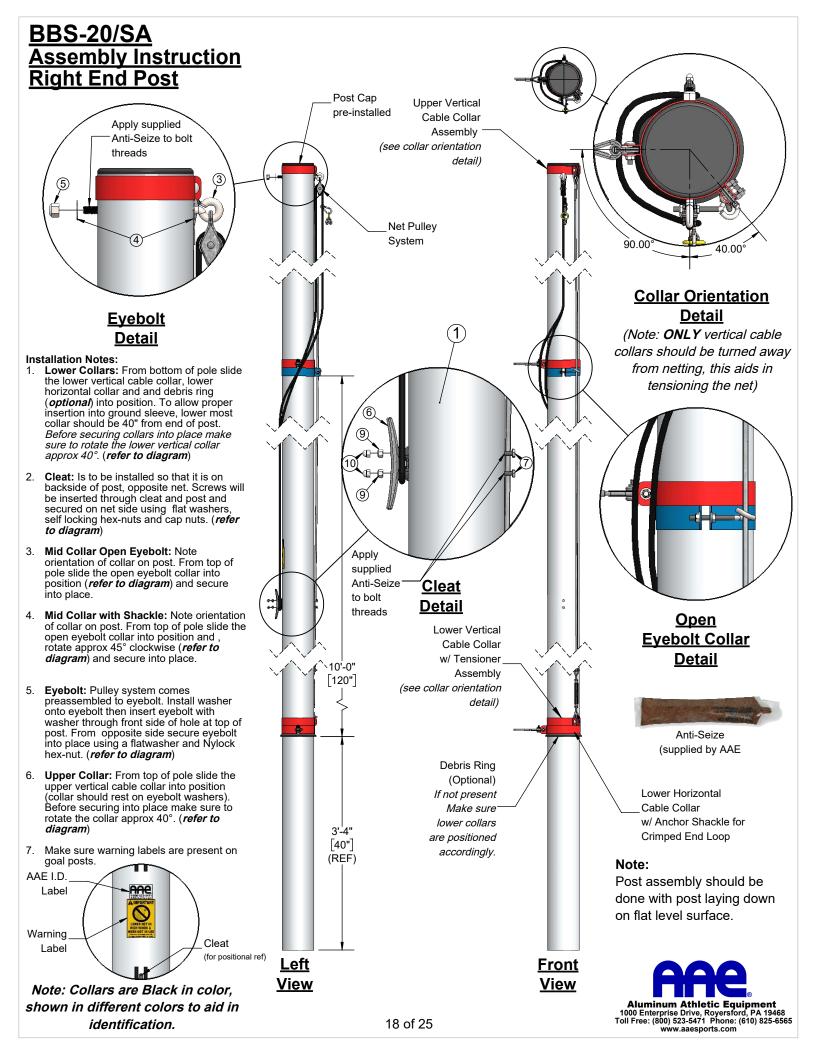
14 of 25

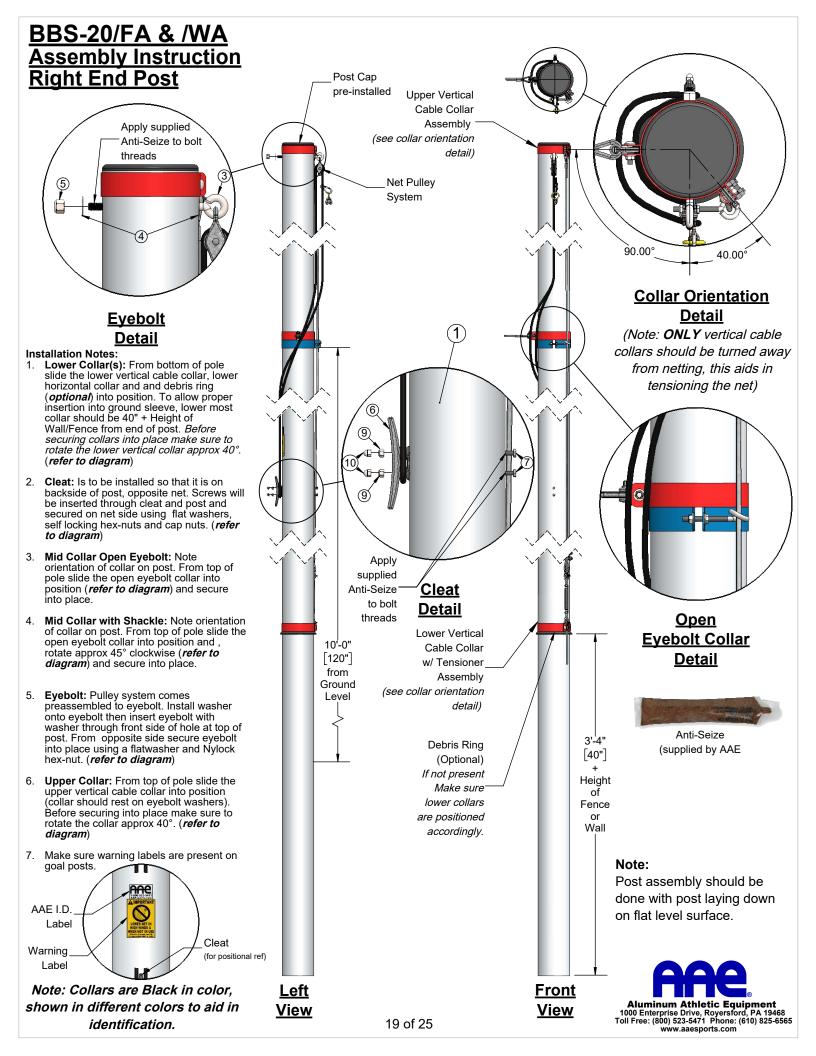
identification.





