



# AMERICAN EAGLE

GOALS



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## PRO SERIES

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### **Installation Instructions - FM54, FM60, FM72**

American Eagle Goals - Customer Service

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## SAFETY INSTRUCTIONS



Before digging for the anchor system, contact your local One-Call center in your area by dialing (811) for underground utility locates.



Owner must ensure that all players know and comply with these rules for safe operation of the system.



- To avoid severe injury or death, do not locate this system under power lines that could potentially come in contact with it when being raised.
- Do not install in an area with overhead power lines located within a 20' radius of the goal location.
- Two or more people in good physical condition and more than capable of lifting at least 100 pounds each are recommended for safe installation.
- Follow all warnings and comply with all weight restrictions listed on all ladders used during the installation process. Use extreme caution.
- Understand and follow all warnings and instructions for all digging equipment used when setting the anchor. i.e. augers, post hole diggers etc.
- Installation and assembly of this product will require bending, heavy lifting/carrying and that can lead to injury. Exercise caution during assembly.

- Only hang from the rim briefly to regain balance and/or injuring others. Release the rim as soon as safely possible to prevent possible damage.
- Do not wear jewelry (watches, rings, necklaces etc.) Items may entangle in net or injure another player.
- Players must wear a mouthguard to prevent injury.
- During play keep players' faces away from the rim, net and backboard. Serious injury could result if face/teeth come in contact with rim, net and/or backboard, especially during dunking activities.
- When making height adjustments, keep hands and fingers clear of moving parts. Do not allow children to adjust the system height.
- Do not climb and/or hang on system components. The product is not designed to be used in this manner and property/personal injury could result.
- Routinely check the system for loose hardware and chipped paint. Remove surface rust and touchup as needed with an exterior enamel paint.
- Keep water and organic material (mulch, grass, dirt etc.) away from the base of the pole.

Most injuries are caused by misuse and/or not complying with rules and instructions.

Use caution when using this system.

## INSTALLATION TIMELINE

DAY 1: Install anchor system as per the instructions below.

Day 2-4: Allow the concrete to cure. \*Cooler temperatures may require additional cure time.

Day 5: Complete assembly and installation of the system as per the instructions below.

## Anchor System Installation Instructions (Day 1)

### Items required for anchor installation - not included

- 11+/- 80 lb. bags of concrete
- 1 - Post hole digger or gas powered auger
- 1 - Shovel
- 1 - Mixing hoe
- 2 - 1 1/8" Open end wrenches or adjustable wrenches
- 1 - Wheel barrow
- 1 - Garden hose
- 1 - Level
- 1 - Tape measure
- 1 - Concrete form (see note below)
- 3 - 36" long pieces of #40 reinforcement bar

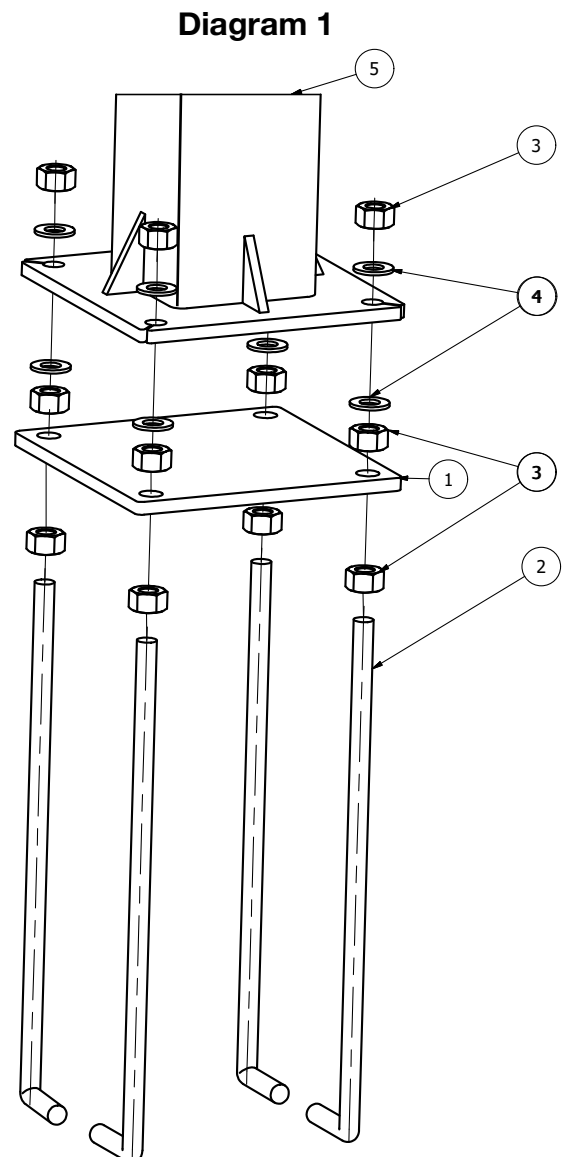
### Step 1 - Assemble Anchor

Locate and assemble the (#1) 9" x 9" bolt pattern anchor kit as shown in the diagram using the supplied hardware located within the anchor box.

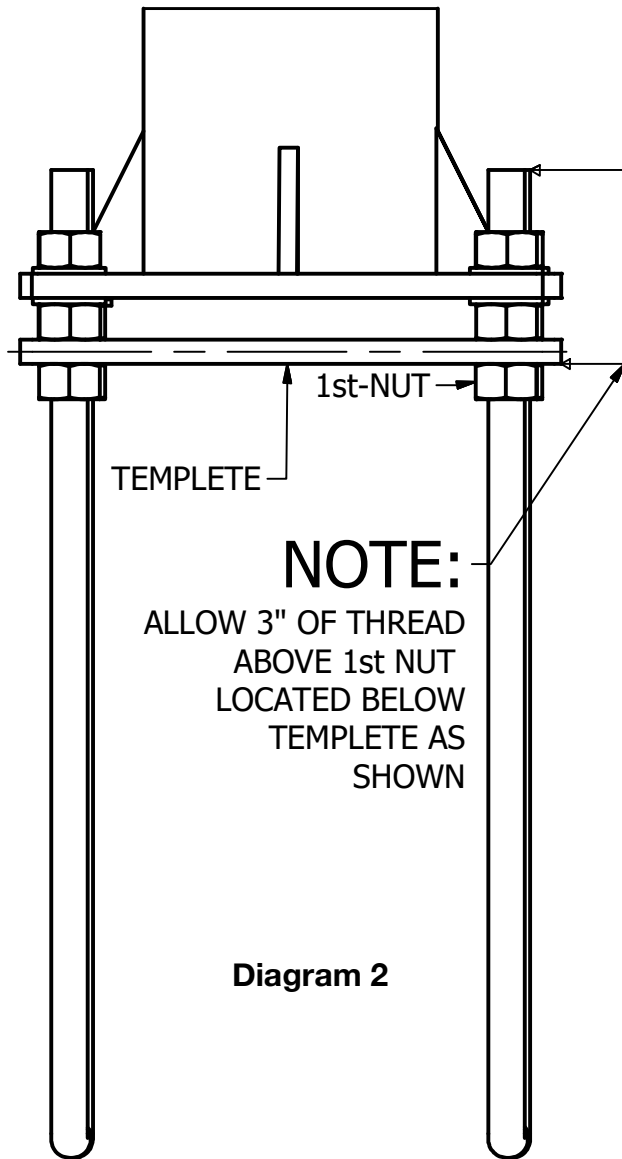
<u>Item</u>	<u>Description</u>
1	Pro Series 9" x 9" bolt pattern template
2	L-Bolt - (4) required
3	3/4" Nut - (12) required
4	3/4" Flat Washer - (8) required
5	*Baseplate portion of the pole.

\*The (#5) baseplate portion of the pole is shown to illustrate the final assembly of the pole and anchor.

