



ADJUSTABLE BASKETBALL SYSTEM
ASSEMBLY INSTRUCTIONS AND OWNER'S MANUAL

 **-PRO™** 435 MAX



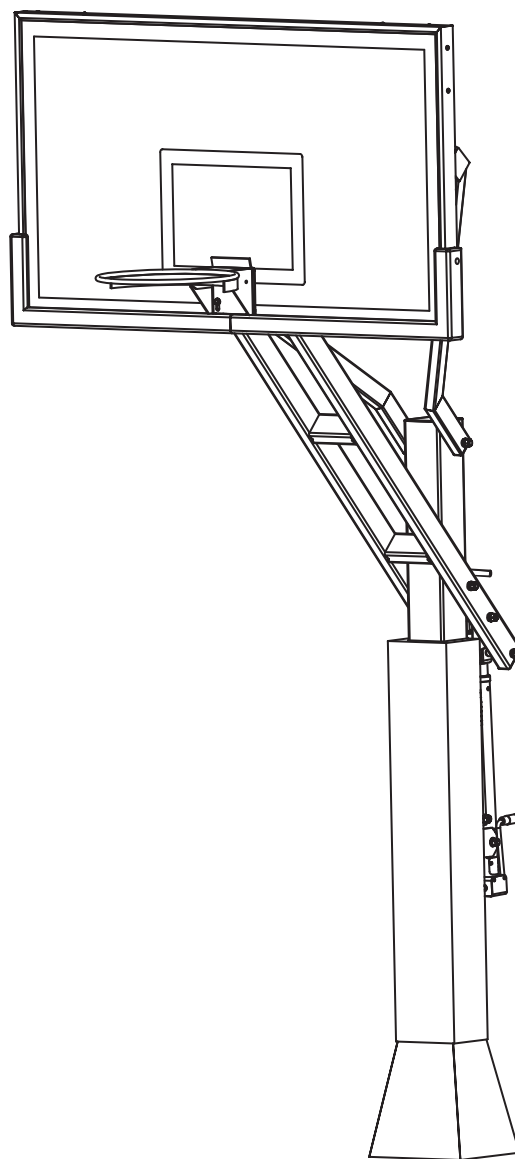
WARNING



FAILURE TO COMPLY WITH ANY OF THE WARNINGS IN THESE INSTRUCTIONS MAY RESULT IN SERIOUS PERSONAL INJURY.

FAILURE TO COMPLY MAY ALSO RESULT IN PROPERTY DAMAGE. PLEASE HEED ALL WARNINGS AND CAUTIONS TO ENSURE YOUR SAFETY.

DO NOT ATTEMPT TO ASSEMBLE THIS SYSTEM WITHOUT CAREFULLY READING AND FOLLOWING ALL INSTRUCTIONS. BEGIN BY IDENTIFYING AND TAKING INVENTORY OF ALL PARTS USING THE PARTS LIST PROVIDED.



Douglas Industries, Inc.
3441 South 11th Ave. -Eldridge, IA 52748
Telephone: 1-800-553-8907
www.douglas-sports.com

Keep this instruction manual in case you have to contact the manufacturer for replacement parts.

TOOLS AND MATERIALS REQUIRED FOR ASSEMBLY
(Not Included)

- | | |
|----------------------------|---|
| 1. (2) Adjustable Wrenches | 9. Shovel |
| 2. Socket Set | 10. Concrete-1/2 yard or 14-16
Bags, (80 lb. bags) |
| 3. 3/4" Wrench | 11. Phillips Head Screwdriver |
| 4. 9/16" Wrench | 12. A minimum of (2) Ladders |
| 5. 1-1/16" Wrench | 13. Carpenter's Level |
| 6. 15/16" Wrench | 14. Water Supply |
| 7. Hammer or Mallet | |
| 8. Tape Measure | |

****A MINIMUM OF 3 ADULTS IS
REQUIRED TO LIFT UNIT INTO PLACE****

STOP!

BEFORE YOU START

STOP!

- A. Identify and inventory all parts using the checklist boxes in the parts list. Be sure to keep the hardware bags and their contents separate. If any parts are missing call our Customer Service Department (800-553-8907).
- B. Test fit all Bolts by inserting them into the respective hole. If necessary, carefully scrape away any excess powder coating buildup from inside the holes. Do not scrape away all of the powder coating. Bare metal may rust.

