

JAYPRO ELITE SERIES ADJUSTABLE PORTABLE BACKSTOPS

Installation and Operating Instructions

<u>Applicable Part Numbers/Models</u>: PBEL54: Jaypro Elite 5400



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Table of Contents

1	Safety1
2	Specifications2
3	Introduction
4	Required Tools
5	Included Hardware & Components
	Miscellaneous Hardware
	Locating devices4
	Anchor Kit (PBELKIT)
	Backboard, Edge Pad & Rim5
	Backboard & Rim hardware kit5
6	Unpacking7
7	Backboard & Rim Installation9
8	Raise Backstop14
9	Set Rim Height/Adjust Leveling Feet16
10	Padding Installation
11	
	Lowering Backstop for Transport
12	Lowering Backstop for Transport22Installing Locating Devices23
12 13	
	Installing Locating Devices

1 Safety

- IMPORTANT: LIFT-ASSIST SPRINGS UNDER EXTREME TENSION. DO NOT ADJUST SPRINGS WITHOUT CONSULTING MANUAL, SEE SECTION 14 (PAGE 26).
- IMPORTANT: DO NOT REMOVE J-HOOK HOLD DOWN CLAMP OR QUICK-RELEASE PIN UNTIL THE BACKBOARD AND RIM HAVE BEEN INSTALLED. FAILURE TO COMPLY MAY RESULT IN SEVERE OR FATAL INJURY AS WELL AS SIGNIFICANT DAMAGE TO SURROUNDING STRUCTURES.
- Follow all warning labels on backstops.

- Do not stand directly behind uprights when raising or lowering the backstop.
- Be sure that area within 8 feet (2.5 meters) of backstop is clear of bystanders before raising or lowering.
- Obtain assistance if lifting/lowering operation is too strenuous.
- Do not use backstop unless it is pinned at game-height using the supplied quick release pin.
- Unit must be pinned in position using supplied quick-release pin at all times unless raising or lowering.
- When raising or lowering, do not release handles until backstop has been pinned in position with the supplied quick-release pin.
- Do not attempt to remove the backboard unless the unit is pinned in position with the supplied quick-release pin.
- Do not hang on rim.
- Do not use power tools to raise or lower wheels.
- Do not use backstop for gameplay unless wheels are raised and unit is supported on feet.
- Inspect backstop for damage before and after each use.

2 Specifications

	Extension	Ballast	Standard Backboard	Standard Rim	Total Weight
Jaypro Elite			GBRUB-54 ²		
5400	54"	800 lbs1	(42" x 54")	GBA-642	1,600 lbs

3 Introduction

This guide describes the installation and use of the ELITE Series Adjustable Portable Backstops, models PBEL54.

The sections of this guide that detail the initial setup of the backstops is written with experienced mechanical contractors/installers in mind. If you require additional information or support to install your backstops, please contact the Jaypro Sports customer support team, Monday through Friday, 8:30AM to 5:00 PM (EST), at 1-800-243-0533.

The guide is organized in the order of operations required for initial assembly, installation, and setup. The installer is responsible to carry out

¹ When PBEL54 shipped with 72" board (optional upgrade), 1000 lbs of ballast is included.

² GBRUB-42 available as optional upgrade, must be specified at time of order

the procedures described in sections 1 through 13. Section 14 describes the procedure for adjusting the lift-assist springs and should only be used by an experienced contractor/installer. Please contact the Jaypro Sports customer support team, Monday through Friday, 8:30AM to 5:00 PM (EST), at 1-800-243-0533 if assistance with locating an experienced professional is required.

4 Required Tools

Before continuing, please verify that you have the following tools required to complete the installation and setup of your Elite series adjustable portable backstop.

- 34mm or 1 5/16" Open end or adjustable wrench (up to 1-1/2")
- 9/16" Combo and socket wrench
- 17mm Combo wrench or 17mm Socket wrench
- #2 Phillips screwdriver
- Level
- 7/8" Transfer punch (recommended)
- 1-1/8" hole saw
- 1-3/8" hole saw
- Adhesive suitable for metal-to-wood bonding
- Sandpaper, 180 320 grit

5 Included Hardware & Components

Before continuing, please verify that you have all the required hardware (included w/ unit) for installation and setup. If any of the following items are missing, contact the Jaypro Sports customer support team, Monday through Friday, 8:30AM to 5:00 PM (EST), at 1-800-243-0533.