The pole is not required to set the anchor.



## Step 1 - Continued



The upper set of (#3) nuts and (#4) washers can be hand threaded onto the (#2) L-Bolts to prevent them from being lost.

- Thread the 1st (#3) nut onto each of the four (#2) L-Bolts leaving 3" of the thread exposed above the (#3) nut as illustrated in **Diagram 2**.
- Insert each (#2) L-Bolt into the (#1) template and secure with (#3) nut as shown in **Diagram 1** on the previous page. Tighten the top (#3) nut to prevent the bolts from moving.
- The remaining hardware is not necessary at this point and can be placed on the (#2) L-Bolts above the (#1) template to prevent them from being lost.

## Step 2 - Dig the Hole

- Before you dig confirm that all underground utilities have been marked and that you understand the markings.
- Irrigation lines, invisible fence wires etc. are not considered an underground utility and will not be marked by the (811) technician.
- Determine your hole location keeping in mind the overhang of the backboard in relationship to the face of the pole and the overall playing area of your driveway or slab.
- Dig a square hole that measures at least 48" deep with a diameter of at least 16 inches and is square with the driveway/slab and/or playing area. \*Keep in mind the top of the anchor (#1) template should be set level with the playing surface to ensure the rim will reach the regulation 10' playing height.

Note: A cardboard concrete form or one constructed out of 2 x 4 lumber is recommended for the top 4" of the hole as it provides a nice finished product, aids in squaring the anchor system with the driveway/slab and/or playing area and provides a reference point for the top of the template in relationship to the playing surface.

AEB ANCHOR SYSTEM INSTALLATION

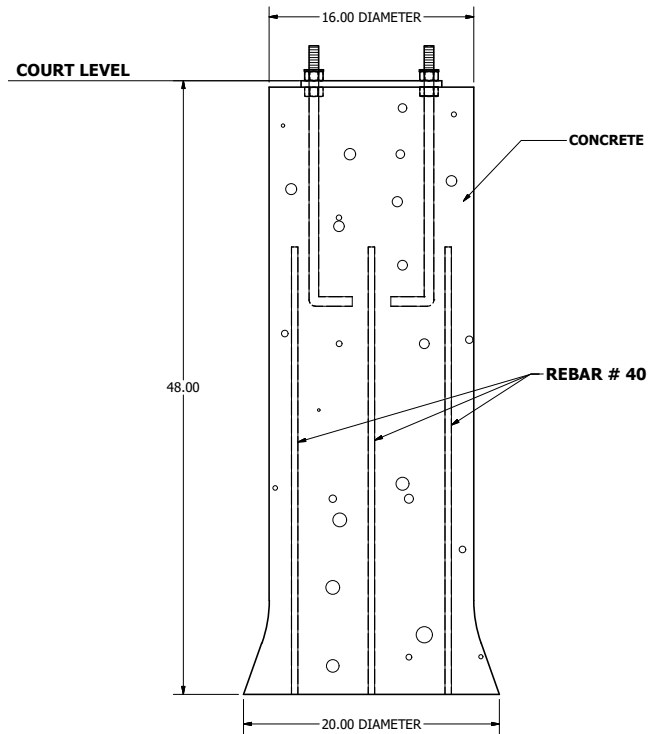


Diagram 3

## Step 3 - Mix the Concrete

- Put concrete in the wheel barrow and add water per the instructions on the bag. Working quickly, thoroughly mix the concrete with the hoe. You'll want the concrete to be the consistency of thick gravy.
- Insert the #40 reinforcement bar pushing each stick to the bottom of the hole after a couple of bags of concrete have been mixed and placed in the hole.
- Working quickly, continue to mix and add concrete until the hole is filled to the top of the cardboard or wooden form. **\*You must work quickly as the concrete has the potential to setup before you have an opportunity to insert the anchor into the wet concrete as detailed in Step 4.**

Note: Wet concrete has the potential to setup very quickly depending on several conditions. These conditions include but are not limited to:

- Air temperature, humidity and the exposure to direct sunlight.

## Step 4 - Insert the Anchor

- Place the anchor in the center of the hole square with the driveway/slab and/or playing area and press it down into the wet concrete until the template is resting on top of the wet concrete.  
Note: The four (#3) nuts located below the (#1) template will be embedded in the concrete.
  - It is important that the anchor is both level side-to-side as well as front-to-back.
  - Check often over the next 30 minutes with a level to ensure that the anchor has not moved from its intended position.
- 

## Allow the Concrete to Cure (Day 2 - 4)

- Allow the concrete to cure a minimum of 72 hours.
  - Cooler temperatures may require additional cure time.
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## Assembly and Installation (Day 5)

### Tools required for assembly

- 1 - Level
  - 1 - 1 1/8" Open end wrench or adjustable wrench
  - 1 - Tape measure
  - 2 - 3/4" Open end wrenches or ratchet & socket
  - 1 - 9/16" Open end wrench
  - 1 - 9/16" Socket & ratchet or additional wrench
  - 1 - 8' Step ladder or Telescopic folding ladder - Preferred
  - 1 - Can of spray adhesive - Optional but highly recommended
- \*Spray adhesive can be found at many hardware stores. (Loctite Brand or 3M)
- Note: Do not use an impact gun on stainless steel hardware.

\*A small tube of LocTite thread locker is located in the hardware box and is intended to be used on only the bolts requiring a split lock washer and finish nut.

## Step 1 - Prepare the Anchor

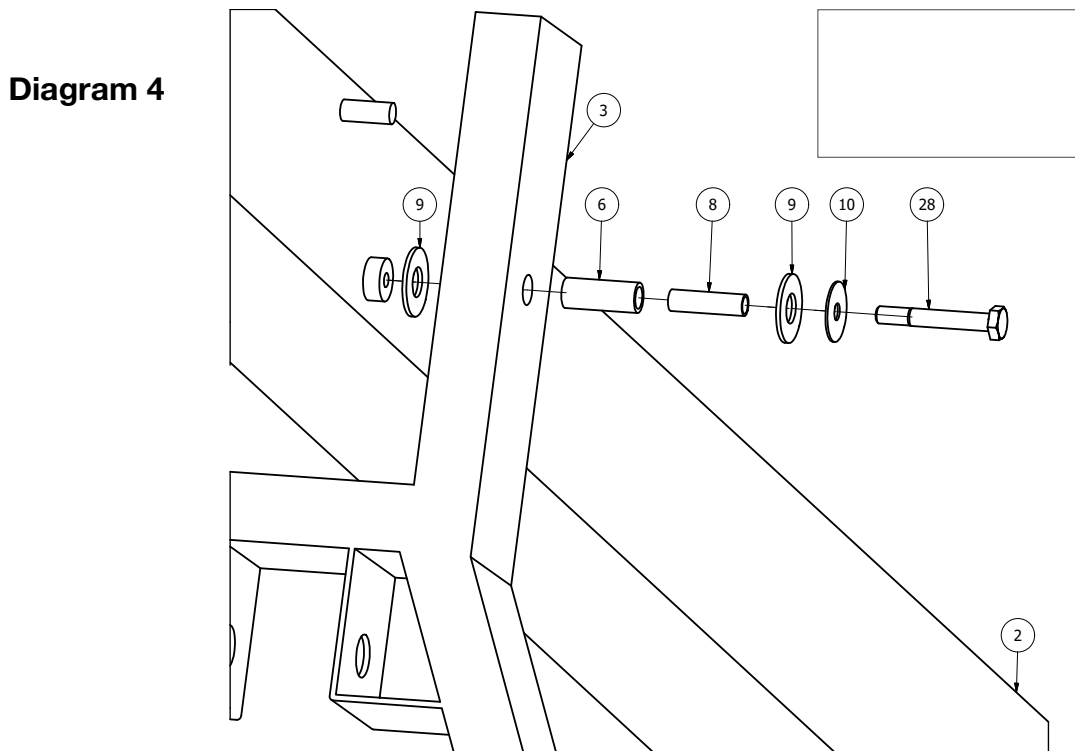
- Remove the (#3) nuts, (#4) washers and the (#1) template from the (#2) L-Bolts leaving the four (#3) nuts that are located below the (#1) template as they will be forever embedded in concrete.
- Thread one (#3) nut all the way down on to each (#2) L-Bolt resting against the nuts embedded in the concrete.
- Lay a level across each pair of (#3) nuts leveling them from front-to-back and left-to-right.
- Place a (#4) washer on top of each (#3) nut after leveling.
- Set the remaining four (#3) nuts and (#4) washers aside.

