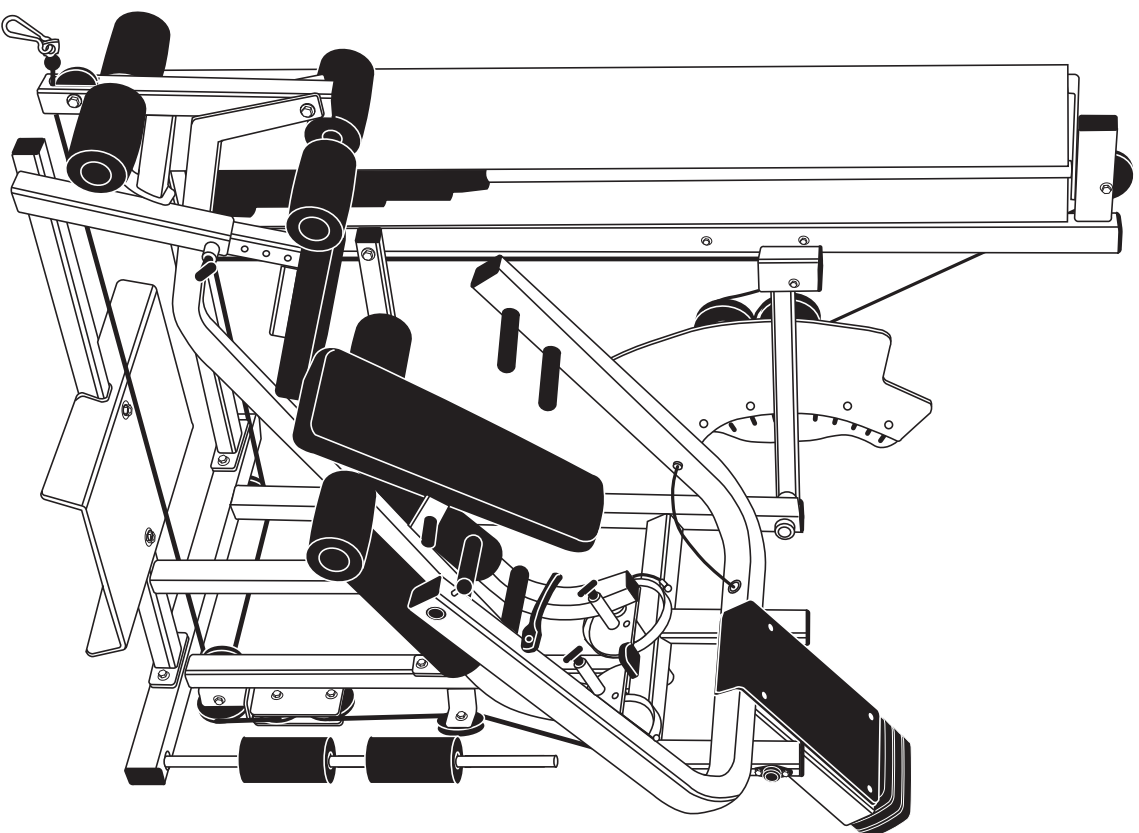


**PRECOR**<sup>®</sup>  
STRENGTH  
USA

**S3.21**

Strength-Training  
Fitness Equipment



Assembly and Maintenance Guide

## Important Safety Instructions

Before beginning any fitness program, you should obtain a complete physical examination from your physician.

*Il est conseillé de subir un examen médical complet avant d'entreprendre tout programme d'exercice. Si vous avez des étourdissements ou des faiblesses, arrêtez les exercices immédiatement.*

When using exercise equipment, basic precautions should always be taken, including the following:

- Read all instructions before using the S3.21 equipment. These instructions are written to ensure your safety and to protect the unit.
- Do not allow children on or near the equipment.
- Use the equipment only for its intended purpose as described in this guide. Do not use accessory attachments that are not recommended by the manufacturer: such attachments might cause injuries.
- Wear proper exercise clothing and shoes for your workout—no loose clothing.
- Use care when getting on or off the unit.
- Do not overexert yourself or work to exhaustion.
- If you feel any pain or abnormal symptoms, stop your workout immediately and consult your physician.

- Never operate the unit when it has been dropped or damaged. Return the equipment to a service center for examination and repair.
- Never drop or insert objects into any opening in the equipment. Keep hands away from moving parts.
- Always check the unit and its cables before each use. Make sure that all fasteners and cables are secure and in good working condition.
- Do not use the equipment outdoors.

### Personal Safety During Assembly

- It is strongly recommended that a qualified dealer assemble the equipment. **Assistance is required.**
- Read each step in the assembly instructions and follow the steps in sequence. Do not skip ahead. If you skip ahead, you may learn later that you have to disassemble components and that you may have damaged the equipment.
- Assemble and operate the S3.21 on a solid, level surface. Locate the unit a few feet from walls or furniture to provide easy access.

The S3.21 is designed for your enjoyment. By following these precautions and using common sense, you will have many safe and pleasurable hours of healthful exercise with your new equipment.

### Obtaining Service

Do not attempt to service the S3.21 yourself except for the maintenance tasks described in this guide. This unit does not contain any user-serviceable parts.

For information about product operation or service, check out the Precor web site at [www.precor.com](http://www.precor.com) or contact an authorized Precor dealer or a Precor factory-authorized service company. To locate the dealer or service person nearest you, call 1-800-4-PRECOR.

If you call or e-mail Customer Service, have the serial number and part numbers available.

You can find the serial number printed on a label on the outside of the Side Upright. For future reference, write the serial number in the space below.

Serial number: \_\_\_\_\_

**IMPORTANT SAFETY INSTRUCTIONS**

## Important Safety Instructions

## Table of Contents

<b>Important Safety Instructions .....</b>	<b>2</b>
Personal Safety During Assembly .....	2
Obtaining Service .....	2
<b>1 Before You Begin .....</b>	<b>5</b>
Unpacking the Equipment .....	5
Optional Equipment .....	5
<b>2 Preparations .....</b>	<b>6</b>
Required Tools .....	6
Installation Requirements .....	6
Assembly Tips .....	6
<b>3 Assembly Instructions .....</b>	<b>7</b>
Open Boxes 1 and 2 .....	8
1. Attach Seat Frame to Main Upright .....	9
2. Attach Cross Brace .....	10
3. Assemble Leg Extension .....	11
4. Assemble Backpad Support .....	12
5. Assemble Backpad Adjuster .....	13
6. Assemble Seat Stem .....	14
7. Assemble Press Arm .....	15

Open Boxes 3 and 4 .....	16
8. Assemble Weight Stack .....	17
9. Attach Angle Bracket .....	18
10. Assemble Bidirectional Arm .....	19
11. Attach Bidirectional Arm .....	20
12. Attach Squat Plate .....	21
13. Route Main Cable on Bidirectional Arm .....	22
14. Route Main Cable Along Back Side .....	24
15. Route Main Cable Along Seat Frame .....	25
16. Set Aside Accessories .....	26
17. Assemble Seat Pad .....	27
18. Assemble Pec Fly Station .....	28
19. Route Pec Fly Cable .....	29
20. Apply Weight Decals .....	30
21. Attach Accessories .....	31
22. Attach Shroud .....	33

## 4

<b>Adjustments and Maintenance .....</b>	<b>34</b>
1. Cable Adjustments .....	34
2. Press Arm Adjustments .....	36
3. Horizontal Pivot Arm Adjustment .....	37
4. Selector Stem Adjustments .....	38
Forward Angle Adjustment .....	38
Backward Angle Adjustment .....	39
Side-to-Side Vertical Adjustment .....	40
5. Maintenance .....	40
Warranty Card and Specifications .....	Back cover

# 1

## Before You Begin

Thank you for purchasing the S3.21. This unit is part of the Precor line of quality strength training machines, which let you target specific muscle groups to achieve better muscle tone and overall body conditioning. To maximize your use of the equipment, please study this guide thoroughly.

### Unpacking the Equipment

The S3.21 is carefully tested and inspected before shipment. Precor ships the unit in several pieces that require assembly. Ask for assistance during the assembly process.

- Review the *Installation Requirements* found on the next page.
- When instructed to open a box, carefully unpack the pieces and lay them on the floor near the location where you plan to use the equipment.

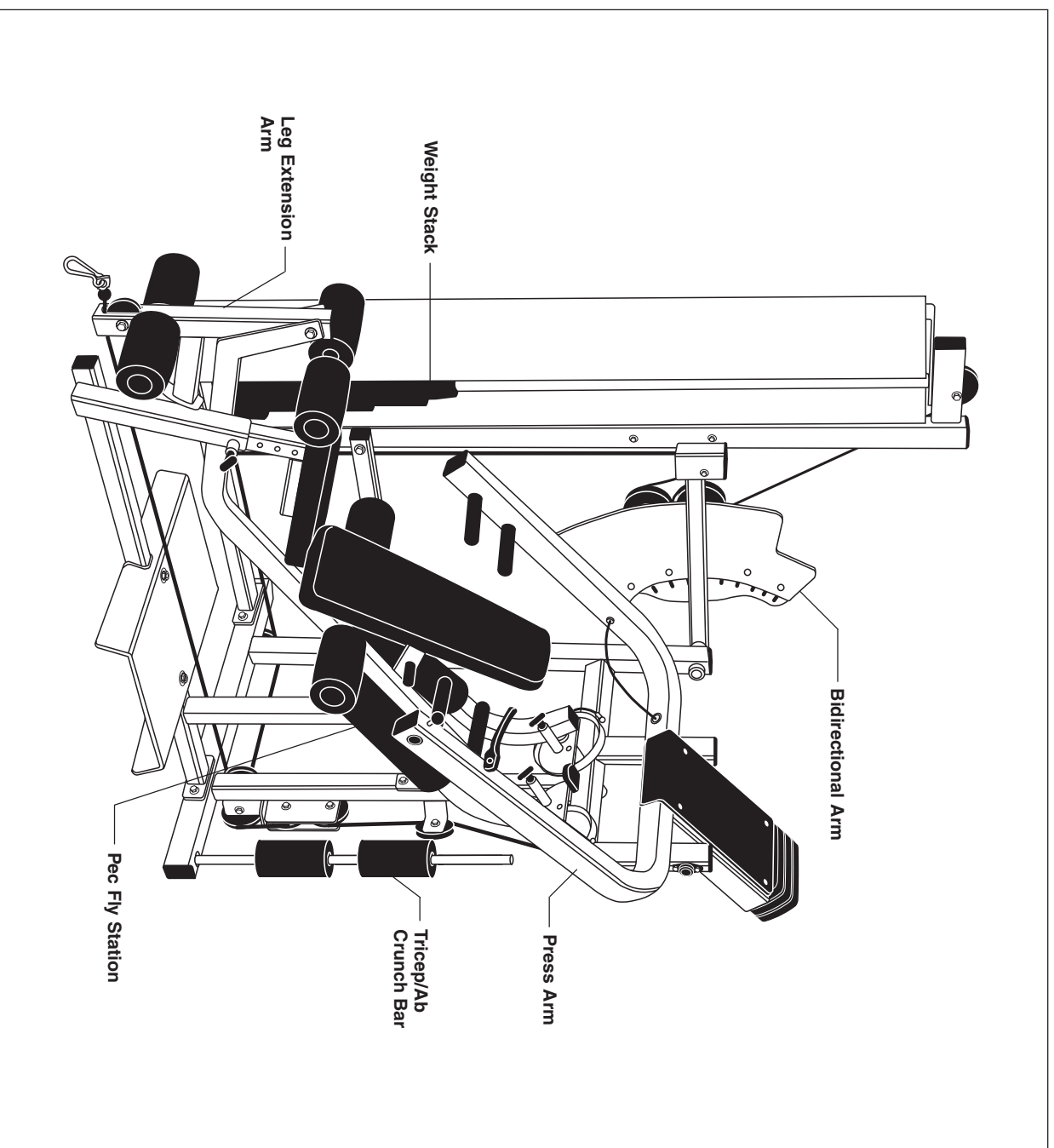
*Be careful to open boxes and assemble components in the sequence presented in this manual.*

If any items are missing, contact the dealer from whom you purchased the unit or call 1-800-4-PRECOR for the dealer nearest you.

### Optional Equipment

Optional equipment that you can purchase through your dealer includes the 250-lb Weight Stack and the Leg Press.

## Before You Begin



# 2

## Preparations

**CAUTION: To set up this unit, you will need assistance. Do not attempt assembly by yourself.**

You must review and follow the instructions in this guide. If you do not assemble and use the S3.21 according to these guidelines, you could void the Pacific Fitness limited warranty (see back cover).

### Required Tools

Tools that you must obtain before assembling the unit include:

- 9/16-inch socket wrench
- 3/4-inch socket wrench
- 9/16-inch box-end wrench
- 3/4-inch box-end wrench
- Standard set of metric Allen wrenches
- Two adjustable pliers or crescent wrenches
- Measuring tape
- Wire tie cutter (cuts plastic tie wraps)
- Rubber mallet
- Step stool

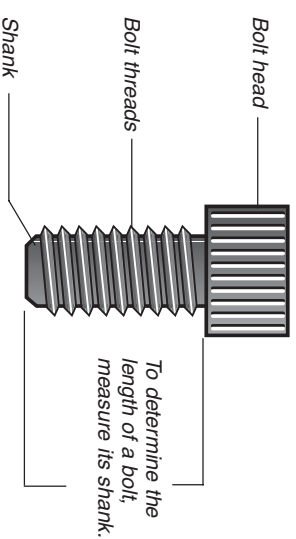
### Installation Requirements

Follow these installation requirements when assembling the unit:

- **Fill out and mail the limited warranty card.** The warranty card is found on the back cover of this guide.
- **Set up the S3.21 on a solid, flat surface.** A smooth, flat surface under the unit helps keep it level. A level unit has fewer malfunctions.
- **Provide ample space around the machine.** Open space around the machine allows for easier access.
- **Insert all bolts in the same direction.** For aesthetic purposes, insert all the bolts in the same direction unless specified (in text or illustrations) to do otherwise.
- **Leave room for adjustments.** Tighten fasteners such as bolts, nuts, and screws so the unit is stable, but leave room for adjustments. **Do not** fully tighten fasteners until instructed in the assembly steps to do so.

### Assembly Tips

- Read all caution notes on each page before completing that step.
- While you may be able to assemble the S3.21 using the illustrations only, important safety notes and other tips are included in the text.
- A 6-inch scale is provided at the bottom of every assembly instruction page. Use this scale to identify the correct size bolts and spacers. The head of a bolt is not used in measuring the length of a bolt.



**Note:** A few of the bolts used to assemble the S3.21 are longer than 6 inches. You may want to use a measuring tape to accurately identify the correct sizes.

To find out the length of a particular bolt, measure its shank (the long, narrow part beneath the head). Refer to the following diagram:

- Some pieces have extra holes that you will not use. Use only those holes indicated in the instructions and illustrations.

## Preparations

# 3

## Assembly Instructions

Assembly of the S3.21 takes professional installers about 2 hours to complete. If this is the first time you have assembled this type of equipment, plan on significantly more time.

