

The 742110, NCAA Hammer/Discus Cage, consists of six rolled aluminum net poles, two galvanized steel door hinge poles, and two 4.35 m wide aluminum movable doors. Per NCAA rules, net is supported at full cage height between the door poles and first net support poles. Includes door braces to help prevent wind damage.

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.

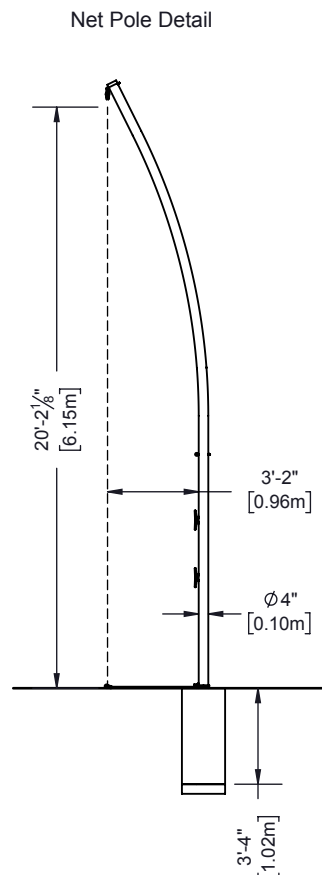
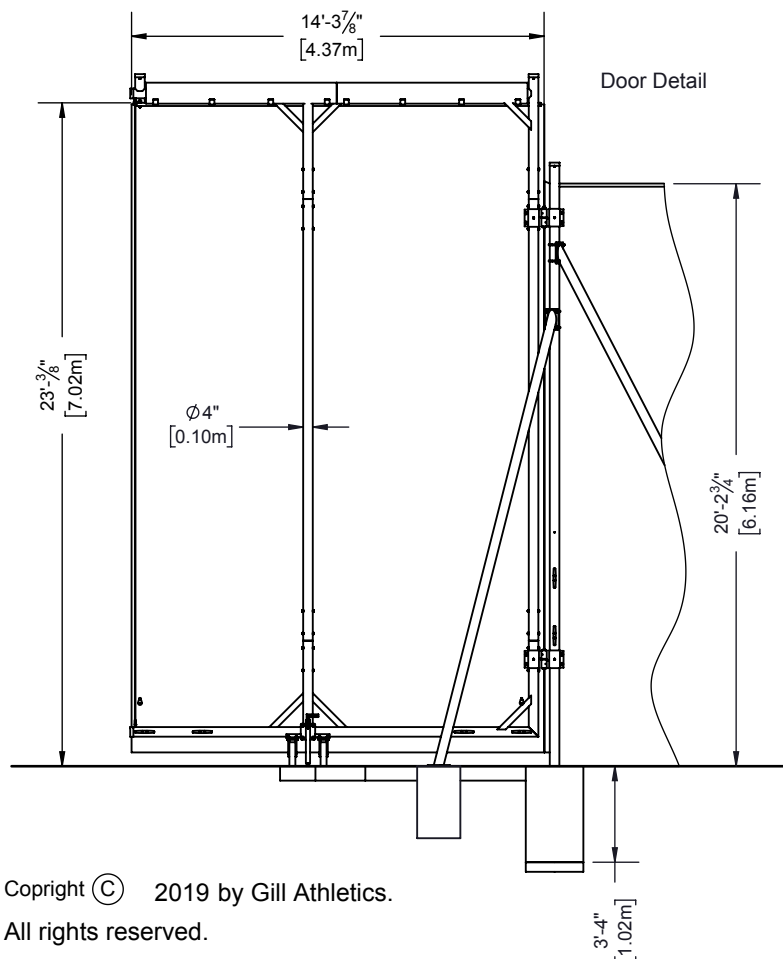
2. The 14' 3 1/4" (4.35m) wide by 23' (7.01m) tall aluminum doors are constructed of the same heavy wall tubing as the net poles. All corner joints are securely welded and cross braced. Each door comes in four sections and is easily assembled at the site. Sections are securely bolted together utilizing 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, 8 gauge, 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 double netted.

NOTE: Ground Sleeves are sold separately.
 Use ground sleeve kit 74211001.

NOTE: Barrier net is sold separately.
 Use barrier net 732103




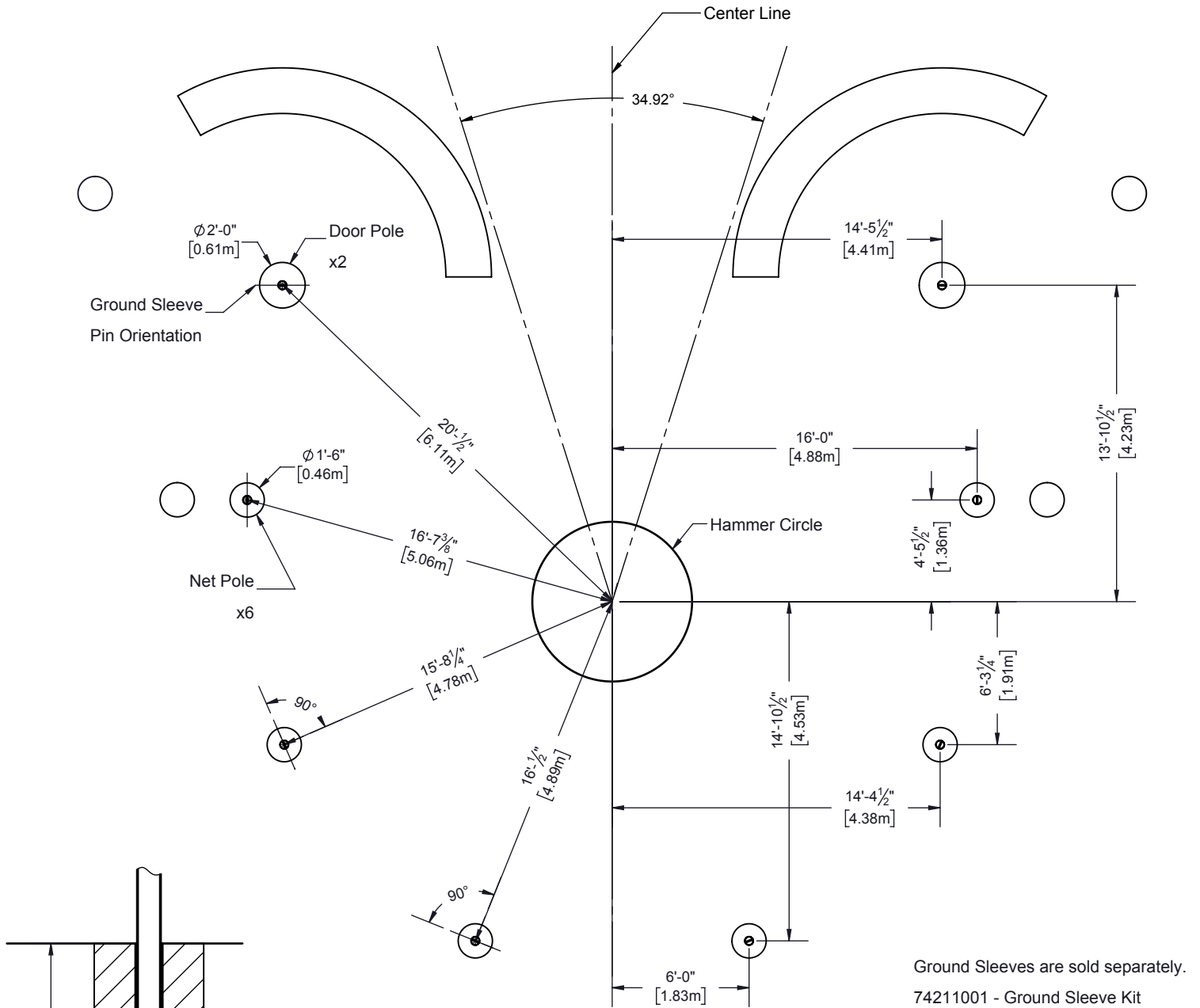
Important Safety Instructions

It is the owner's/manager's responsibility to insure that all users of this equipment become familiar with the contents of this manual, to instruct users on the proper operation of the equipment, and to warn them of the potential hazards.

Prior to Operating:

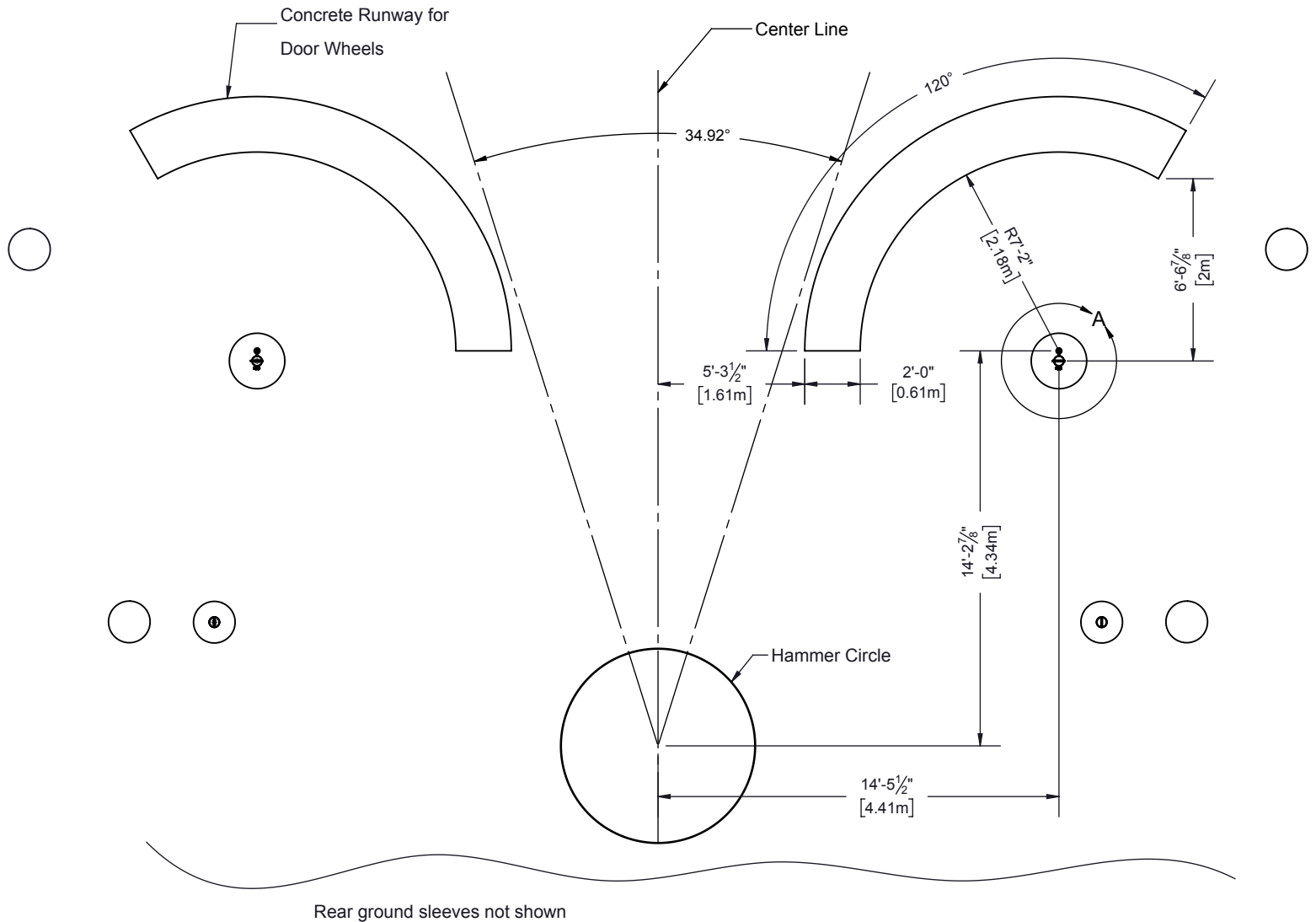
- Read all instructions before using the equipment.
- Do not allow children on or near the equipment.
- Inspect the unit carefully for any worn, loose, or missing parts. If any defect is suspected, do not use! Report suspected problems to authorized personnel immediately!
- Use the equipment only for its intended purpose.
- Do not use the equipment alone.

 **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.



NOTES:

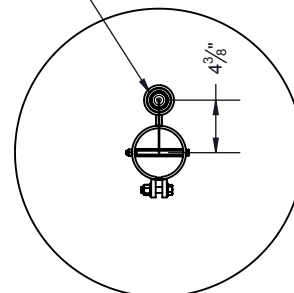
1. The left and right sides mirror each other. Dimensions are to ground sleeve centers at ground level.
2. The two door pole sleeves are aligned perpendicular to the sector center line. Note the Ground Sleeve Pin Orientation Line.
3. The two forward rolled net poles are aligned parallel to the sector 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. 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.



NOTES:

1. 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.

Door Pivot Point

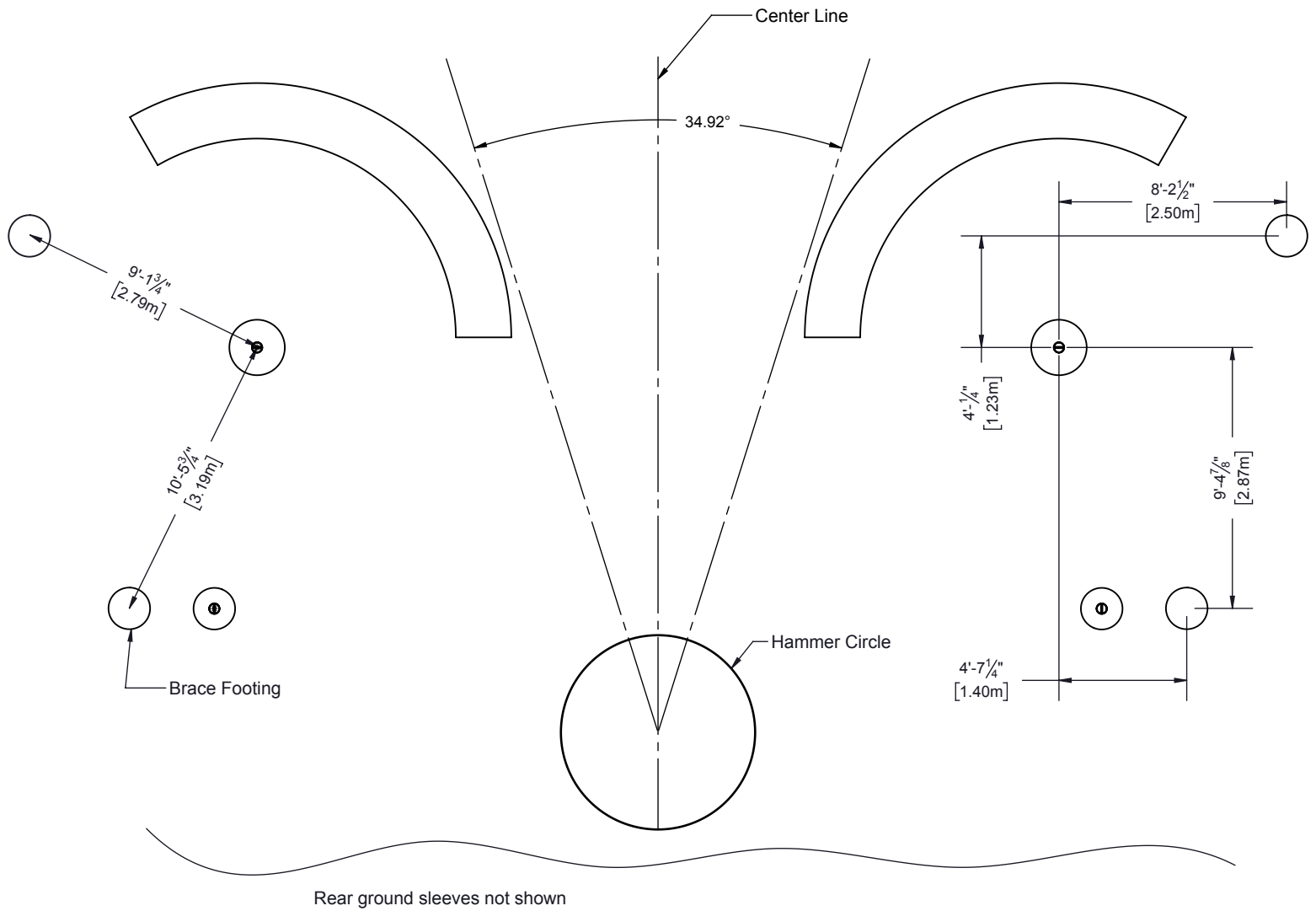


DETAIL A



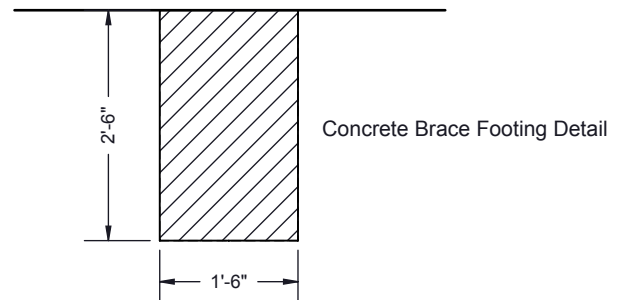
www.gillathletics.com
800-637-3090

742110 - NCAA HAMMER/DISCUS CAGE BRACE FOOTINGS



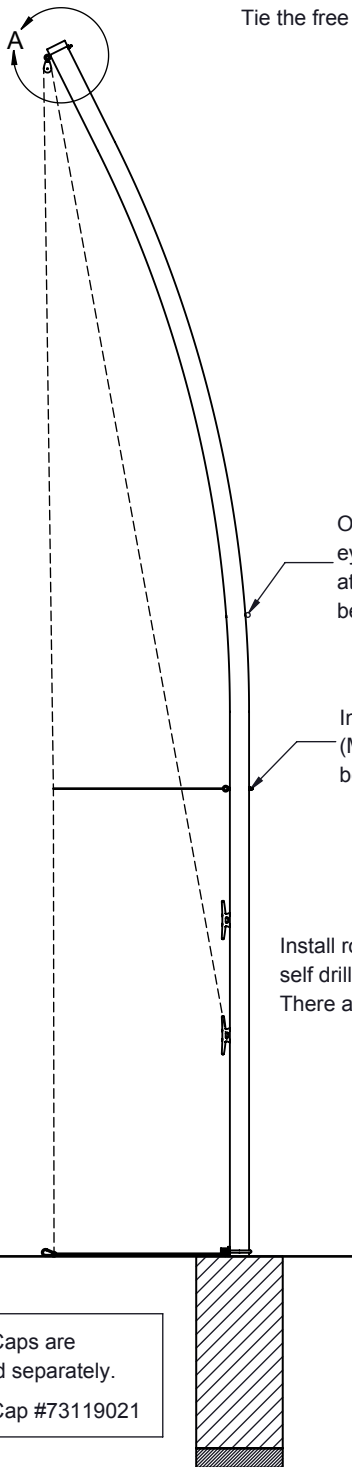
NOTES:

1. The left and right sides mirror each other. Dimensions are to footing centers at ground level.
2. 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.