## Step 2 - Pole Assembly - Lower Arm

Position the base plate of the pole inline with the anchor and up against the front set of anchor bolts. Prop the pole up on a padded saw horse or a folding ladder as shown in **Diagram 4** to complete the following. Note: It is very important that the installer understands the importance of the bushing assembly. A properly assembled bushing will not only protect the painted parts during adjustment, but will provide a smooth and quiet operating system.

- Attach the lower Y-arm to the pole as shown in **Diagram 4** using one (#28) bolt, one (#10) stainless washer, two (#9) ABS washers, one (#8) stainless steel tube and one (#6) white nylon tube per side of the lower arm.
- Fully tighten both (#28) bolts.

\*Experienced Installer Tip: Apply a small amount of spray adhesive to the smooth side of the (#9) washers and slide them over the (#6) nylon tube adhering them to the sides of the Y-arm. This will help prevent them from falling off when raising the Y-arm into position.

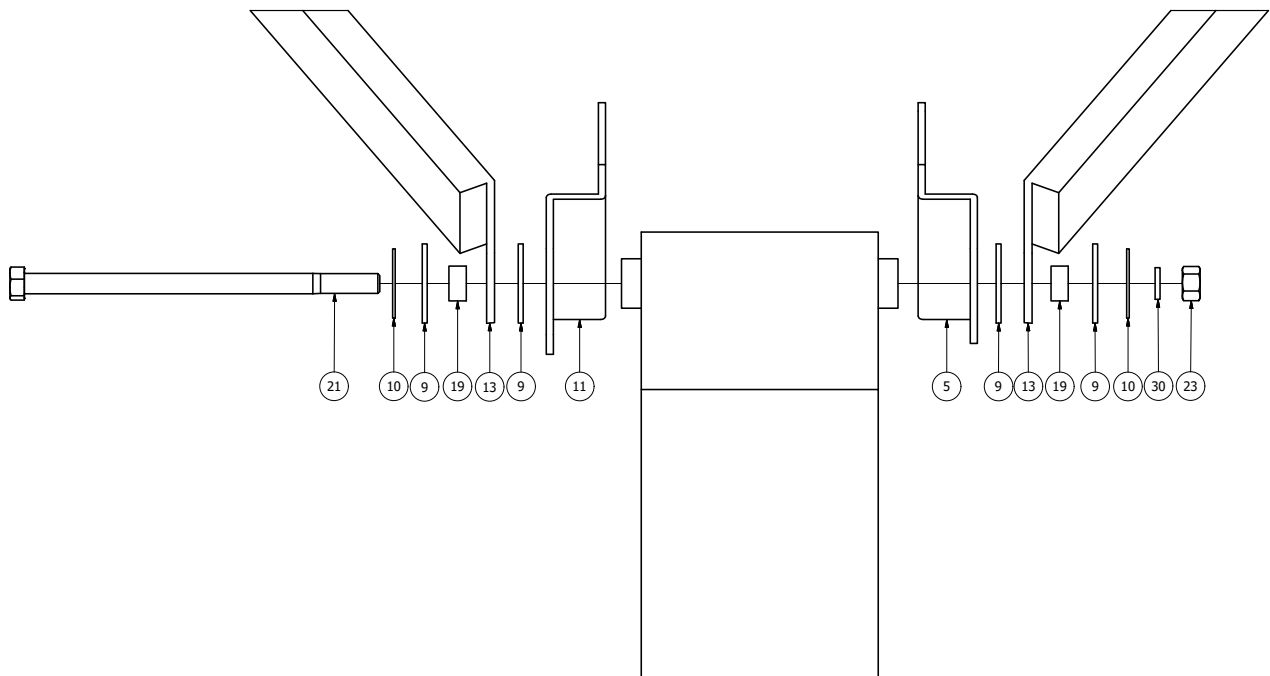




## Step 3 - Pole Assembly - Upper Arms

- Attach the upper arms (#13) and the (#5,#11) Front Mount adapter brackets to the pole as shown in **Diagram 5** using one (#21) bolt, two (#10) stainless steel washers, four (#9) ABS washers, 2 (#19) gray nylon tubes, one (#30) split lock washer and one (#23) finish nut. Tighten the (#23) nut just enough to keep the assembly together but still allowing the (#5,#11) adapter brackets to be manipulated.
- Do not apply any Loctite to the threads of the (#21) bolt at this time. The (#23) nut can be removed in step 4 and Loctite applied prior to fully tightening the hardware.