Miscellaneous Hardware



Figure 5-1: Push Button T-Handle (1X)



Figure 5-2: Locator Pin Bushing (2X)





Figure 5-4: Wire-snap safety pin for locator pins (2X)

Anchor Kit (PBELKIT)³



Figure 5-5: FP-89 Floor Anchor (1X)



Figure 5-6: Cover plate (for flaoting wood floors only)



Figure 5-7: ½"-13 Eyebolt w/ shoulder (1X)



Figure 5-8: Shackle (2X)



Figure 5-9: Twisted chain (8")

³ Included with PBEL96, optional on PBEL66 & PBEL54, see catalog for ordering information

Backboard, Edge Pad & Rim







Figure 5-11: Backboard (54" board supplied w/ PBEL54 **Optional 72" board GBRUB**-42)



Figure 5-12: Edge pad (1X, model varies)



Figure 5-14: Right (viewed from court) backboard support arm (1X).

Backboard & Rim hardware kit



Figure 5-15: Wire Net Tie (1X, incl. with goal)



Figure 5-16: Wrench & Adjust Pin (1X Each, incl. with goal)



Figure 5-17: M10 Nylon Lock Nuts (6X)

Figure 5-18: M10 x 30mm Carriage Bolts (6X)

- 5 of 27-JSL-Inst039-CHN www.jayprosports.com



Figure 5-19: M10 Flat Washer (6X)





Figure 5-20: 3/8"-16 x 1-1/2" Hex Bolt (2X)

Figure 5-21: 3/8" Flat Washer (4X)



Figure 5-22: 3/8"-16 Flanged Hex Nuts (6X)



Figure 5-23: 3/8" x 4 1/2" Hex Bolt (4X)

6 Unpacking



- 1. Carefully remove any outer wrap or packaging materials.
 - a. Use caution when using a box cutter or other sharp objects to avoid scratching the powder-coated surfaces.
 - b. Do not remove cargo straps (if installed) or j-hook until after the backboard is completely installed.
- 2. Raise feet all the way with a 34mm or 1 5/16" open wrench or adjustable wrench (up to1 1/2").
 - a. It will be necessary to back off the jam nut that is jammed against the underside of the frame.
 - b. The front of the unit should now be resting on the wheels.



Figure 6-1: Back off Jam nut.

Figure 6-2: Raise feet using wrench.

3. Carefully roll backstop off pallet or container.

WARNING: be sure that nobody is directly in front of or behind backstop when rolling off pallet.

All pictures shown are for illustration purpose only Actual product may vary due to product enhancement.

7 Backboard & Rim Installation

WARNING: DO NOT REMOVE J-HOOK, CARGO STRAPS (IF INSTALLED), OR QUICK-RELEASE PIN UNTIL THE BACKBOARD AND RIM HAVE BEEN INSTALLED. FAILURE TO COMPLY MAY RESULT IN SEVERE OR FATAL INJURY AS WELL AS SIGNIFICANT DAMAGE TO SURROUNDING STRUCTURES.

- 1. Lower wheels until both 2-by-4's on side of base are level.
- 2. Lower both feet by hand or using a 34mm or 1 5/16" open or adjustable wrench until they touch the ground.
- 3. Lock feet in place by tightening jam nuts against frame with wrench (as in Figure 7-3).
- 4. Raise wheels and confirm base is still level.

NOTE: LEVELING FEET WILL BE DOWN WHEN UNPACKING



Figure 7-1: Operate jack to lower wheels.



Figure 7-2: Lower feet using wrench.

All pictures shown are for illustration purpose only Actual product may vary due to product enhancement.

- 9 of 27-JSL-Inst039-CHN www.jayprosports.com



Figure 7-3: Lock feet w/ Jam nut.

Figure 7-4: Raise wheel to level feet.

5. Attach left and right backboard support arms to slots in boom using the M10 carriage bolts (2X), M10 nylon lock nuts (2X) and M10 flat washers (4X) as shown below. Hand-tighten the nuts; do not use a wrench.