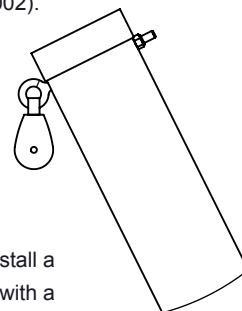
Before putting the net poles into the ground sleeves, install all of the hardware onto the poles.

Tie one end of a 50ft rope to the bottom rope cleat. Run it through the top pulley and back down. Tie the free end of the rope onto a snap hook (M2223). This will be used to raise the net.



Install the pipe cap (PCAP00158002).

Install pulley (73210042) with 5/16"-18 nylock nut (M1254). The open side of the eye-bolt should be up.



DETAIL A

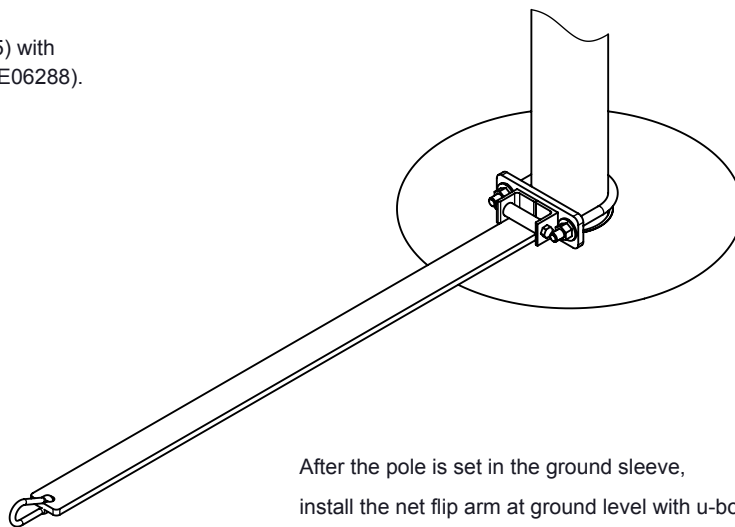
On the two front poles, install a second pulley (PULY00100) with a quick link (CHAN00021000).

On the two rear most poles, 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). Hook rubber strap (M733) between the eyebolt and main net.

Install rope cleats (M2245) with self drilling screws (HDWE06288). There are pilot holes.

Ground Sleeve Caps are available but sold separately.
Ground Sleeve Cap #73119021



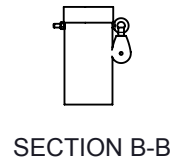
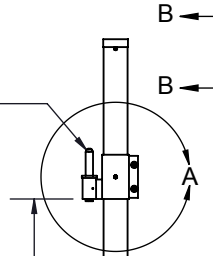
After the pole is set in the ground sleeve, install the net flip arm at ground level with u-bolt (M2298), washers (M2263), and 1/2"-13 nuts (HDWE030030E0). After the net is installed, clip the bottom of the net to the end of the flip arm.



www.gillathletics.com
800-637-3090

742110 - NCAA HAMMER/DISCUS CAGE DOOR POLE INSTALLATION

Lower pole hinge segment with LONG
PIN (M1799), snap ring (M2248) and
bronze bearing (73110013).



Install the pipe cap (PCAP00158002).

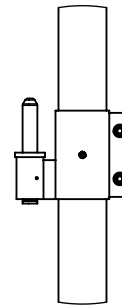
Install pulley (73210042) with 5/16"-18
nylock nut (M1254). The open side of the
eye-bolt should be up. The pulley should
face the inside of the cage.

NOTES:

1. The longer hinge pin is installed in the upper hinge
to aid in hinge alignment during door installation.

2. During installation of the door, ensure hinge
segments are not knocked out of alignment and
bronze bearings are in place.

3. 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.



DETAIL A

Clamp lower hinge section to door pole. Make sure
the bolt head side of the connection is towards the
inside of the cage. Use the following hardware:

2x 1/2"-13 x 2 1/4" hex bolts (HDWE011480E0)

4x 1/2" washers (HDWE05017)

2x 1/2"-13 nylock nuts (M2232)

15'-4"
[4.67m]

Lower pole hinge segment with SHORT
PIN (M1798), snap ring (M2248) and
bronze bearing (73110013).



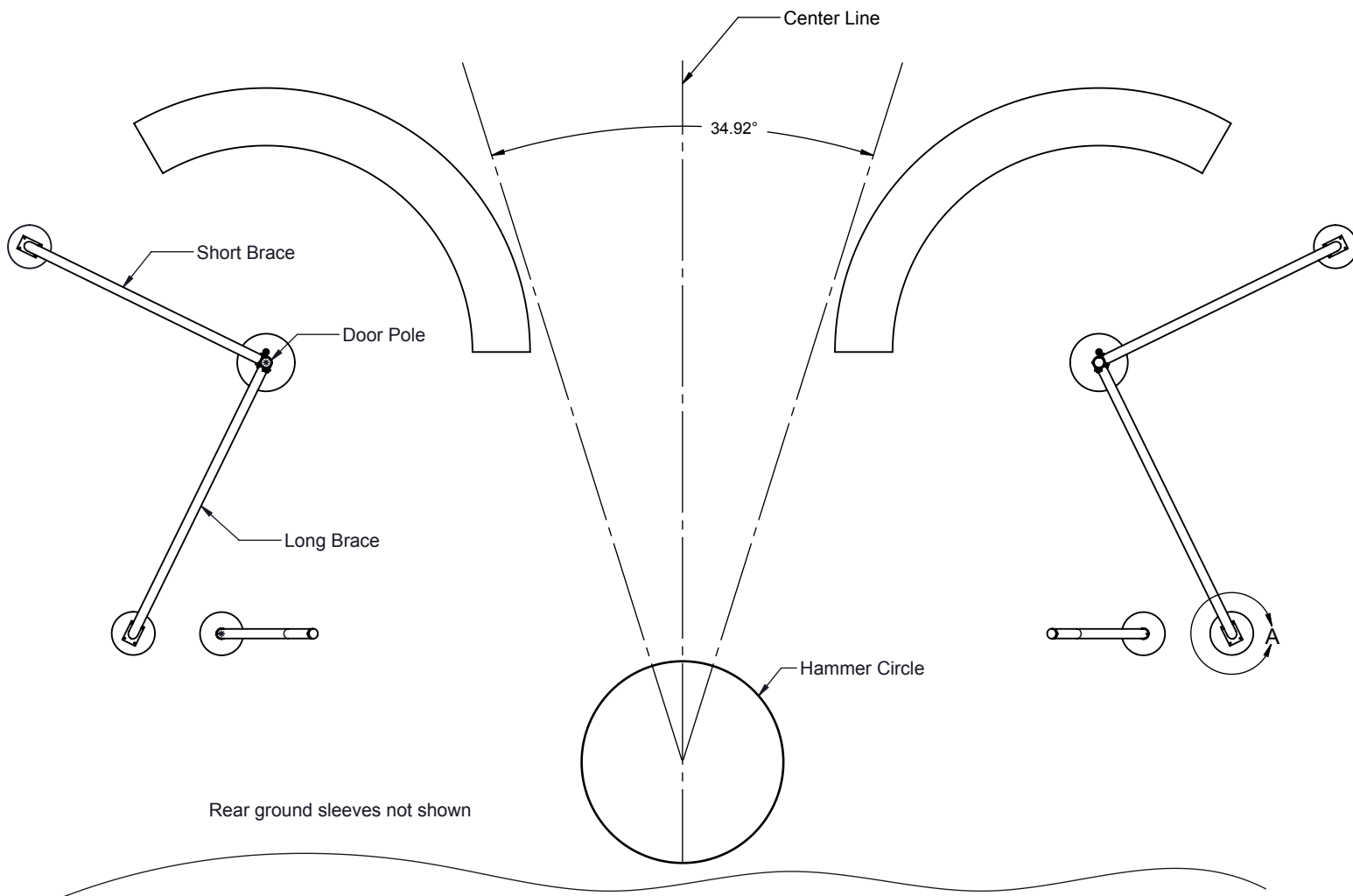
3'-4 7/8"
[1.04m]

Install rope cleats (M2245) with self
drilling screws (HDWE06288). There
are pilot holes. The rope cleats must
point to the outside of the cage.



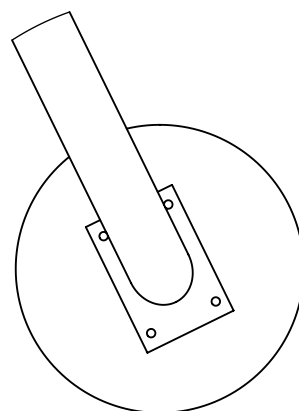
www.gillathletics.com
800-637-3090

742110 - NCAA HAMMER/DISCUS CAGE BRACE POLES



Attach the braces to the door pole with u-bolts, but leave them loose until base plate anchors are installed.

Use the holes in the base plate to mark holes positions for 1/2" anchor bolts.