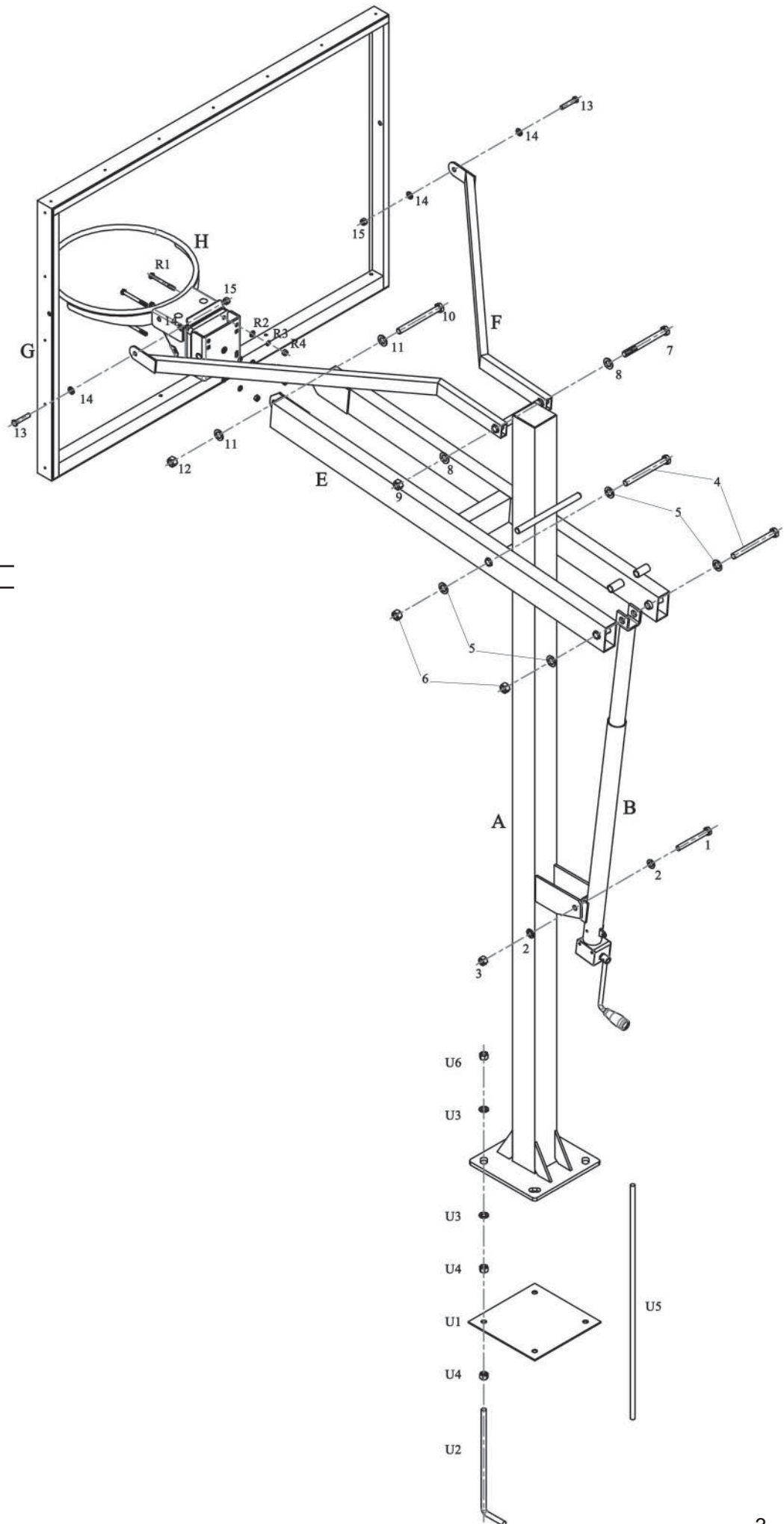


SAFETY INSTRUCTIONS



FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE AND WILL VOID THE WARRANTY. The owner must ensure that all players know and follow these rules to safely operate the system. Proper and complete assembly, use and supervision is essential for proper operation and to reduce the risk of accident or injury. A high probability of serious injury exists if this system is not installed, maintained, or operated properly.

