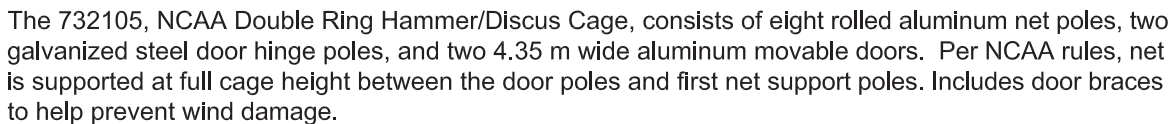




SPECIFICATIONS





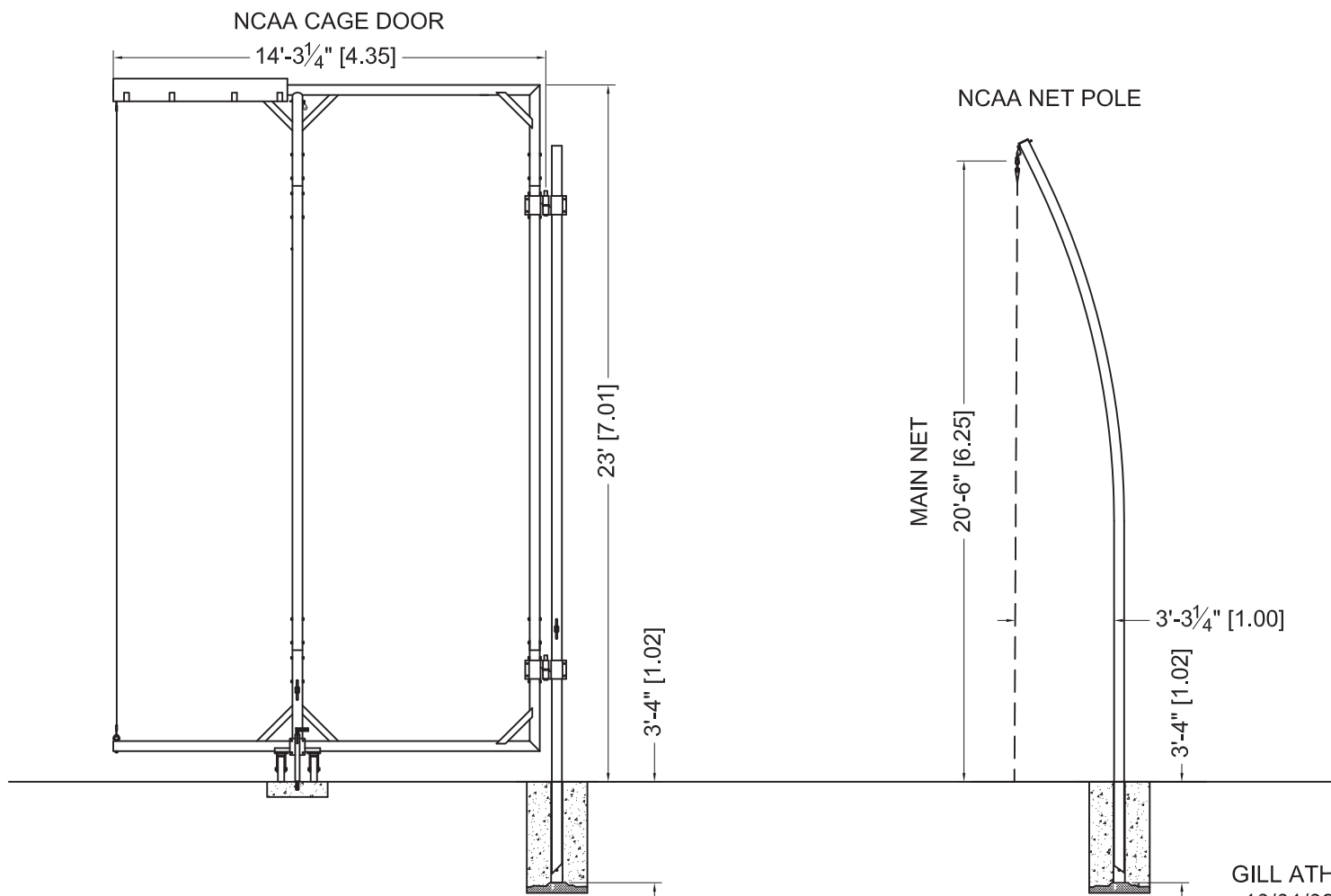
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732105 - NCAA DOUBLE CIRCLE HAMMER/DISCUS CAGE SPECIFICATIONS

GENERAL SPECIFICATIONS

1. The net poles are 4" diameter, 7/32" wall, 6061-T6 aluminum tube and stand 21' (6.40m) tall in their 3'-6" ground sleeves. The poles roll inward offsetting the net 1 meter at ground level. Vertically swinging net arms at each pole position hold the net in place and allow the net to envelop an errant hammer then drop back into position. 5/16" net rope swivel pulleys with eyebolts attach to the top of each net pole to facilitate the raising and lowering of the net.
2. The 14' 3 1/4" (4.35m) wide by 23' (7.01m) tall aluminum doors are constructed of the same heavy wall tubing as the net poles. All corner joints are securely welded and cross braced. Each door comes in four sections and is easily assembled at the site. Sections are securely bolted together utilizing 28" long, 1/4" wall, inner sleeve tubes. The outermost vertical frame member has been replaced with a steel cable to hold the door net in position. This design minimizes the frame structure a hammer can hit at its most vulnerable position.

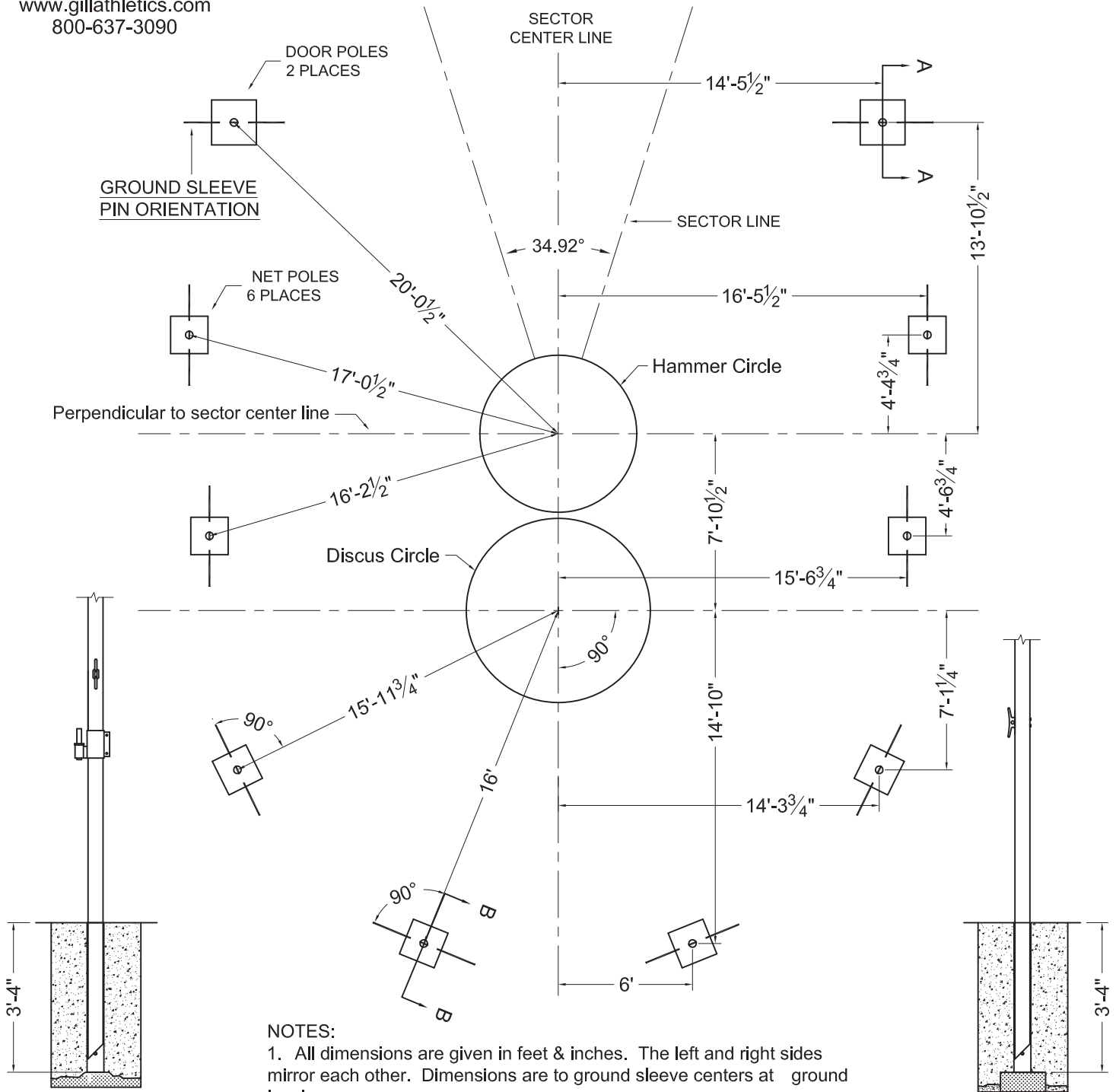
3. The doors pivot on two 4" diameter, 5/16" wall, galvanized steel poles set vertically in 3'-6" ground sleeves. Each pole utilizes two heavy duty hinges with bronze thrust bearings and 1 1/4" stainless steel hinge pins. The positions of these hinges can be adjusted to compensate for any settling of the concrete door runways. Doors swing from the closed to fully open position.
4. The net is fully supported between the doors and the first net poles by 1 5/16" galvanized steel tubes. There is also a net support tube between the two rear most net poles, above the rear entrance. The rest of the net hangs free with a heavy rope reinforcement to minimize sag. The nets are constructed of 749 lb. test, #84 knotted, weather treated nylon. The cage doors are triple netted with the main cage net extending out to the end of the door. The doors are covered with a doubled door net.