**Professional installers are highly recommended!**

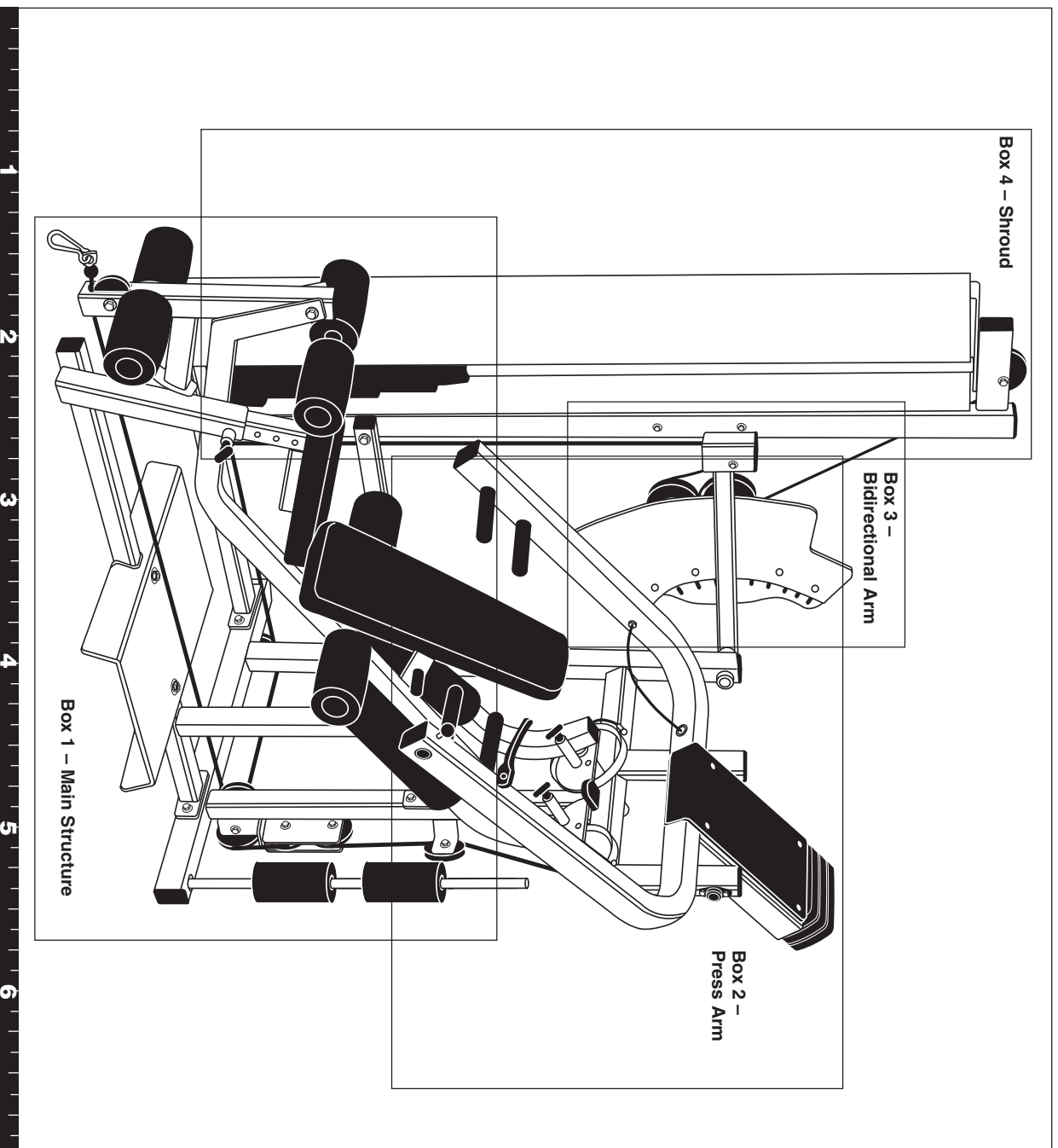
However, if you acquire the appropriate tools, obtain assistance, and follow the assembly steps sequentially, the process will take time, but is fairly easy.

**CAUTION: Obtain assistance! Do not attempt to assemble the S3.21 by yourself. Review the Installation Requirements on page 6 before proceeding with the following steps.**

The S3.21 comes in four boxes.

*Be careful to open boxes and assemble components in the sequence presented in this manual.*

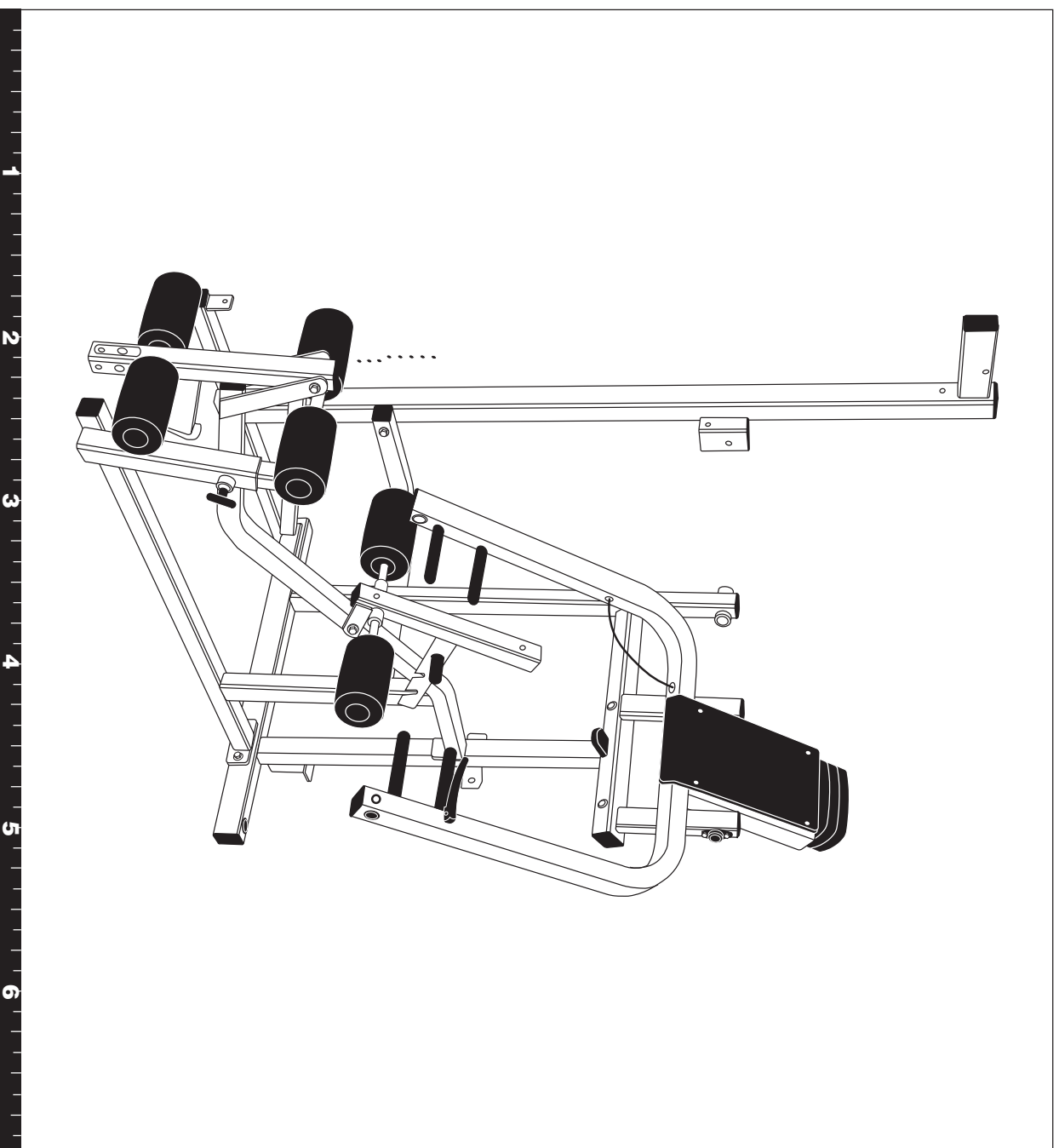
**Note:** With so many assembled parts, proper alignment and adjustment is critical. While tightening the nuts and bolts, be sure to leave room for adjustments. **Do not fully tighten bolts until instructed to do so.**



## Open Boxes 1 and 2

Use tie cutters to open the boxes.

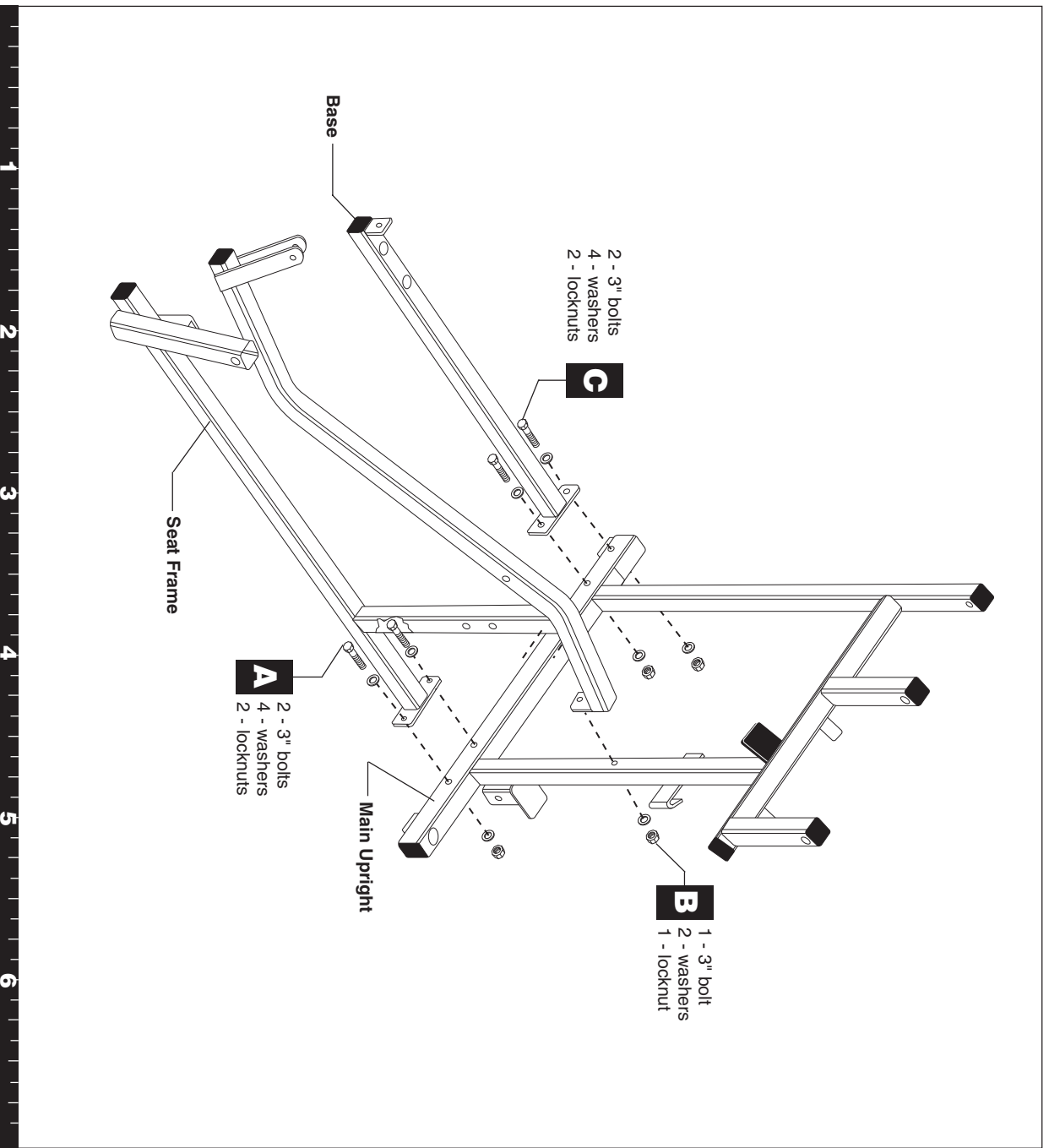
In this section, you will assemble the main structure of the S3.21. The diagram shows how the S3.21 will look after you complete this section.





## 1. Attach Seat Frame to Main Upright

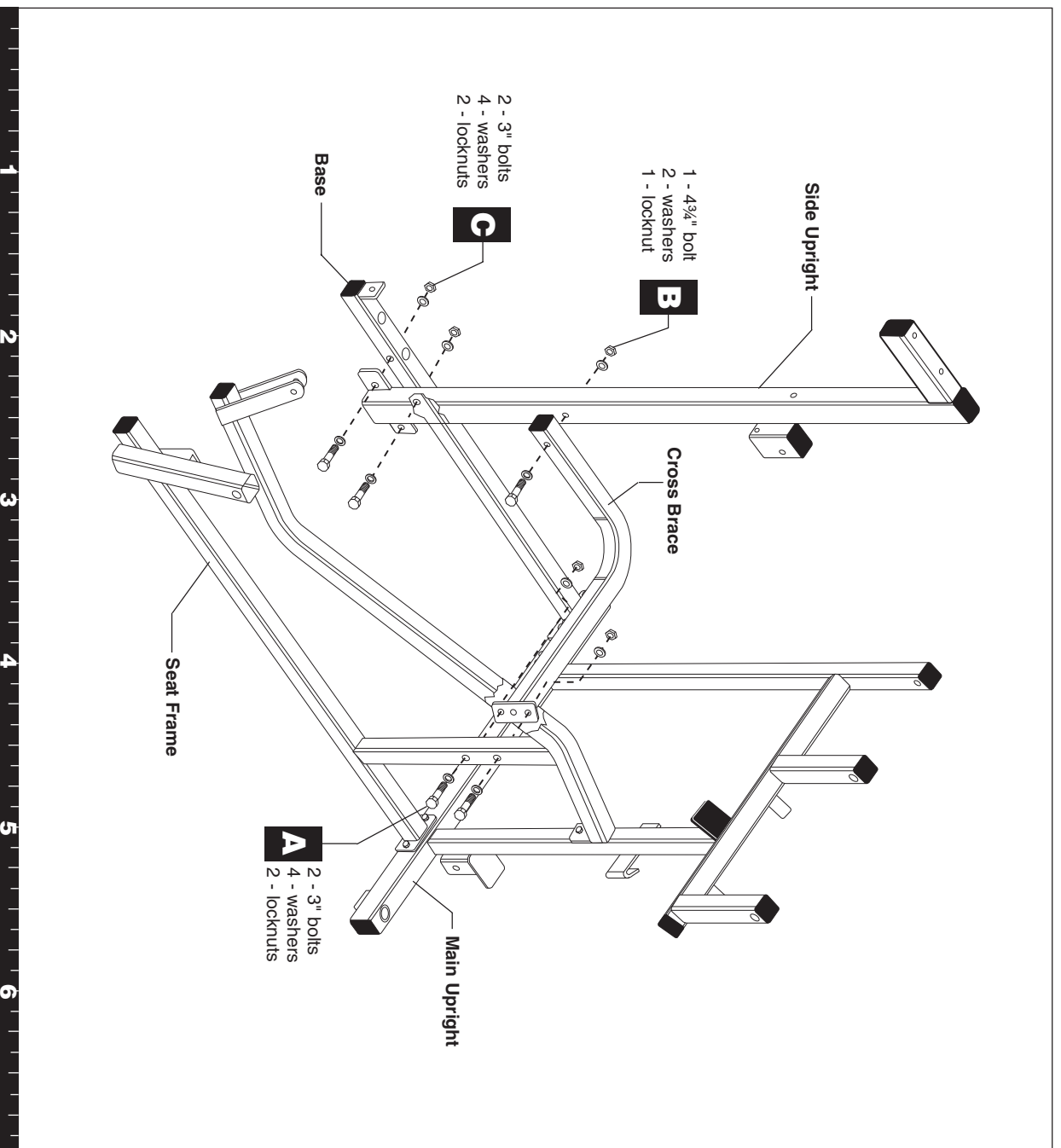
- A. Attach the two bottom holes of the Seat Frame to the Main Upright using  
two 3-inch bolts  
four washers  
two locknuts  
Finger tighten.
- B. Attach the top hole of the Seat Frame to the Main Upright using  
one 3-inch bolt  
two washers  
one locknut  
Finger tighten.
- C. Attach the Base to the Main Upright using  
two 3-inch bolts  
four washers  
two locknuts  
Finger tighten.