**Diagram 5**

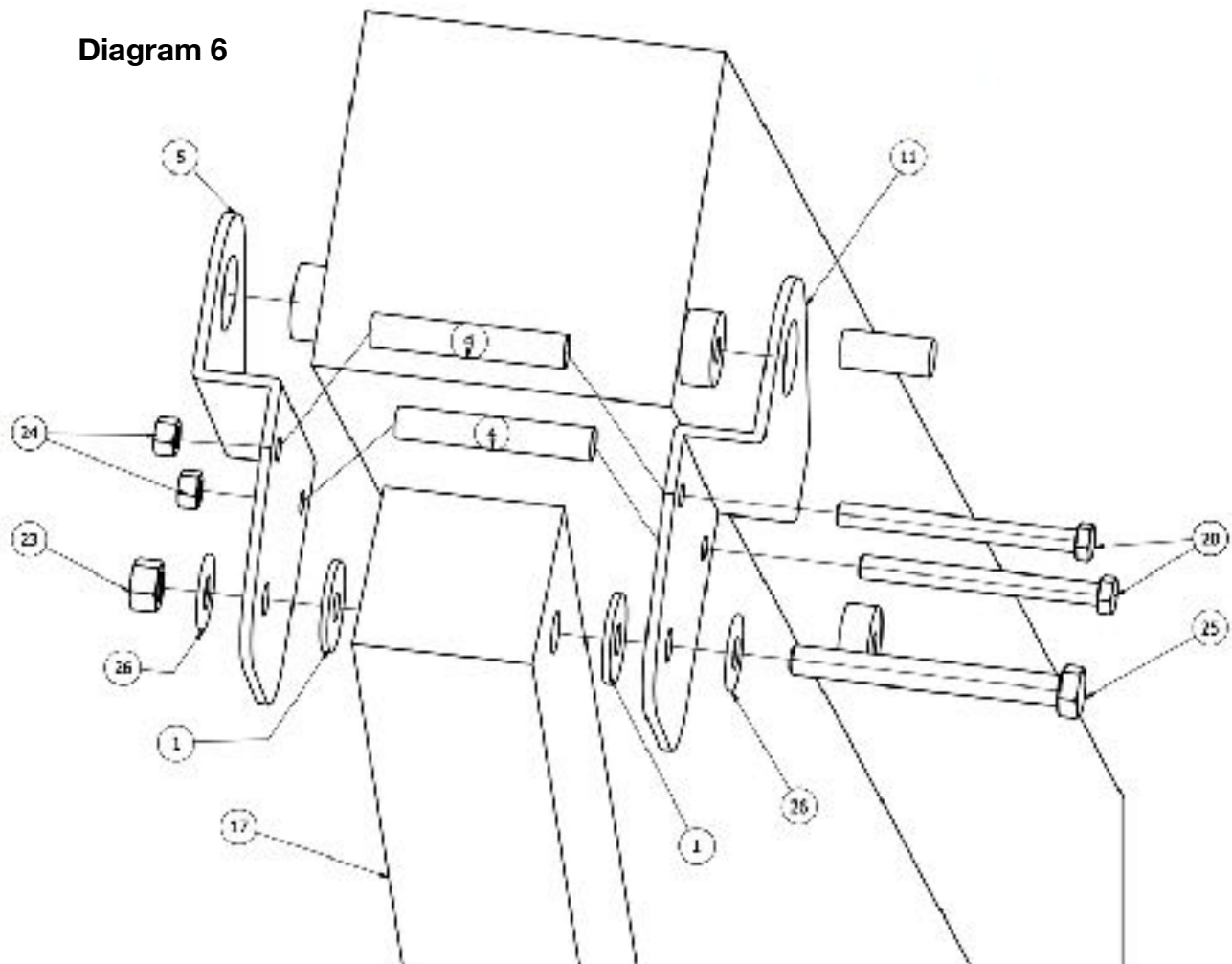




## Step 4 - Pole Assembly - Upper Jack Attachment

- Locate and unwrap the jack. Clip the zip tie being careful not to drop the jack as it will separate.
- Turn the eyelet on the bottom of the jack to partially extend the jack.
- Attach the (#17) jack to the (#5,#11) jack ears using one (#25) bolt, two (#26) stainless washers, two (#1) ABS washers as shown in **Diagram 6**. Do not fully tighten the bolt at this time.
- Insert the (#4) stainless steel spacer tubes between the (#5,#11) adapter brackets and secure with the (#20) bolts and (#24) nylon insert lock nuts. No washers are used here.
- Remove the (#23) nut and apply a small amount of LocTite to the bolt threads before threading the nut back on to the bolt. You may now fully tighten all the hardware associated with the upper arms and jack brackets. Do not over tighten the (#24) nuts, snug is tight enough.

\*Experienced Installer Tip: When attaching the jack to the jack adapter brackets it helps to keep the hardware a little loose in order to properly line up the bolt holes. Once everything is lined up and in place proceed with tightening the hardware.

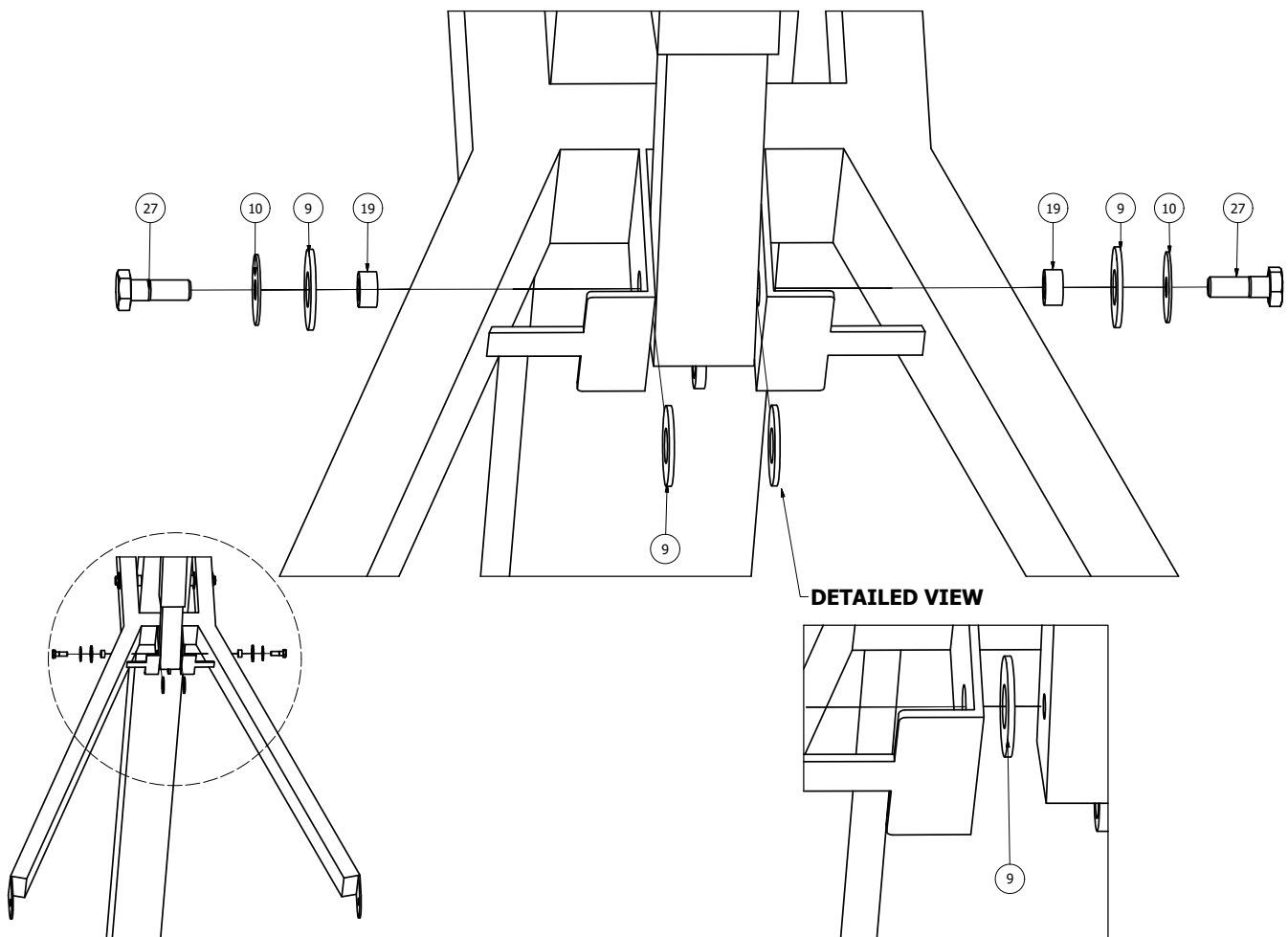


## Step 5 - Pole Assembly - Lower Jack Attachment

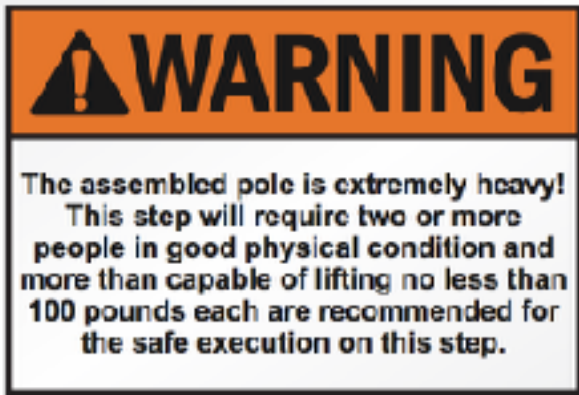
- Turn the eyelet at the bottom of the jack in order to better line up the holes in the jack with the holes in the Y-Arm as shown in **Diagram 7**. Insert the two (#19) gray nylon bushings into the brackets located on the Y-arm.
- Attach the jack to the Y-arm using one (#27) bolt, one (#10) stainless steel washer, two (#9) ABS washers and one (#19) gray nylon bushing per side. Fully tighten hardware.

**\*Experienced Installer Tip:** Apply a small amount of spray adhesive to the smooth side of the (#9) ABS washers and slide them over the (#19) gray nylon tube adhering them to the sides of the Y-arm bracket. This will help prevent them from falling off during assembly.