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732105 - NCAA DOUBLE CIRCLE HAMMER/DISCUS CAGE GROUND SLEEVE PLACEMENT



NOTES:

1. All dimensions are given in feet & inches. The left and right sides mirror each other. Dimensions are to ground sleeve centers at ground level.
2. The two door pole sleeves are aligned perpendicular to the sector center line. Note the Ground Sleeve Pin Orientation Line.
3. The four forward rolled net poles are aligned parallel to the sector center line. Note the Ground Sleeve Pin Orientation Line.
4. The four net poles at the back are aligned perpendicular to the circle center. Note the Ground Sleeve Pin Orientation Line.
5. Sleeves for all poles can be installed on crushed rock or a concrete block. Both versions are shown. To allow for drainage, sleeves should not be completely encased in concrete.
6. The overall dimensions of the concrete piers for the sleeves are to be determined by the local contractor and should take into consideration the local soil conditions, water table, and frost line.

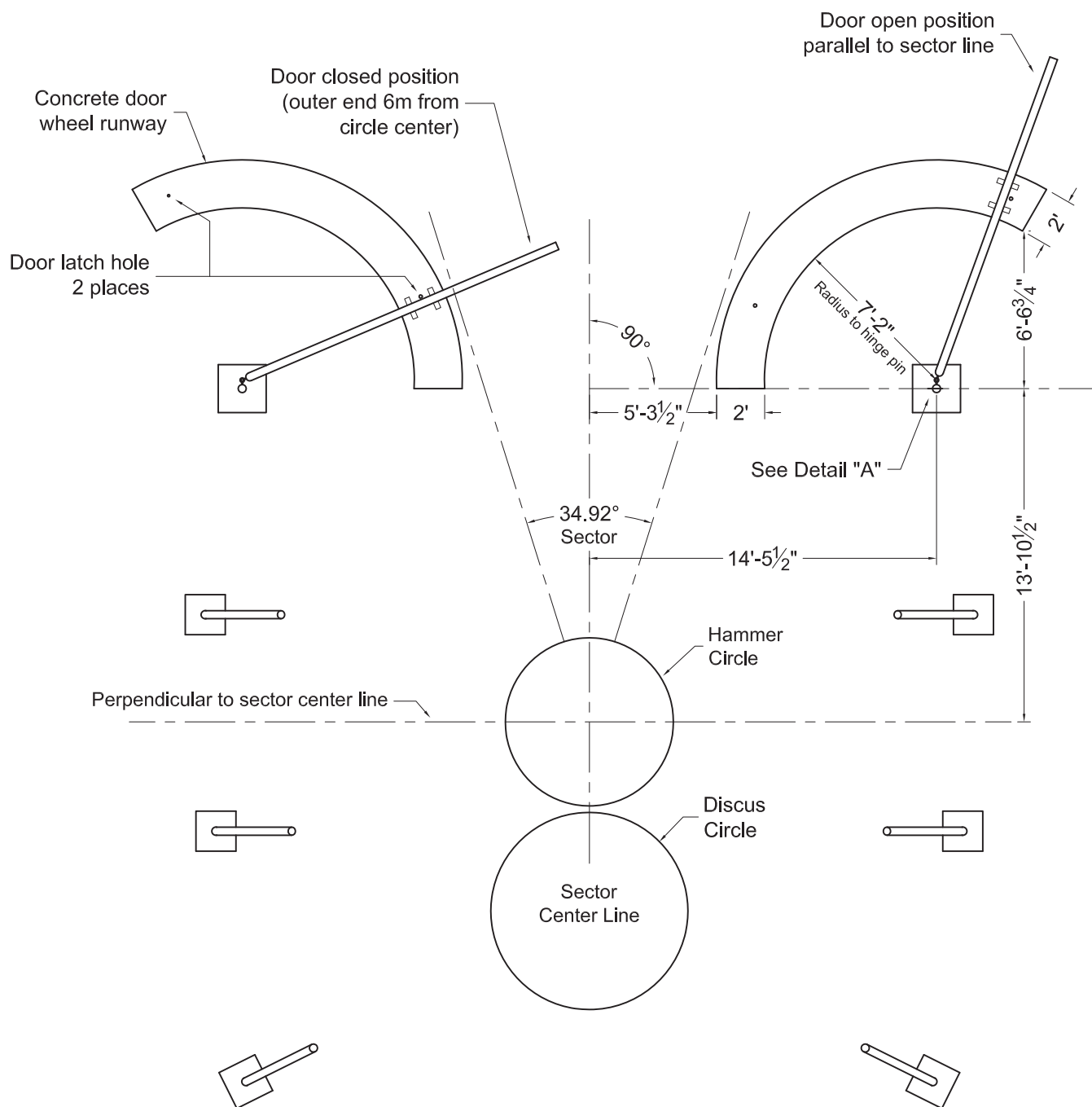
SECTION A-A
DOOR POLE WITH
GROUND SLEEVE

SECTION B-B
NET POLE WITH
GROUND SLEEVE



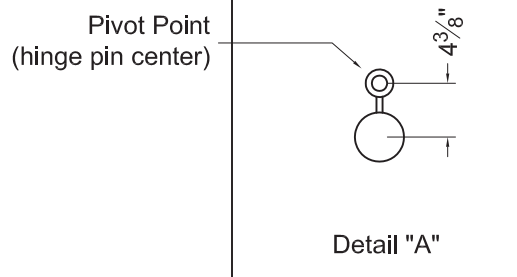
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732105 - NCAA DOUBLE CIRCLE HAMMER/DISCUS CAGE DOOR RUNWAY PLACEMENT



NOTES:

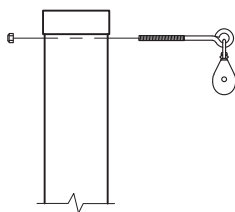
1. All dimensions are given in feet & inches. Left and right sides mirror each other.
2. Surface of caster wheel runways must be level to support doors through their entire swing.
3. Recommend concrete runways to be a minimum 6" thick.
4. Runway arc measured from door hinge pivot point, Detail "A".
5. Recommend holes in the runways for the door latch pins be drilled after the doors are in place to ensure proper position and function.





