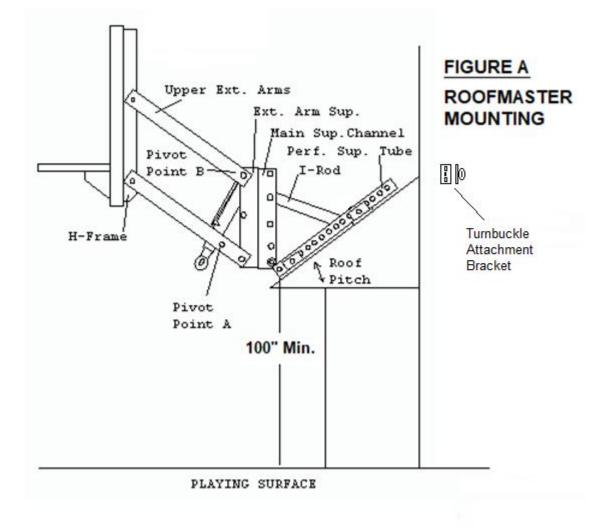
# FIRST TEAM SPORTS, INC. RoofMaster Assembly Instructions

(revised 11/22/2023)



### **Bill of Materials**

- (2) Roof Strut
- (2) Perforated Tube
- (1) I-Rod
- (1) Main Sup. Channel
- (1) Ext. Arm Support
- (2) Upper Ext. Arm
- (2) Lower Ext. Arm
- (1) H-Frame
- (1) Adjustment Crank
- (1) Height Indicator
- (1) Crank Handle
- (1) Rim Height Stickers

- (2) 3/8" x 1 1/4" Eye Bolt
- (1) 3/8"x13" Hex Bolt
  - (4) 3/8"x2 1/2" Hex Bolt
  - (10) 3/8" Flat washer
  - (7) 3/8" Lock washer
  - (7) 3/8" Hex Nut
  - (2) 1/2"x4 1/2" Hex Bolt
  - (6) <sup>1</sup>/<sub>2</sub>" Lock washer
  - (6) 1⁄2" Hex Nut
  - (6) 1/2" Locknut
  - (8) <sup>1</sup>/<sub>2</sub> " Flat washer
  - (2) Turnbuckles

- (4) 1/2"x 11/2" Hex Bolt
- (1) 1/2"x 8" Hex Bolt
- (5) 1/2"x 12 1/2" Hex Bolt
- (1) Anti-Seize Lubricant
- (12) 1/2" Nylon Flat washer
- (4) 5/16" x 1" Mach. Screw
- (4) 5/16" Flat washer
- (4) 5/16" Lock washer
- (4) 5/16" Hex Nut
- (2) Lift Spring
- (2) Turnbuckle Bracket

### NOTE: Immediately unpack all components and cross check against bill of materials. Report any shortages to First Team customer service at 1-888-884-6677.

### WARNING!! WARNING!! WARNING!! WARNING!! WARNING!!

Proper installation of this basketball structure requires adequate roof structure integrity. Consult with an architect or engineer if you are uncertain about whether your roof is sufficient to support this structure adequately.

#### WARNING!! WARNING!! WARNING!! WARNING!! WARNING!!

Because each installation situation is unique, the anchoring hardware required to attach this system to your roof is not included with the unit. It is up to you to determine what hardware is suitable for your particular installation. It is advisable to consult with an architect or engineer if you are unsure about selecting the appropriate mounting hardware. Inadequate or improper installation of this basketball system can result in serious injury or death!

Read and understand all instructions completely before proceeding with installation.

#### IMPORTANT!!! IMPORTANT!!! IMPORTANT!!!

WITH THIS BASKETBALL GOAL YOU SHOULD HAVE RECEIVED SOME ANTI-SEIZE LUBRICANT. DURING ASSEMBLY YOU WILL PERIODICALLY BE ASKED TO SMEAR A GENEROUS PORTION OF THIS LUBRICANT ON CERTAIN BOLTS. THIS LUBRICANT IS VERY IMPORTANT AND VERY MESSY AND WILL STAIN. HAVE CLEAN UP RAGS AVAILABLE. IF YOU DO NOT WISH TO STAIN YOUR HANDS TRY USING A BRUSH OR OTHER UTENSIL TO SPREAD LUBRICANT. MAKE SURE TO SPREAD A GENEROUS LAYER OF ANTI-SEIZE LUBRICANT

### OVER THE ENTIRE SHAFT OF THE BOLT WHEN INSTRUCTED. DO NOT APPLY ANTI-SIEZE LUBRICANT TO ANY BOLTS OTHER THAN THOSE INSTRUCTED. THIS LUBRICANT WILL GUARD AGAINST RUST, AND HELP ENSURE PROPER PIVOT OPERATION FOR YEARS TO COME.