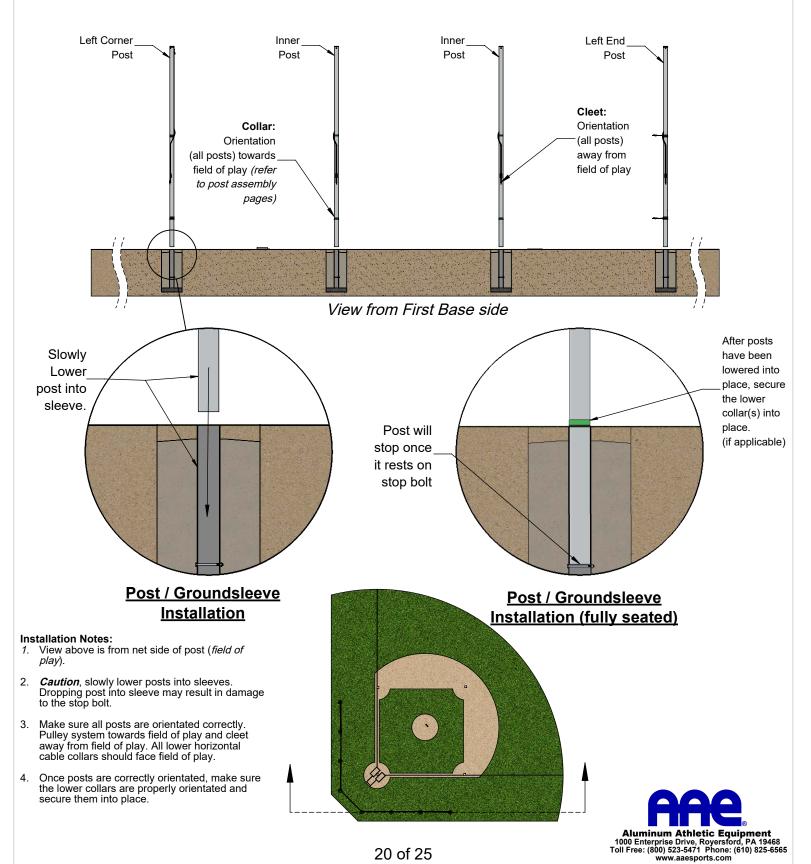






Note: Collars are Black in color, shown in different colors to aid in identification.