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73210010 - NCAA HAMMER/DISCUS CAGE DOOR POLE DOOR POLE INSTALLATION



Install the pipe cap (PCAP00158002) at the top of the door pole.

Install net pole pulley (73210042) with $\frac{5}{16}$ "-18 nylock hex nut (M1254) at the top of the door pole facing inside the cage, install the eyebolt so the open end of the eye is up.

Lower pole hinge segment with long pin (M1799), snap ring (M2248) and bronze bearing (73110013)

Clamp lower hinge section to door pole. Make sure that the bolt head side of the connection is towards the inside of the cage. Use the following hardware:
two $\frac{1}{2}$ "-13 x $2\frac{1}{4}$ " hex bolts (HDWE011480E0)
four $\frac{1}{2}$ " washers (HDWE05017)
two $\frac{1}{2}$ "-13 nylock hex nuts (M2232)

14'-8 $\frac{5}{8}$ "
RING
TO
RING

Lower pole hinge segment with short pin (M1798), snap ring (M2248) and bronze bearing (73110013)

Rope cleat (M2244) mounted facing the outside of the cage with two $\frac{5}{16}$ "-18 x 6" hex bolts (HDWE01314), $\frac{5}{16}$ " washers (HDWE050020E0) and $\frac{5}{16}$ "-18 nylock nuts (M2244),

NOTES:

1. All dimensions are given in feet and inches.
2. The proper orientation of the sleeve through bolt determines the proper orientation of the door pole. Each sleeve has a $\frac{1}{4}$ " through hole at the top edge through which a wood dowel could be placed to help insure proper alignment. The concrete dimensions shown for the sleeves are to be considered as minimums. Ground conditions must be considered for each site.
3. Note the position and orientation of the hinge segments with respect to the ground.
4. The longer hinge pin is installed in the upper hinge to aid in hinge alignment during door installation.
5. During installation of the door, ensure hinge segments are not knocked out of alignment and bronze bearings are in place.
6. With the door in place on the hinge pins and the castor wheels resting on the runway, both door hinge segments should be resting on the bronze bearings. To make small adjustments, carefully loosen the door pole segment clamping ring, one hinge at a time, and adjust. The door should be braced to prevent motion from side to side which will upset the alignment of the hinge pins.

Sleeve orientation hole

3'-4 $\frac{3}{4}$ "

3'-4"

6"

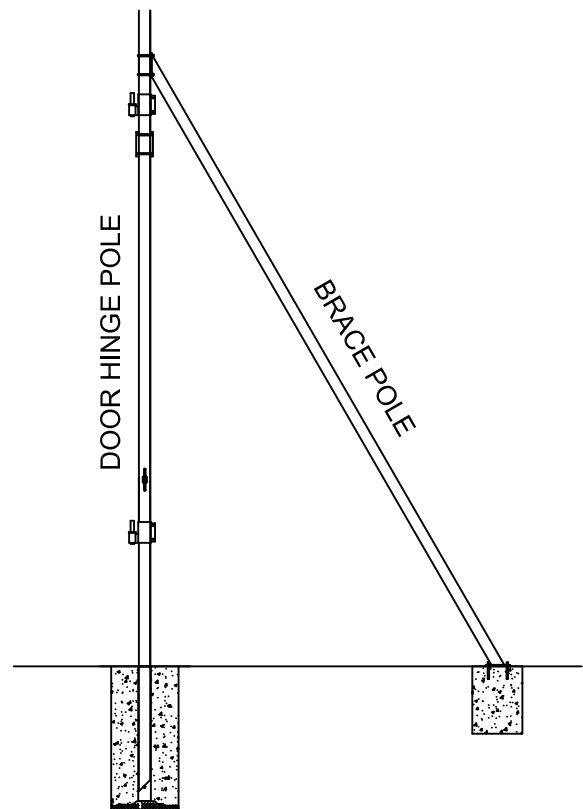
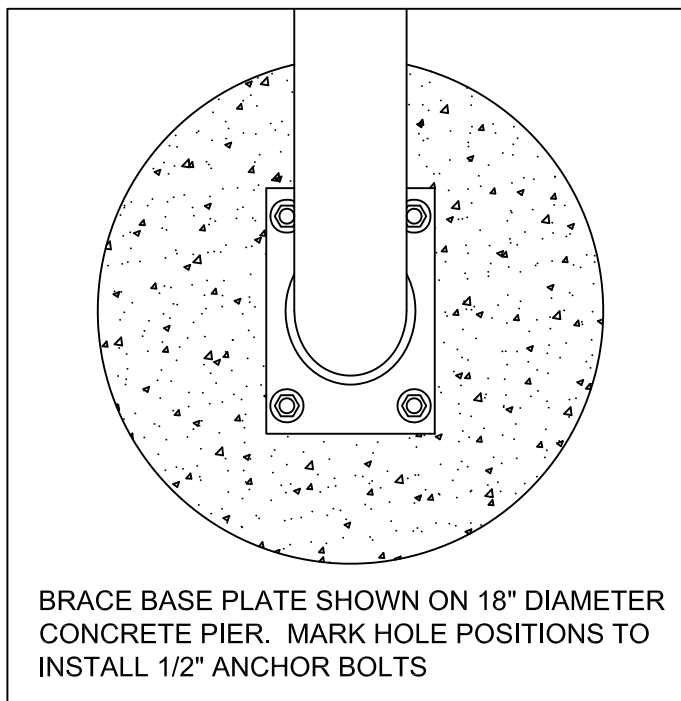
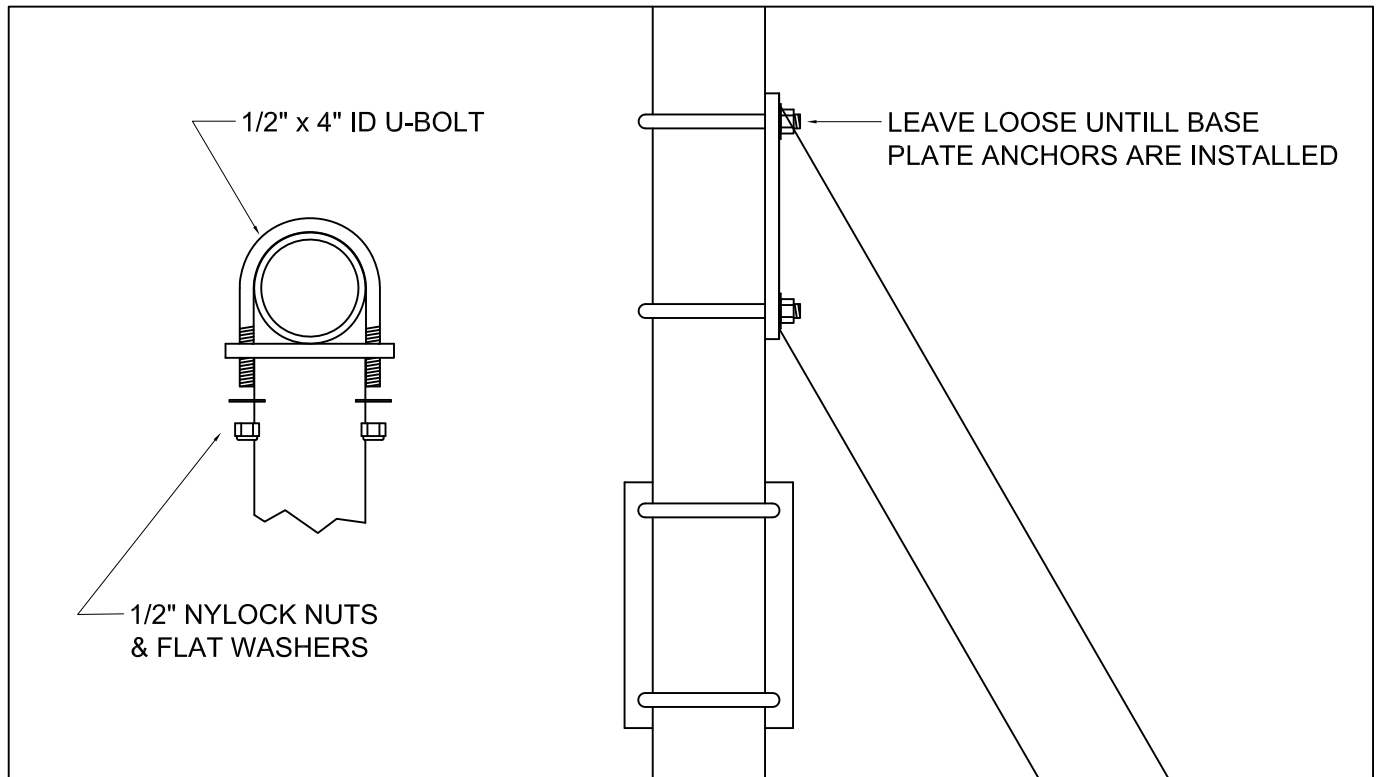
2'