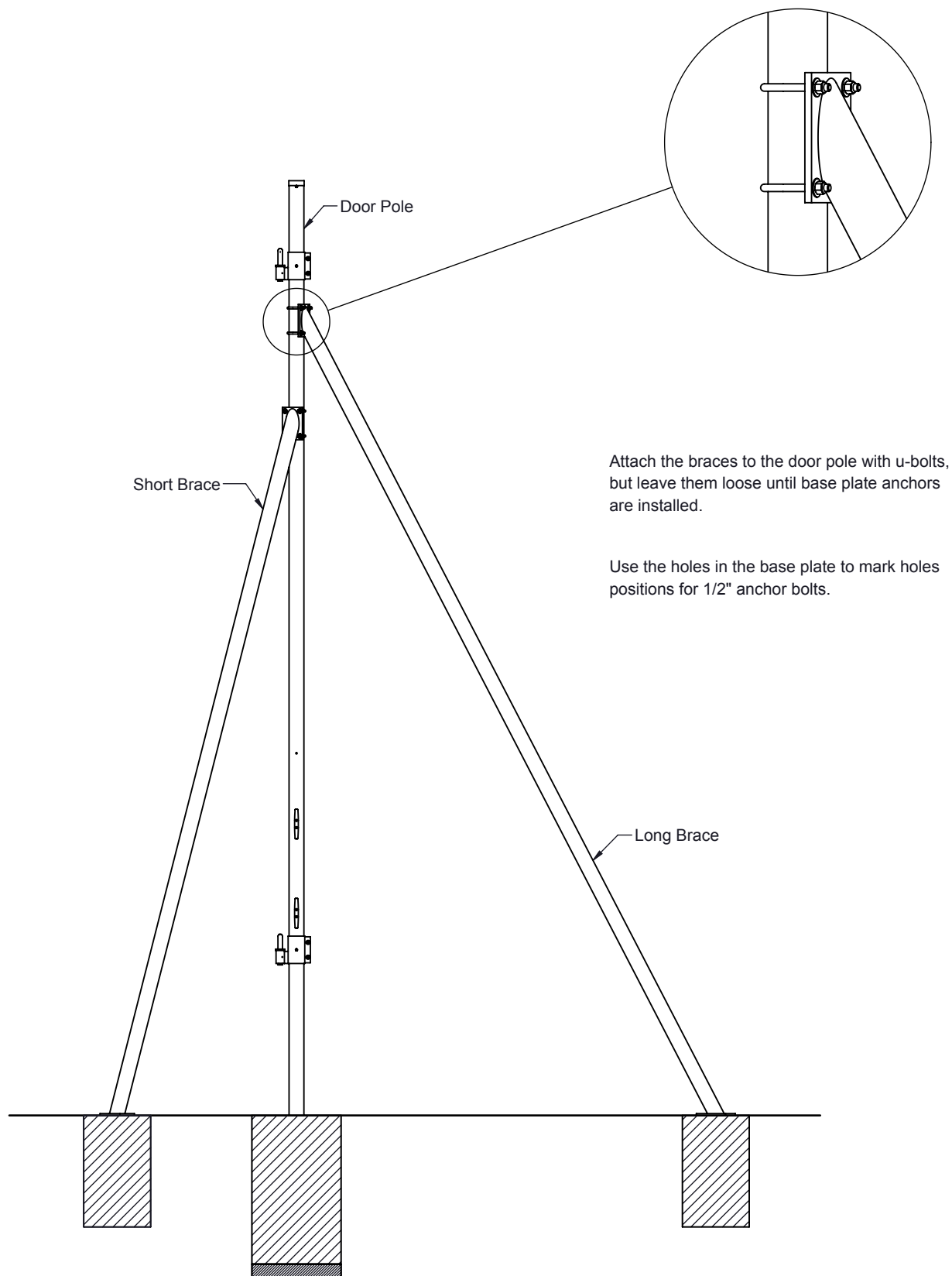


DETAIL A



www.gillathletics.com
800-637-3090

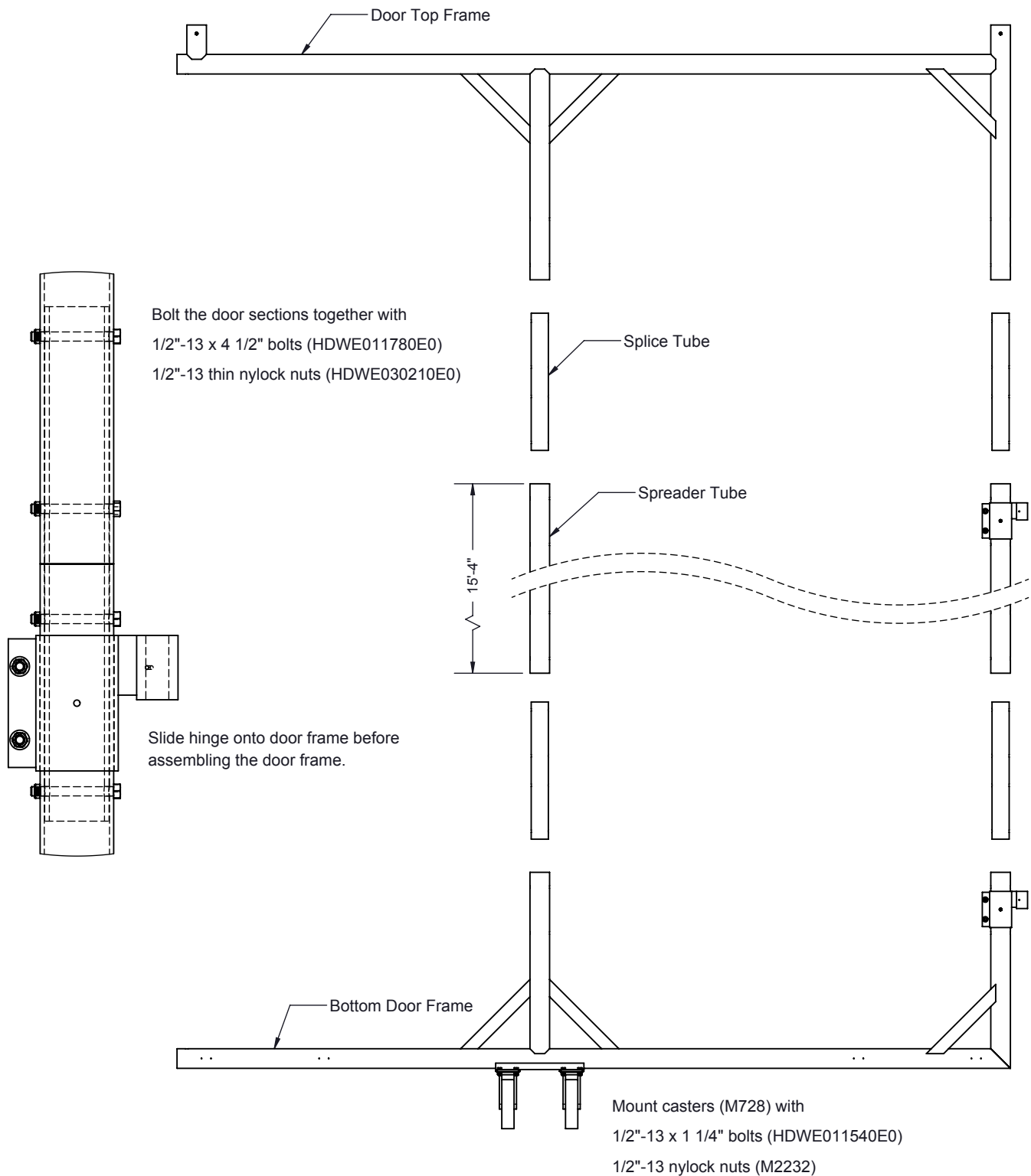
742110 - NCAA HAMMER/DISCUS CAGE BRACE POLES





www.gillathletics.com
800-637-3090

742110 - NCAA HAMMER/DISCUS CAGE DOOR ASSEMBLY

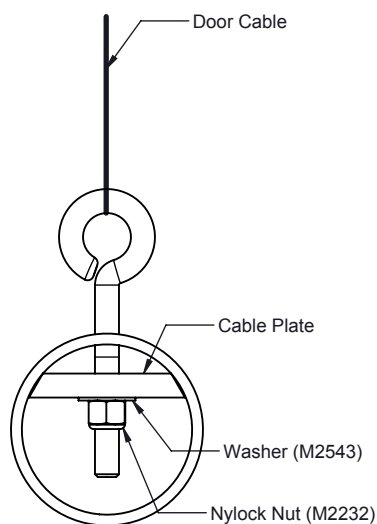
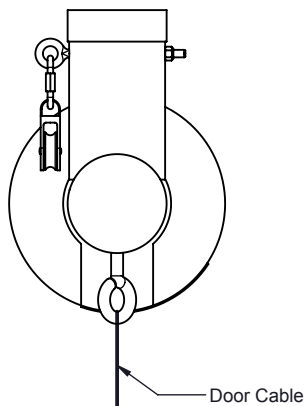




Install pulleys (PULY00100) with
quick link (CHAN00021000)
5/16" x 5" eyebolt (M2745)
5/16"-18 nylock nut (M1254)

The pulleys should face the inside of the cage.