Your RoofMaster basketball system is designed to be mounted to a pitched roof (0-45 degree) or horizontal flat surface. Follow the instructions below under the heading "Roof Mounting" if you are mounting to an angled roof or flat roof surface.

### **ROOF MOUNTING**

1. Using (4) 3/8"x 2 ½" hex bolts, flat washers, lock washers & hex nuts, assemble the (2) roof struts to the (2) perforated support tubes as shown in Figure C. Be sure to place (1) 3/8" flat washer between the welded tabs on the roof struts and the perforated support tubes to prevent paint wear. Just attach bolts finger tight for now. You may need to adjust their positioning later. Don't worry about "Distance A" (Figure C), "Distance A" will vary depending on your particular configuration, but should be no less than 24".

2. Next, using (2)  $\frac{1}{2}$  x 4  $\frac{1}{2}$  hex bolts, lock washers, & hex nuts attach the main support channel to the front pivot tubes welded to the front of the perforated supports as shown in Figure D. **Spread** 

### Anti-Seize lubricant on both of these bolts, (do not get lubricant on bolt threads).

3. The next step is to position the assembly on your roof to determine the appropriate configuration for your roof pitch. Place the structure on your roof as shown in Figure A. Using (1) ½"x 8" hex bolt and locknut attach one end of the I-Rod to the Main Support Channel and the other end to one set of

pre-drilled holes in the perforated tubes using (1) 3/8"x 13" hex bolt, (2) flat washers, (1) lock washer and (1) hex nut. The various holes in the perforated tubing are provided so that you may

attach the I-Rod in the appropriate holes to level the Main Support Channel front-to-back as shown in Figure A. It may be necessary to relocate the backside roof strut if it obstructs the necessary attachment for the I-Rod. **Spread Anti-Seize lubricant on the shaft of both of these bolts, (do not get lubricant on bolt threads).** 

4. Secure the entire assembly to the roof as shown in Figure A. It is important that the bottom of the Perforated Support Tubes be no lower than 100" above the playing surface (shown in Figure A). If this point is lower than 100" the unit may not adjust fully to 10'. Additionally, make certain the entire assembly is sitting squarely on the roof (not at an angle) before fixing structure to the roof. This will ensure that the backboard will be square with your playing surface. HARDWARE FOR SECURING ASSEMBLY TO ROOF IS NOT SUPPLIED AND IS THE RESPONSIBILITY OF THE CUSTOMER.

## WARNING!! WARNING!! WARNING!! WARNING!!

First Team does not provide roof anchors with any structure. The purchaser assumes liability for the installation of any roof mounted structure. Through bolting this roof mounted system is always best. This may require access to the inside of the roof and possible reinforcement between rafters. Consult a professional architect, engineer, or contractor to determine safe methods of installation to your home/facility's roof construction. SEVERE INJURY OR DEATH MAY OCCUR IF UNIT IS INSTALLED IMPROPERLY OR INSTALLED ON A ROOF THAT IS INADEQUATE TO SUPPORT THE WEIGHT OF THE UNIT AND ANY ADDED WEIGHT HANGING FROM THE STRUCTURE.

## WARNING!! WARNING!! WARNING!! WARNING!!

All assembly materials are supplied except hardware to attach the unit to the customer's roof. Attachment method and type of anchor used are the responsibility of the installer. SEVERE INJURY OR DEATH MAY RESULT FROM FAILURE TO SELECT A PROPER ANCHORING SYSTEM GIVEN THE CONSTRUCTION & CONDITION OF THE ROOF OR IMPROPER USE OF THE PROPER ANCHORING SYSTEM!!