Crushed rock and/or concrete block



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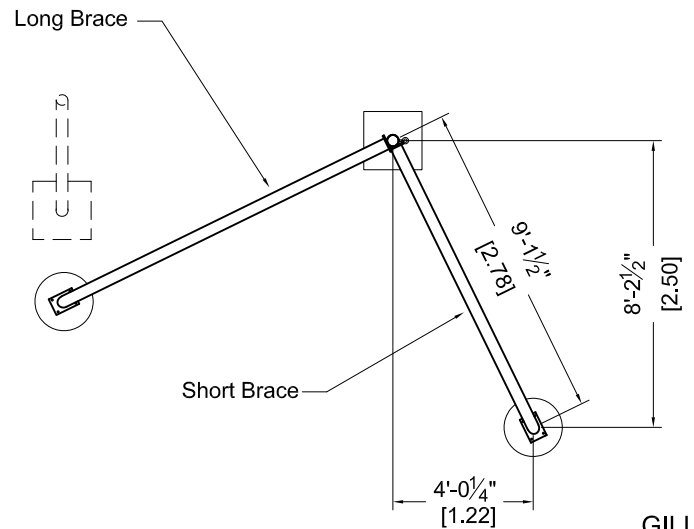
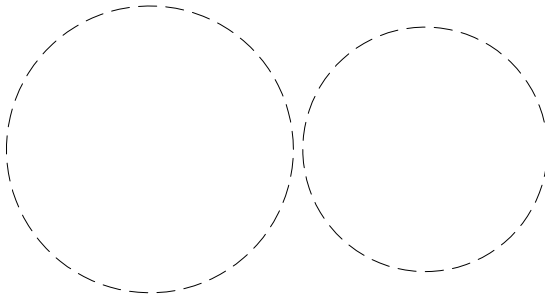
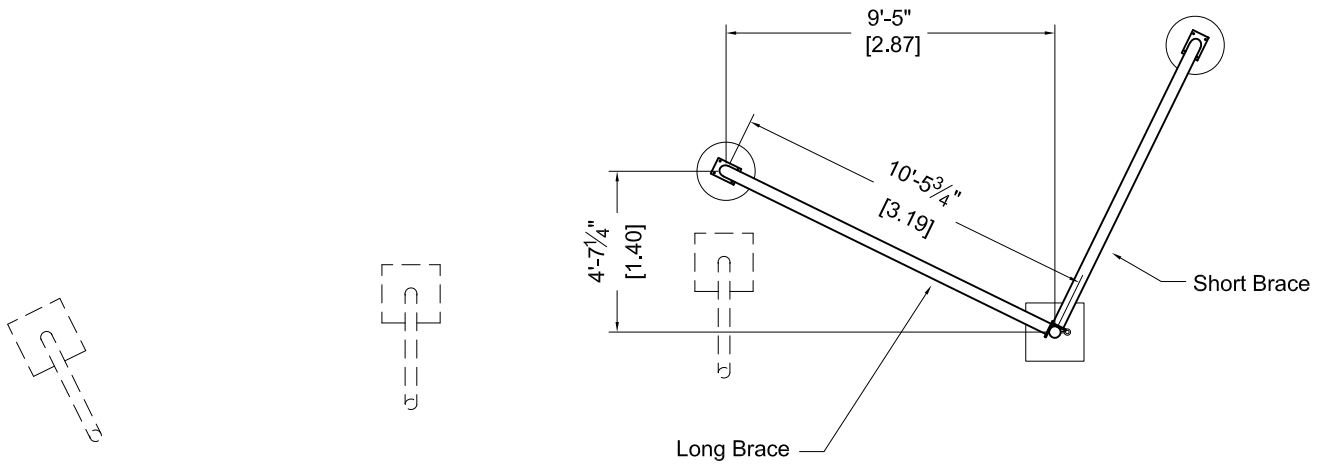
DOOR POLE BRACE INSTALLATION





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DOOR POLE BRACE INSTALLATION



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3/25/19

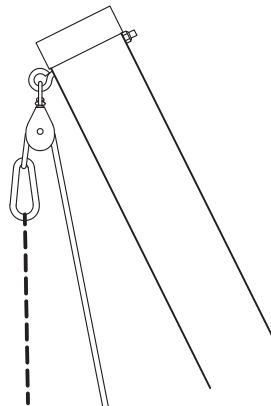


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73210020 - NCAA HAMMER/DISCUS CAGE NET POLE NET POLE INSTALLATION

Install the pipe cap (PCAP00158002)
at the top of the net pole.

Install net pole pulley (73210042) with
 $\frac{5}{16}$ "-18 nylock hex nut (M1254) at the
top of the net pole, install the eyebolt
so the open end of the eye is up.

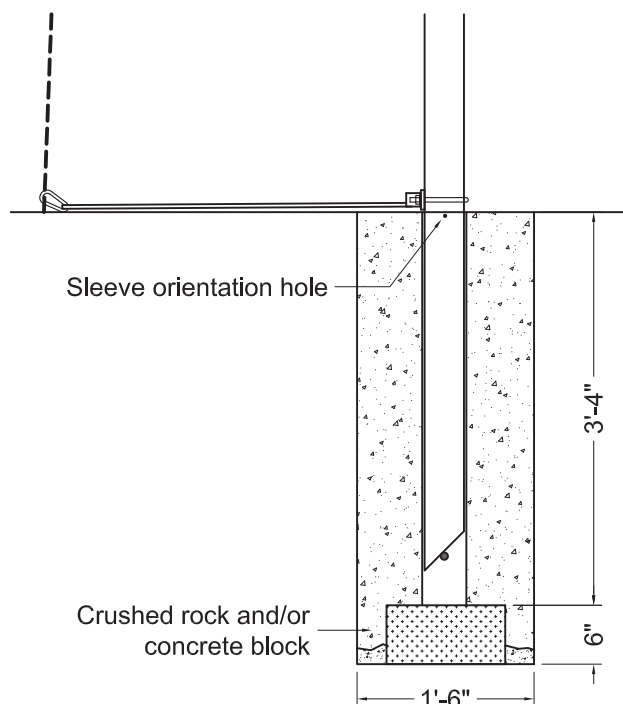


On the two rear most poles only,
install eyebolt (M2745) with nylock
nut (M1254) at hole 11ft from the
ground. These will be used to
secure the rear door flap.

Install eyebolt (M2745) with nylock
nut (M1254) at hole 8ft from the
ground. Hook rubber strap (M733)
between eyebolt and main net.

Install rope cleat (M2244) with nylock nuts
(M1254), $\frac{5}{16}$ " washers (HDWE050020E0)
and $\frac{5}{16}$ "-18 x 6" hex bolts (HDWE01314).

Install net flip arms (73210043) at ground level on
each net pole with u-bolt (M2298), washers
(M2263), and $\frac{1}{2}$ "-13 nuts (HDWE030030E0). Clip
the rope edge of the net to the end of the net arm.



Ground Sleeve Caps are
available but sold separately.