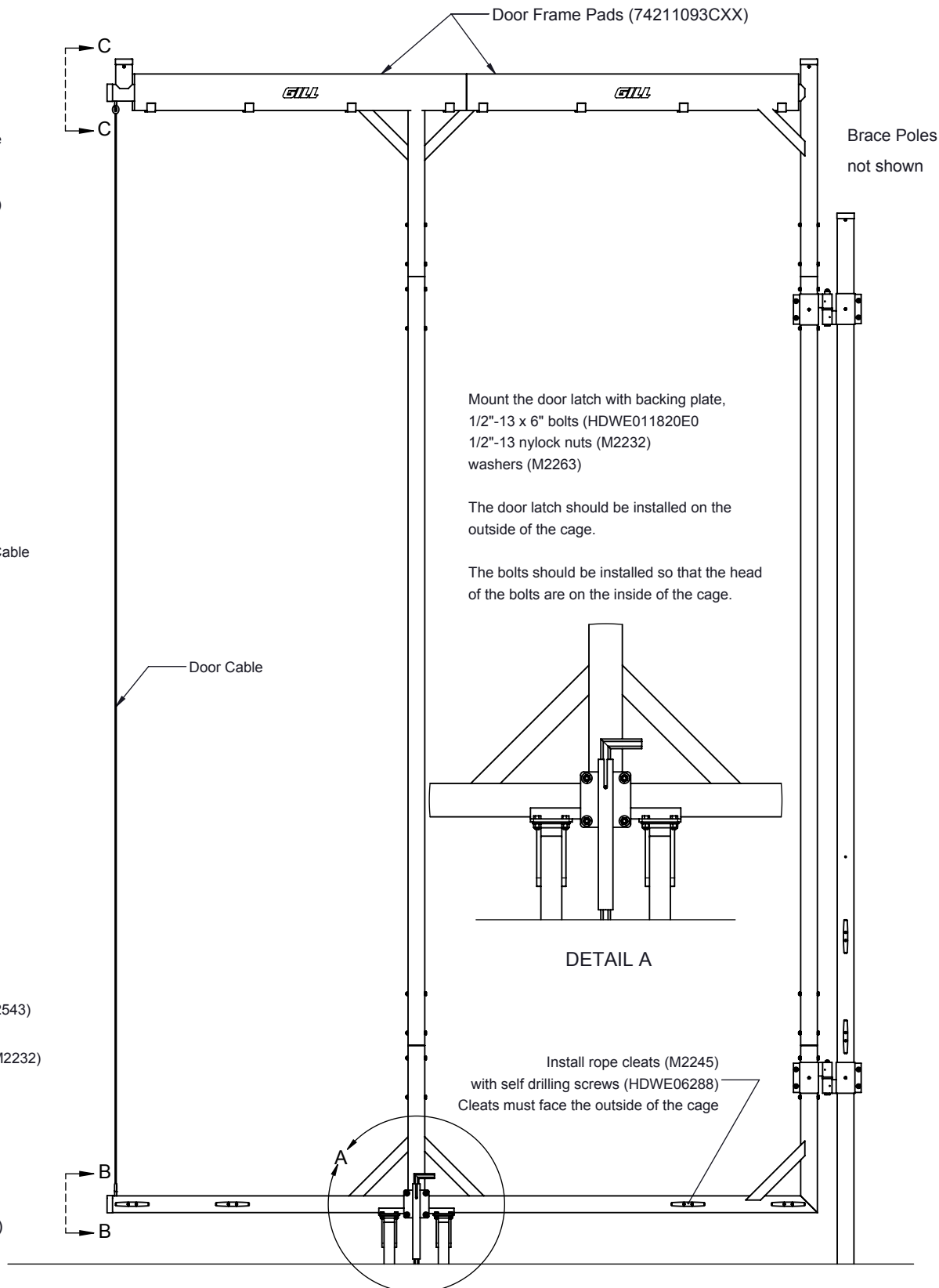
Install end caps (PCAP00158002)



SECTION B-B

Tension the cable at the bottom door frame. DO NOT overtighten.

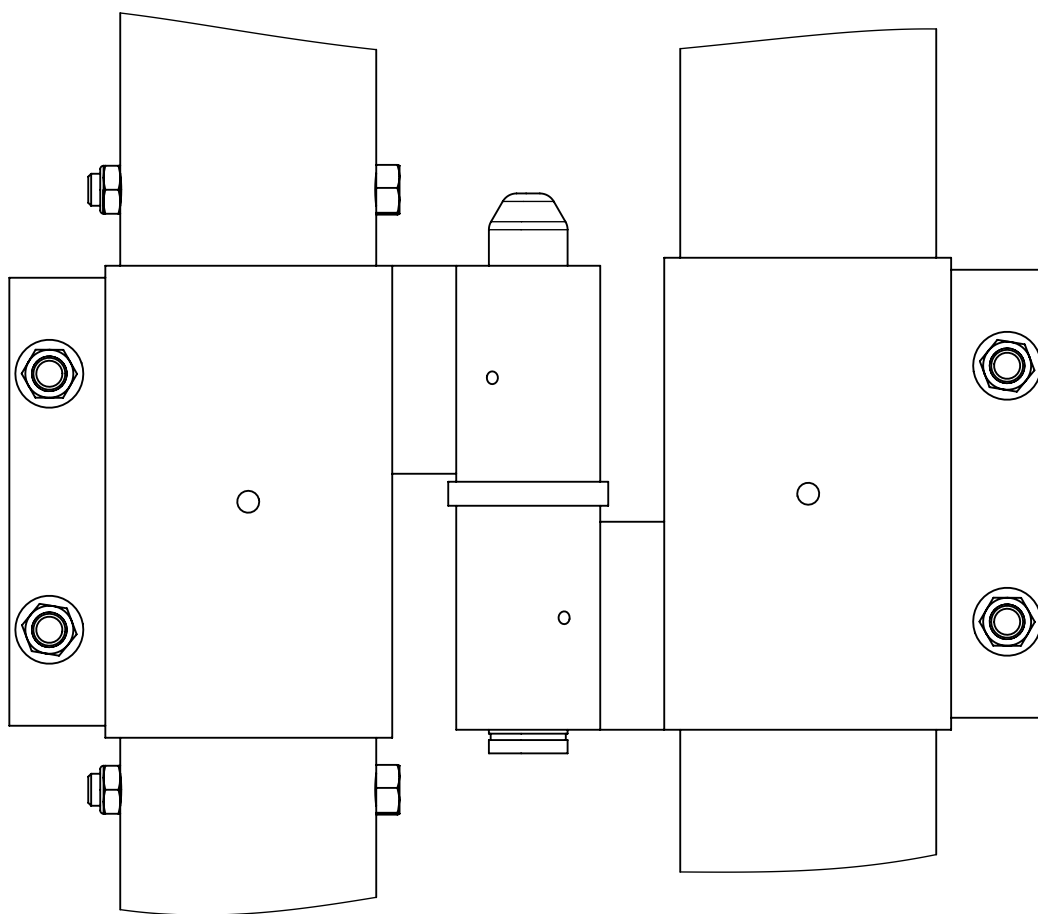
Install end caps (PCAP00158002) after cable is installed.



All hinge hardware should be oriented so that the bolt head is facing the inside of the cage. This will help prevent the net from getting caught on the hardware.

After the doors have been installed and all final adjustments have been made, lock the hinges in place. Use the holes in the body of the hinge as guides to drill $21/64$ " diameter holes through the door pole and door frame.

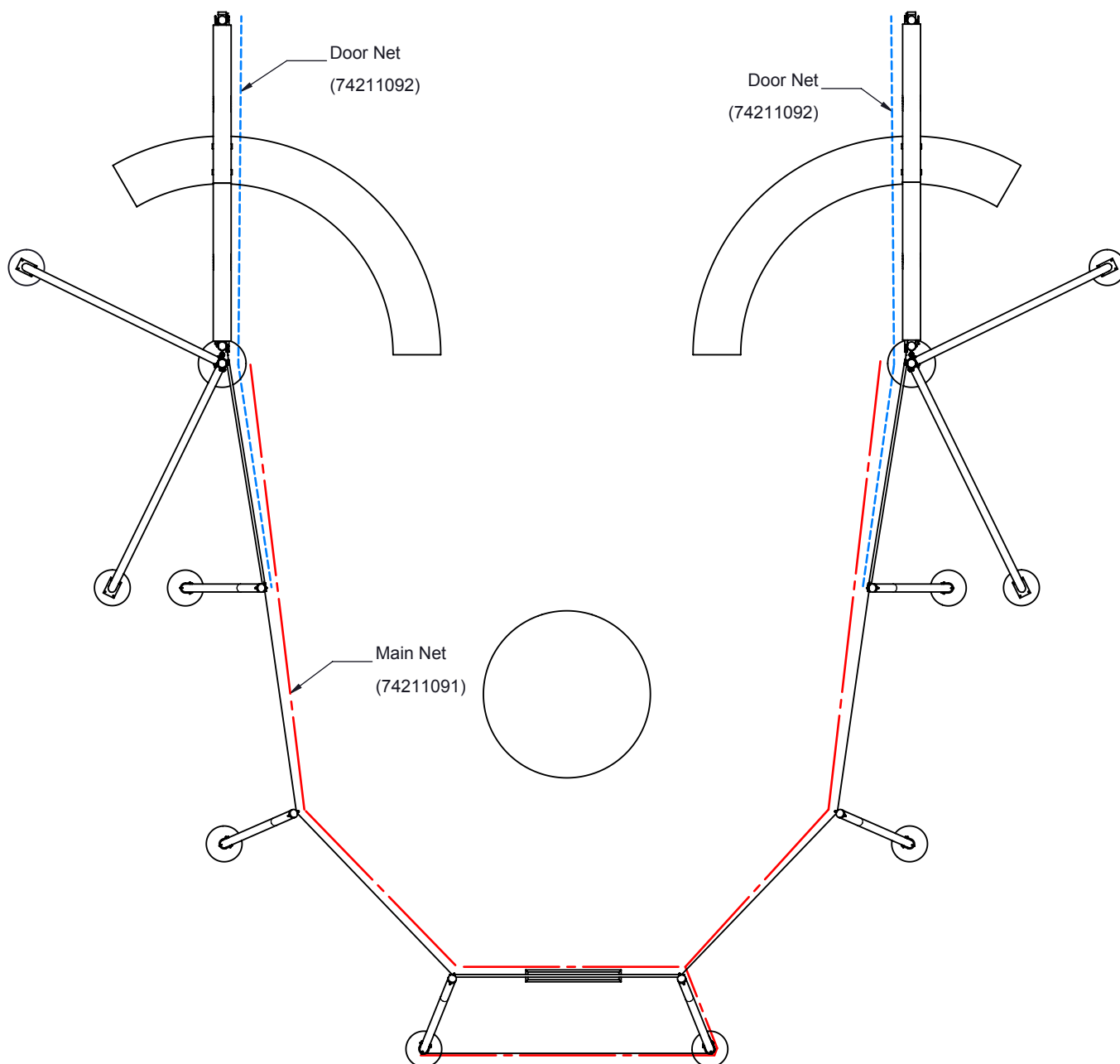
Install a $5/16$ "-18 bolt (HDWE012560E0) through the holes and secure with a $5/16$ "-18 nylock nut (M1254).