- If using a ladder during assembly, use extreme caution. Follow all warnings and cautions on the ladder carefully.
- 3-4 people are required to lift the unit into place.
- Before digging, contact the appropriate agency to locate underground power cables, gas, and water lines. Do not install the system within 20 feet of overhead power lines.
- Climate, corrosion, or misuse could result in system failure.
- If technical assistance is required, contact the manufacturer.
- Minimum operational height is 5' to the Rim. Most injuries are caused by misuse and/or failure to follow instructions. Use caution when using the system.



PARTS LIST

ITEM	QTY	DESCRIPTION
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SYSTEM COMPONENTS

A	1	Main Post
B	1	Actuator
C	1	Pole & Gusset Padding
D	1	Rim Height Sticker
E	1	Main Extension Arm
F	2	Upper Extension Arm
G	1	Backboard
H	1	Flex Rim (Separate Pack)
I	1	Rim Pad (Pre-attached)

UNDERGROUND PARTS

U1	1	Anchor Template
U2	4	16 mm Anchor J-Bolt
U3	8	Thick Washer for J-Bolt
U4	8	Hex Nut M16
U5	4	Anchor Rebar 36"L
U6	4	Lock Washer M16

RIM HARDWARE

R1	4	Carriage Bolt M10 x 110mm
R2	4	Flat Washer M10
R3	4	Lock Washer M10
R4	4	Hex Nut M10

HARDWARE LIST

1	1	Hex Bolt M16 x 4.72"
2	2	Flat Washer M16
3	1	Lock Nut M16
4	2	Hex Bolt M18 x 12.8"
5	4	Flat Washer M18
6	2	Lock Nut M18
7	1	Hex Bolt M18 x 10.43"
8	2	Flat Washer M18
9	1	Lock Nut M18
10	1	Hex Bolt M18 x 8.46"
11	2	Flat Washer M18
12	1	Lock Nut M18
13	2	Hex Bolt M12 x 2.56"
14	4	Flat Washer M12



**Know what's below.
Call 811 before you dig.**

One, free easy call gets your utility lines marked
AND helps protect you from injury and expense

Utility Markings

Color	Definition
Red	Electric
Yellow	Gas, Oil, Petroleum
Orange	Communication, Phone, TV
Blue	Portable Water, Irrigation
Green/Brown	Sewer
White	Proposed Dig

NOTE: At rim height 10', distance from the face of backboard to the front of Main Post(A) is 36", Choose the proper location to dig for the concrete footing:

STEP A

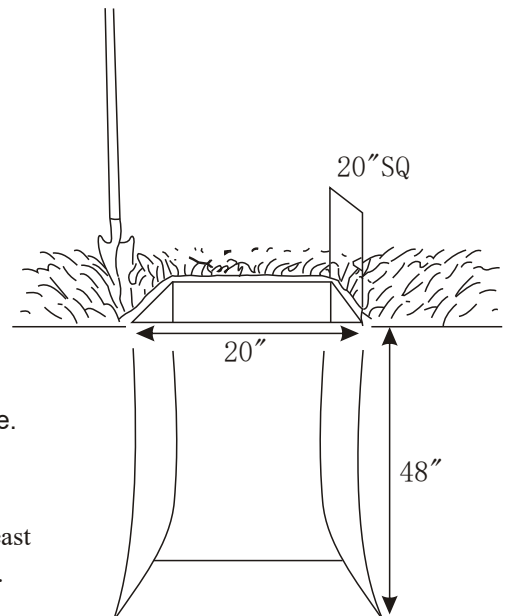
- Dig a hole 48" deep and 20"x 20" square. The edge of the hole should be flush with the edge of the playing surface. If you live in an area where heavy frost can occur, it may pose a problem, consult your local building inspector to determine the appropriate hole depth.

NOTE: The hole must be at least 48" deep.

- Build a form before pouring the concrete pad, to ensure that the top of the concrete remains straight and square. The form should be placed about 1/2" above the playing surface to allow for water drainage.
- Bell out the bottom of the hole.