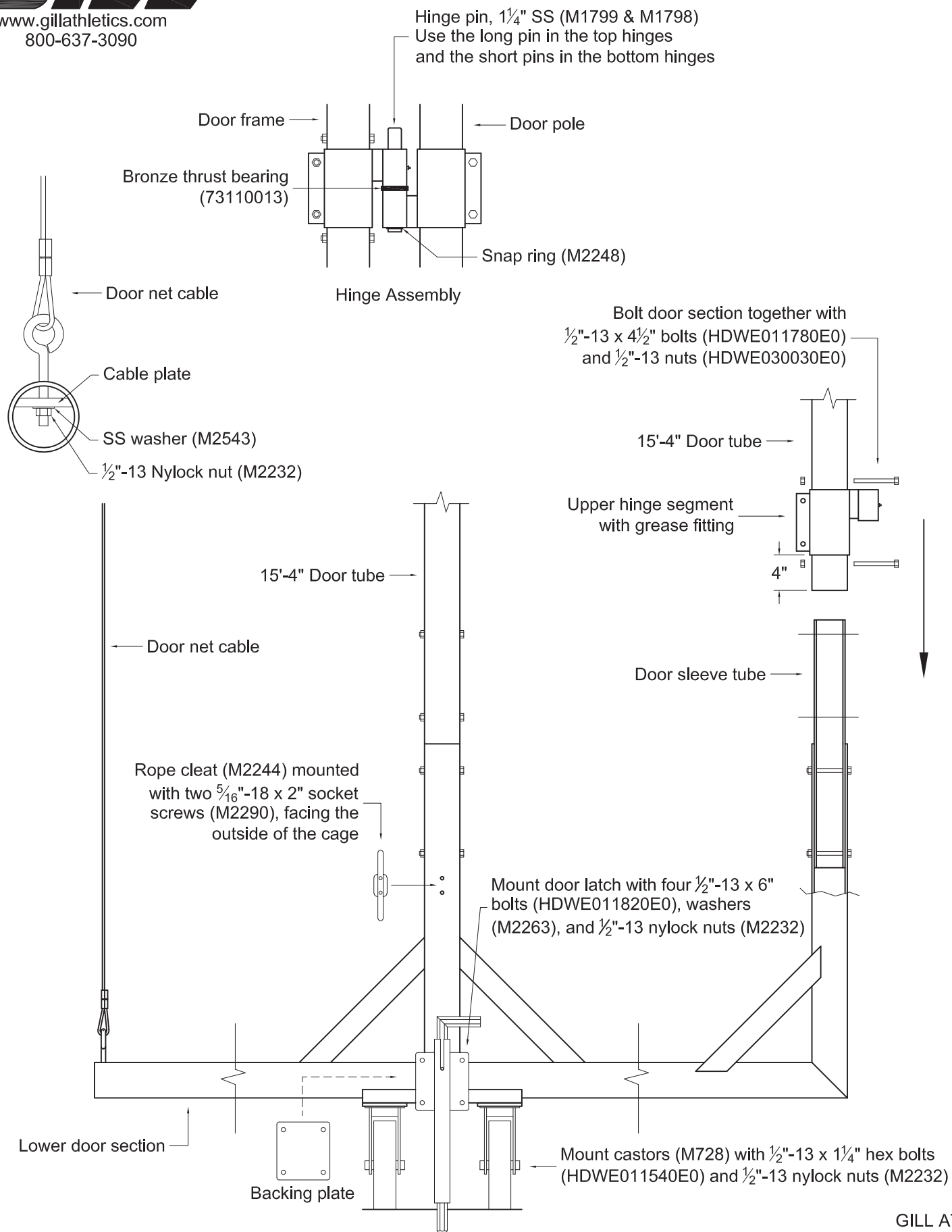
Works with Ground Sleeve Cap
#73119021

Center of Cage



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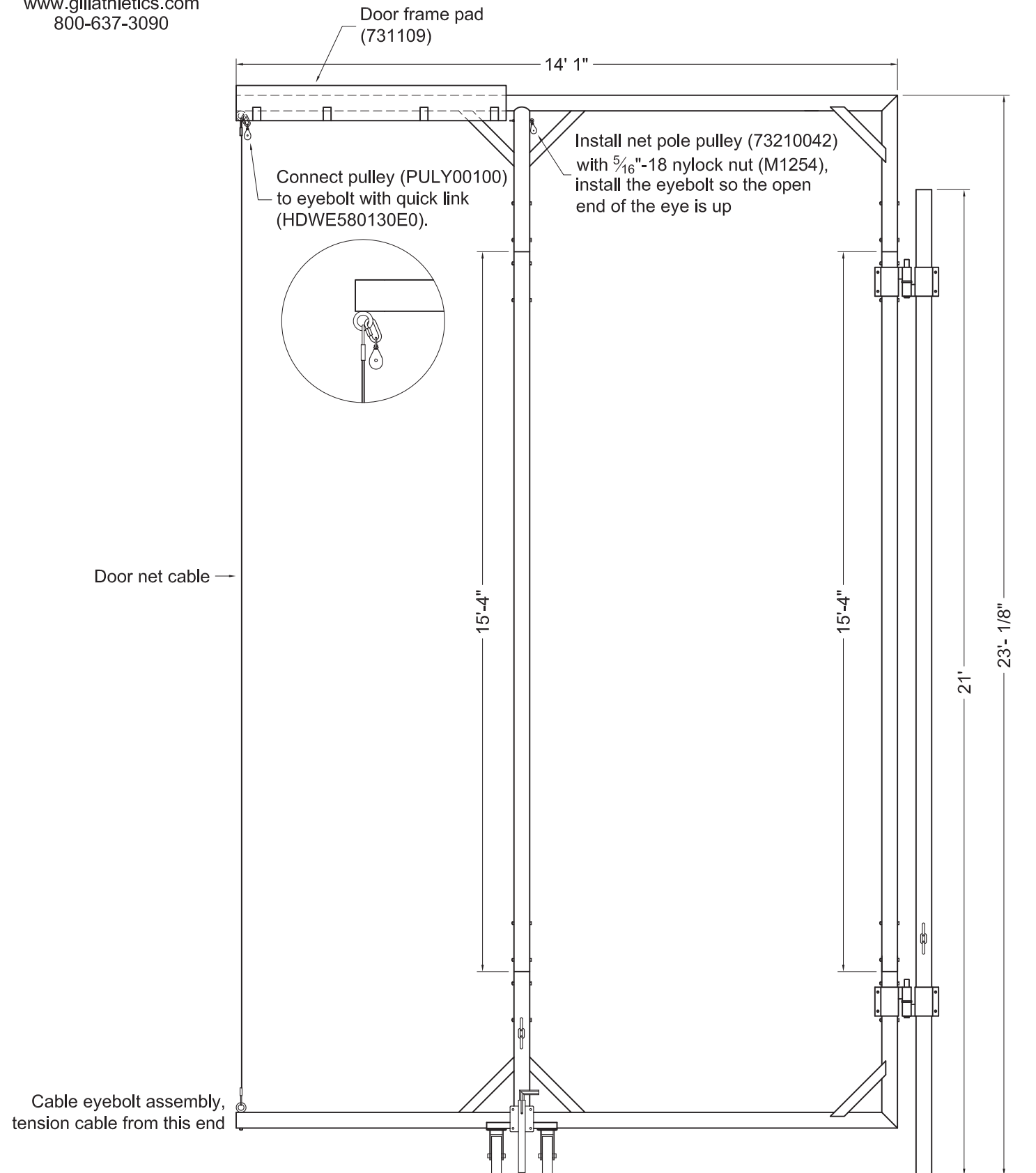
73210005 - NCAA HAMMER/DISCUS CAGE 7m DOOR 7m DOOR ASSEMBLY





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73210005 - NCAA HAMMER/DISCUS CAGE 7m DOOR 7m DOOR ASSEMBLY