The netting consists of three parts. There are two door nets and one main net.

The door nets should be installed first. The door net has a double layered section and a tail that extends back to the first net pole.

The main net should be installed last and overlap in front of the tail of the door net.



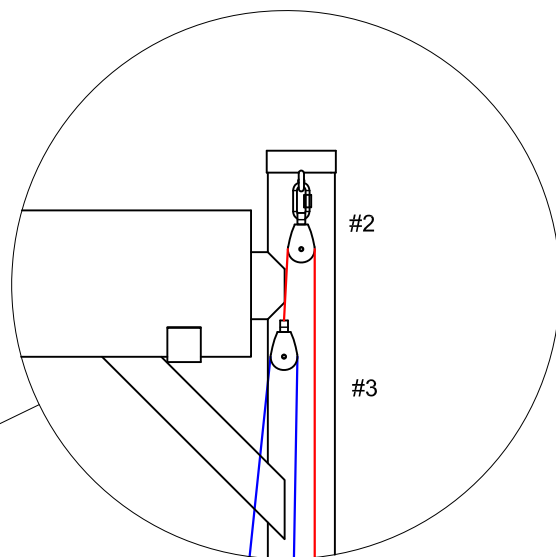


www.gillathletics.com
800-637-3090

742110 - NCAA HAMMER/DISCUS CAGE DOOR NET INSTRUCTIONS

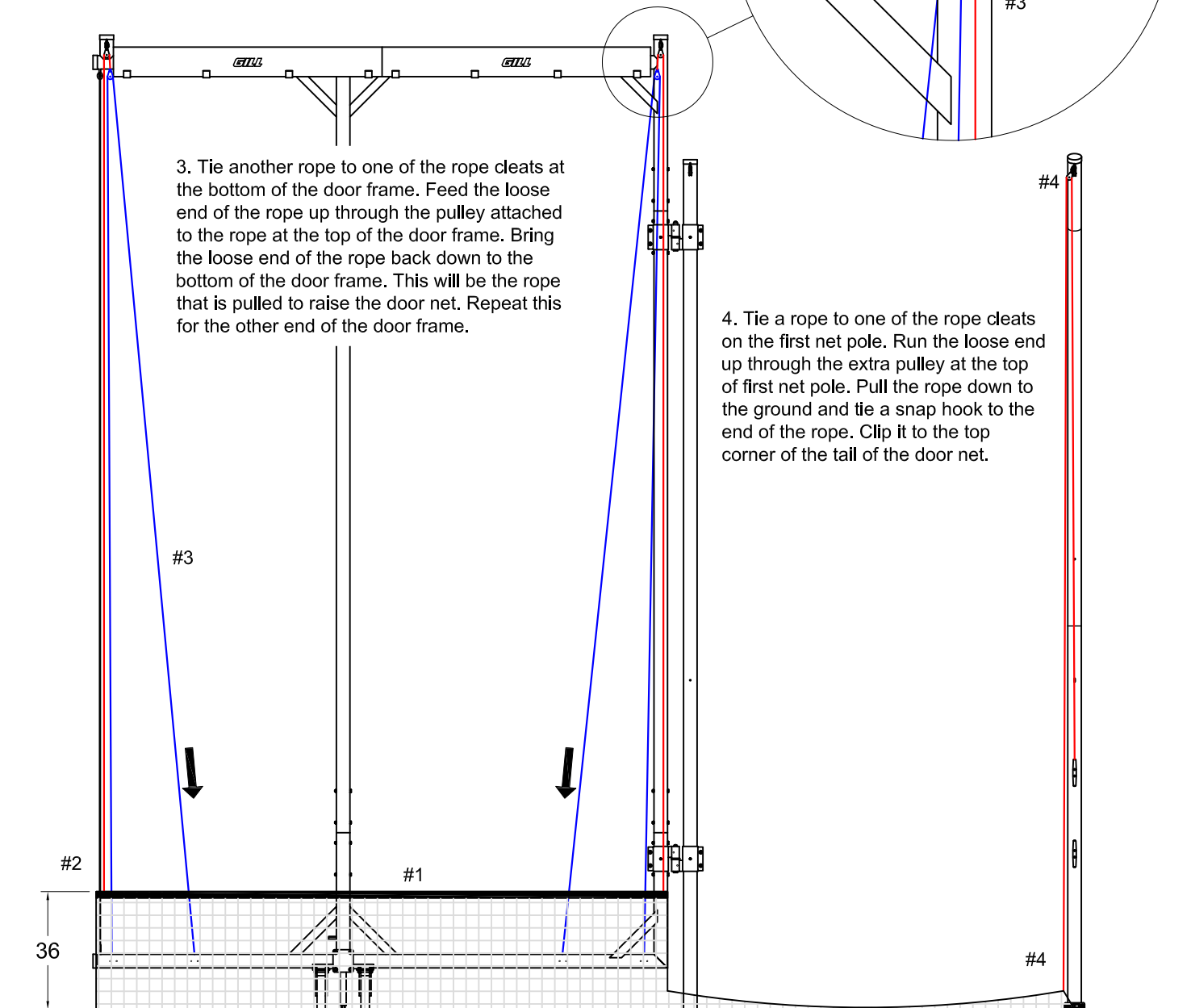
These instructions are best viewed in color.

1. Feed the net support tube (74211041) through the double layered portion of the door net. Install the eyebolts (M2249) in the net support tube with nylock nuts (M1254).
2. Tie the end of a rope to a pulley. Feed the loose end of the rope through the pulley at the top of the door frame. Pull the loose end of the rope down and cut the rope where it is about 36" from the ground. Tie a snap hook to the loose end of the rope clip it to the eyebolt on the net support tube. Repeat this for the other end of the door frame.



3. Tie another rope to one of the rope cleats at the bottom of the door frame. Feed the loose end of the rope up through the pulley attached to the rope at the top of the door frame. Bring the loose end of the rope back down to the bottom of the door frame. This will be the rope that is pulled to raise the door net. Repeat this for the other end of the door frame.

4. Tie a rope to one of the rope cleats on the first net pole. Run the loose end up through the extra pulley at the top of first net pole. Pull the rope down to the ground and tie a snap hook to the end of the rope. Clip it to the top corner of the tail of the door net.