## Step 1. Attach Seat Frame to Main Upright

## 2. Attach Cross Brace

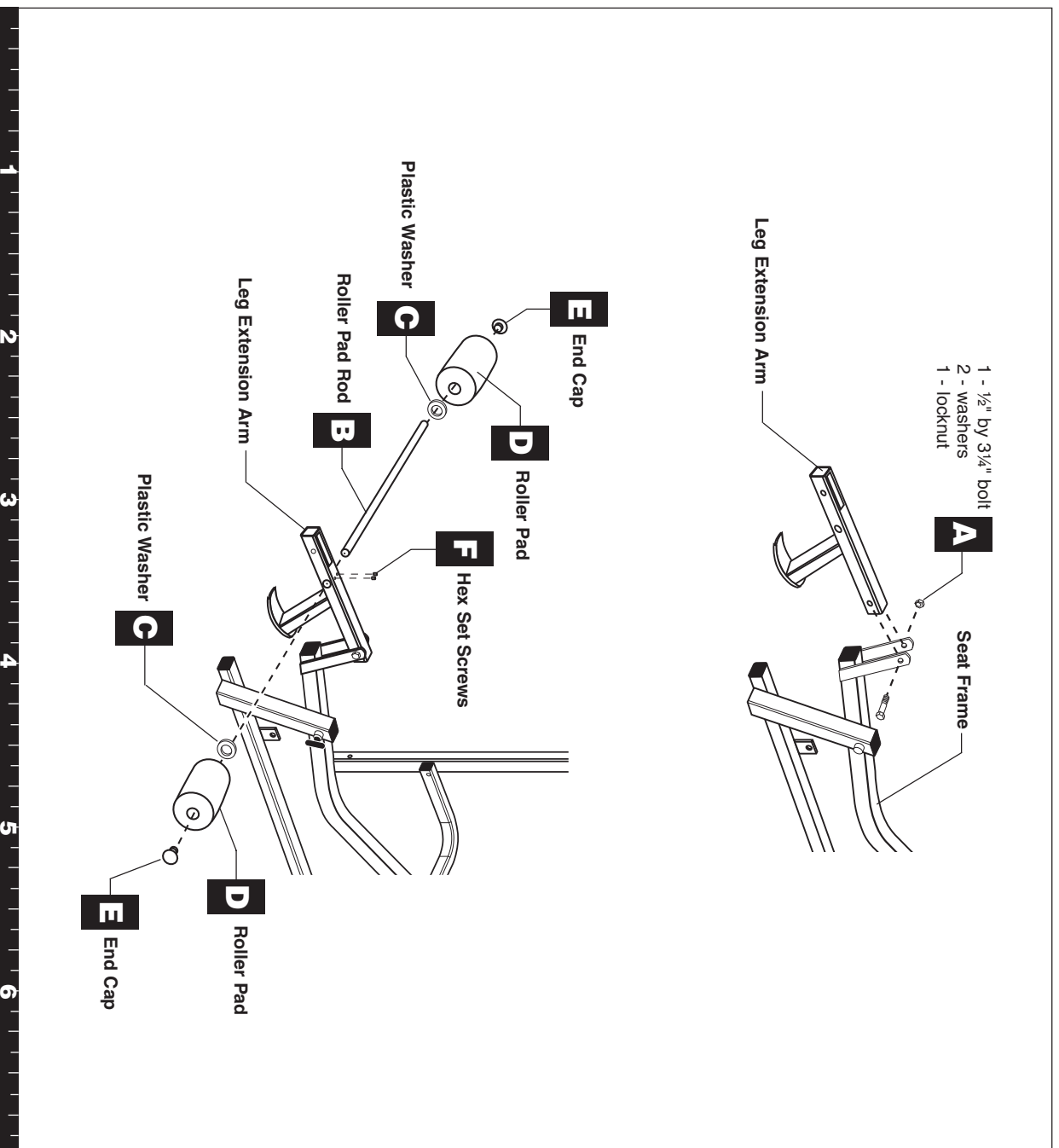
- A. Attach the Cross Brace to the Seat Frame using  
two 3-inch bolts  
four washers  
two locknuts  
Finger tighten.
- B. Attach the Side Upright to the Cross Brace using  
one 4 $\frac{3}{4}$ -inch bolt  
two washers  
one locknut  
Finger tighten.
- C. Attach the Side Upright to the Base using  
two 3-inch bolts  
four washers  
two locknuts  
Finger tighten.
- D. Wrench tighten all bolts from steps 1 and 2.



## Step 2. Attach Cross Brace

### 3. Assemble Leg Extension

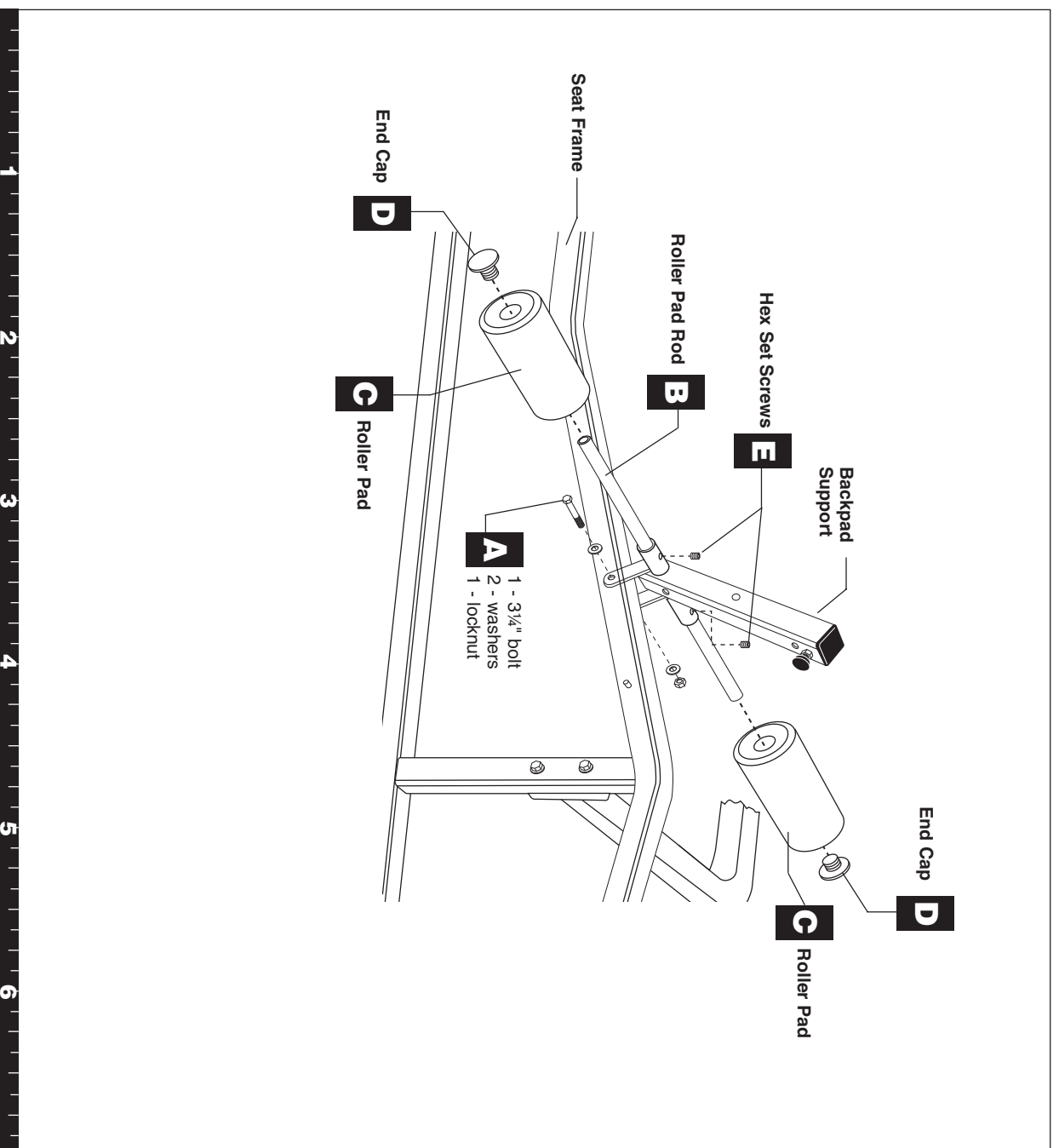
- A. Attach the Leg Extension Arm to the Seat Frame using one 1/2-inch by 3/4-inch bolt two washers one locknut Wrench tighten, still allowing movement.
- B. Insert one Roller Pad Rod in the Leg Extension Arm.
- C. Slide two Plastic Washers on the Roller Pad Rod.
- D. Slide two Roller Pads on the Roller Pad Rod. Center the Pads on each side of the Rod.
- E. Insert two End Caps in the ends of the Roller Pad Rod.
- F. Secure the Roller Pad Rod in place using two hex set screws.



### Step 3. Assemble Leg Extension

## 4. Assemble Backpad Support

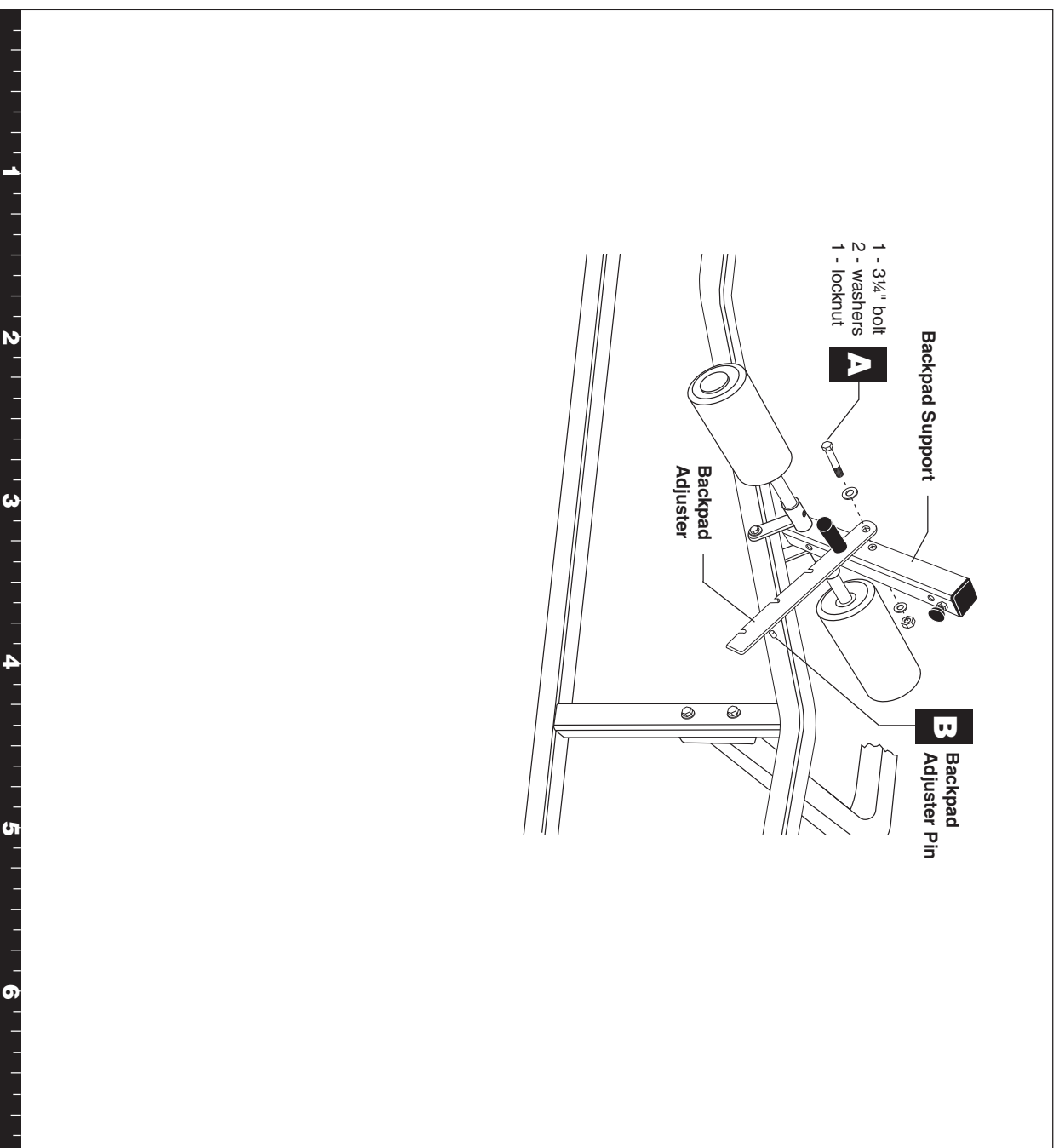
- A. Attach the Backpad Support to the Seat Frame using  
one 3¼-inch bolt  
two washers  
one locknut  
Wrench tighten, still allowing movement.
- B. Insert one Roller Pad Rod in the Backpad Support.
- C. Slide two Roller Pads on the Roller Pad Rod. Center the Pads on each side of the Roller Pad Rod.
- D. Insert two End Caps in the ends of the Rod.
- E. Secure the Roller Pad Rod in place using two hex set screws.



## Step 4. Assemble Backpad Support

## 5. Assemble Backpad Adjuster

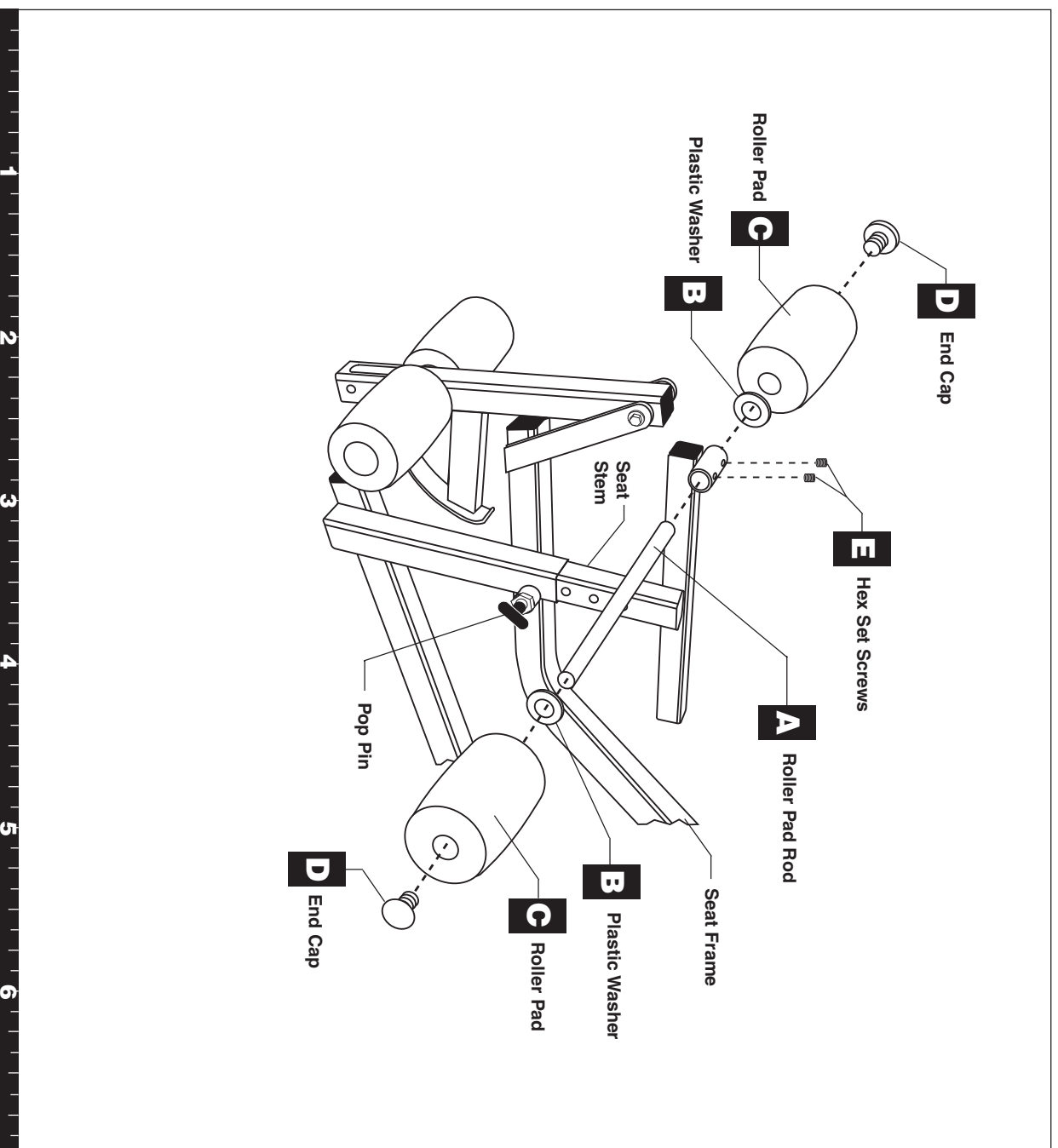
- A. Attach the Backpad Adjuster to the Backpad Support using  
Support using  
one 3¼-inch bolt  
two washers  
one locknut
- B. Wrench tighten and then loosen the bolt so that when the Backpad Support is moved, the Backpad Adjuster can fall with gravity and lock in place on the Backpad Adjuster Pin.