Figure 7-5: Backboard Support Arms

- 6. Insert 3/8"-16 x 1½" hex bolts (2X), 3/8" flange hex nuts (2X) into middle row of holes in backboard mount (Figure 7-6, details A & B).
- 7. Attach the backboard support arms to the slots in the top of the backboard frame using the M10 carriage bolts (2X), M10 split washers (2X), M10 flat washers (4X), and M10 flanged nuts (2X) as shown in Figure 7-6 (detail C). Hand-tighten the nuts.

- 8. Check the plumb and of the backboard. If it is not plumb, slide the backboard support arms in the slots in the boom until the board is plumb. Once the board is plumb, wrench-tighten all nuts.
- 9. Remove front cover from supplied rim.
- 10. Fasten rim to board using the 3/8"-16 x 4 1/2" hex bolts (4X), 3/8" flat washers (4X) and 3/8" flanged nuts (4X) as shown in Figure 7-7. Ensure that rim is level, side-to-side⁴, before fully tightening nuts.
- 11. Replace rim cover.
- 12. Follow instructions included with rim to attach net.



Figure 7-6: Installation of backboard to boom.

- 12 of 27-JSL-Inst039-CHN www.jayprosports.com



Figure 7-7: Attach rim to board.

- 13 of 27-JSL-Inst039-CHN www.jayprosports.com

8 Raise Backstop

WARNING: DO NOT REMOVE J-HOOK, SAFETY STRAP OR QUICK-RELEASE PIN UNLESS THE BACKBOARD AND RIM HAVE BEEN INSTALLED. FAILURE TO COMPLY MAY RESULT IN SEVERE OR FATAL INJURY AS WELL AS SIGNIFICANT DAMAGE TO SURROUNDING STRUCTURES.

WARNING: DO NOT STAND DIRECTLY BEHIND UPRIGHTS WHEN RAISING OR LOWERING THE BACKSTOP. SEE Figure 8-4 FOR DETAILS ON WHERE TO SAFELY POSITION YOURSELF WHEN RAISING/LOWERING THE BACKSTOP.

WARNING: BE SURE THAT AREA WITHIN 8 FEET (2.5 METERS) IS CLEAR OF BYSTANDERS BEFORE RAISING OR LOWERING.

WARNING: DO NOT USE BACKSTOP UNLESS IT IS PINNED AT GAME-HEIGHT USING THE SUPPLIED QUICK RELEASE PIN.

WARNING: UNIT MUST BE PINNED IN POSITION USING SUPPLIED QUICK-RELEASE PIN AT ALL TIMES UNLESS RAISING OR LOWERING.

WARNING: WHEN RAISING OR LOWERING, DO NOT RELEASE HANDLES UNLESS BACKSTOP IS PINNED IN POSITION WITH THE SUPPLIED QUICK-RELEASE PIN.

1. ONLY IF BACKBOARD HAS BEEN INSTALLED, remove quick-release pin from height adjuster mechanism (Figure 8-1).



Figure 8-1: Height adjuster mechanism

- 2. Carefully remove J-Hook by removing nut as shown in figure below.
 - a. Pay extra attention when removing the J-Hook to make sure that the backstop does not begin to rise on its own. If it does, retighten J-Hook, reinstall the quick-release pin and refer to section 14 for details on how to adjust the springs⁴.

⁴ Spring tension is preset at factory. Under normal circumstances, spring adjustment is not typically necessary.

 b. If the unit does not rise on its own (indicates that springs are correctly adjusted), completely remove J-hook and then reinstall the quick-release pin to lock in the storage position or refer to section 13 for instructions on how to raise the backstop.



Figure 8-2: Remove J-Hook

- 3. Remove any remaining protective wrapping and/or cargo strap from the frame. Be careful to not scratch the powder-coated finish if using a box-cutter or other sharp object.
- 4. ONLY IF BACKBOARD IS INSTALLED, remove the quick-release pin from the height adjuster mechanism (Figure 8-1).
- 5. Stand to one side of the unit and lift one of the two handles on the lower upright (Figure 8-4).
 - a. If raising the backstop is too strenuous obtain assistance before attempting to raise.
 - b. Be sure to maintain control of the uprights while raising. Do not release handle while raising.



Figure 8-3: Lift handle on lower upright.



Figure 8-4: Where to safely stand when raising/lowering backstop.