NOTE: A square hole prevents the rotation of the concrete.

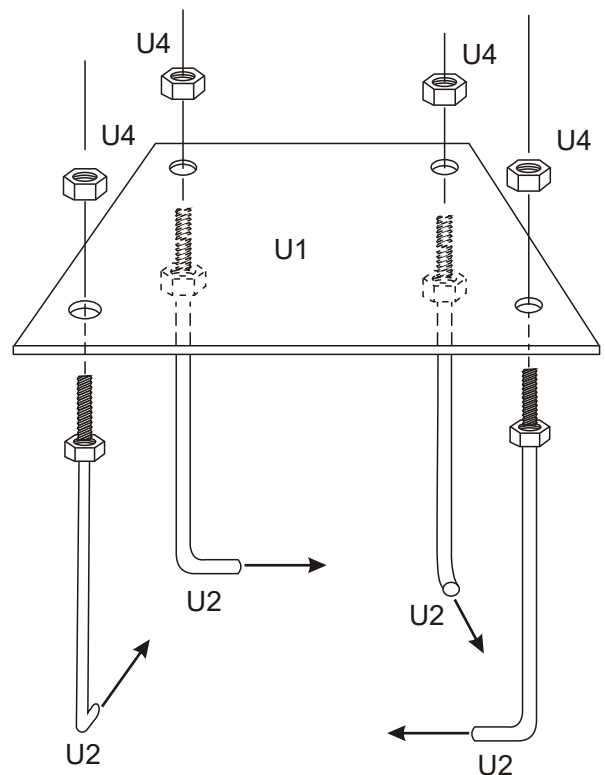
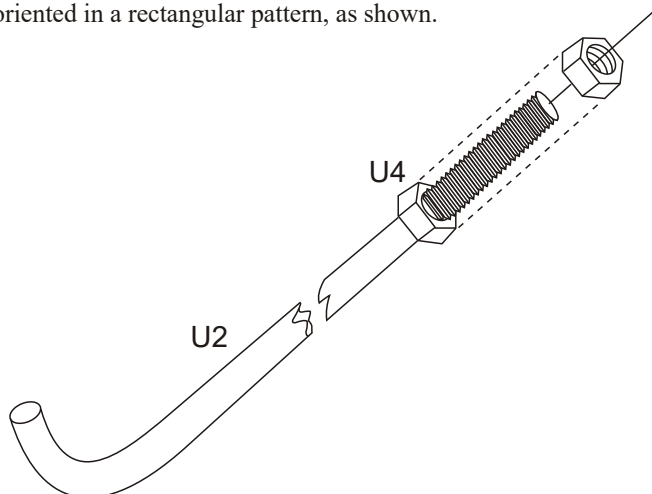
NOTE: The area behind the playing surface must be cleared off by at least 3 feet to enable the user to stand behind the pole to adjust the Rim height.



STEP B

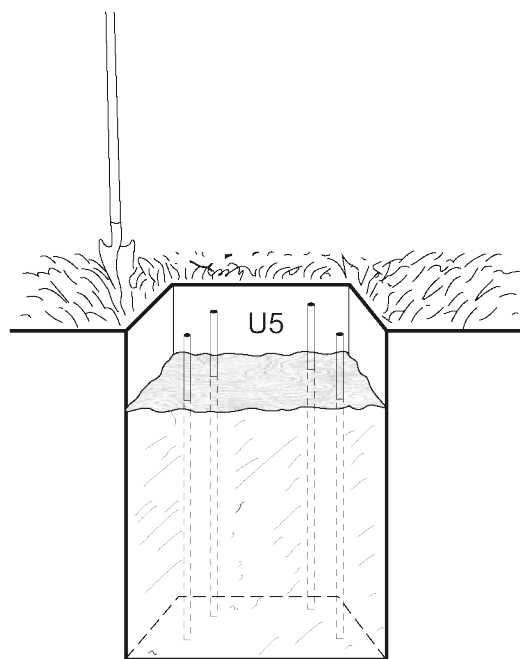
- Thread a 16mm Hex Nut (U4) onto each of the 16mm J-Bolts (U2). Securely tighten the Nuts all the way down to the end of the threads.
- Slide the threaded end of the J-Bolts through the holes in the Anchor Template (U1) and secure each J-Bolt with a 16mm J-Bolt Hex Nuts (U4) as shown. Securely tighten all Nuts at this time.