## Step 5. Assemble Backpad Adjuster

## 6. Assemble Seat Stem

- A. Slide two Plastic Washers on the Roller Pad Rod.
- B. Insert one Roller Pad Rod in the Seat Stem.
- C. Slide two Roller Pads on the Roller Pad Rod. Center the Pads on each side of the Rod.
- D. Insert two End Caps in the ends of the Roller Pad Rod.
- E. Secure the Roller Pad Rod in place using two hex set screws.

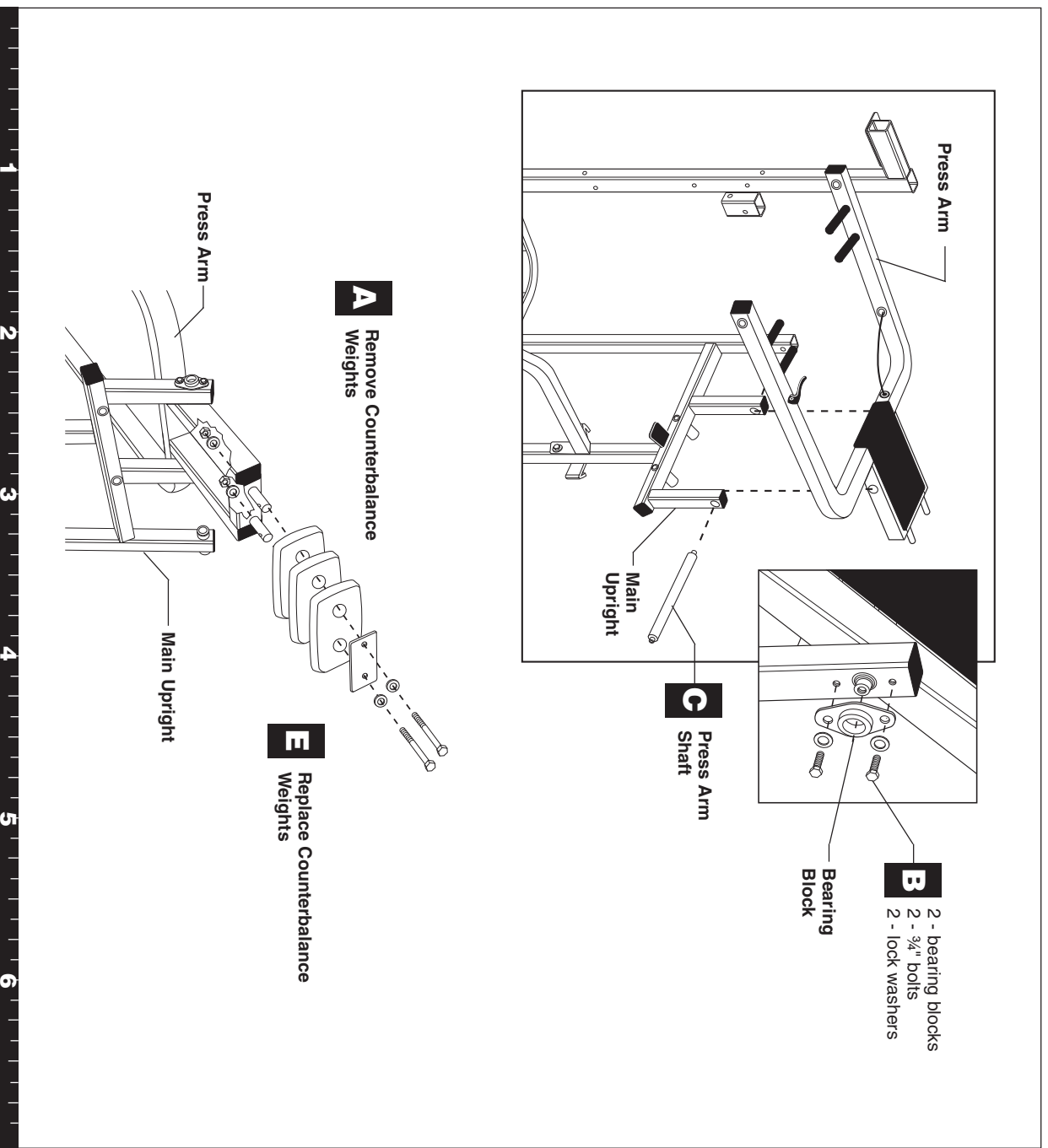


## Step 6. Assemble Seat Stem

## 7. Assemble Press Arm

**CAUTION:** This step requires two people. The Press Arm comes with three 10-lb Counterbalance Weights installed on its end. To ease assembly, remove the weights before attaching the Press Arm to the Main Upright.

- A. Remove the Counterbalance Weights attached at the end of the Press Arm.
  - B. Remove the Bearing Blocks by removing two  $\frac{3}{4}$ -inch bolts and two lock washers.
  - C. Align the Press Arm with the two holes in the Main Upright and slide the Press Arm Shaft through the Main Upright, the Press Arm, and out the other side of the Main Upright.
  - D. Reattach two Bearing Blocks to the Main Upright and Press Arm Shaft (one on each side) using two  $\frac{3}{4}$ -inch bolts two lock washers (from step B). Wrench tighten.
  - E. Replace the Counterbalance Weights on the Press Arm. Wrench tighten.
- This completes boxes 1 and 2. You may move the boxes out of the way.

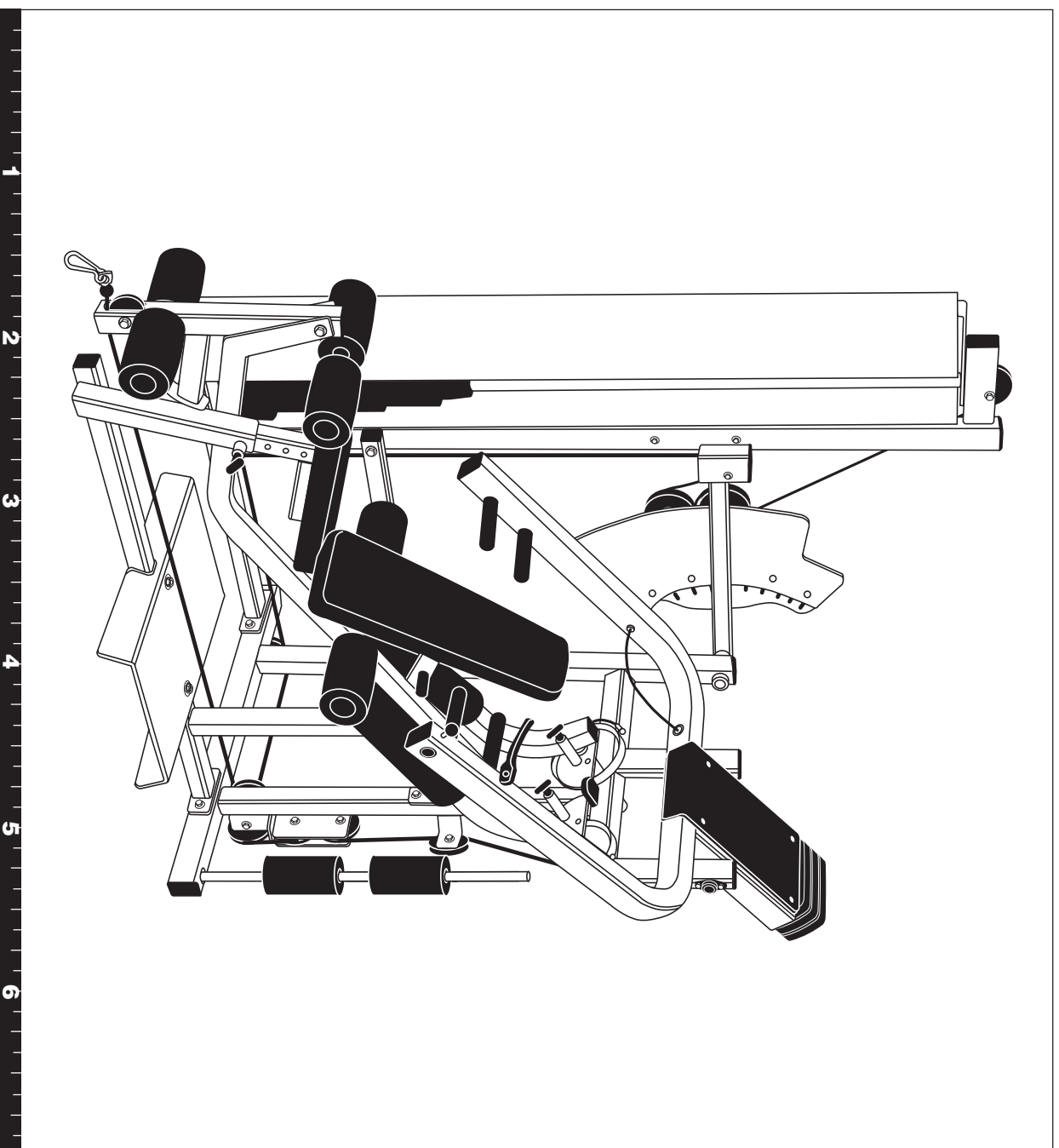


## Step 7. Assemble Press Arm

## Open Boxes 3 and 4

Use tie cutters to open the box.

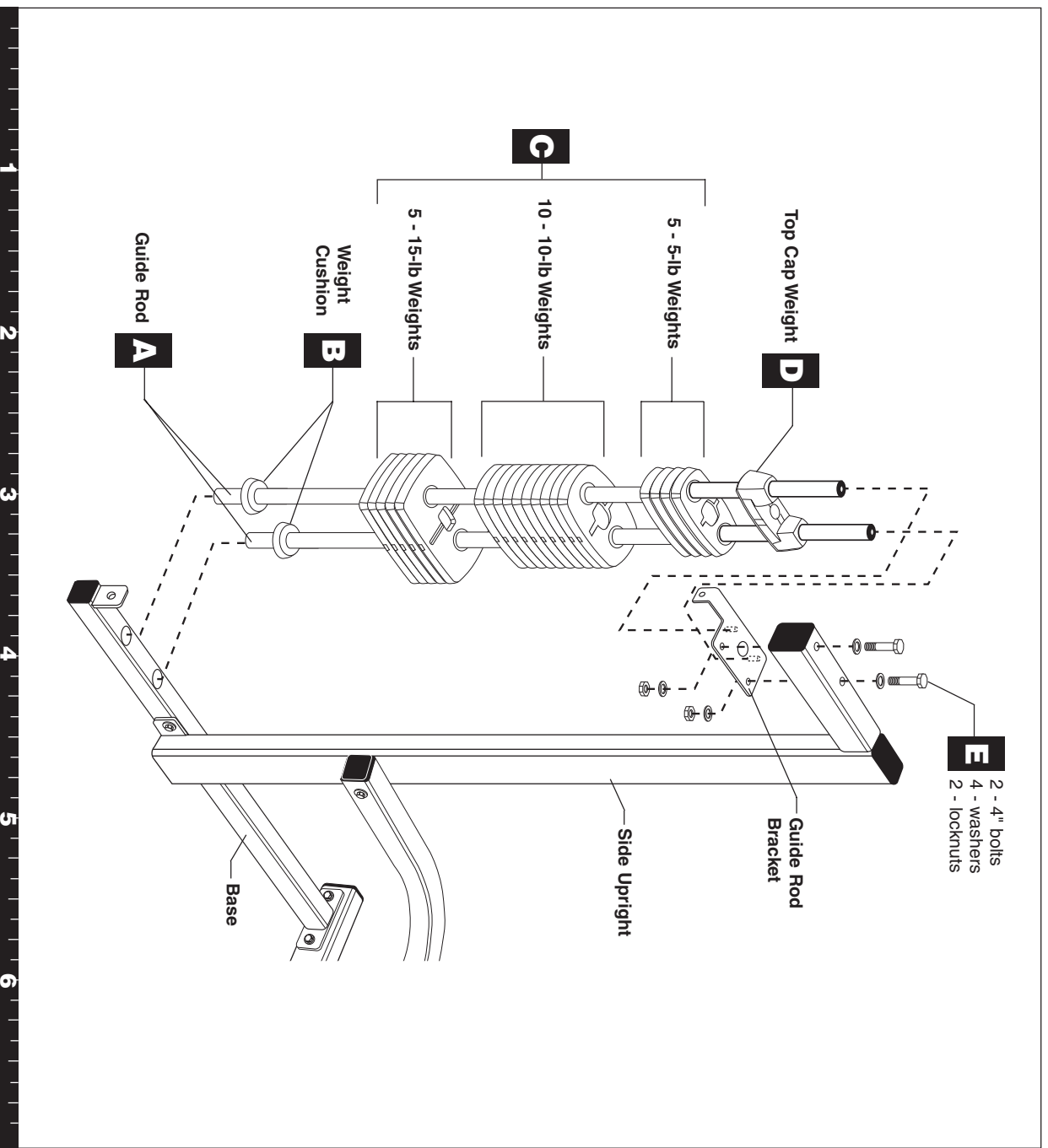
In this section you will assemble the Bidirectional Arm, Seat Pads, and Shroud of the S3.21. The diagram shows how the S3.21 will look after you complete this section.





## 8. Assemble Weight Stack

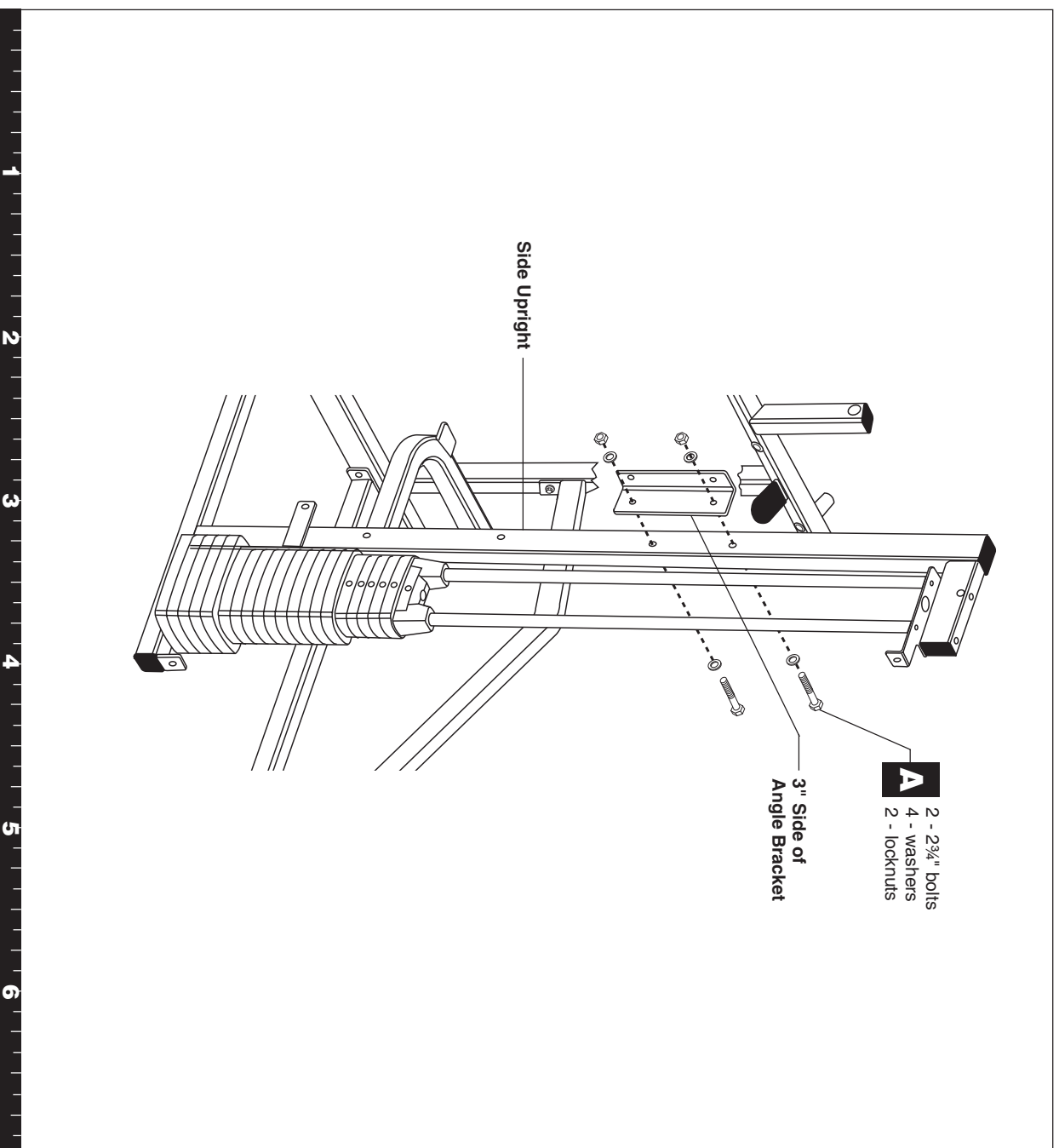
- A. Place two Guide Rods (from Box 2) in the large holes on the base of the Side Upright. The Guide Rods will be unstable until you complete step 3. Avoid getting lubricant from the Guide Rods on your clothing or on other parts of the machine.
  - B. Place one Weight Cushion on each Guide Rod and allow them to slide down to the top of the Base.
  - C. Add the five 15-lb weights, the ten 10-lb weights, and the five 5-lb weights. Note the tab location for the weight stickers (you will attach the stickers later). Hold your finger over the plastic bushing in each weight to prevent the bushing from popping out.
- CAUTION: The weights are heavy! Handle them carefully so as not to drop them or injure yourself. Pick up and place one weight at a time on the Guide Rods. Have someone hold the Guide Rods in place while you slide the weights on the stack.**
- D. Place the Top Cap Weight (from Box 2) on the Guide Rods with the hole facing the Seat Frame. Slide it down until it rests on the Weight Stack.
  - E. Insert the retainer pins of the Guide Rod Bracket (from Box 2) in the Guide Rods. Attach the Bracket to the Main Upright using two 4-inch bolts, four washers, two locknuts, and a wrench.