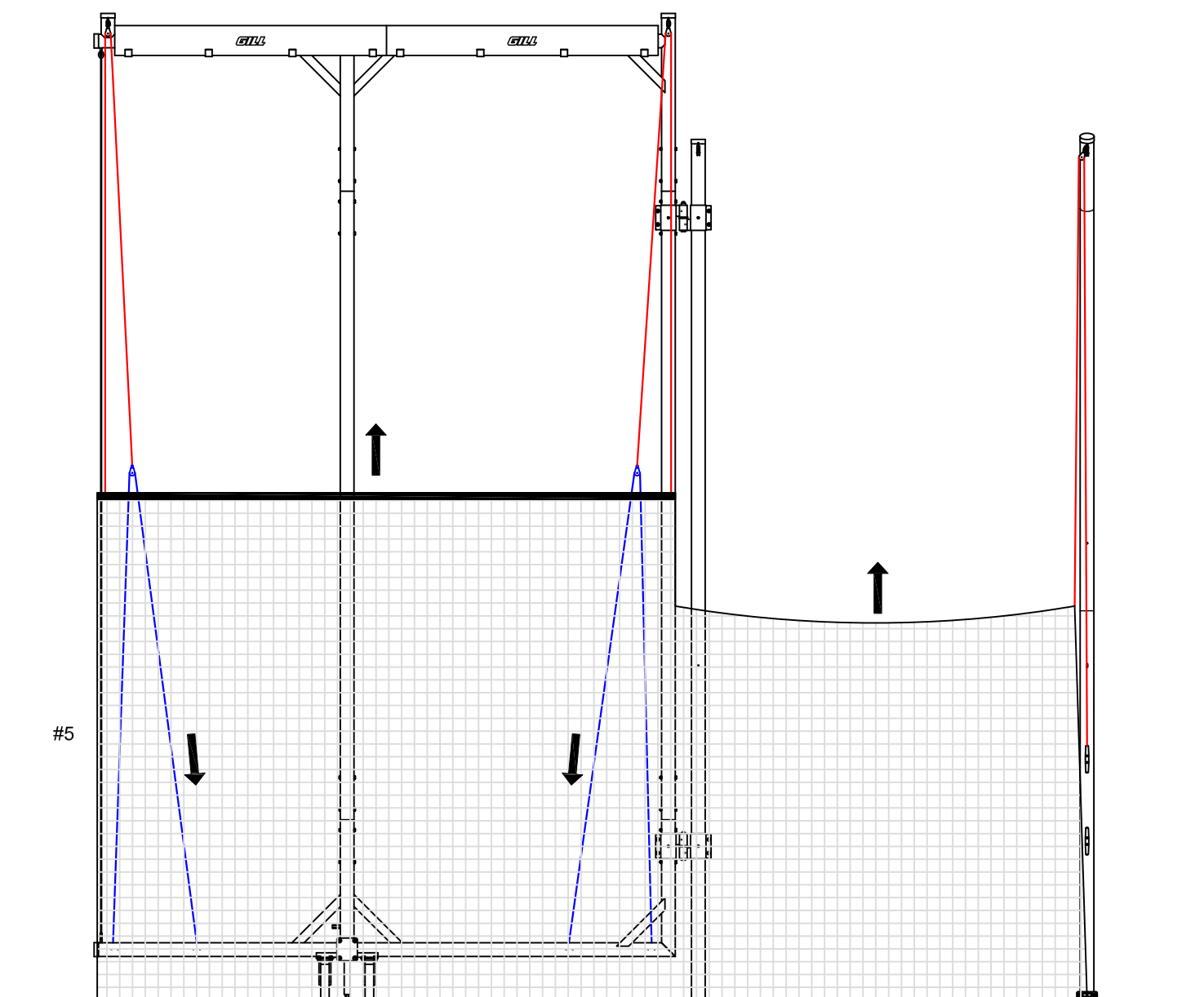




www.gillathletics.com
800-637-3090

742110 - NCAA HAMMER/DISCUS CAGE DOOR NET INSTRUCTIONS

5. Slowly raise the net. Use a snap hook about every 2 feet to connect the front edge of the net to the door cable.

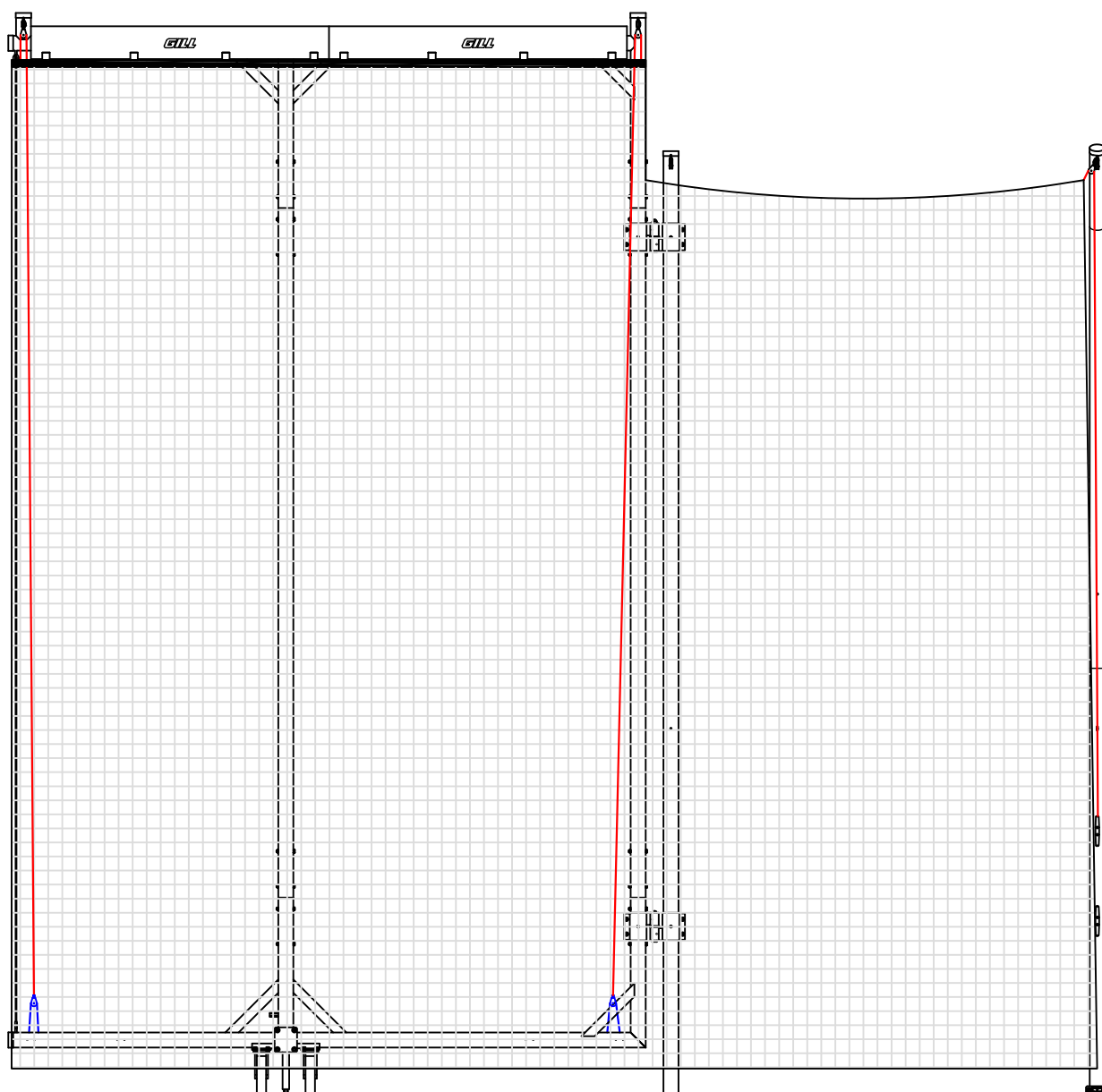




www.gillathletics.com
800-637-3090

742110 - NCAA HAMMER/DISCUS CAGE DOOR NET INSTRUCTIONS

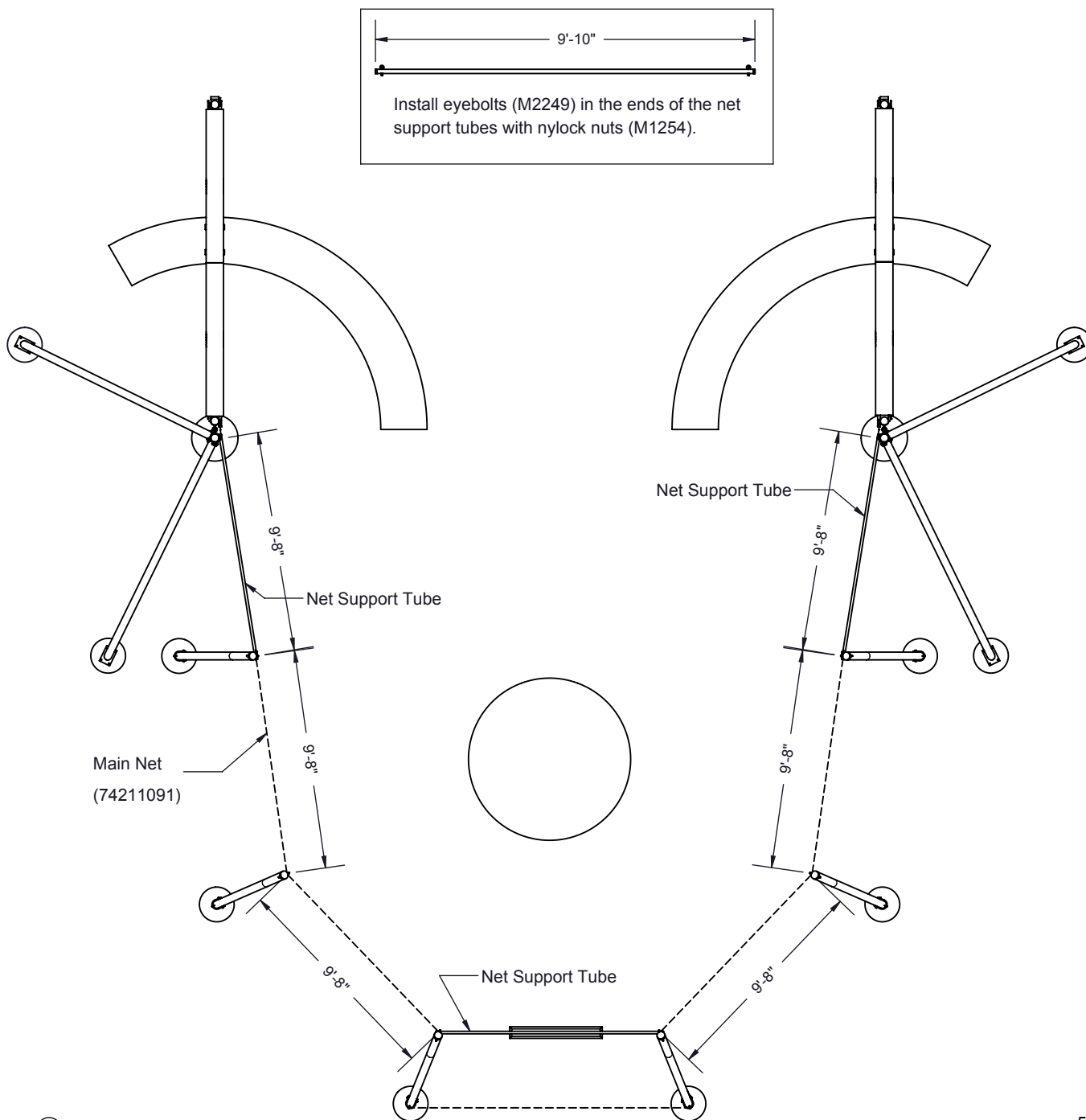
This is what the door net should look like when complete.