NOTE: Make sure the curved "J" ends of the J-Bolts are oriented in a rectangular pattern, as shown.



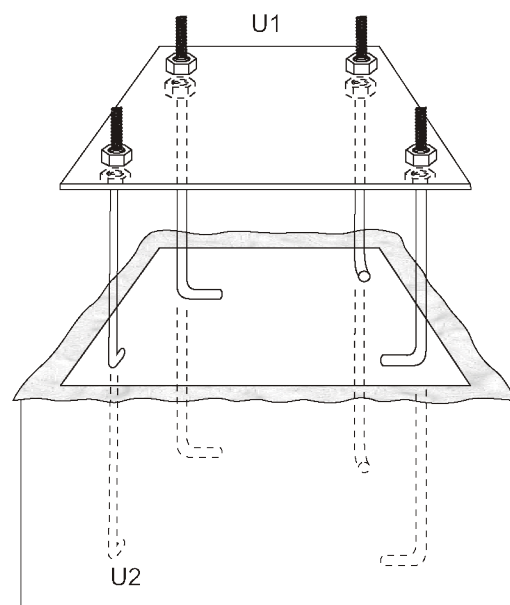
STEP C

- Mix the concrete according to the instructions on the bags. Note that a thicker mix of concrete will dry stronger than a thin mix. Pour the concrete into the hole, stopping approximately 18 inches from the top of the hole.
- Insert the four pieces of Anchor Rebar (U5) into the hole, pushing each piece firmly to the bottom of the hole. The four pieces should be arranged in a square approximately 8 inches wide so that each piece of rebar will be positioned next to the J-Bolts when the J-Bolt Template is placed in the cement.
- Finish filling the hole to the top with concrete. The top of the concrete should reach just above the level of the top of the form.



STEP D

- Position the J-Bolt Template (U1) over the hole so that it is centered, with the sides of the plate square with the sides of the hole.
- Push the J-Bolts (U2) into the concrete until the J-Bolt Template is resting flat against the surface of the concrete.
- Grasp the tops of the J-Bolts and agitate the Template assembly back and forth repeatedly to eliminate any air bubbles in the concrete. Lift the Template slightly above the concrete when agitating. Make sure the Template is resting on the concrete after agitating. Form the concrete into a downward slope away from the Pole to allow water runoff.
- Clean off any concrete that may be on the J-Bolt Template or the exposed portions of the J-Bolts.
- Using a carpenter's level, make sure the Template is square to and level with the playing surface.
- Allow the concrete to cure for a minimum of 5-7 days before installing the rest of your basketball system. In cold, wet weather or humid climates, allow additional time for the concrete to cure.



YOU ARE NOW FINISHED WITH THE INITIAL ASSEMBLY STEPS. DO NOT PROCEED WITH THE ASSEMBLY UNTIL THE CONCRETE HAS FULLY CURED. CURING WILL TAKE A MINIMUM OF 72 HOURS. IN HUMID CLIMATES OR WET WEATHER, ALLOW ADDITIONAL TIME FOR THE CONCRETE TO CURE.



WARNING



NEVER USE THE SYSTEM WITHOUT FOLLOWING THE CEMENTING INSTRUCTIONS. FAILURE TO FOLLOW ALL OF THESE INSTRUCTIONS AND WARNINGS COULD LEAD TO SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE AS LISTED ON PAGE ONE.



WARNING



BECAUSE OF THE SIZE AND WEIGHT OF THIS SYSTEM, A MINIMUM OF THREE ADULTS ARE REQUIRED FOR THE FOLLOWING STEPS

STEP 1

- A. Slide a 16mm Thick Washer (U3) over each of the J-Bolts (U2) as shown in FIGURE 1A.
- B. Remove the Padding from Main Post (A). Place the Main Post (A) over the J-Bolts. Slide a 16mm Thick Washer (U3), and thread a 16mm Lock Nut (U6) to each J-bolt. Tighten the Nuts only a few turns onto the J-Bolts as shown in FIGURE 1B.
- C. If the Main Post (A) is not exactly vertical, adjust the 16mm J-Bolt Hex Nuts (U4) located under the Post base. Tighten all of the Hex Nuts (U4) Above Post base when Main Post (A) is vertical.