## Step 8. Assemble Weight Stack

## 9. Attach Angle Bracket

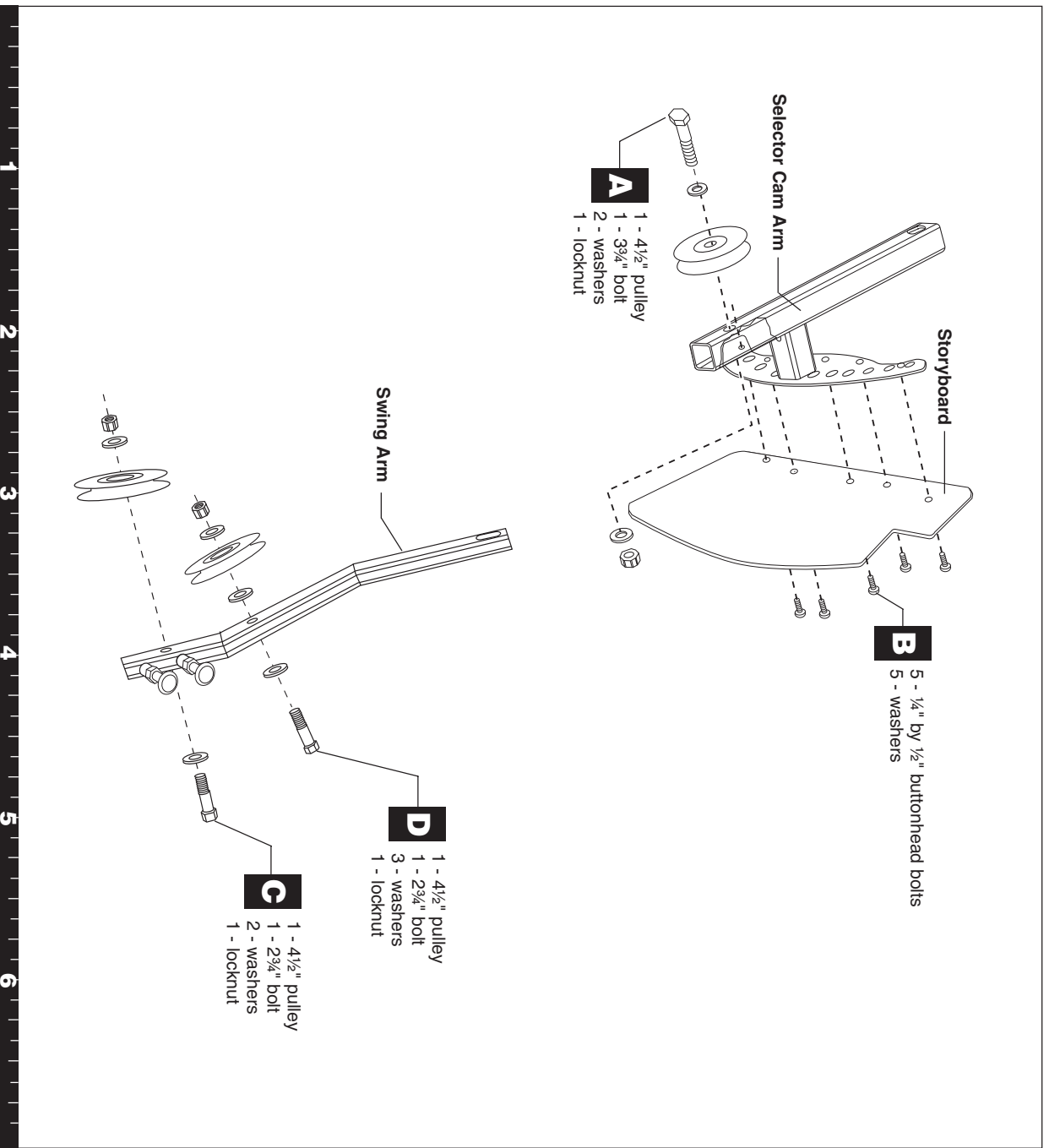
- A. Attach the Angle Bracket to the Side Upright so that the wider (3-inch) side of the Bracket contacts the Side Upright using
  - two 2 $\frac{3}{4}$ -inch bolts
  - four washers
  - two locknutsWrench tighten.



## Step 9. Attach Angle Bracket

## 10. Assemble Bidirectional Arm

- A. Attach one 4½-inch pulley to the Selector Cam Arm using
  - one 3¾-inch bolt
  - two washers
  - one locknut
 Wrench tighten.
- B. Attach the Storyboard to the Selector Cam Arm using
  - five ¼-inch by ½-inch buttonhead bolts
  - five washers
 Wrench tighten, and then set the Selector Cam Arm aside.
- C. Attach one 4½-inch pulley to the small hole in the Swing Arm closest to the end using
  - one 2¾-inch bolt
  - two washers
  - one locknut
 Wrench tighten.
- D. Attach one 4½-inch pulley to the middle hole in the Swing Arm using
  - one 2¾-inch bolt
  - three washers
  - one locknut
 Wrench tighten.

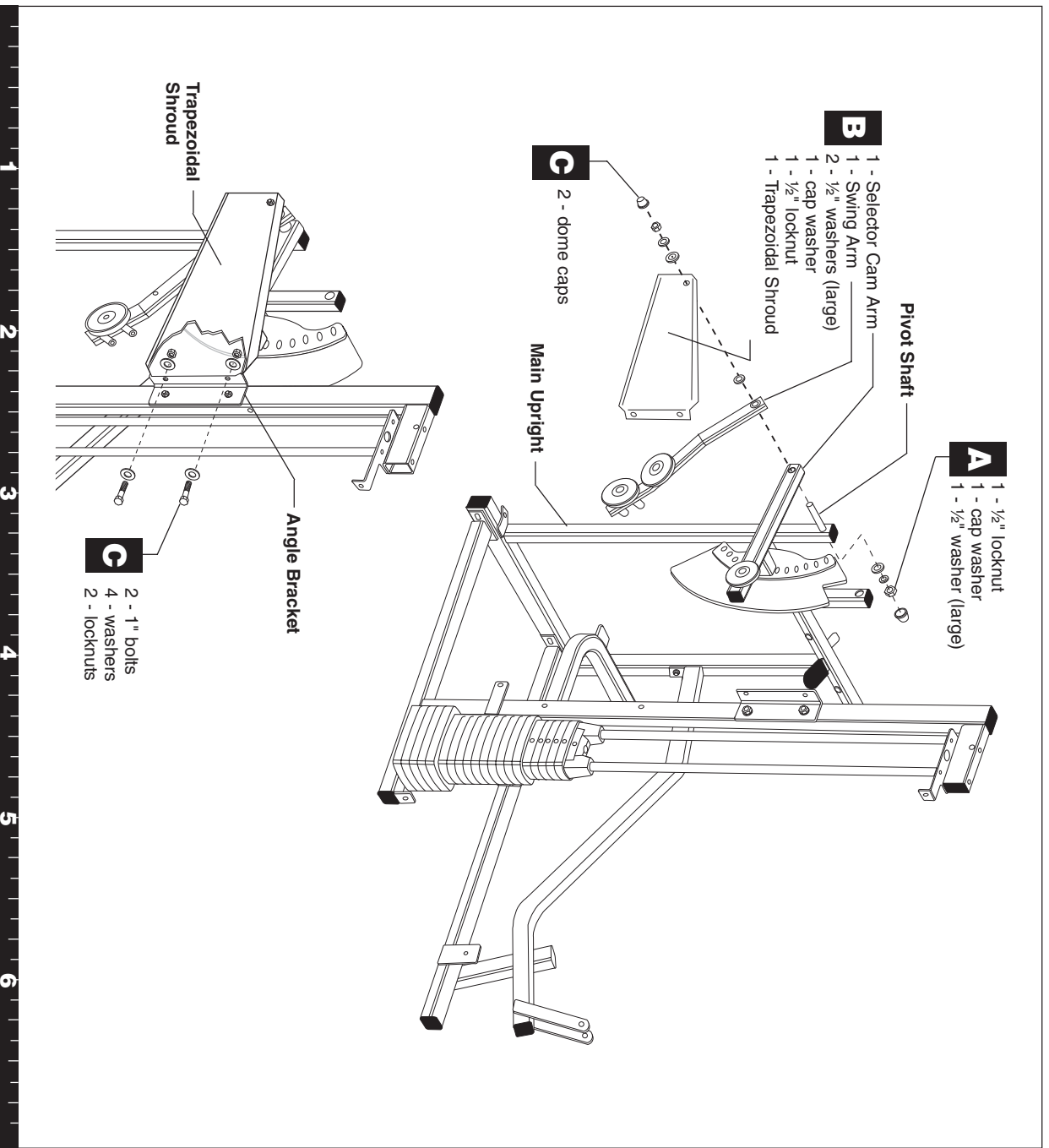


## Step 10. Assemble Bidirectional Arm

## 11. Attach Bidirectional Arm

- A. Insert the Pivot Shaft in the Main Upright and attach it using
  - one ½-inch washer (large)
  - one cap washer
  - one ½-inch locknut
  - Wrench tighten.
- B. On the Pivot Shaft, slide
  - one Selector Cam Arm
  - one Swing Arm
  - one ½-inch washer (large)
  - one Trapezoidal Shroud
 Attach using
  - one ½-inch washer (large)
  - one cap washer
  - one ½-inch locknut
 Wrench tighten, still allowing movement.
- C. Snap a dome cap onto each end of the Pivot Shaft.
- D. Attach the other end of the Trapezoidal Shroud to the Angle Bracket using
  - two 1-inch bolts
  - four washers
  - two locknuts
 Wrench tighten.

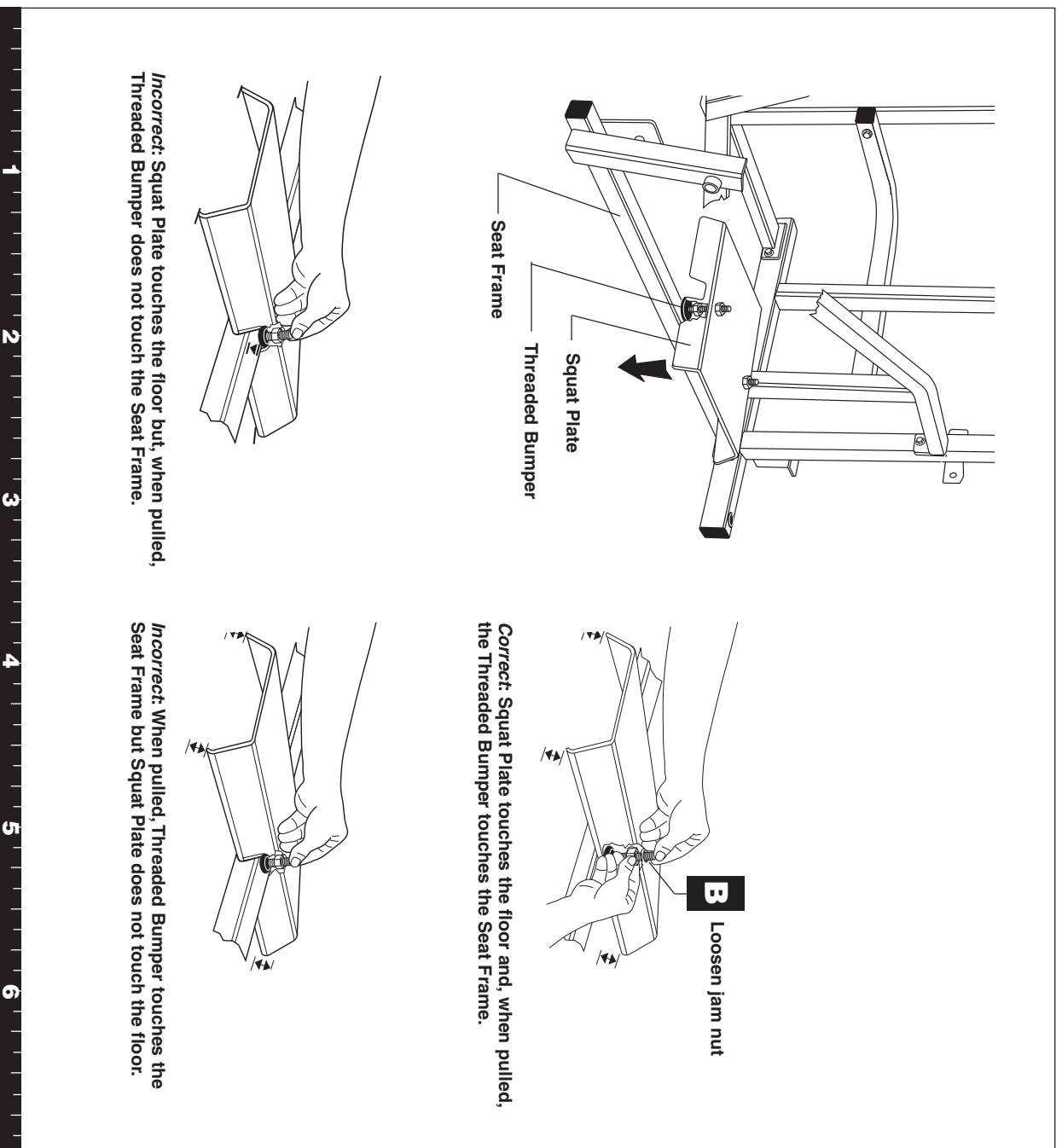
**NOTE:** The Swing Arm and the Selector Cam Arm will swing loosely. They will be tightened into position later in the assembly.



## Step 11. Attach Bidirectional Arm

## 12. Attach Squat Plate

- A. Hold the Threaded Bumpers in place as you place the Squat Plate on the Seat Frame approximately where a person would stand doing squats.
- B. Loosen the jam nut until, when you pull on the shaft of the Threaded Bumper, the Threaded Bumper still touches the Seat Frame and the Squat Plate still touches the floor. This position will vary depending on the type of flooring. Repeat for both Threaded Bumpers.
- C. Remove the Squat Plate to wrench tighten the Threaded Bumpers and nuts.
- E. Replace the Squat Plate on the Seat Frame.