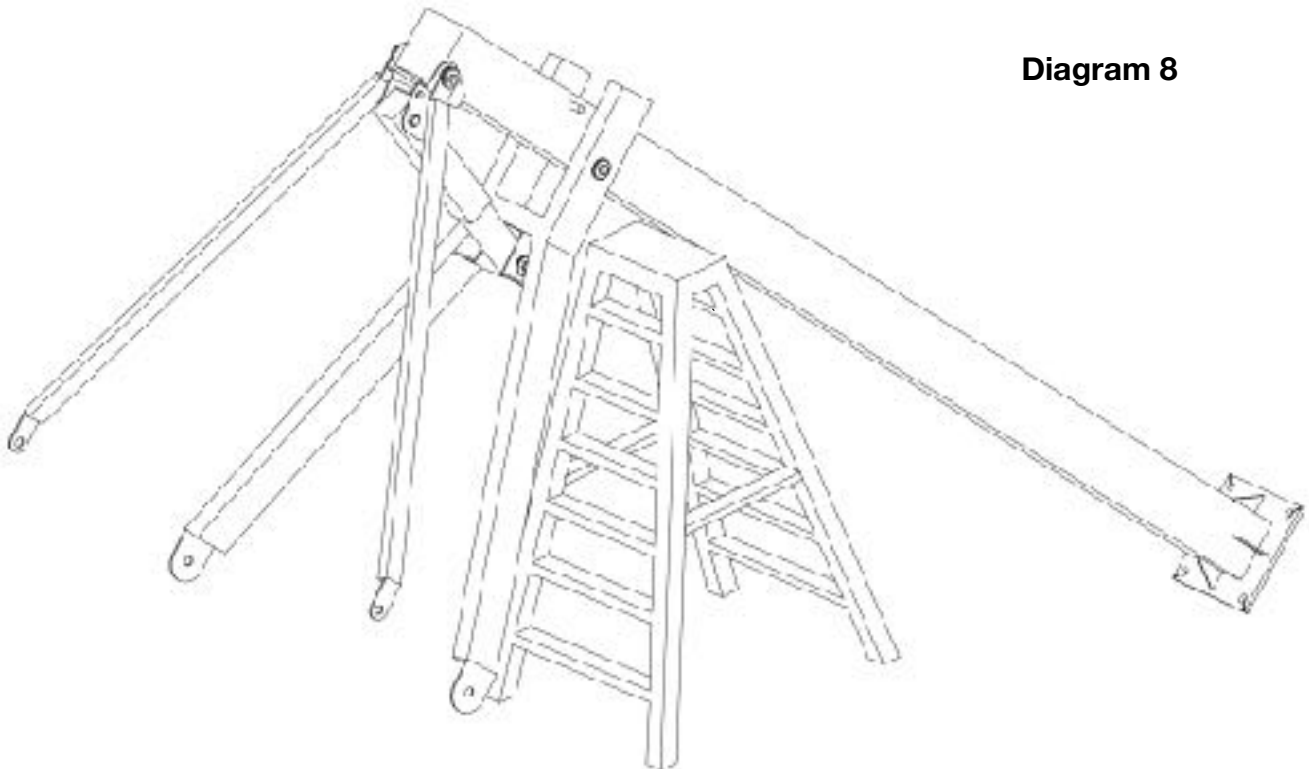
**Diagram 7**



## Step 6 - Uprighting the Pole



- Locate the anchor bolt hardware that was set aside in **Step 1** and place it beside the anchor.
- Lift the assembled pole onto the anchor bolts maintaining full contact with the pole at all time.
- Secure the base of the pole to the anchor bolts using the four (#4) washers and four (#3) nuts.
- Tighten the four (#3) nuts snug, but do not fully tighten them at this time.



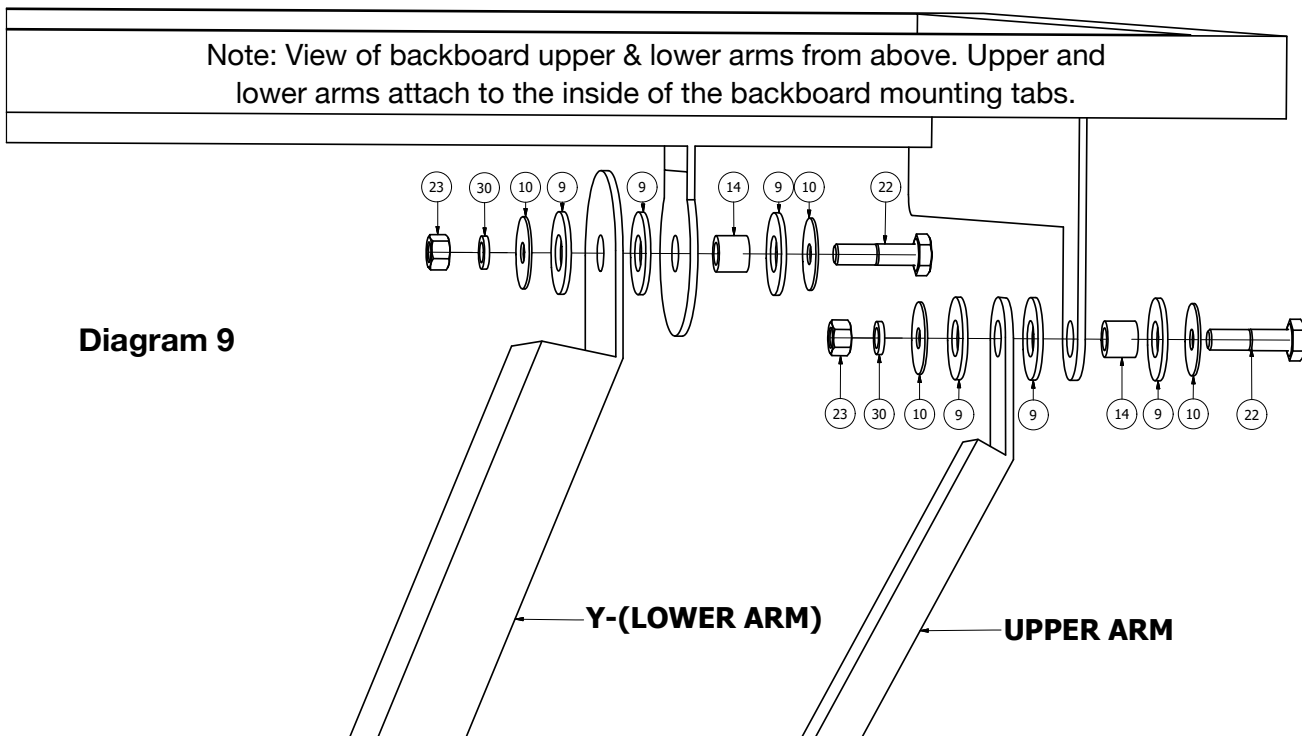
**Diagram 8**

## Step 7 - Backboard Attachment



\*Experienced Installer Tip: Pre-install the four (#14) gray nylon tubes into the ends of the upper and lower arms. Apply a small amount of spray adhesive to the smooth side of eight (#9) ABS washers. Slide the (#9) ABS washers over the (#14) gray nylon tubes and adhere them to both sides of the upper and lower arm tabs.

- Adjust the the height of the lower arm to its lowest point.
- With at least four capable adults, raise the backboard into position while the fifth person attaches the backboard to the lower arm using the hardware shown in **Diagram 9**.
- This is a pivot point. Do not over tighten these bolts.
- Raise the top of the backboard up and into position and attach the upper arms using the hardware shown in **Diagram 9**. This is a pivot point. Do not over tighten these bolts.
- \*\*\*LocTite must be applied to the threads of the four (#22) bolts where contact is made with the nut.



## Step 8 - Square the Backboard

- Now that the backboard is attached, take a moment to check if the backboard is square to the playing area.
- If any adjustment needs to be made, simply loosen the four (#3) nuts from **Step 6** ever so slightly and rotate the pole on the anchor. DO NOT completely remove any of the (#3) nuts.
- Once the backboard is square with the playing area tighten the four (#3) nuts completely.