NOTE: After you are satisfied that the structure is adequately fastened to the roof and that the roof is adequate to support the weight of this basketball system, you may proceed with the rest of the installation.

5. The Roofmaster is supplied with (2) Turnbuckle Attachment Brackets. These brackets serve as a safety backup to the primary mounting structure fastening hardware. Secure each Turnbuckle Attachment Bracket to the roof positioned approximately 12" above the top ROOF STRUT. (see figure C).

6. The top ROOF STRUT has a series of holes provided in the gusset running along the top of the ROOF STRUT. Using (2) 3/8" flat washers, (1) 3/8" lock washer and (1) 3/8" hex nut, secure (1) 3/8" x 1  $\frac{1}{4}$ " Eye Bolt to the left and right side of the ROOF STRUT positioned in the hole that lines up best with the TURNBUCKLE ATTACHMENT BRACKET above it that you just installed in step 5.

7. Using the attachment hardware installed on the TURNBUCKLES, attach (1) TURNBUCKLE from each TURNBUCKLE ATTACHMENT BRACKET down to the EYE BOLT installed below it. (See Figure C) Turnbuckles should be snug enough not to rattle, but not so tight they put stress on the Roof Strut. **DO NOT OVERTIGHTEN TURNBUCKLES!** 

8. Using (4) ½"x 1½" hex bolts, flat washers, lock washers and hex nuts fasten the Extension Arm Support to the Main Support Channel. The channels bolt together in a face-to-face fashion. You have been supplied (4) extra nylon flat washers. These flat washers can be sandwiched between the channels if necessary to "fine tune" the front-to-back leveling of the Extension Arm Support. Simply place one or two nylon washers at each of the upper or lower attachment points to pitch the Extension Arm Support forward or back. Additionally, adjust the side-to-side level of the Extension Arm Support. When you are satisfied with both the "front-to-back" and "side-toside" leveling of the Extension Arm Support, tighten all hardware. **ATTN: Make sure the Extension Arm Support is right-side-up. The welded tabs inside the channel should be at the top.** 

9. Attach the Lower Extension Arms using (1)  $\frac{1}{2}$ "x 12  $\frac{1}{2}$ " hex bolt, (2) nylon flat washers and (1)  $\frac{1}{2}$ " locknut. Place one nylon flat washer between the extension arm and the extension arm support. The nylon washers eliminate paint wear and provide free movement at the pivot points. Remember, the nylon flat washers go BETWEEN the extension arms and the side of the extension arm support.

10. Attach the Upper Extension Arms using (1)  $\frac{1}{2}$ "x 12  $\frac{1}{2}$ " hex bolt, (2) nylon flat washers, and (1)  $\frac{1}{2}$ " locknut. Additionally, while attaching the extension arms make sure to also attach the Adjustment Crank. The yoked clevis of the adjustment crank should be cradled between the two welded tabs at the top of the extension arm support. Also attach the Rim Height indicator at this time. The welded tube on the rim height indicator fits between the yoked clevis on the adjustment crank. NOTE OF CLARIFICATION: The Upper Extension Arms, Adjustment Crank and Rim Height Indicator are all attached using the same  $\frac{1}{2}$ " x 12  $\frac{1}{2}$ " hex bolt mentioned above.

11. Next, using (1)  $\frac{1}{2}x$  12  $\frac{1}{2}$  hex bolt and locknut attach the bottom end of the adjustment crank to the set of welded tubes on the lower extension arms as shown in Figure A. **Spread Anti-Seize Iubricant on the shaft of this bolt.** 

12. Bolt the H-Frame to the extension arms using (2)  $\frac{1}{2}$ "x 12  $\frac{1}{2}$ " hex bolts, (4) nylon washers and (2)  $\frac{1}{2}$ "

locknuts. Remember to place the nylon washers between the extension arms and the sides of the H-Frame.

13. Unpackage backboard. IF YOU PURCHASED AN ACRYLIC (plexiglass) BACKBOARD you will find two rubber gaskets packaged in with the backboard. One gasket goes behind the backboard between the H-Frame and the backside of the board. You will use the other gasket later in the

assembly to be used on the face of the backboard between the rim and the face of the backboard. This eliminates any steel-to-acrylic contact.