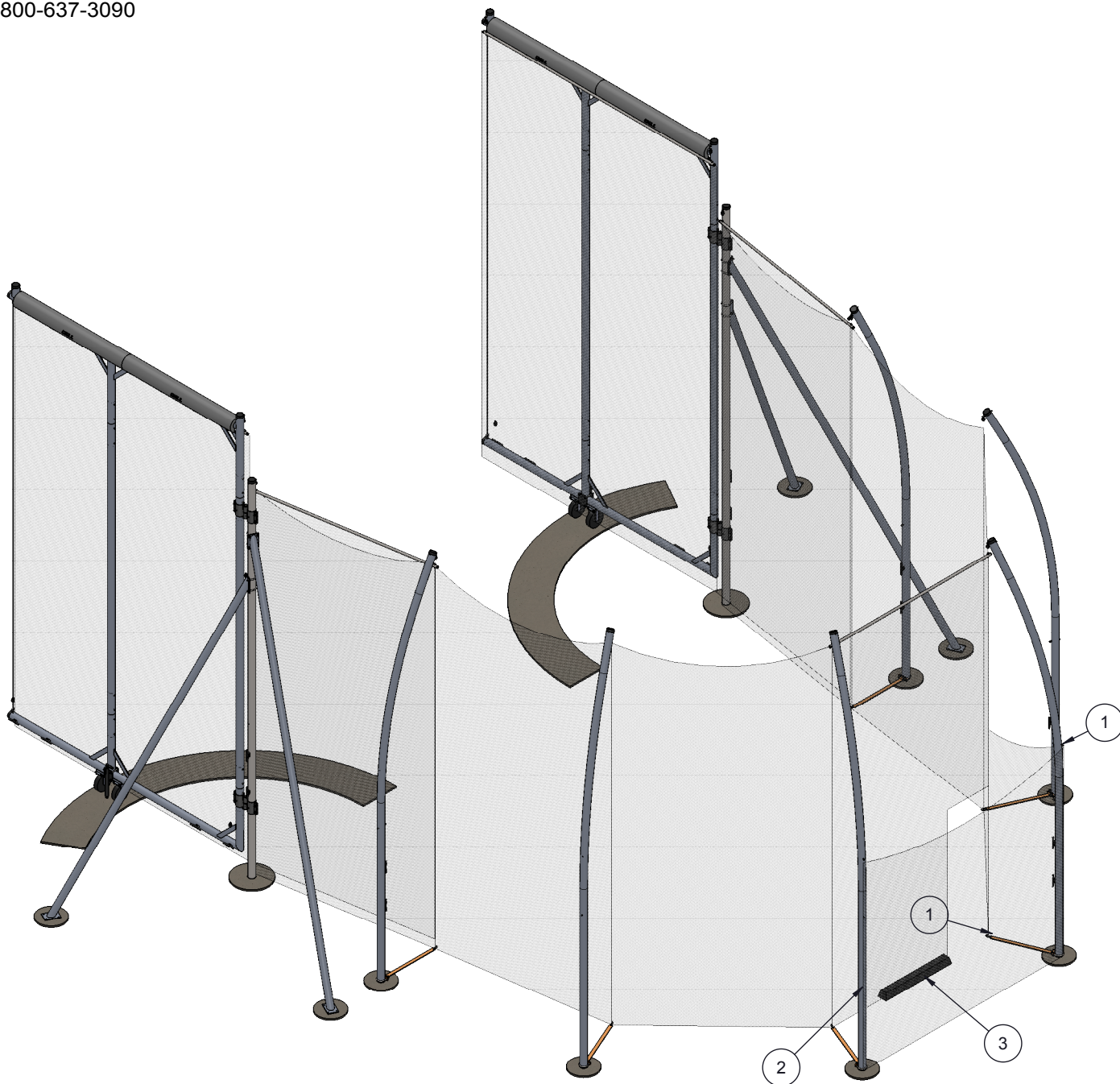


The main net has a "rear door cut out" and flap that need to be oriented correctly to work. See the next page for an isometric view.

Measure along the top of the main net and mark the pick-up points with ribbon or marking-spray-paint. This will help ensure that the net is evenly distributed. Some adjustments may be needed later.

Net support tubes (74211042) are used at the front two sections and the rear middle section.



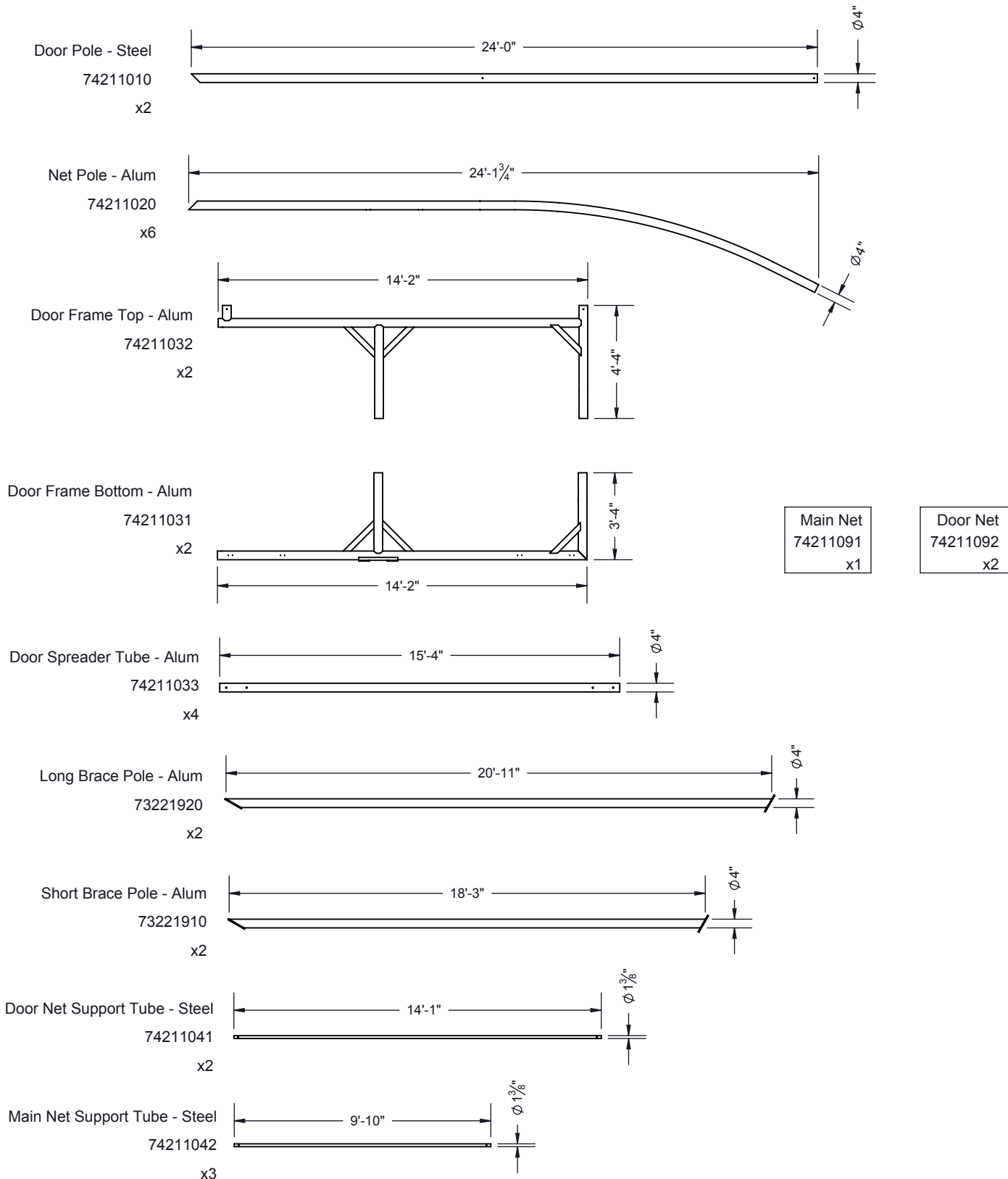


1. Wrap the rear access net extension around the outside of the two rear most net poles. Hook the net to the poles at the eyebolt 11ft from the ground.
2. Lace the entire end of the net extension to this pole using rope.
3. Clip the door flap weight (73210050) to the bottom net edge rope next to the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



www.gillathletics.com
800-637-3090

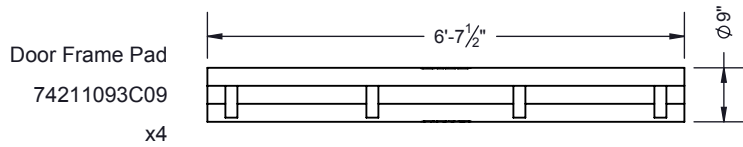
742110 - NCAA HAMMER/DISCUS CAGE SHIPPING LIST





www.gillathletics.com
800-637-3090

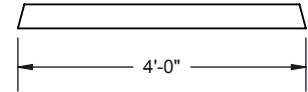
742110 - NCAA HAMMER/DISCUS CAGE SHIPPING LIST



Door Flap Weight

73210050

x1



Hardware

74211060

x1

HDWE - Net Support Tubes
7421106001
x1

HDWE - Doors
7421106002
x1

HDWE - Poles
7421106003
x1

HDWE - Rope Cleats
7421106004
x1

HDWE - Brace Poles
73210460
x1

Door Cable Assembly
74211035
x2

Rubber Strap 24"
M733
x6

5/16" Polyester Rope
50' Roll
M2016
x18

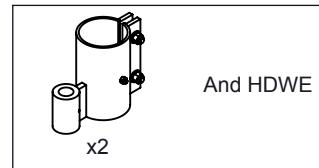
Warning Sign
M2322
x3

Loose Leaf Ring
M1250
x12

Hinge Assembly

73110012

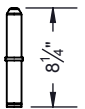
x4



Short Hinge Pin

M1798

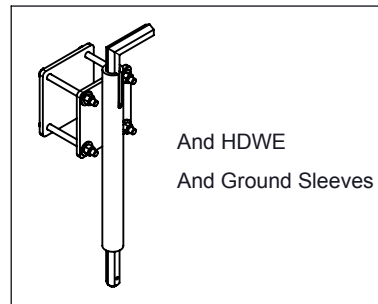
x2



Latch Assembly

73110045

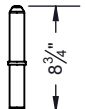
x2



Long Hinge Pin

M1799

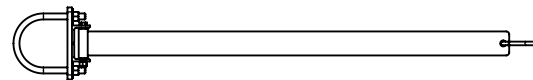
x2



Flip Arm

73210043

x6



10" Caster

M728

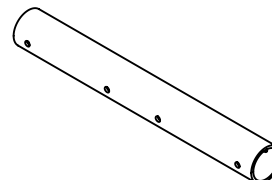
x4



Door Splice Tube

732100054

x8



4" Pipe Cap

PCAP00158002

x16