- 6. Raise backstop to maximum height (the uprights will reach a hard stop and will be fully vertical).
 - c. Insert the quick-release pin into the height adjuster.

9 Set Rim Height/Adjust Leveling Feet

- 1. With backstop in fully raised position, lower wheels until both 2-by-4's on side of base are level.
- 2. Lower both feet by hand or using a 34mm or 1 5/16" open or adjustable wrench until they touch the ground.
- 3. Lock feet in place by tightening jam nuts against frame with wrench (as in Figure 7-3).
- 4. Raise wheels and confirm base is still level.



Figure 9-1: Operate jack to lower wheels.



Figure 9-3: Lock feet w/ Jam nut.

Figure 9-2: Lower feet using wrench.

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Figure 9-4: Raise wheels.

- 5. Verify that the top of the rim is 10 feet off the ground.
 - d. If the rim is not at 10 feet, adjust both feet (be sure to maintain level side-to-side) until it is.
- 6. With the backstop still set to 10', verify that the board is still plumb. If not, adjust according to the procedure in section 7.

- 7. Lower the backstop to the transport position by removing the quickrelease pin and pulling back on handles until backstop is fully lowered.
 - a. Always stand on the same side of the unit as the ring on the quick-release pin when pulling the pin; never reach across to the other side of the upright to pull the pin.
- 8. Pin the unit in the lowered (transport) position.
- 9. Raise the feet until both feet are off the ground and the unit rolls freely on all four wheels.

10 Padding Installation

Padding should be installed ONLY AFTER the foot heights have been set (see section 8 above).

10.1 Included Padding & Hardware



- 18 of 27-JSL-Inst039-CHN www.jayprosports.com





Figure 10-5: M8 Flat

Washer (20X)



Figure 10-6: Phillips Round HD Screw M8 x 20mm (20X)

10.2 Padding Installation

- 1. Install pads with backstop at 10'0" height.
- 2. Install the upright pad(s) as shown below.



Figure 10-7: PBEL54 pad.

- 3. Install the front pad (PBEL54):
 - a. Lower the unit by retracting the feet until the front wheels are on the ground.
 - b. Support the front pad against the front of the base frame such that the top is flush with the tops of the side pads. Use of 1/4" - 3/8" shim is recommended.
 - c. Fasten front pad to base frame using two C-Clips along the top horizontal 2x4 and two C-Clips along the bottom horizontal 2x4 (Figure 9-10).



Figure 10-8: C-Clips fastened to the front pad.

- 4. Install the left and right side pads.
 - a. Properly locate the side pads by aligning the holes on the inside faces of the pads with the hubs on the sides PBEL base frame.
 - b. Fasten the side pads to the base frame using two C-Clips along the horizontal 2x4 and one C-Clip along the diagonal 2x4.



Figure 10-9: Install side pads to frame using straps and U-Clips

11 Lowering Backstop for Transport

- 1. Lower wheels (see Figure 9-1) until the feet are off floor and high enough to be clear of any potential obstacles, such as thresholds.
- 2. Remove quick-release pin from height adjust mechanism.
- 3. Stand to one side of the unit and pull one of the two handles on the lower upright (Figure 8-4).
 - a. If lowering the backstop is too strenuous obtain assistance before attempting to raise.
 - b. Be sure to maintain control of the uprights while lowering. Do not release handle while lowering.
- 4. Reinsert quick-release pin to lock backstop in transport position.

12 Installing Locating Devices

1. Locate holes. There are two options for locating the holes for the anchor and locator bushings.

<u>Option 1:</u>

Locate the holes according to the diagram below that is appropriate for your backstop model:

a. PBEL54 (54" overhang): refer to Figure 12-1

Option 2:

- a. Position the backstop such that it is centered on court and the front surface of the backboard glass (at 10'0" height) is the correct distance from the baseline (48").
- b. Use the transfer punch or a marker to locate holes for locator bushings, using the holes for the alignment pins as guides.
- c. Locate hole for floor anchor such that there will be some slack in the chain when installed to anchor point at rear of PBEL base frame. Refer to section 13 for anchor kit installation.
- 2. Drill the holes for the locating bushings using the 1-1/8" hole saw. Drill all the way through the floor surface.
- 3. Sand the inside surface of the hole and the outside surface of the bushing.
- 4. Clean and dry all sanded surfaces.
- 5. Liberally apply adhesive to surface of the drilled hole only.
- 6. Press the bushing into the hole until it is approximately 1/16" below the floor surface.
- 7. Clean up any adhesive residue according to manufacturer's instructions.