14. IF YOU PURCHASED A TEMPERED GLASS BACKBOARD you should find (4) grommets mounted in the four rim holes in the glass. If the grommets are not there, check in the box, they may have fallen out during shipping. If the grommets are missing and cannot be located, DO NOT PROCEED WITH INSTALLATION, call First Team immediately for replacements, 1-888 - 884-6677. Grommets prevent glass breakage when tightening rim bolts.

15. Remove and discard the plastic shipping strap located at the top of the backboard frame joint.

16. Hang backboard on H-Frame lining up the four holes at the top of the backboard frame with the four holes in the top of the H-Frame. Loosely attach board at these four points using the 5/16" hardware that came with the backboard.

17. Loosely attach backboard to H-Frame at the four points along the bottom of the backboard frame as well. Use the 5/16" hardware provided in the bolt kit. Remember, IF YOU HAVE AN ACRYLIC BACKBOARD, make sure to get the gasket sandwiched between the backboard and the face of the H-Frame. (We recommend tape to hold it in place during assembly) Also, be

sure the holes in the backboard and the holes in the H-Frame are aligned so the rim bolts will be able to pass thru when attaching rim.

18. IF YOU PURCHASED A TEMPERED GLASS BACKBOARD, check once again to make sure all (4) grommets are in place in the backboard rim mounting holes. When you are satisfied with rim hole/H-Frame alignment, attach rim following the instructions provided in the rim box. Then tighten the

5/16" hardware at both the top and bottom of the backboard frame.

19. Next, using a measuring tape crank unit until rim measures 10' from playing surface. Make a pencil mark on the side of the adjustment crank where the height indicator stops. Repeat this step for 9  $\frac{1}{2}$ , 9', 8  $\frac{1}{2}$ , 8' and 7  $\frac{1}{2}$ '. When finished peel and apply each rim height sticker lining up the pencil mark with mark provided on each respective sticker.

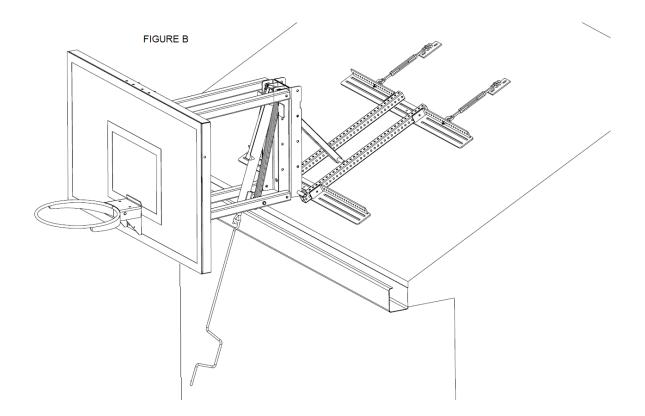
NOTE: If the system is mounted at a point higher than 100" (see Figure A) the unit may not be adjustable to the 7  $\frac{1}{2}$  range. Utilize as many height stickers as is appropriate for your application.

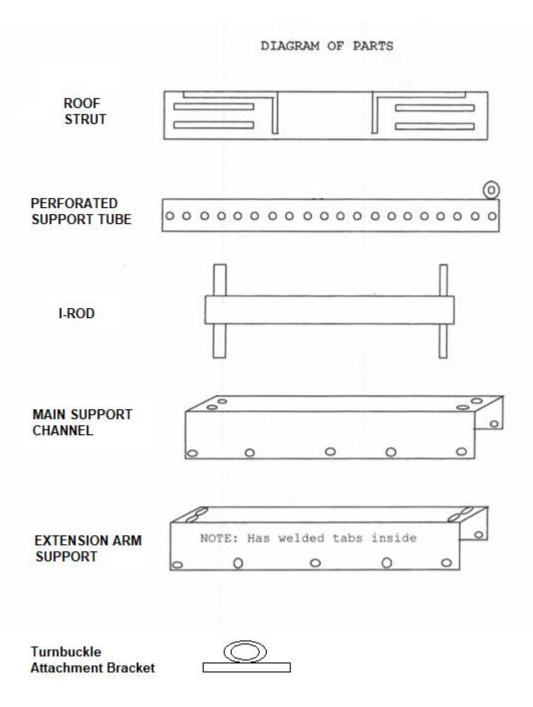
20. Next, using the adjustment handle, crank unit upward as far as possible. Then attach (2) lift springs from pivot point A to pivot point B as shown in Figure A. You may find it helpful to attach spring to upper pivot point B first, then pull down on the spring extending the spring until it hooks itself over pivot point A.