NOTE: Face the Main Post (A) with Actuator Bracket facing away from playing court (as shown in FIGURE 1C).

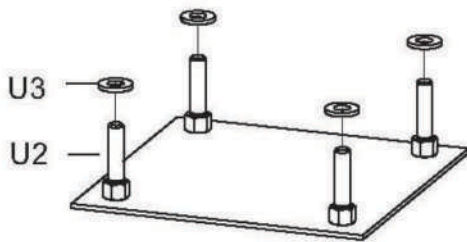


FIGURE 1A

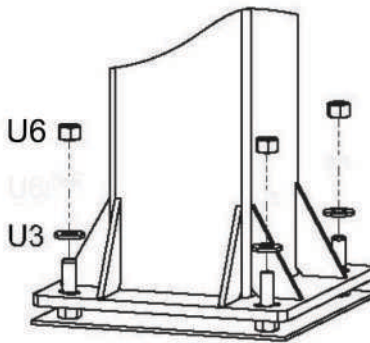


FIGURE 1B

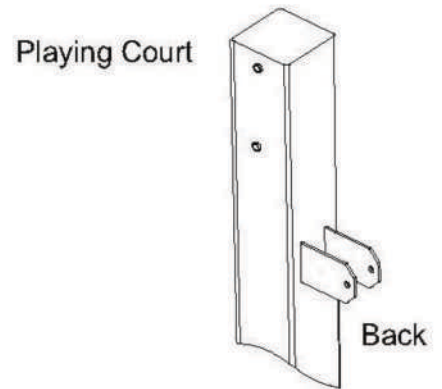
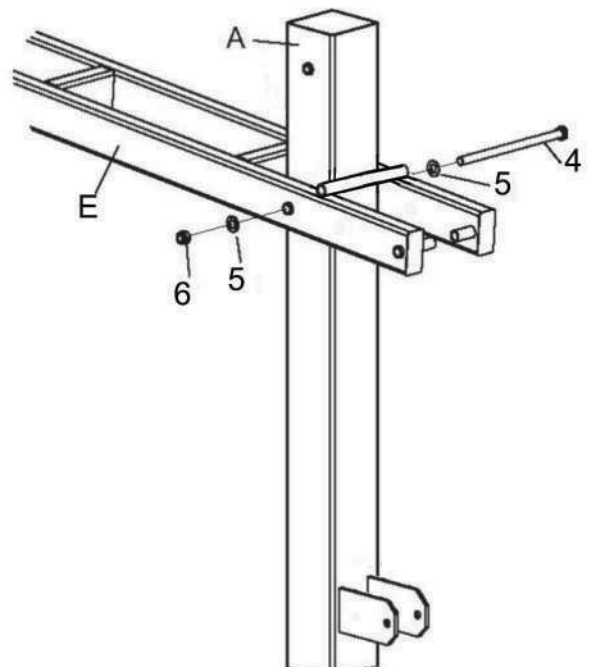