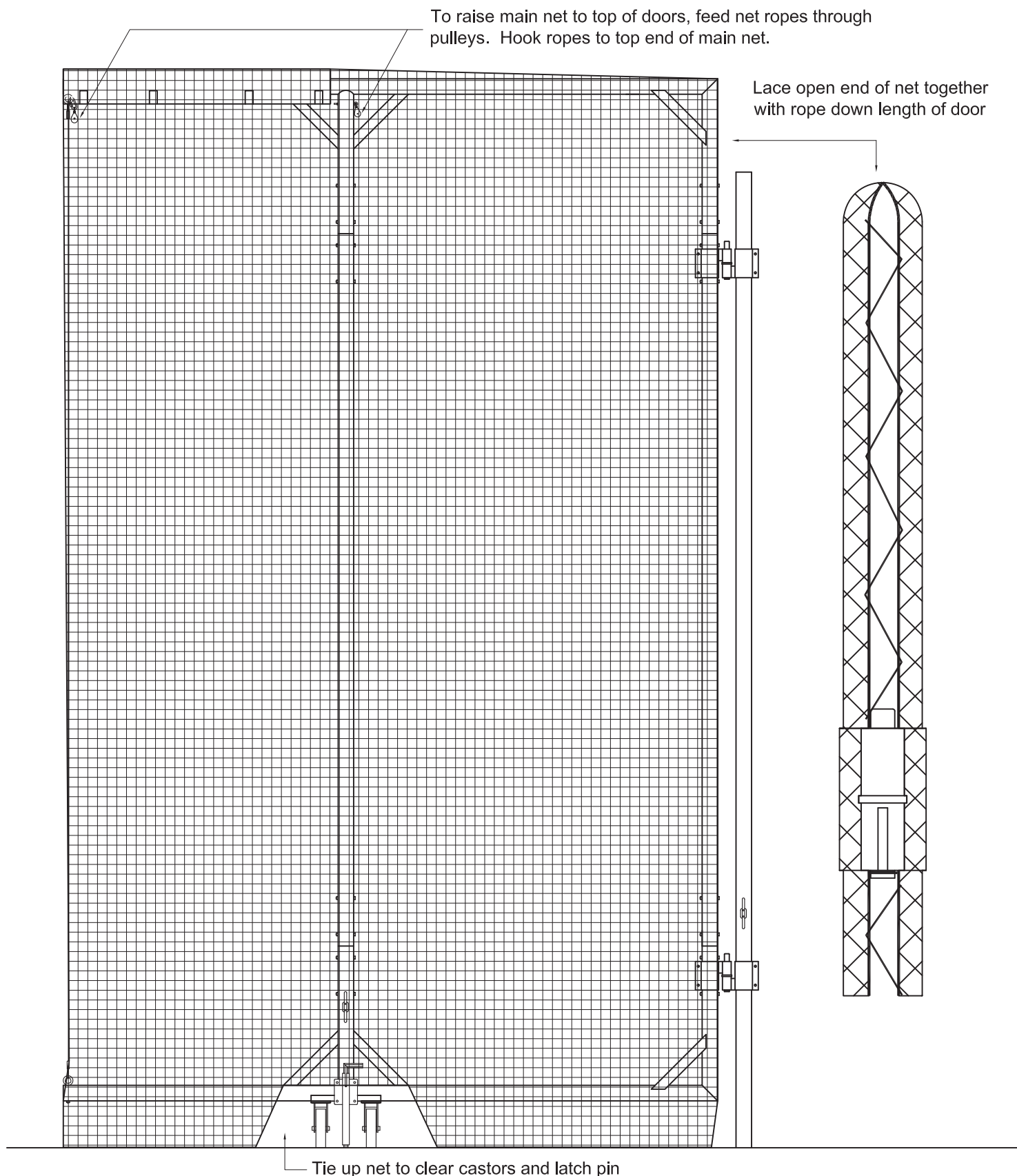


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73210005 - NCAA HAMMER/DISCUS CAGE 7m DOOR 7m DOOR NET INSTALLATION

To raise main net to top of doors, feed net ropes through pulleys. Hook ropes to top end of main net.

Lace open end of net together with rope down length of door



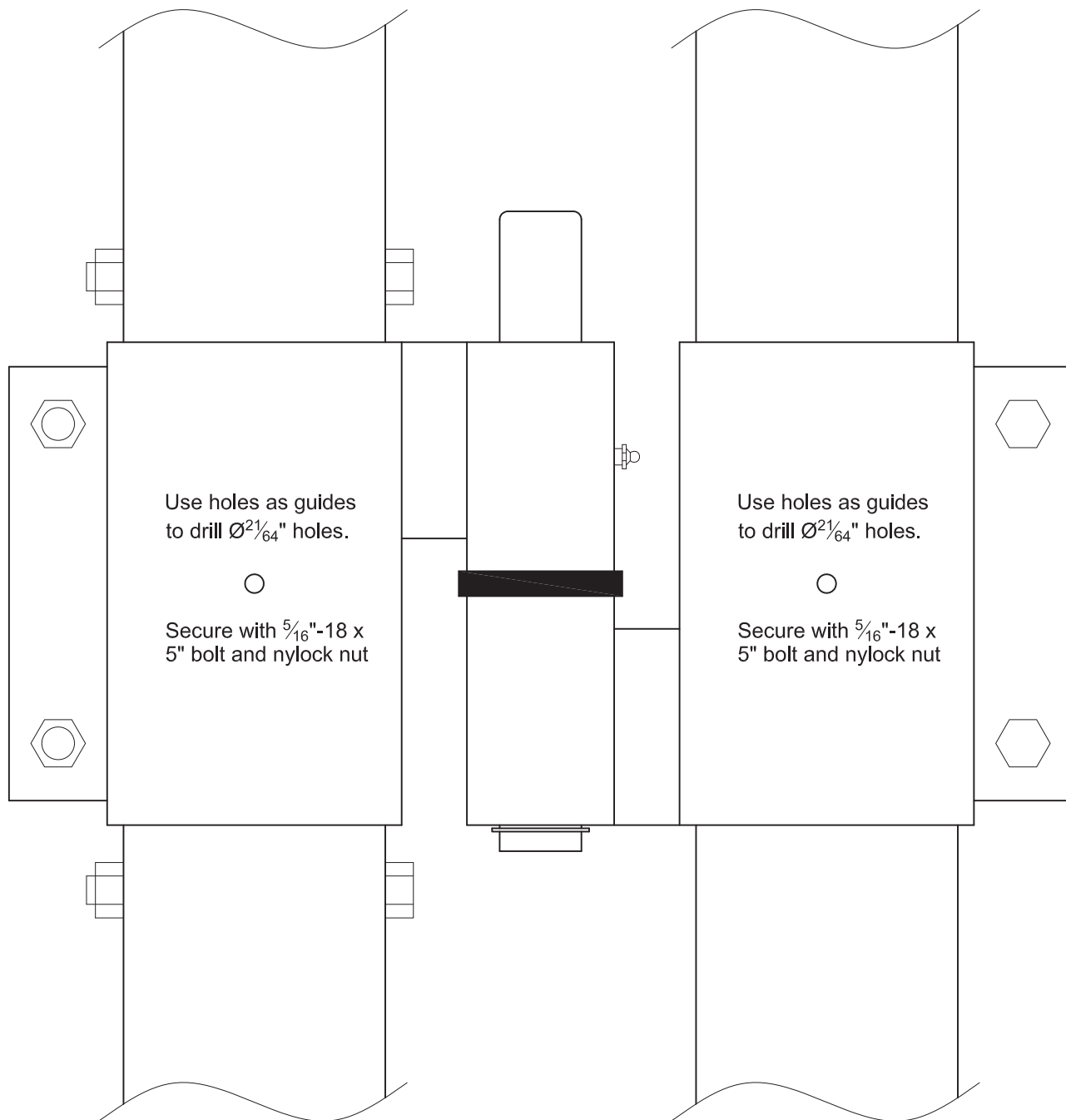


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73110012 - HAMMER/DISCUS CAGE DOOR HINGE HINGE LOCK BOLT

After the doors have been installed and all final adjustments have been made, use the holes in the body of the hinges as guides to drill $\varnothing 2\frac{1}{64}$ " holes through the door pole and the door.

Install a $\frac{5}{16}$ "-18 x 5" bolt (HDWE012560E0) through the holes and secure with a $\frac{5}{16}$ "-18 nylock nut (M1254).