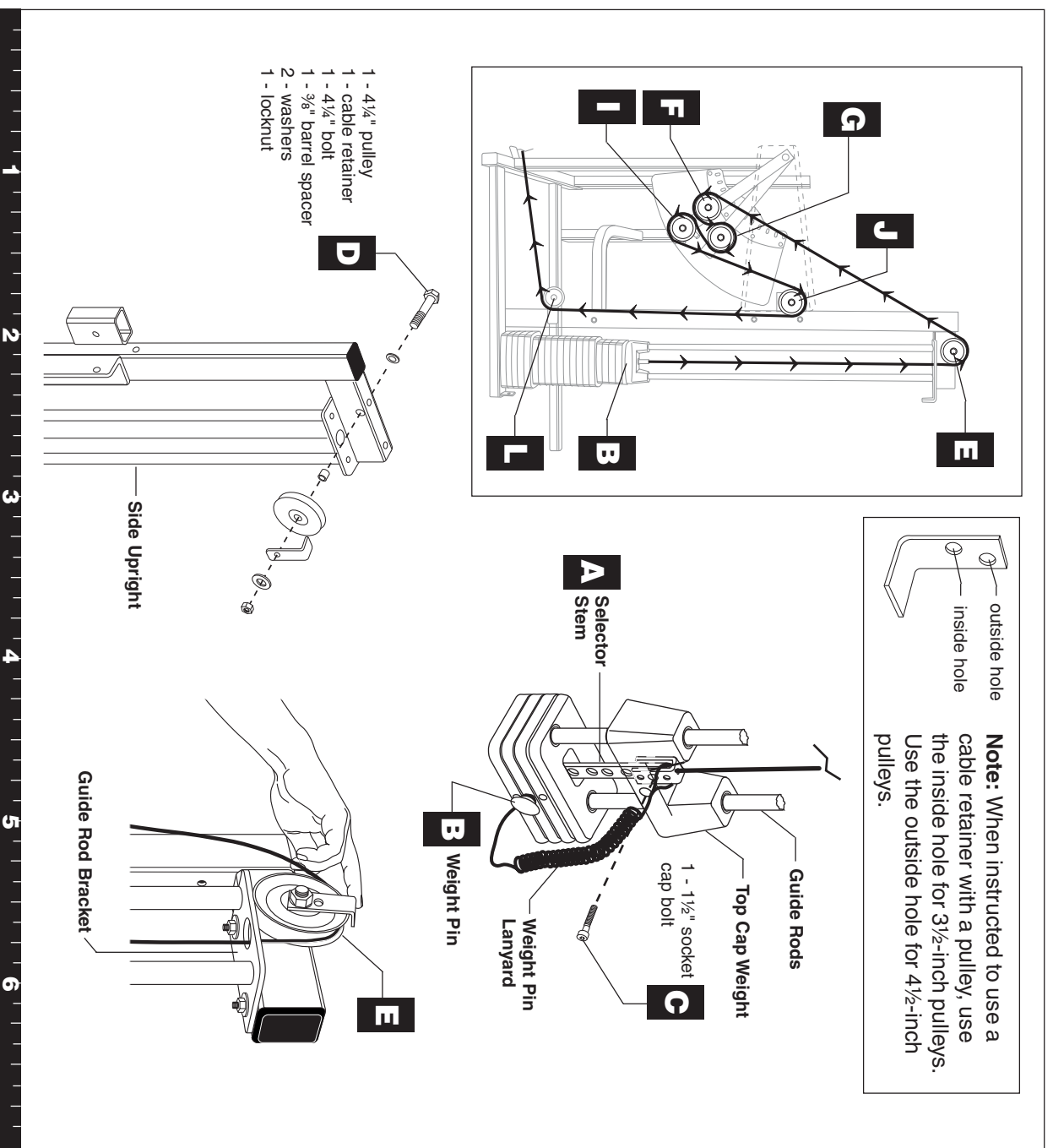


## Step 12. Attach Squat Plate

### 13. Route Main Cable on Bidirectional Arm

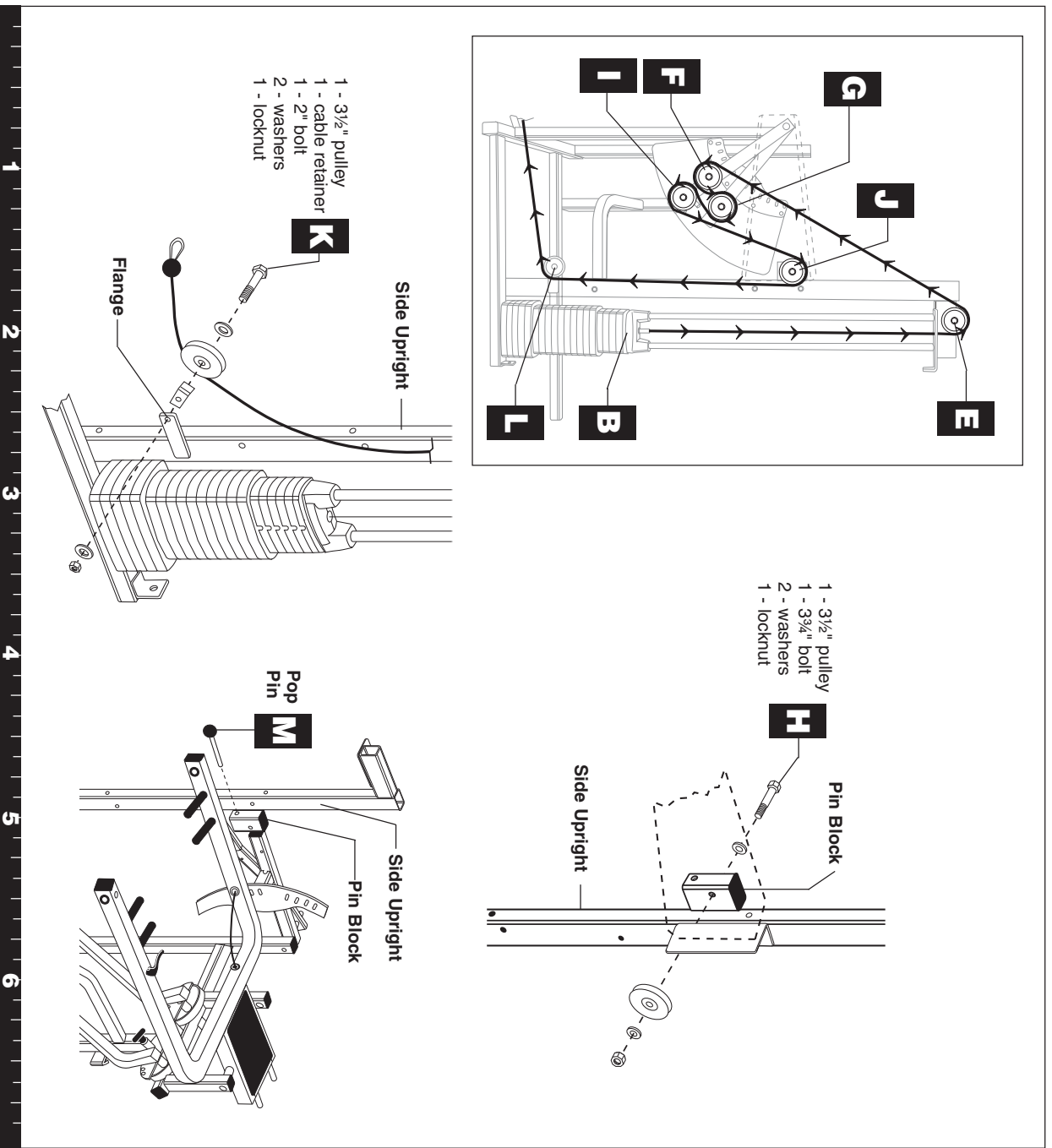
**Note:** When instructed to use a cable retainer with a pulley, use the inside hole for 3½-inch pulleys and the outside hole for 4½-inch pulleys.

- A. Insert the Selector Stem in the Weight Stack with the threaded hole at the top. Hold the Selector Stem approximately one foot above the Top Cap Weight.
- B. Insert the Weight Pin to suspend the Selector Stem.
- C. Place the loop end of the Weight Pin Lanyard into the U end of Cable #40485-101. Align the U end of the Cable, the top of the Selector Stem, and the Top Cap Weight. Attach using one 1½-inch socket cap bolt. Wrench tighten.
- Note:** Do not remove the Weight Pin or lower the Top Cap Weight at this time.
- D. Attach one 4½-inch pulley and one cable retainer to the top of the Side Upright using one 4¼-inch bolt one ⅜-inch barrel spacer two washers one locknut Finger tighten.
- E. Feed the Cable through the Guide Rod Bracket and between the 4½-inch pulley and the cable retainer. Wrench tighten.
- F. Wrap the Cable (as shown) under the top pulley on the Swing Arm (from step 10).
- G. Wrap the Cable over the pulley on the Selector Cam Arm (from step 10). Allow the cable to hang loosely temporarily.



### Step 13. Route Main Cable on Bidirectional Arm

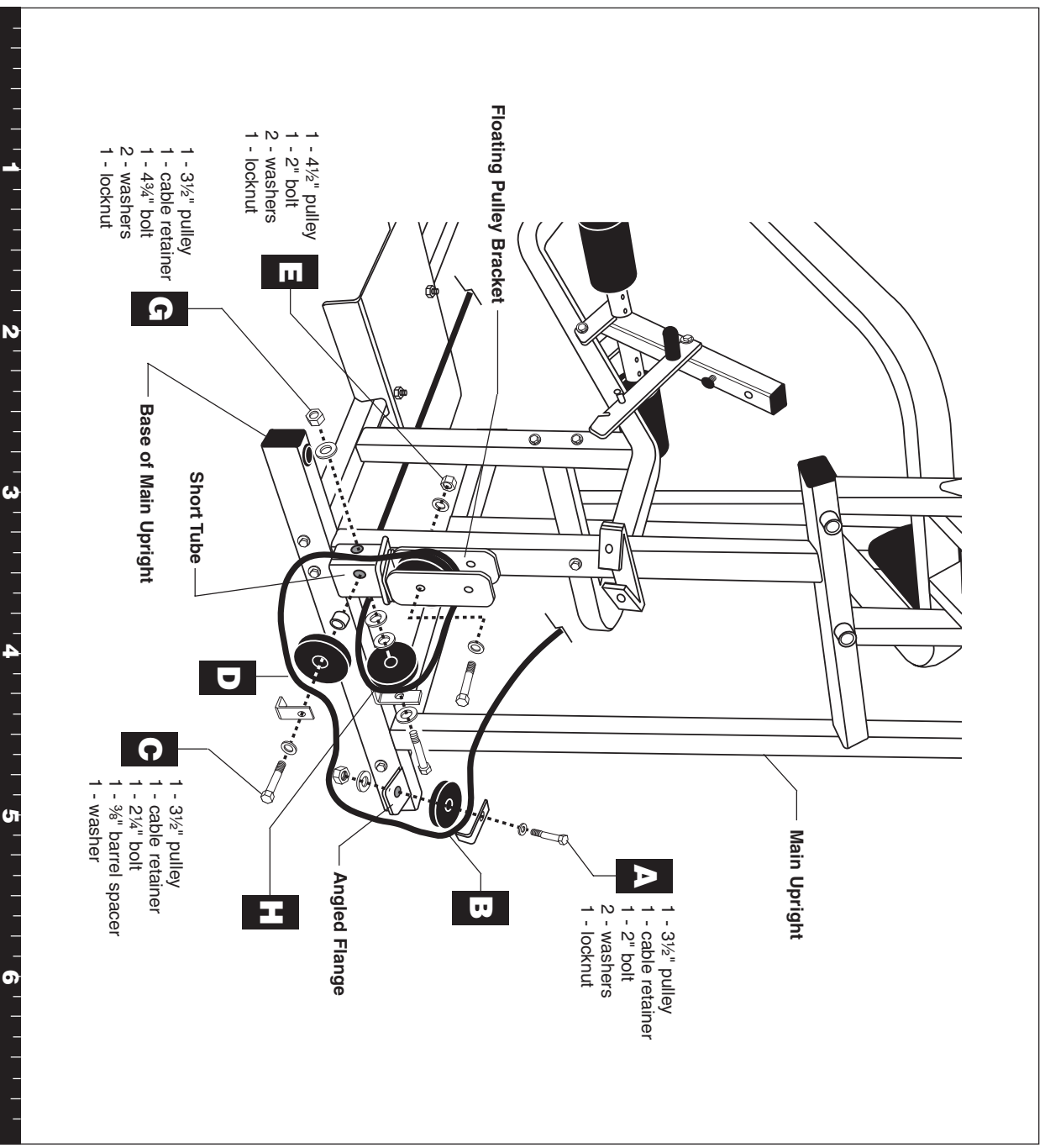
- H. Attach one 3½-inch pulley to the Shroud side of the Pin Block on the Side Upright using one 3¾-inch bolt two washers one locknut Wrench tighten.
- I. Wrap the Cable under the bottom pulley on the Swing Arm (from step 10).
- J. Wrap the Cable over the 3½-inch pulley on the Pin Block.
- K. Attach one 3½-inch pulley and one cable retainer to the flange on the Side Upright using one 2-inch bolt two washers one locknut Wrench tighten.
- L. Wrap the Cable under the pulley and allow it to hang loosely toward the back of the S3.21.
- M. Insert the Pop Pin in the Pin Block to hold the Selector Cam Arm in place.



**Step 13. Route Main Cable on Bidirectional Arm, Continued**

## 14. Route Main Cable Along Back Side

- A. Attach one 3½-inch pulley and a cable retainer to the angled flange at the base of the Main Upright using
  - one 2-inch bolt
  - two washers
  - one locknut
 Finger tighten.
- B. Feed the Cable between the pulley and the cable retainer and wrench tighten the bolt.
- C. Attach one 3½-inch pulley and a cable retainer to the short tube at the base of the Main Upright using
  - one 2¼-inch bolt
  - one ⅝" barrel spacer
  - one washer
 Finger tighten.
- D. Feed the Cable between the pulley and the cable retainer and wrench tighten the bolt.
- E. Attach one 4½-inch pulley to the Floating Pulley Bracket using
  - one 2-inch bolt
  - two washers
  - one locknut
 Finger tighten.
- F. Allow the Floating Pulley Bracket to rest on the short tube at the base of the Main Upright. Feed the Cable over the pulley, but do not wrench tighten the bolt.
- G. Attach one 3½-inch pulley and a cable retainer to the inside of the short tube at the base of the Main Upright using
  - one 4¾-inch bolt
  - two washers
  - one locknut
 Finger tighten.
- H. Feed the Cable between the pulley and the cable retainer and wrench tighten the bolt.