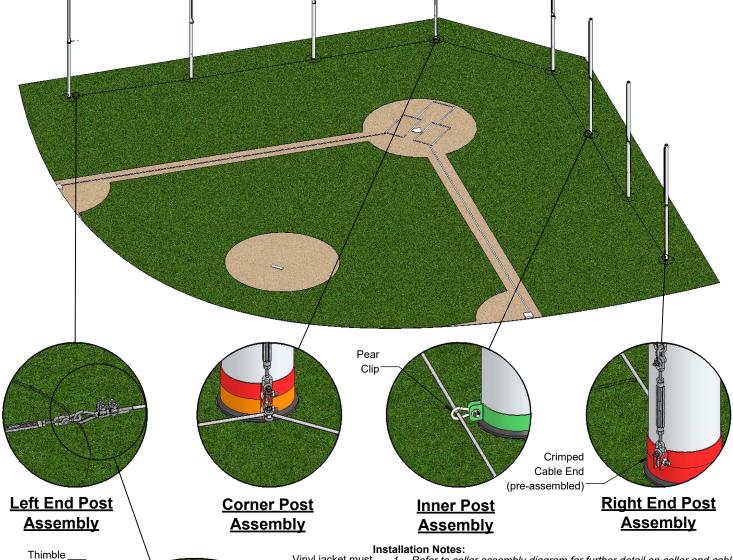
Note: number of inner posts may vary from what is shown.



# BBS-20/SA Assembly Instruction Lower Horizontal Support Cable

(must be present)

Note: Collars are Black in color, shown in different colors to aid in identification.



Vinyl jacket must

be stripped from
cable loop end

Support Cable vinyl jacket

After cable has

tensioned trim back cut end and wrap with tape

been fully

assembly.

- Refer to collar assembly diagram for further detail on collar and cable assembly.
- Install Crimped Cable End to Right End Post collar using an anchor shackle.
- Route cable to Left End Post. Snap cable into Pear Clips of the Inner Posts along the way and route inside of shackle on Corner Posts.
- 4. Before assembling Clamped Cable Loop End, fully open the turnbuckle.
- With anchor shackle and thimble inplace run cable thru the shackle as shown. Pull slack out of cable and mark vinyl sleeve approximately 4" from thimble end. Strip vinyl from mark location towards cable loop end.
  - With the slack still being pulled out of cable install and secure the cable clamps. The first clamp should butt upto the thimble, the second should be spaced approx. 1" on center from the first. Cable clamps must be gripping bare cable to ensure proper seating/grip.

Clamped Loop End Detail \_Cable Clamp Loop must be on cut end of cable

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21 of 25

BBS-20/WA Note: Collars are Black in color, Assembly Instruction
Lower Horizontal
Support Cable shown in different colors to aid in identification. Large Eyebolt Large Eyebolt Small Eyebolt, Crimped 4' Spacing Cable End entire (pre-assembled) **Right End Post Left End Post** length of **Inner Post Corner Post** cable **Assembly Assembly Assembly Assembly Installation Notes:** Vinyl jacket must Refer to collar assembly diagram for further detail on collar and cable be stripped from assembly. cable loop end Install Crimped Cable End to Right End Post Large Eyebolt using an anchor shackle. Support Route cable to Left End Post. Make sure to route cable thru Small & Cable vinyl Large Eyebolts installed to top of wall. jacket Before assembling Clamped Cable Loop End, fully open the turnbuckle. With anchor shackle and thimble inplace run cable thru the shackle as shown. Pull slack out of cable and mark vinyl sleeve approximately 4" from thimble end. Strip vinyl from mark location towards cable loop After cable has With the slack still being pulled out of cable install and secure the cable clamps. The first clamp should butt upto the thimble, the second should be spaced approx. 1" on center from the first. Cable clamps been fully tensioned trim must be gripping bare cable to ensure proper seating/grip. back cut end and Thimble wrap with tape