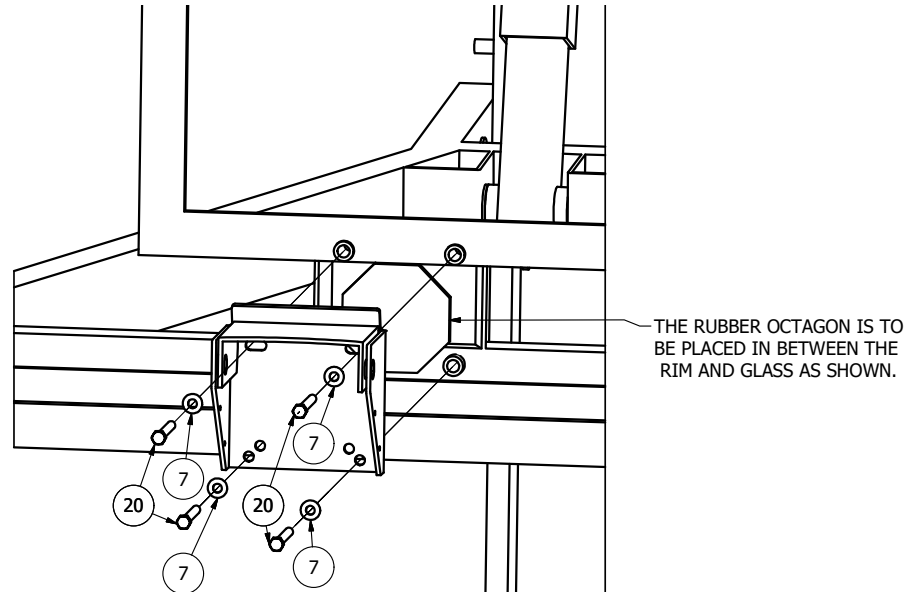
\*Experienced Installer Tip: As you tighten the four (#3) nuts completely, check the backboard to see if it is plumb. Place a level on the face of the glass running from top to bottom and on the side of the backboard on the outside of the aluminum trim. The four (#3) nuts located below the baseplate of the pole can be adjusted to fine tune the backboard. Once you are satisfied, double check to make sure the top four (#3) nuts are tight.

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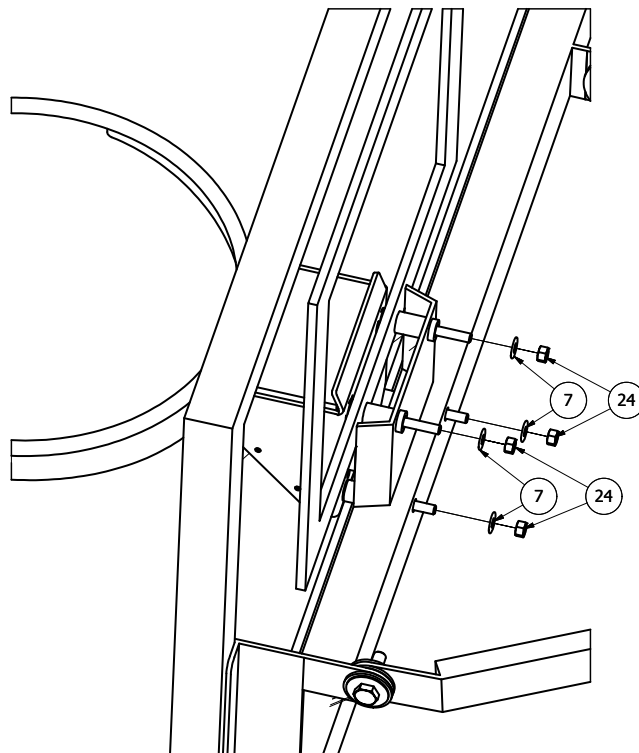
## Step 9 - Rim Attachment

\*Experienced Installer Tip: Apply a small amount of spray adhesive to the backside of the (#12) rubber octagon and adhere it to the backboard centered between the rim standoff tubes.

- Using the hardware attached to the rim cover plate, attach the rim to the backboard as shown in **Diagram 10**. Snug hardware, do not fully tighten at this time.
- Place a level across the rim side-to-side and adjust the rim until it is level.
- Finish tightening all four (#21) nuts.



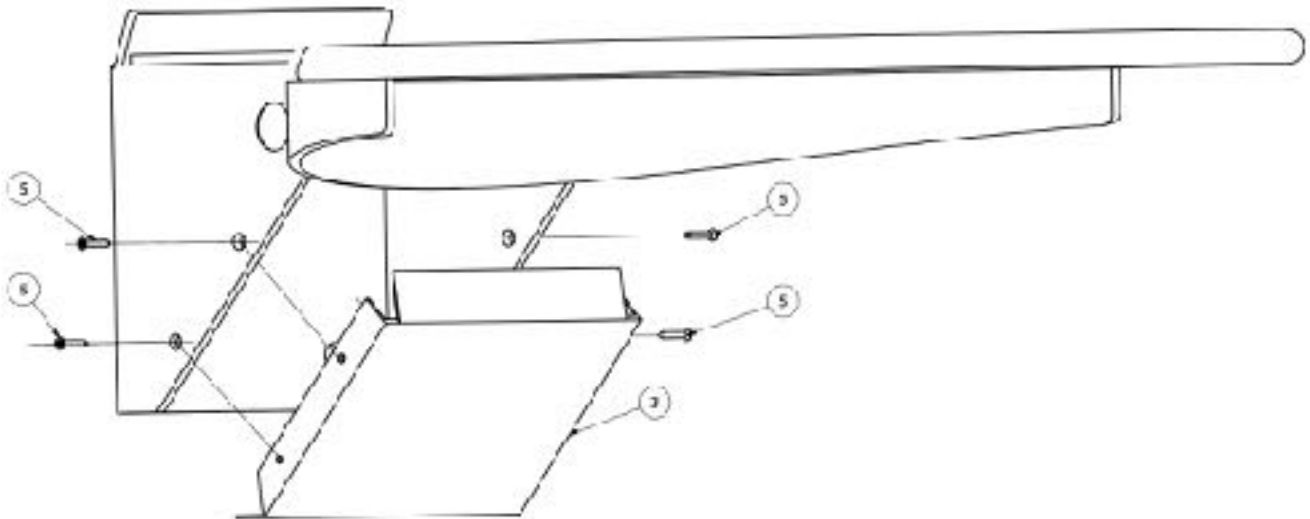
**Diagram 10**



## Step 10 - Rim Cover Plate Attachment

- Attach the rim cover plate as shown in **Diagram 11**.
- A cordless drill is recommended for installing the (#5) rim screws.
- Do not over tighten the (#5) screws as they could strip.
- Attach the net to the rim.