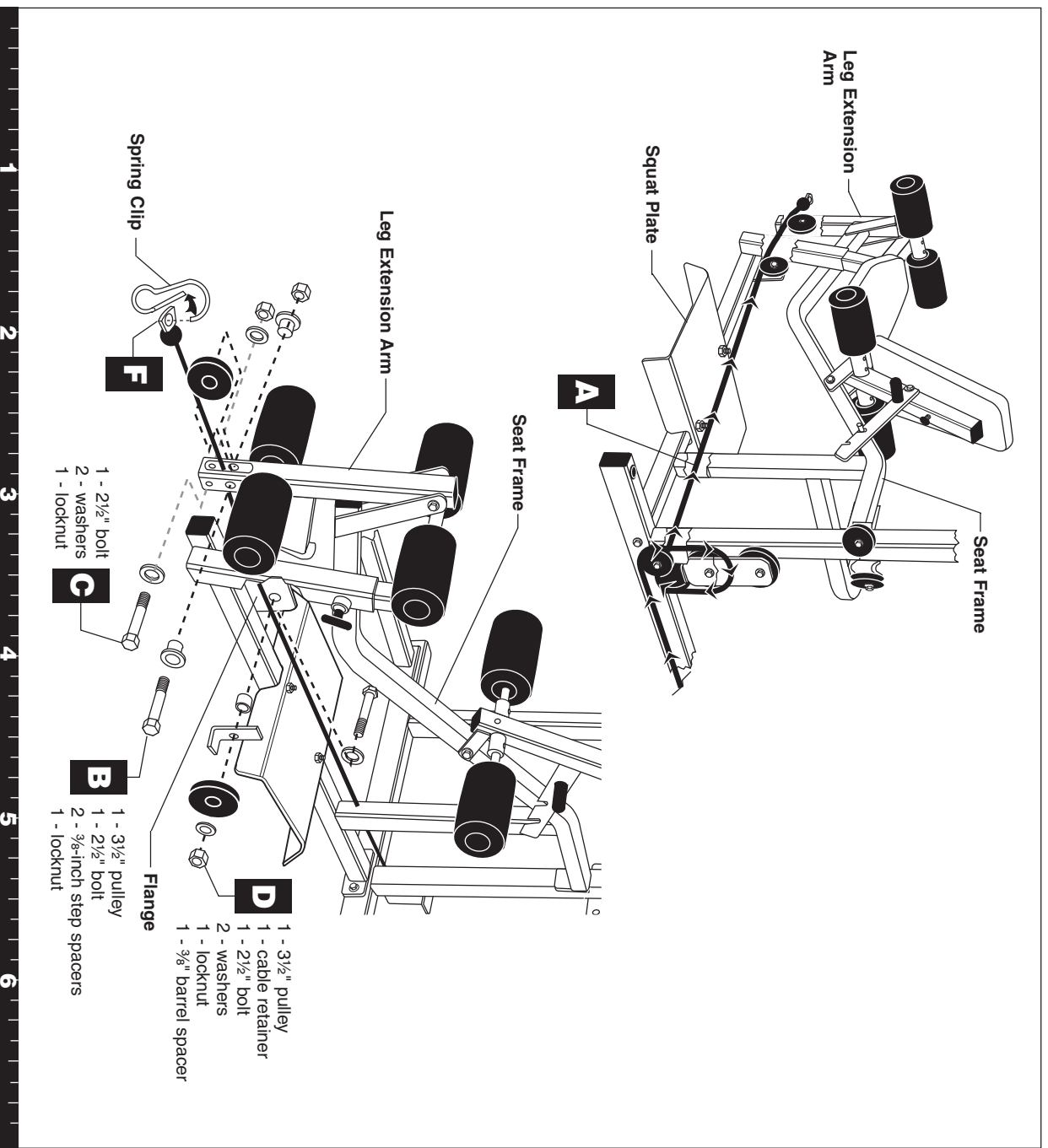


## Step 14. Route Main Cable Along Back Side



## 15. Route Main Cable Along Seat Frame

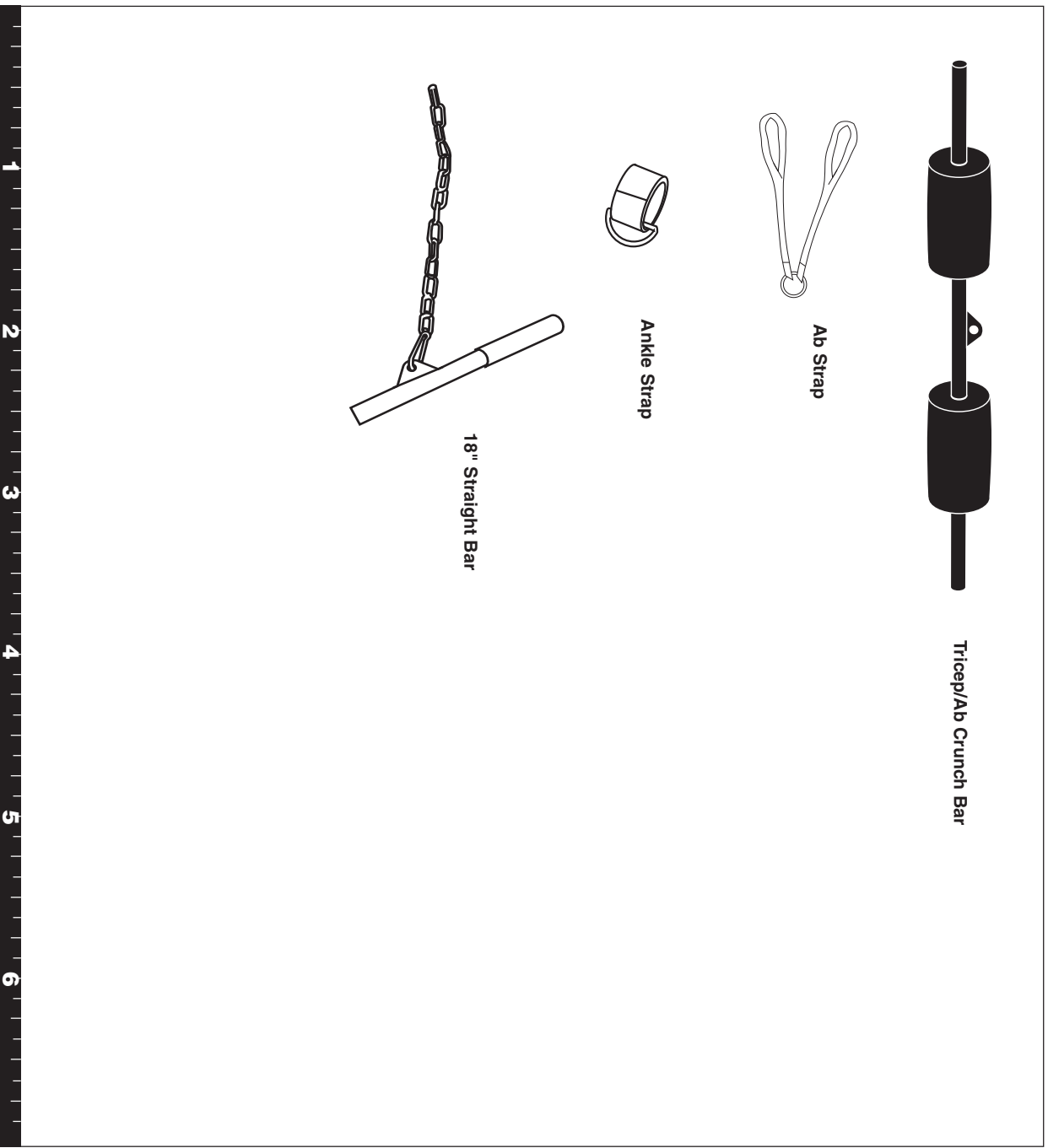
- A. Feed the Cable along the full length of the Seat Frame, above the Squat Plate, and through the window on the Leg Extension Arm.
- B. Feed the Cable under one 3½-inch pulley and attach the pulley in the pulley window using one 2½-inch bolt two ⅜-inch step spacers one locknut Finger tighten.
- C. In the remaining hole of the pulley window, create a cable retainer using one 2½-inch bolt two washers one locknut Ensure the Cable passes above the bolt and finger tighten.
- D. Attach a 3½-inch pulley and cable retainer to the flange at the base of the Seat Frame using one 2½-inch bolt two washers one ⅜-inch barrel spacer one locknut Finger tighten.
- E. Wrench tighten all bolts from this step.
- F. Attach a spring clip to the end of the Cable.



## Step 15. Route Main Cable Along Seat Frame

## 16. Set Aside Accessories

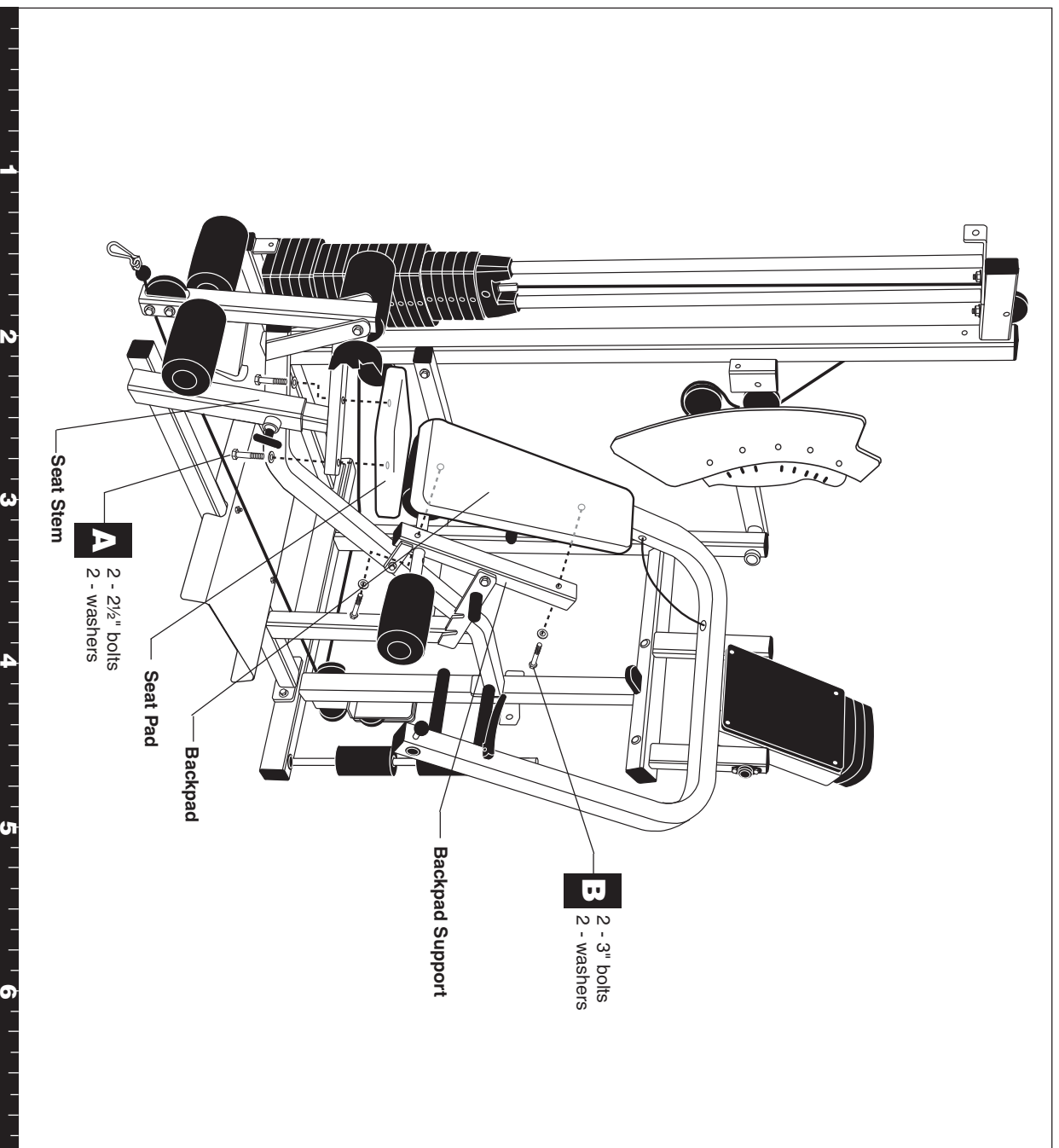
- A. Set aside the
  - Tricep/Ab Crunch Bar
  - Ab Strap
  - Ankle Strap
  - 18-inch Straight



## Step 16. Set Aside Accessories

## 17. Assemble Seat Pad

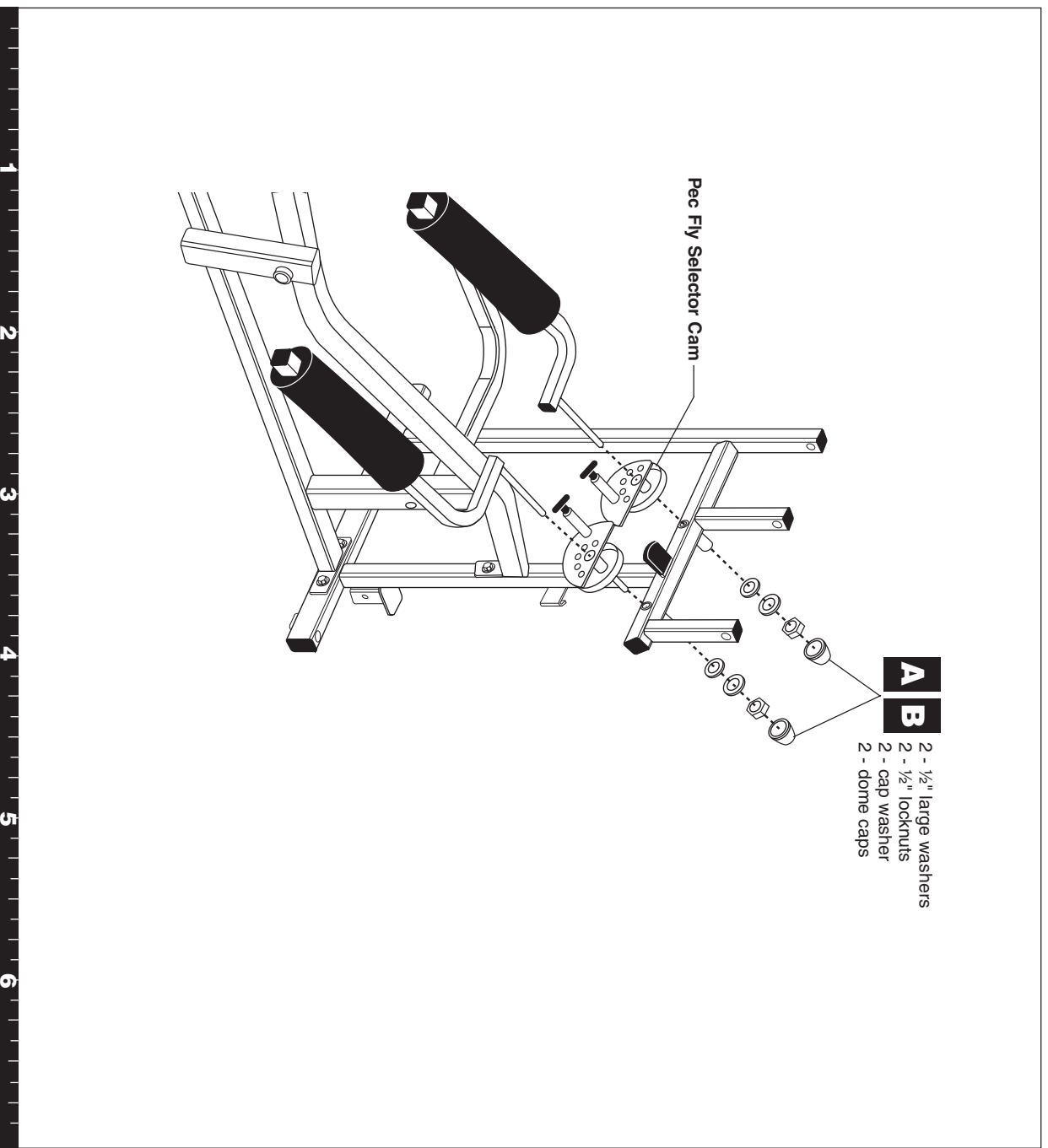
- A. Attach the Seat Pad to the Seat Stem using  
two 2½-inch bolts  
two washers
- B. Attach the Backpad to the Backpad Support using  
two 3-inch bolts  
two washers  
Wrench tighten.