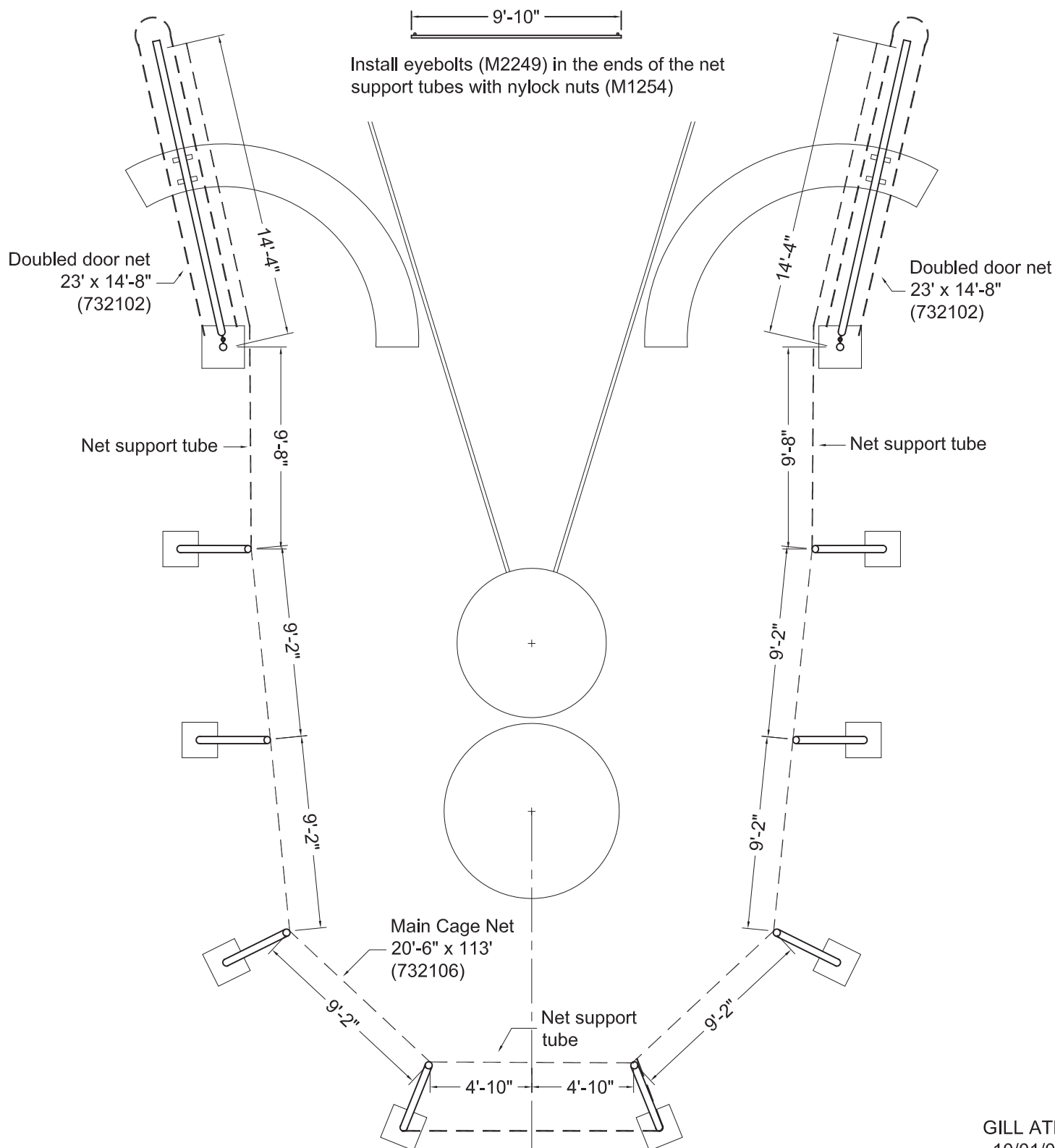




732105 - NCAA DOUBLE CIRCLE HAMMER/DISCUS CAGE NET INSTALLATION

NOTES:

1. Net support tubes are 1 5/16" OD, 14 Gauge galvanized steel.
3. The net is supported on this frame by inserting the tubes into the top folded edge of the main net.
4. Hook the net ropes directly to the net edge rope and/or eyebolts in net support tubes.
5. Ensure the net rope hooks are properly closed before raising the main net.

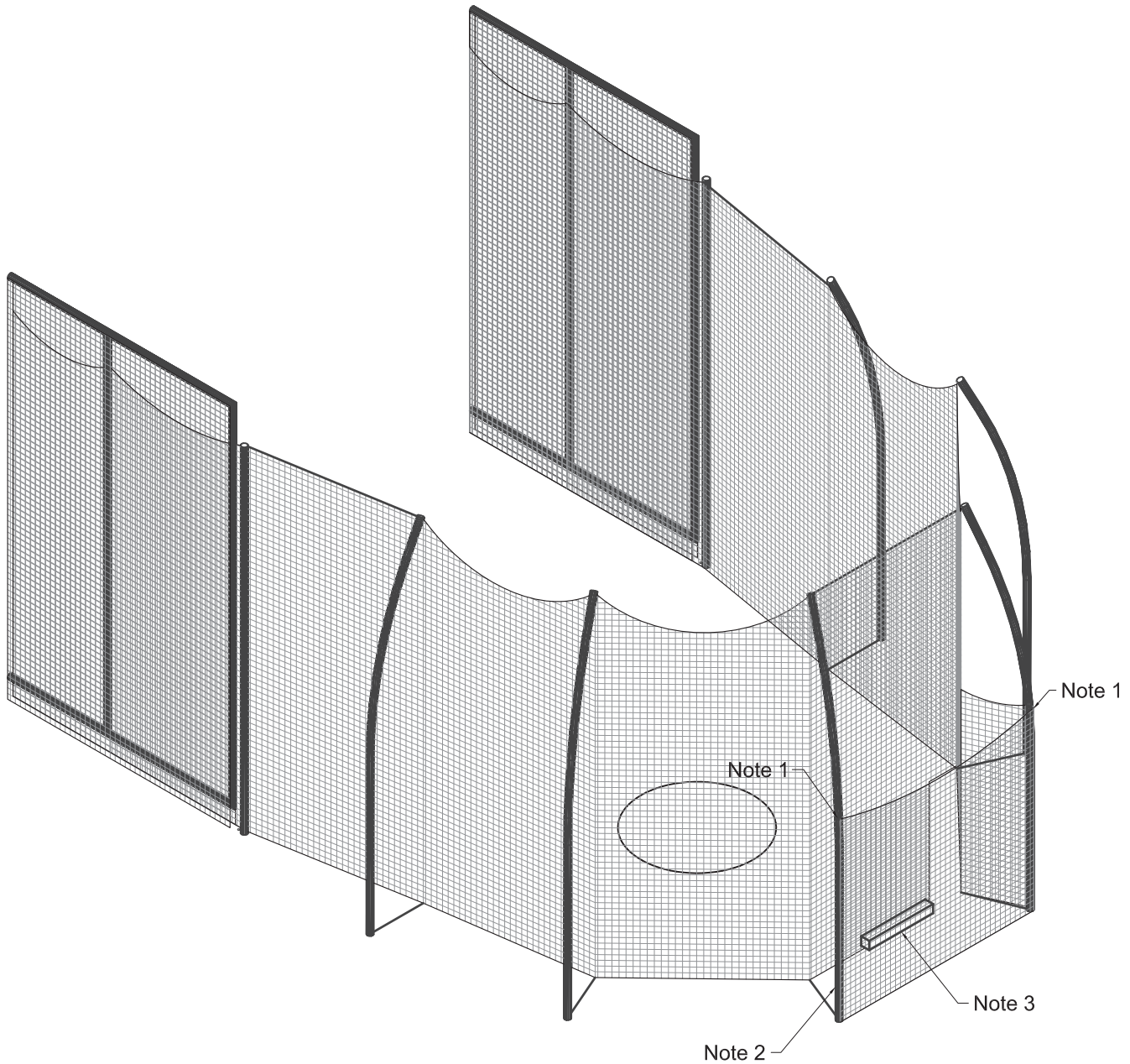




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HAMMER CAGE REAR ENTRY INSTALLATION

Hammer cage size and layout will vary depending on model number.
Rear door design is consistent among all Gill hammer cages.