FIGURE 1C

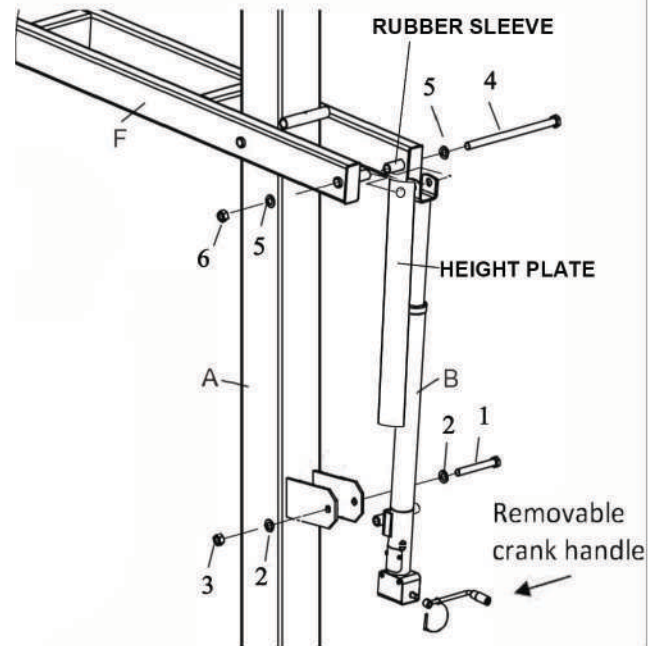
STEP 2

Slide the Main Extension Arm (E) over the top of the Main Post (A) and attach to the lower pivot tube welded on front side of Pole (A) with one Hex bolt M18 x 12.8" (#4), two flat washers M18 (#5) and one Lock nut M18 (#6)



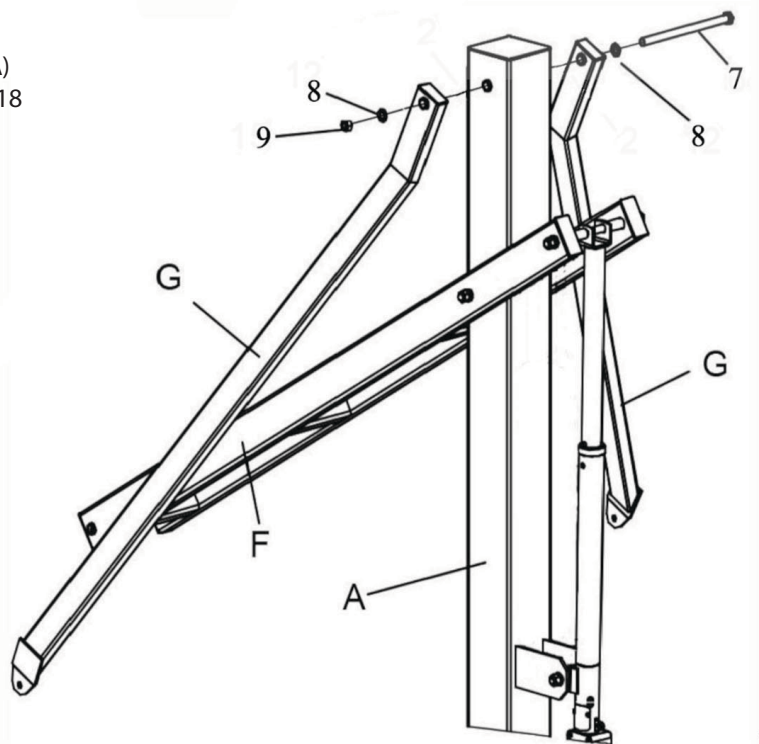
STEP 3

- A. Connect Actuator to Main Extension Arm (E). Place the upper bracket of Actuator (B) between the last set of welded tubes on the Main Extension Arm (E), attach the two parts using Hex Bolt M18 x 12.8" (#4), two Flat Washers M18 (#5) and one Lock Nut (#6)
- B. Connect Actuator (B) to the mounting bracket welded in the middle of Post (A), using one Hex Bolt M16 x 4.72" (#1), two Flat Washers for M16 Bolt (#2) and one Lock Nut for M16 bolt (#3).
- C. Attached Crank handle to the actuator. Slide Removable crank handle onto the shaft sticking out of Gear Box (Actuator), lock it in place with the attached pin.