Cable Clamp Loop

must be on cut end of cable

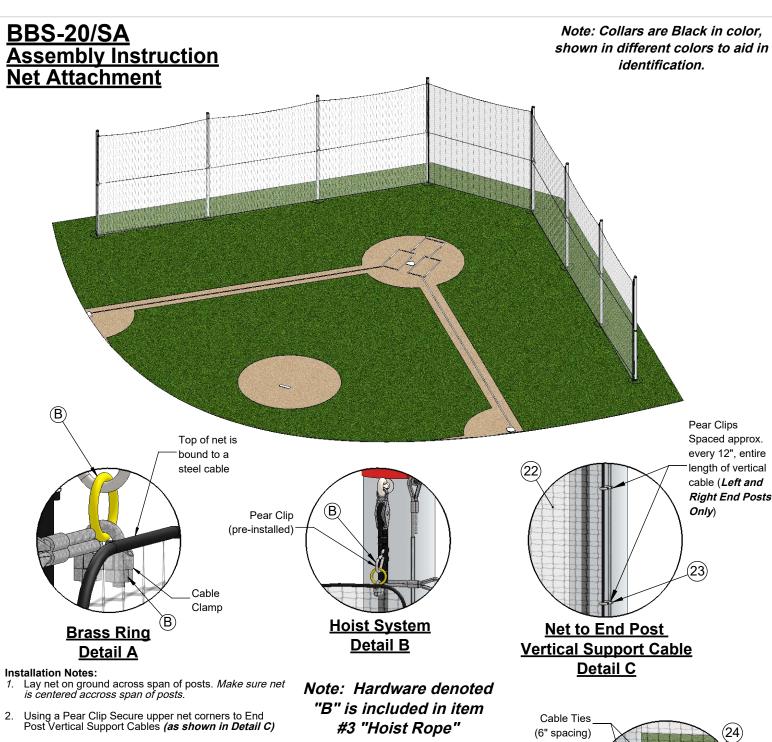
22 of 25

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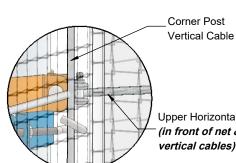
(must be present)

**Clamped Loop End** 

**Detail** 



- Secure Brass Rings to top of net using Cable Clamp (as shown in Detail A). One ring and clamp per post and they should be centered as close as possible to its coinciding post.
- After Brass Rings have been secured to net, clip ring into it's posts hoist system Pear Clip (as shown in Detail B).
- As net is being raised make sure to secure net sides to the end post vertical support cables using provided *Pear Clips (refer to Detail C)*. Pear Clips should be spaced approx. 12" or 9 net squares.
- Once net has been completed raised tie hoist ropes onto cleat. Connect and tension the clamped loop ends of the *Corner Post Vertical Cables*.
- Next install the *Upper Horizontal Cable*. Process for installation is the same as the Lower Horizontal cable. Difference being to make sure to run cable so that the net and corner post vertical support cables are between it and the posts, *(refer to Detail D)*.
- Lastly using provided *Cable Ties* spaced 6" apart, secure bottom of net to lower horizontal cable, *(refer to Detail E)*.



Upper Horizontal & Corner

Vertical Support Cables

Detail D

(Left Corner Post config shown)

Cable Ties
(6" spacing)

\_Corner Post
Vertical Cable

Upper Horizontal Cable
(in front of net & corner)

Net to Lower
Horizontal Support Cable
Detail E

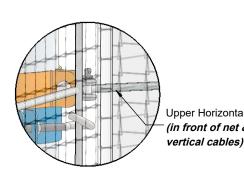


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23 of 25

**BBS-20** Note: Collars are Black in color, shown in different colors to aid in Assembly Instruction
Net Attachment identification. (B) Pear Clips Spaced approx. every 12", entire Top of net is length of vertical bound to a cable (Left and steel cable Right End Posts (B) Only) Pear Clip (pre-installed) 23 Cable Clamp **Hoist System** Net to End Post **Brass Ring Detail B Vertical Support Cable Detail A Detail C Installation Notes:** Lay net on ground across span of posts. Make sure net is centered accross span of posts. Note: Hardware denoted "B" is included in item Using a Pear Clip Secure upper net corners to End Post Vertical Support Cables *(as shown in Detail C)* Cable Ties #3 "Hoist Rope" (6" spacing)