Diagram 11



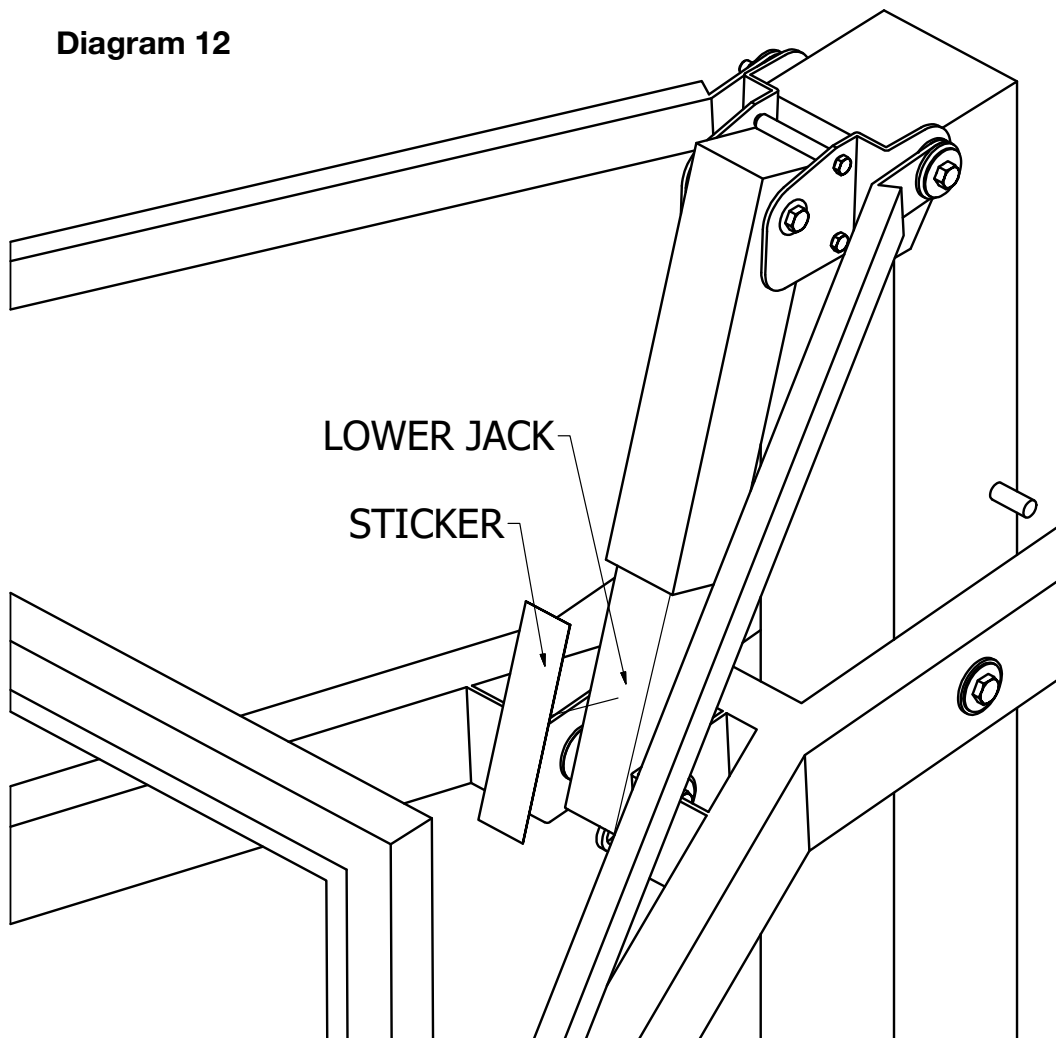


## Step 11 - Height Indicator Attachment

- Measuring from the top of the rim to the top of the playing surface, adjust the height of the rim to lowest corresponding height listed on the height sticker.
- Make a reference mark on the inner portion of the jack at the bottom of the outer sleeve.
- Adjust the backboard to its lowest point and apply the height decal to the inner portion of the jack lining the reference mark up with the corresponding height on the decal as shown in **Diagram 12**.

Note: You may apply the height decal to the front or the rear of the jack, however a portion of the height decal may need to be trimmed off. While this is a rare occurrence, it is possible depending on the height of your anchor system in relationship to the slope of the driveway where the rim height measurement was taken.

**Diagram 12**



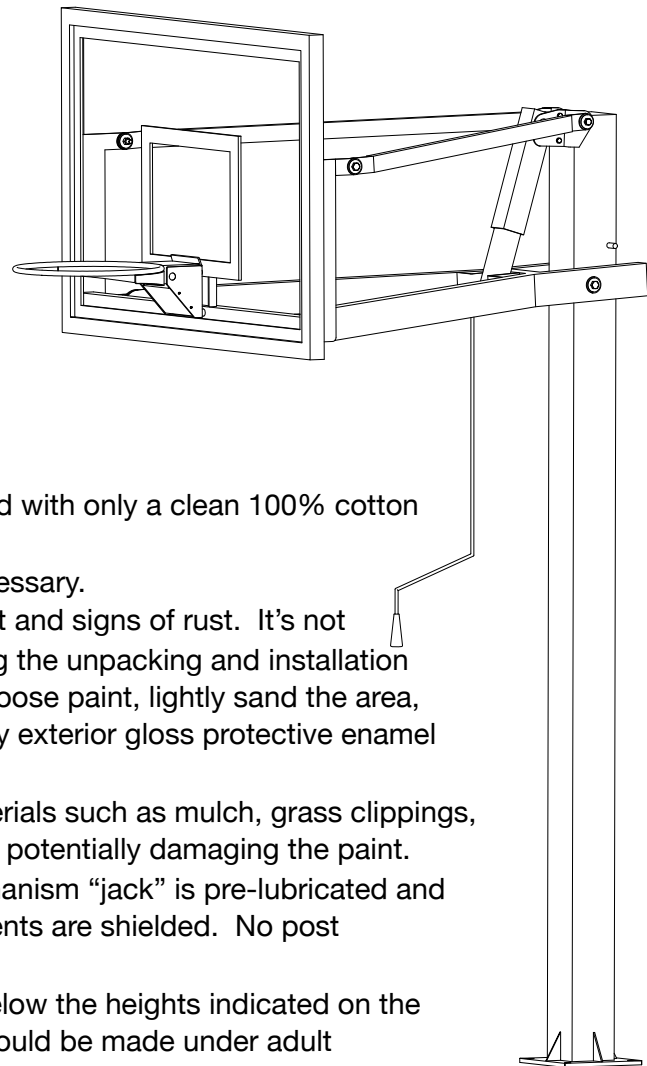
## Care and Maintenance

### Maintenance

The longevity of your American Eagle basketball system depends on several variables. The climate in which it is installed, exposure to corrosives such as salt, chemicals including but not limited to herbicides and pesticides as well as organic materials can all contribute to deterioration.

For safety reasons the following should be checked on a regular basis.

- Clean both sides of the backboard as needed with only a clean 100% cotton cloth and regular household glass cleaner.
- Inspect all nuts and bolts and tighten as necessary.
- Inspect the entire assembly for chipped paint and signs of rust. It's not uncommon for parts to be mishandled during the unpacking and installation process. If rust should appear, remove any loose paint, lightly sand the area, apply a quality primer and paint with a quality exterior gloss protective enamel such as Rust-Oleum.
- Inspect the base of the pole for organic materials such as mulch, grass clippings, top soil etc. as these items will trap moisture potentially damaging the paint.
- The American Eagle height adjustment mechanism "jack" is pre-lubricated and built in such a way that the internal components are shielded. No post installation lubrication is necessary.
- The goal should not be adjusted above or below the heights indicated on the height adjustment decal. All adjustments should be made under adult supervision.