STEP 4

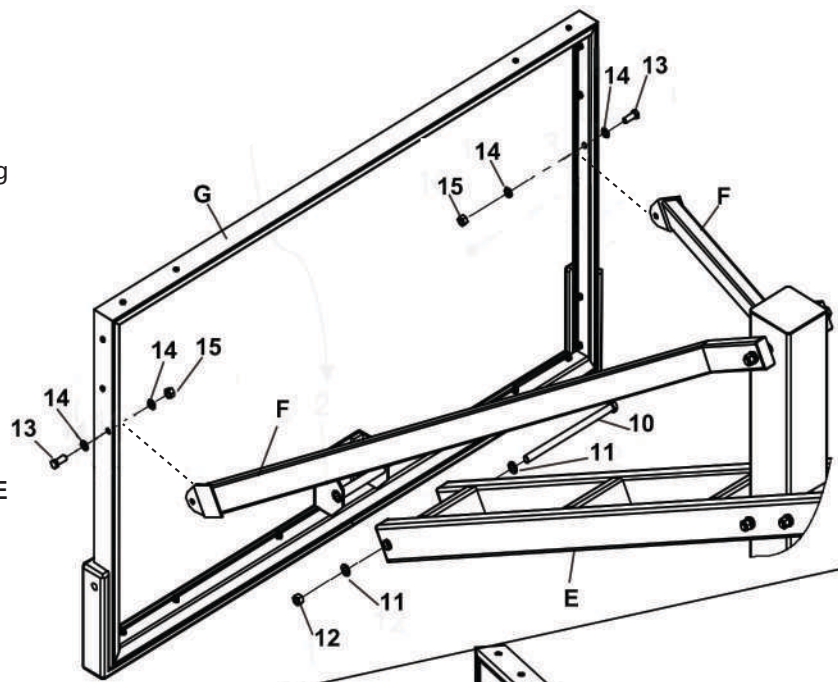
- A. Attach the two Upper Extension Arms (F) to Main Post (A) with one Hex bolt M18 x 10.43" (#7), two Flat Washers M18 (#8) and one Lock Nut M18 (#9).



STEP 5

- A. Crank the Main extension arm as low as possible.
- B. Attach the Backboard to Main Extension Arm (E) by using a Hex Bolt M18 x 8.46" (#10), two M18 flat Washers (#11) and one Lock Nut M18 (#12).
- C. Connect Upper Extension Arms (F) to Backboard (G), using 2 Hex bolts M12 x 2.56" (#13), 4 Flat Washers M12 (#14) and 2 Lock nuts M12 (#15).

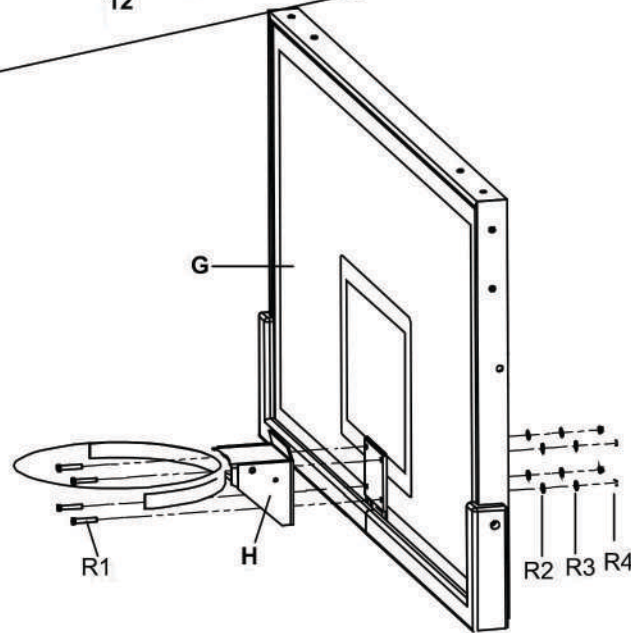
*ATTACH UPPER ARMS TO INSIDE OF BACKBOARD FRAME



STEP 6

- A. Remove the screws on Rim spring box cover, open the Spring box. (*Rim Spring Box cover may not be factory-assembled.*)
- B. Mount the rim to the Mounting bracket on Backboard (G) using the hardware supplied in rim box.
- C. Re-attach Spring box cover to the Rim with removed screws.

NOTE: Use a level to make sure rim is level side to side before tightening nuts.



STEP 7

- A. After everything is square, make sure all nuts on the system have been tightened. **NOTE:** Do not over tighten the Nuts, make sure the unit can be adjusted up and down.
- B. To apply the Rim Height Sticker (In the manual pack), first use a tape measure to crank rim up to exactly 10' from the playing surface. Use a pencil to make a mark on the Actuator(B) where the bottom of the black cover sleeve(B). Then, peel and apply Rim Height Sticker to outside of Actuator(B) lining up the pencil mark with the 10' mark on the Rim Height Sticker. See detail A.
- C. Attach Post Pad and Gusset Pad to Main Post (A) as shown.