- Secure Brass Rings to top of net using Cable Clamp (as shown in Detail A). One ring and clamp per post and they should be centered as close as possible to its coinciding post.
- After Brass Rings have been secured to net, clip ring into it's posts hoist system Pear Clip (as shown in Detail B).
- As net is being raised make sure to secure net sides to the end post vertical support cables using provided *Pear Clips (refer to Detail C)*. Pear Clips should be spaced approx. 12" or 9 net squares.
- Once net has been completed raised tie hoist ropes onto cleat. Connect and tension the clamped loop ends of the Corner Post Vertical Cables.
- Next install the *Upper Horizontal Cable*. Process for installation is the same as the Lower Horizontal cable. Difference being to make sure to run cable so that the net and corner post vertical support cables are between it and the posts, *(refer to Detail D)*.
- Lastly using provided Cable Ties spaced 6" apart, secure net offset border to fence rail, (refer to Detail E).



Upper Horizontal & Corner
Vertical Support Cables
Detail D
(Left Corner Post config shown)

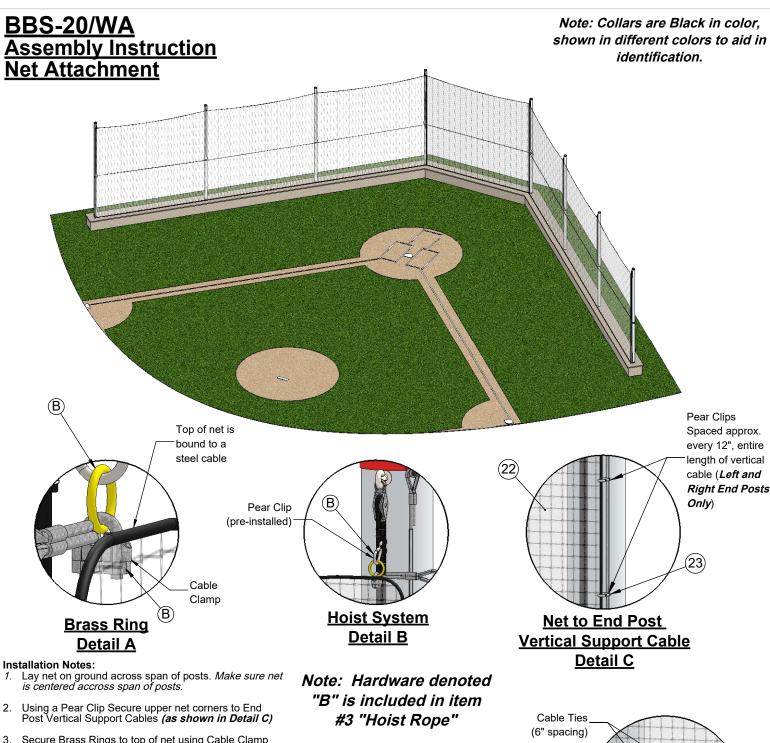
Cable Ties
(6" spacing)

Upper Horizontal Cable
(in front of net & corner

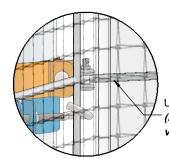
Net to Lower
Horizontal Support Cable
Detail E



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- Secure Brass Rings to top of net using Cable Clamp (as shown in Detail A). One ring and clamp per post and they should be centered as close as possible to its coinciding post.
- After Brass Rings have been secured to net, clip ring into it's posts hoist system Pear Clip (as shown in Detail B).
- As net is being raised make sure to secure net sides to the end post vertical support cables using provided *Pear Clips (refer to Detail C)*. Pear Clips should be spaced approx. 12" or 9 net squares.
- Once net has been completed raised tie hoist ropes onto cleat. Connect and tension the clamped loop ends of the *Corner Post Vertical Cables*.
- Next install the *Upper Horizontal Cable*. Process for installation is the same as the Lower Horizontal cable. Difference being to make sure to run cable so that the net and corner post vertical support cables are between it and the posts, *(refer to Detail D)*.
- Lastly using provided *Cable Ties* spaced 6" apart, secure bottom of net to lower horizontal cable, *(refer to Detail E)*.



Upper Horizontal Cable

(in front of net & corner
vertical cables)

Upper Horizontal & Corner
Vertical Support Cables
Detail D
(Left Corner Post config shown)

Net to Lower
Horizontal Support Cable
Detail E



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25 of 25