NOTES:

1. Wrap the rear access net extension around the outside of the two rear most net poles. Hook the net to the poles at the eyebolt 11ft from the ground.
2. Lace the entire end of the net extension to this pole using rope.
3. Clip the door flap weight (73210050) to the bottom net edge rope next to the entry way to keep the net from moving in the wind.

WARNING: This product can expose you to Titanium Dioxide, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

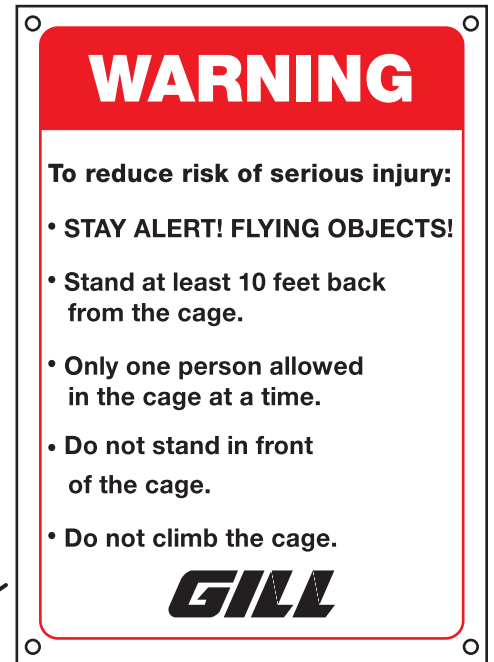
suggestions@gillathletics.com

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12-03-12
Hammer Cage Rear Entry

For the protection of athletes, spectators, and coaches install warning signs according to the diagram below.

Attach signs (M2322) to the cage net with the included 1.25" rings (M1250) in each corner. Signs should face away from the cage toward spectators.



Center Back: Attach sign to the outside of the net at eye level in the middle of the back of the cage.



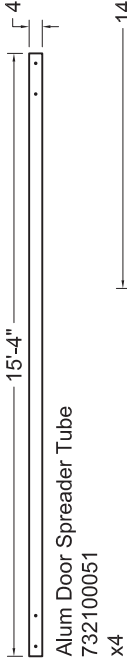
Left Front Side: Attach sign to the outside of the net at eye level near the front left side of the cage.



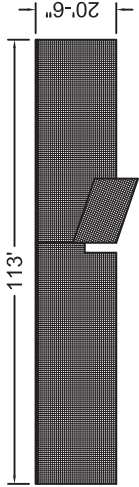
Right Front Side: Attach sign to the outside of the net at eye level near the front right side of the cage.



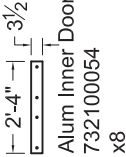
Door Frame Pad
731109
x2



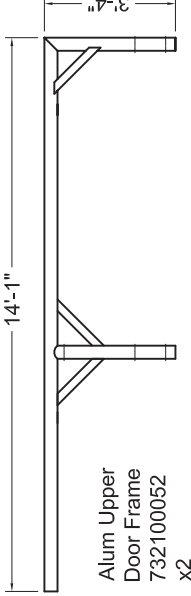
Alum Door Spreader Tube
732100051
x4



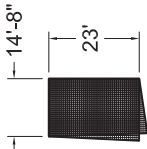
Main Net
732106
x1



Alum Inner Door Sleeve
732100054
x8



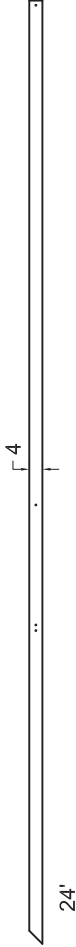
Alum Upper
Door Frame
732100052
x2



Door Net
732102
x2



Door Flap Weight
73210050
x1

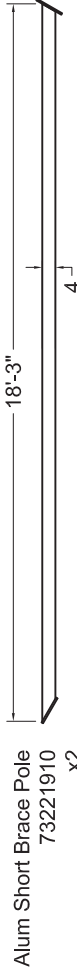


Steel Door Pole
73210010
x2



Alum Net Pole
73210020
x8

Steel Net Support Tube, 118"
73210047
x3



Alum Short Brace Pole
73221910
x2



Alum Long Brace Pole
73221920
x2

QTY.	PART #	DESCRIPTION
2	731109	Door Frame Pad
1	732106	Main Net, 113' x 20'-6"
2	732102	Door Net, 14'-8" x 23'
4	732100051	Door Spreader Tube
2	732100052	Door Top Frame
2	732100053	Door Bottom Frame
8	732100054	Door Inner Sleeve
4	732100051	Door Spreader Tube
2	73210010	Door Pole
8	73210020	Net Pole
1	73210050	Door Flap Weight
1	73210540	Cage Components (see page 2)
3	73210047	Net Support Tube, 118"


QTY.	PART #	DESCRIPTION
8	M2298	U-Bolt, 1/2"-13 x 4"
8	M2583	1/2"-13 x 4 1/4" Concrete Anchor
16	M2543	1/2" SS Flat Washer
16	M2780	1/2"-13 SS Nylock Hex Nut

REV	DATE	INITIAL	NOTE:
B	10-05-11	CEB	Added locking bolts for hinges
C	11-26-12	CEB	Moved the net support tubes to the top level
D	01-25-13	CEB	Bolt on rope cleats & plastic pole caps
E	08-19-14	CEB	Broke out door parts
F	05-23-16	CEB	Unique hinge pins, new pulleys
G	01-22-18	CEB	Added braces, updated hinge, latch, and rope cleat HDWE

QTY.	PART #	DESCRIPTION
8	M2298	U-Bolt, 1/2"-13 x 4"
8	M2583	1/2"-13 x 4 1/4" Concrete Anchor
16	M2543	1/2" SS Flat Washer
16	M2780	1/2"-13 SS Nylock Hex Nut



Hardware Kit
73210560
x1



HARDWARE:	
QTY.	PART#
4	HDWE011820E0
4	M2232
8	M2263

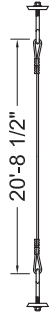
Door Latch
73110045
x2

HINGE HARDWARE		
QTY.	PART #	DESCRIPTION
1	73110013	Hinge Bearing, Bronze
4	M2232	1/2"-13 Nylock Hex Nut
4	HDWE011480E0	1/2"-13 x 2 1/4" Hex Bolt
8	HDWE05017	1/2" Flat Washer (SAE) 1 1/8" OD
1	M2248	1 1/4" Snap Ring, External
2	HDWE012560E0	5/16"-18 x 5" Hex Bolt
2	M1254	5/16"-18 Nylock Hex Nut

Hinge Assembly
73110012
x4



10" Rigid Castor
M728
x4



Door Cable Assembly
73210046
x2

Warning Sign
M2322
x3



Ring Clip
M1250
x12



Net Arm
73210043
x8

CAGE COMPONENTS x1 (73210540)	
QTY.	PART #
2	73110045
4	73110012
4	M728
2	73210046
8	73210043
3	M2322
12	M1250
1	73210560

Long Hinge Pin
M1799
x2



Short Hinge Pin
M1798
x2



Rope Cleat
M2244
x12



Rubber Strap 24"
M733
x8



1/4" Polyester Rope
50' roll
M2005
x15

DOOR HARDWARE BAG x2 (73210064)	
QTY.	PART #
16	HDWE011780E0
16	HDWE030030E0
8	HDWE011540E0
8	M2232
1	73210042
1	M1254
1	PULY00100
1	HDWE580130E0
2	M2290

PULLEY HARDWARE BAG x1 (73210562)	
QTY.	PART #
10	73210042
10	M1254

ROPE HARDWARE BAG x1 (73210563)	
QTY.	PART #
14	M2223
6	M1254
6	M2249

GENERAL HARDWARE BAG x1 (73210565)	
QTY.	PART #
25ft	M2005
2	M2223
30	M1254
10	M2745
20	HDWE01314
20	HDWE050020E0
10	PCAP00158002

NCAA DOUBLE RING HAMMER CAGE, SHIPPING LIST			
SCALE: (none)		PART #: 732105	
DATE: 09/07/06		DWG #: 732105ship2	
DRAWN BY: JWD		SHEET: (2 of 2)	



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