Figure 12-1: PBEL54 Locating and anchor holes locations.

13 Installing Anchor Kit

The anchor kit is included with the PBEL96 ONLY. See the Jaypro multisport catalog to order for use with the PBEL54 or PBEL66⁵.

The anchor kit is supplied with the FP-89 floor anchor, for use with all floor types except floating wood floors. A brass cover plate is also supplied for use with floating wood floors.

For installation in all floor types other than floating wood floors, Refer to FP-89 installation instructions (included with kit) for details.

For installation in floating wood floors ONLY, unscrew the top plate from the FP-89 floor anchor (Figure 13-1) and install with the brass cover plate (Figure 5-6). Refer to FP-100 installation instructions (included with kit) for details.

For all floor types, locate holes for floor anchors according to the appropriate diagram:



a. PBEL54 (54" overhang): refer to Figure 12-1

Figure 13-1: Unscrew top plate of FP-89 to convert for use in floating wood floors.

Anchor the PBEL backstop to the floor anchor using the supplied shackles, chain, and eyebolt. Attach anchor kit to eye on rear of ballast tray.

⁵ When ordering anchor kit for the PBEL54 or PBEL66, be sure to specify floor type.

14 Spring Adjustments

WARNING: DO NOT REMOVE SPRINGS UNDER ANY CIRCUMSTANCES. IF YOU SUSPECT THAT A SPRING IS DAMAGED AND REQUIRES REPLACEMENT CONTACT JAYPRO IMMEDIATELY AT (800) 243-0533.

WARNING: WHEN ADJUSTING THE SPRINGS ALWAYS ENSURE THAT THE LOCKNUTS ARE NEVER LOOSENED TO THE POINT WHERE NO THREADS ARE VISIBLE.

Adjusting the lift-assist springs and should only be used by an experienced contractor/installer. Please contact the Jaypro Sports customer support team, Monday through Friday, 8:30AM to 5:00 PM (EST), at 1-800-243-0533 if assistance with locating an experienced professional is required.

The spring tension is pre-set at the factory. Under normal circumstances, spring adjustment is not typically necessary. Over time, however, the springs may require adjustment to ensure that the lift-assist characteristics of the springs are maintained.

- 1. Use a pair of 22mm combo wrenches or 22mm deep socket wrench for spring adjustments.
- 2. You will need to place a steel rod in the eye of the eyebolt to which the springs are attached (inside face of rear horizontal 2x4) to prevent the eyebolt from rotating as you adjust the nuts.
- 3. Loosen and back off all five jam nuts, but do not remove.
- 4. If the unit raises on its own, the springs are too tight.
 - a. Loosen each nut by the same amount.
 - b. Proceed from right to left, loosening each nut by one complete rotation.
 - c. Pull the quick-release pin form the height adjuster mechanism to see if the problem has been corrected. If not, repeat steps a and b.
- 5. If the unit requires excessive force to raise, the springs do not have enough pre-tension.
 - a. Tighten each nut by the same amount.
 - b. Proceed from right to left, tightening each nut by one complete rotation.
 - c. Pull the quick-release pin form the height adjuster mechanism to see if the problem has been corrected. If not, repeat steps a and b.
- 6. Placing a wrench on the locking nut, securely tighten each of the five jam nuts.

15 Maintenance

Your ELITE series portable backstop is designed to provide years of play; however, it is recommended that they be inspected at least once every season, for signs of excessive wear. Key areas to inspect include (but are not limited to):

- Welds on the boom, uprights and base.
- The springs, in particular the areas of the hooks.
- The backboard frame.
- The rim housing.

Lubrication should be applied to the bronze bushings and the spring contact points once a season or when normal raising/lowering of the backstop creates excessive noise.

Doublecheck that the board and rim are level and plumb and verify that all bolted connections are well fastened.

If you require additional information or support maintaining your backstops, please contact the Jaypro Sports customer support team, Monday through Friday, 8:30AM to 5:00 PM (EST), at 1-800-243-0533.