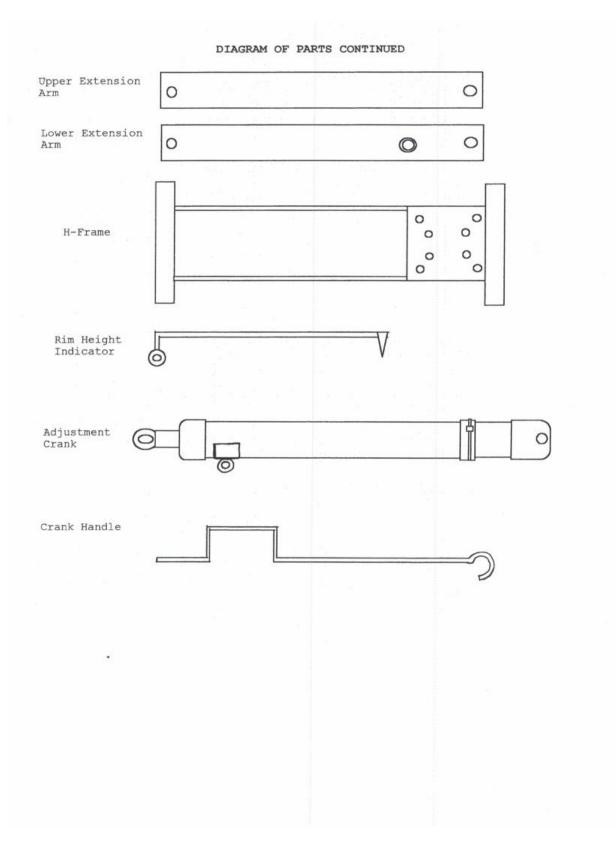
21. Make sure all hardware has been tightened. If unit is difficult to crank you may have over tightened the bolts at the main pivot points, try loosening them slightly. Check over the unit periodically to make sure no hardware has loosened as the unit ages.

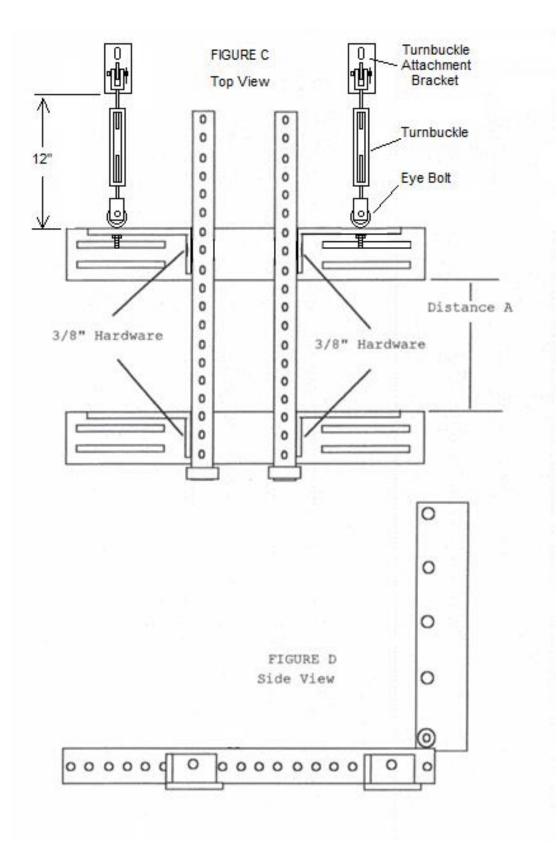
Installation of your First Team RoofMaster Basketball System is complete!

TIP: Find a safe and handy location to store your crank handle. If you ever lose your crank handle, replacements can be purchased by calling First Team at 1-888-884-6677. We hope you enjoy your RoofMaster basketball system.









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