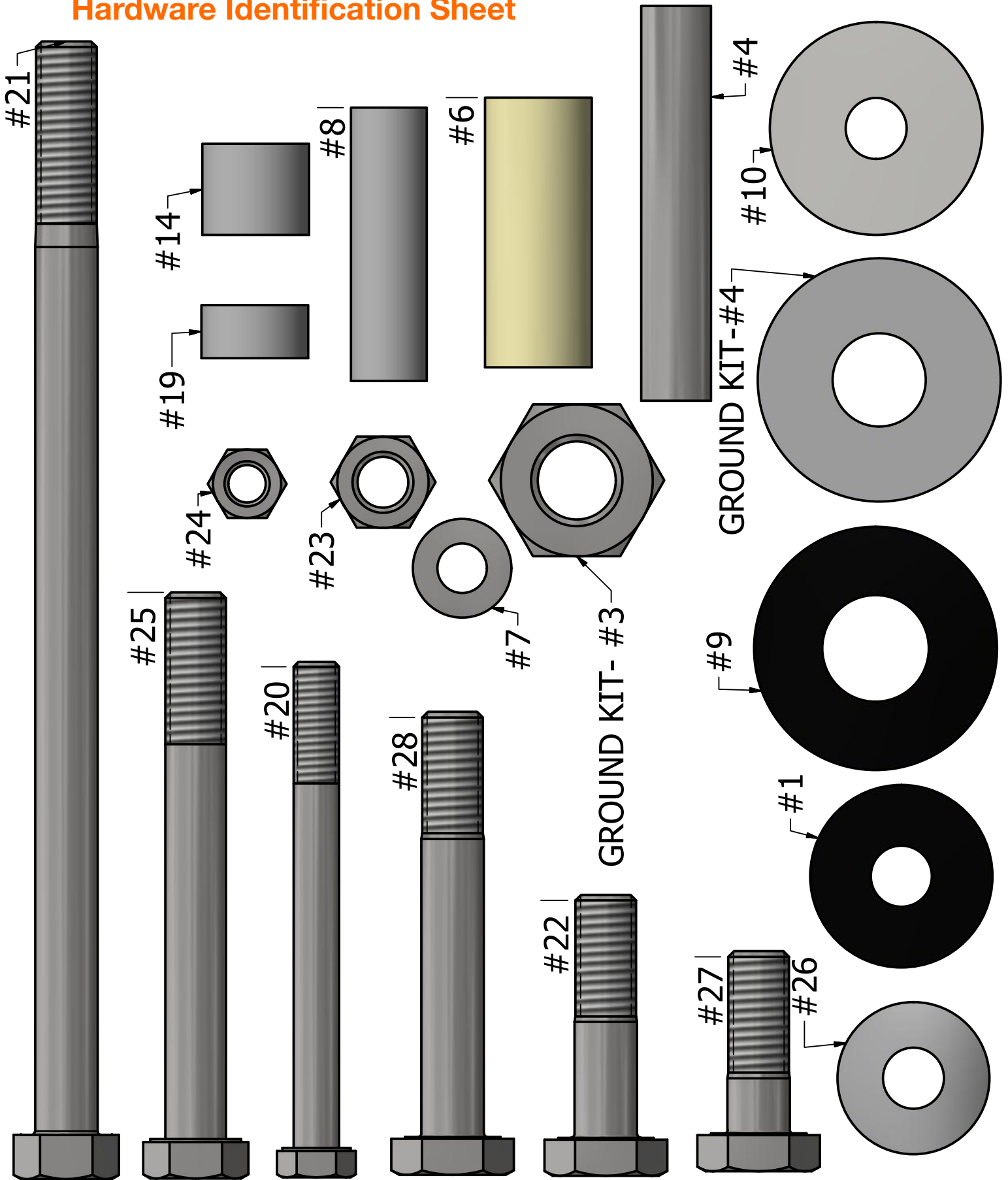
Questions?

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[www.aegoals.com](http://www.aegoals.com)

# Hardware Identification Sheet



Hardware List - Pro Series FM

<u>Key #</u>	<u>Description</u>	<u>Quantity</u>
	<u>Anchor Kit</u>	
3	3/4 - 10 Hex Nut	12
4	3/4" Flat Washer	8
	<u>Basketball Goal</u>	
27	1/2" - 13 x 1" SS HHCS	2
22	1/2" - 13 x 2" SS HHCS	4
28	1/2"-13 x 3 1/2" SS HHCS	2
25	1/2"-13 x 4 1/2" SS HHCS	1
21	1/2"-13 x 9" SS HHCS	1
23	1/2"-13 SS Finish Nut	6
20	3/8"-16 x 4 1/2" SS HHCS	2
24	3/8"-16 SS Nylock Nut	2
10	1 3/4" OD x 1/2" ID SS Washer	14
26	1/2" SS Washer	2
4	3 1/4" Long SS Tube	2
8	2 1/4" Long SS Tube	2
9	2" OD x 7/8" ID ABS Washer	24
19	7/16" Long Gray Nylon Bushing	4
14	3/4" Long Gray Nylon Bushing	4
6	2 7/32" Long Nylon Bushing	2
1	1 1/2" OD x 1/2" ID ABS Washer	2
	<u>Rim Hardware</u>	
7	3/8" SS Flat Washer	8
20	3/8"-16 x 4" ZN HHCS	4
5	#10 x 3/4" Phillips SS Screw	4
	Cover Plate	1
	Net	1

## Warranty

### Limited Lifetime Warranty

**Warranty Coverage:** American Eagle Basketball Systems warrants to the original retail purchaser that any product of its manufacture is free from defects in material and workmanship. This warranty is void if the product has been damaged by accident, negligence, use for purposes for which it is not intended, improper service, failure to follow the instructions provided with the product or other causes not arising out of defects in material or workmanship. A limited lifetime warranty is effective for the duration of ownership by the original retail purchaser or five years after product discontinuation by American Eagle Basketball Systems.

Subject to proper installation and normal residential use, American Eagle Basketball Systems warrants, subject to the limitations below, to the original retail purchaser all structural components of the American Eagle Basketball System to be free of defects in material and workmanship for the duration of ownership by the original purchaser or five years after product discontinuation by American Eagle Basketball Systems.

**Not Covered By This Warranty:** Use of product in non-residential applications including, but not limited to, schools, parks, public or private recreational facilities. Product subjected to abuse, negligence, improper installation, vandalism, acts of God, alteration of product and any other events beyond the control of American Eagle Basketball Systems. Paint or rusted parts. If rust should appear, remove loose paint, lightly sand affected area, primer and paint with an exterior enamel paint. Rims are not warranted for any defects other than workmanship. Bent rings, torn back plates, damaged springs and damaged eyebolts are a result of hanging on the rim and are not warranted. Shipping charges both ways. Product shipped collect will be refused. Protective padding is not warranted for any defects other than workmanship for a period of one year. Service charges, labor charges, equipment rental and travel expenses associated with the replacement of repair or warranty item.

American Eagle Basketball Systems reserves the right to examine photographs or physical evidence of product claimed to be defective, and to recover said product, prior to authorization of warranty claims. All warranty claims must be arranged through American Eagle Basketball Systems prior to any product returns.

The sole obligation of American Eagle Basketball Systems and the exclusive remedy under the applicable warranty, is repair or replacement of any component part determined by American Eagle Basketball Systems to be defective and covered by the warranty. American Eagle Basketball Systems will not be liable for any other damages or expenses.

**Warranty Disclaimers:** The applicable warranty is expressly in lieu of all other warranties, expressed or implied. American Eagle Basketball Systems does not assume, and no other person or representative is authorized to assume for American Eagle Basketball Systems any other liability in connection with the sale of American Eagle Basketball Systems products. Under no circumstances shall American Eagle Basketball Systems be liable for any indirect, consequential, special, incidental, punitive or exemplary damages of any kind. The American Eagle Basketball Systems product is intended to be used to play the sport of basketball. All sports involve risk of injury. The user assumes all risk of injury resulting from the use of this product. All products are sold on this condition and no representative of American Eagle Basketball Systems may waive or change this policy.

Some states do not allow the exclusion or limitation of implied warranties or consequential or incidental damages, so the above limitations or exclusions may not apply to you.

**Legal Remedies:** This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

**Warranty Guidelines Required For All Warranty Claims**

1. Proof of purchase (original retail purchaser) is required for all warranty claims.
2. Call or write American Eagle Basketball Systems to receive a Return Authorization Number and any instructions for the return.

**Questions or Comments**  
**Phone: 1-844-422-4625**  
**Email: [sales@aegoals.com](mailto:sales@aegoals.com)**  
**[www.aegoals.com](http://www.aegoals.com)**

**American Eagle Basketball Systems**  
**735 Bacon Street**  
**Indianapolis, IN 46227**  
**Attn: Warranty Department**

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