## Step 17. Assemble Seat Pad

## 18. Assemble Pec Fly Station

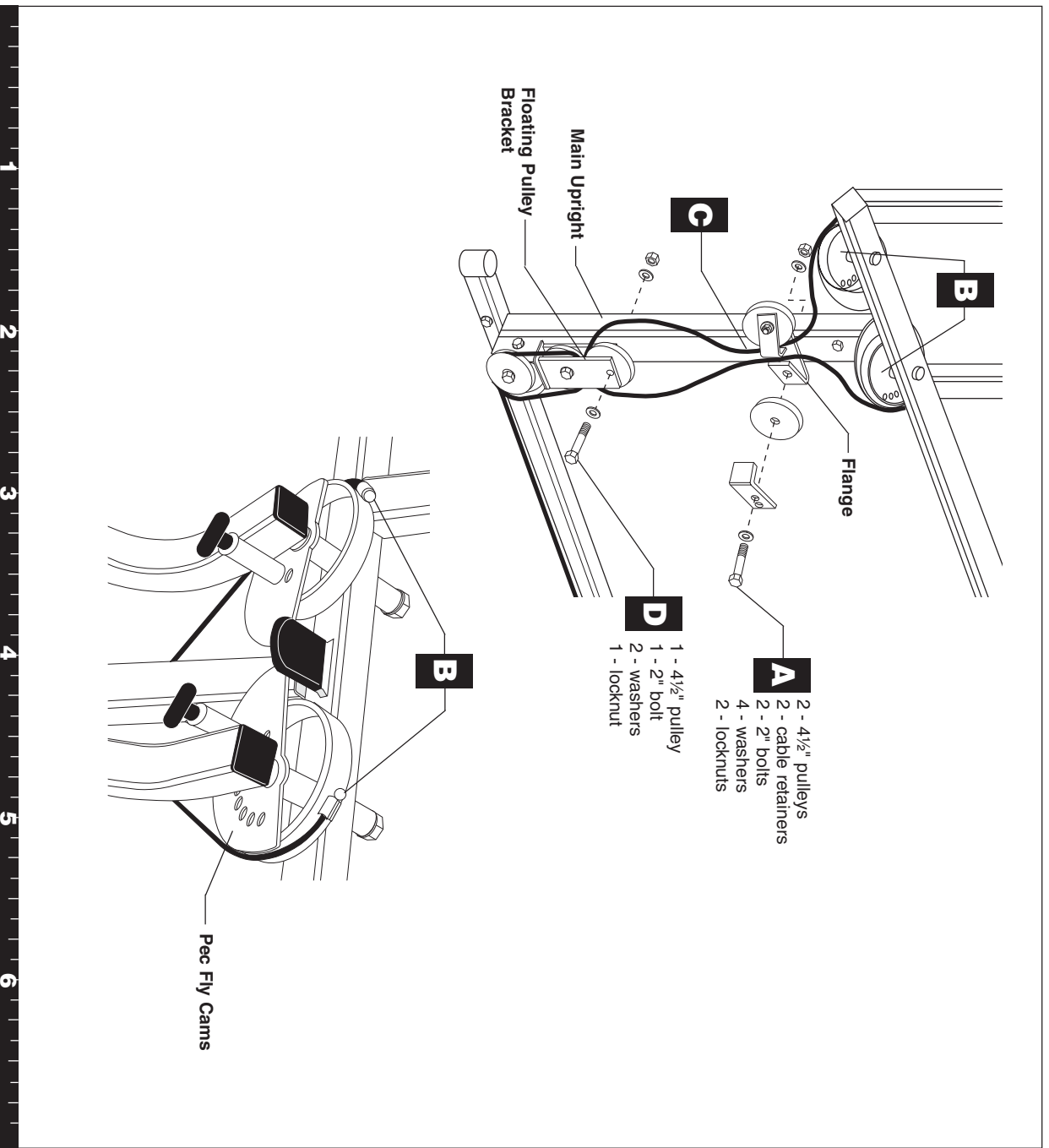
- A. Slide one Pec Fly Selector Cam on the shaft of the Pec Fly Arm and lock it into place with the pop pin. Slide the Pec Fly shaft in the Main Upright, ensuring that the Pec Fly Arm curves outward as illustrated. Attach using
  - one ½-inch large washer
  - one cap washer
  - one ½-inch locknut
  - one dome cap
 Wrench tighten. The sequence will be Pec Fly Arm, Pec Fly Selector Cam, Main Upright, ½-inch large washer, cap washer, ½-inch locknut, dome cap.
- B. Slide the other Pec Fly Selector Cam on the shaft of the Pec Fly Arm and lock it into place with the pop pin. Slide the Pec Fly shaft in the Main Upright, ensuring that the Pec Fly Arm curves outward as illustrated. Attach using
  - one ½-inch large washer
  - one cap washer
  - one ½-inch locknut
  - one dome cap
 Wrench tighten. The sequence will be Pec Fly Arm, Pec Fly Selector Cam, Main Upright, ½-inch large washer, cap washer, ½-inch locknut, dome cap.



## Step 18. Assemble Pec Fly Station

## 19. Route Pec Fly Cable

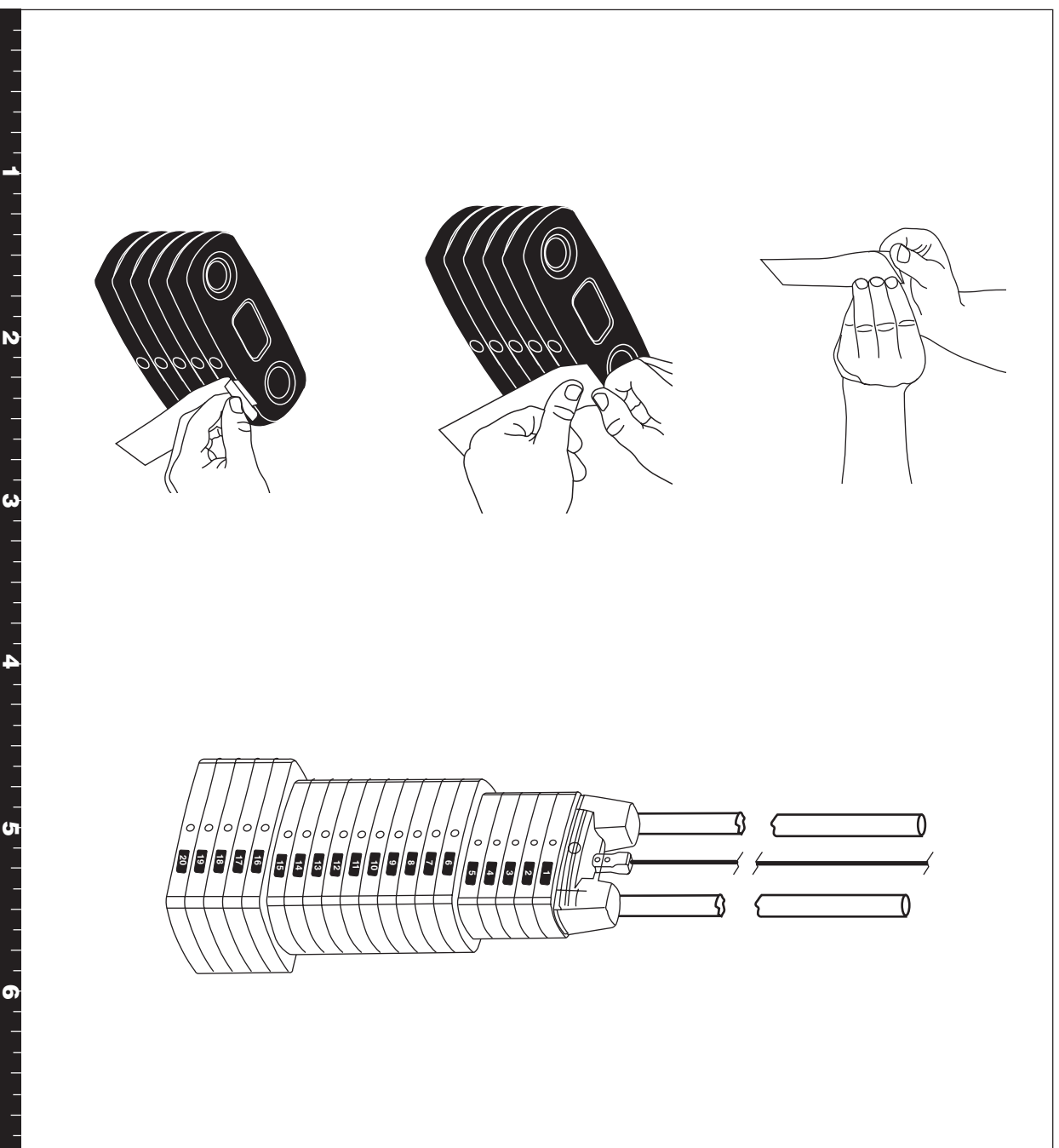
- A. Attach two 4½-inch pulleys and two cable retainers to the flanges on the vertical tube of the Main Upright using
  - Upright using
  - two 2-inch bolts
  - four washers
  - two locknuts
 Finger tighten.
- B. Insert each end of Cable #40484-101 in the slots on both of the Pec Fly Cams.
- C. Feed the Cable between the pulley and cable retainer toward the inside of each of the 3½-inch pulleys from step A.
- D. Feed the Cable around one 4½-inch pulley and attach the pulley to the Floating Pulley Bracket using
  - one 2-inch bolt
  - two washers
  - one locknut
- E. Wrench tighten all bolts from this step.



## Step 19. Route Pec Fly Cable

## 20. Apply Weight Decals

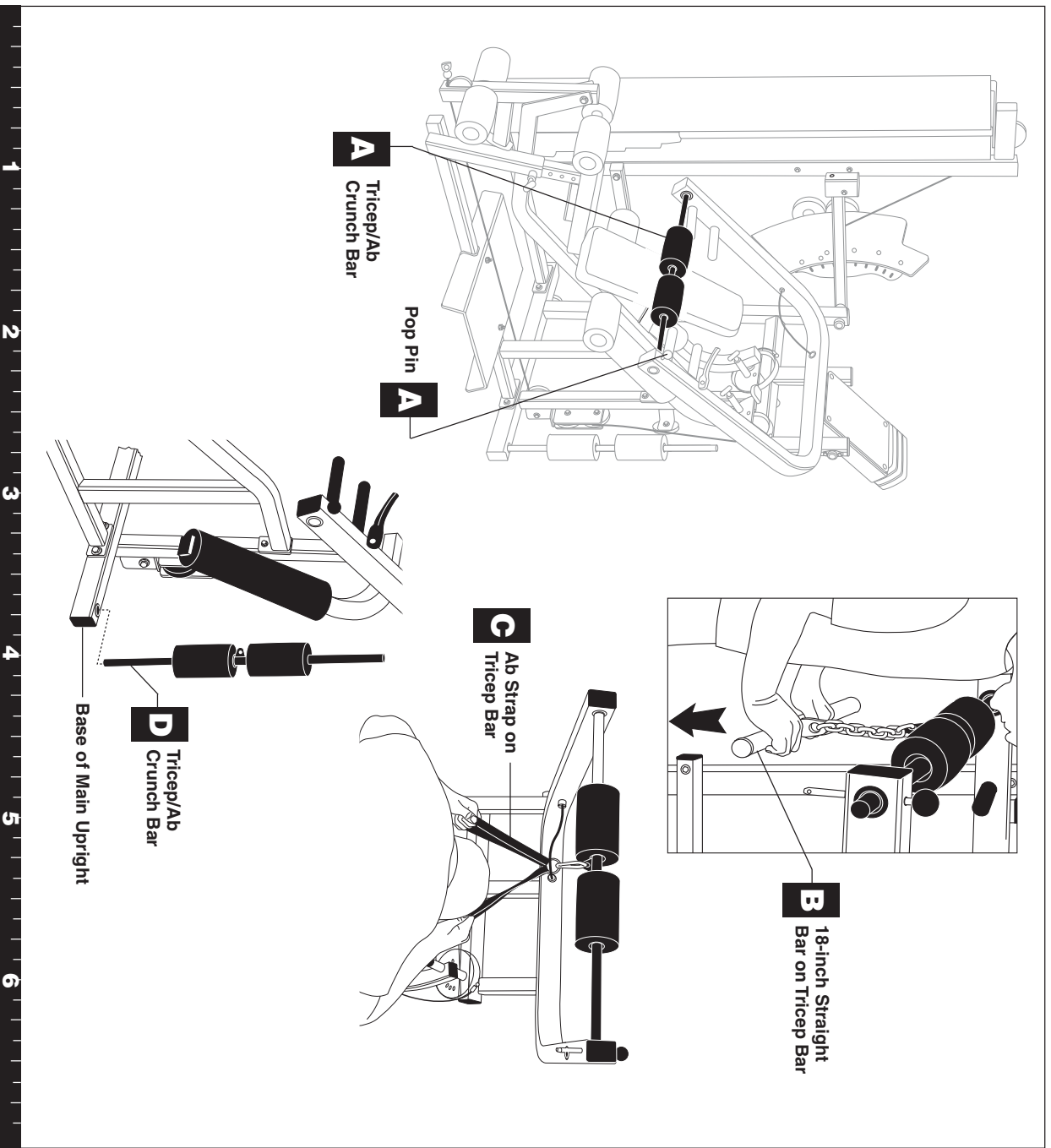
- A. Remove the backing for the decals labeled 1–5. Press the decals to the front surface of the top five weight plates in the tab location as indicated. Remove the front decal protector.
- B. Remove the backing for the decals labeled 6–15. Press the decals to the front surface of the middle ten weight plates in the tab location as indicated. Remove the front decal protector.
- C. Remove the backing for the decals labeled 16–20. Press the decals to the front surface of the bottom five weight plates in the tab location as indicated. Remove the front decal protector.



## Step 20. Apply Weight Decals

## 21. Attach Accessories

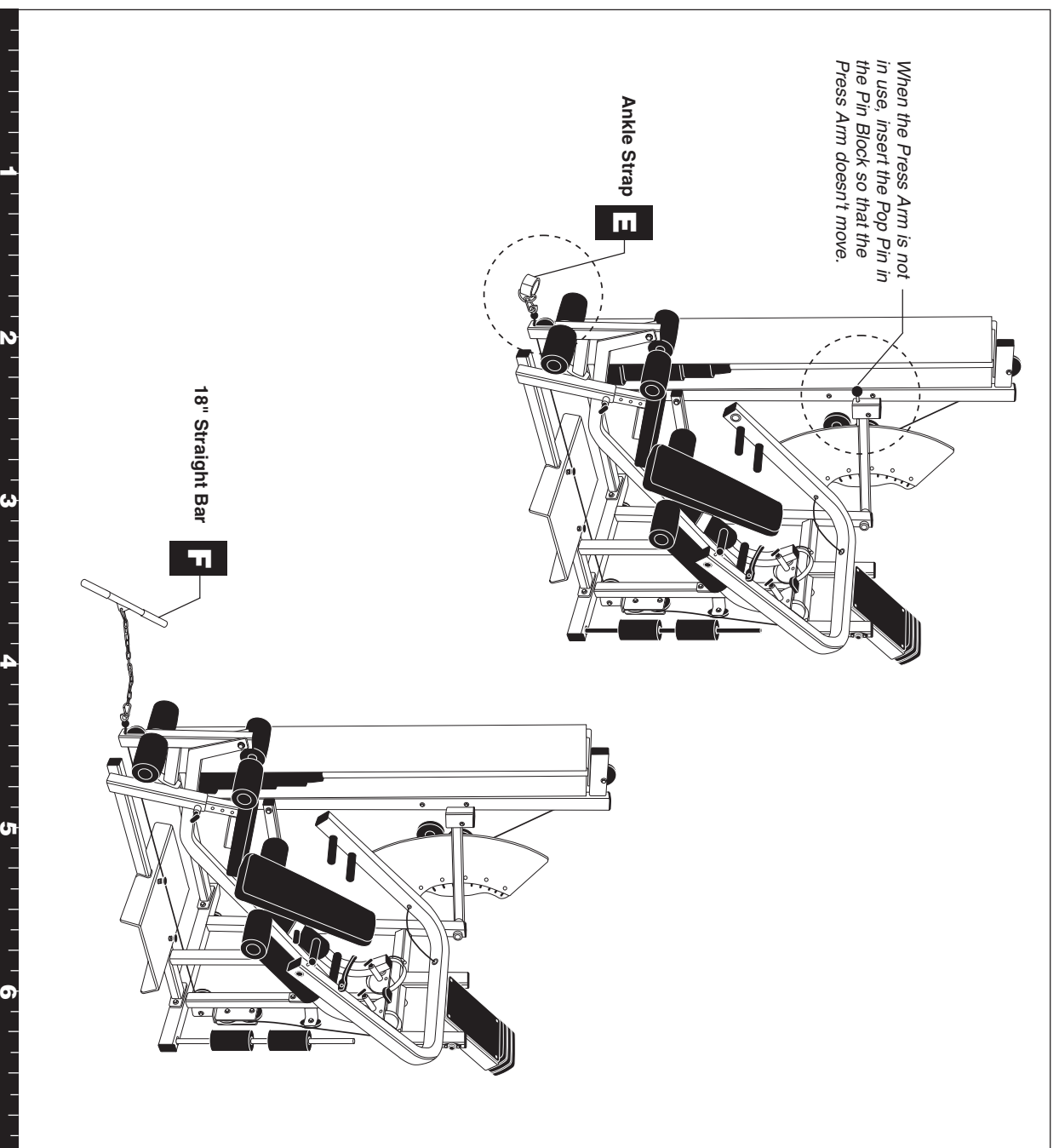
- A. Insert the Tricep/Ab Crunch Bar in the holes at the ends of the Press Arm and lock it in place with the Pop Pin. This placement allows exercisers to work out a different muscle group.
- B. Clip the 18-inch Straight Bar to the Tricep/Ab Crunch Bar to work out another muscle group.
- C. Clip the Ab Strap to the Tricep/Ab Crunch Bar to work out another muscle group.
- D. When not in use, you can store the Tricep/Ab Crunch Bar in the hole at the base of the Main Upright.



## Step 21. Attach Accessories

- E. Clip the Ankle Strap to the cable at the end of the Seat Frame.
- F. Clip the 18-inch Straight Bar to the cable at the end of the Seat Frame to work out a different muscle group.

**CAUTION:** When the Press Arm is not in use, insert the Pop Pin in the Pin Block on the Side Upright so that the arm doesn't move if someone leans on it accidentally.



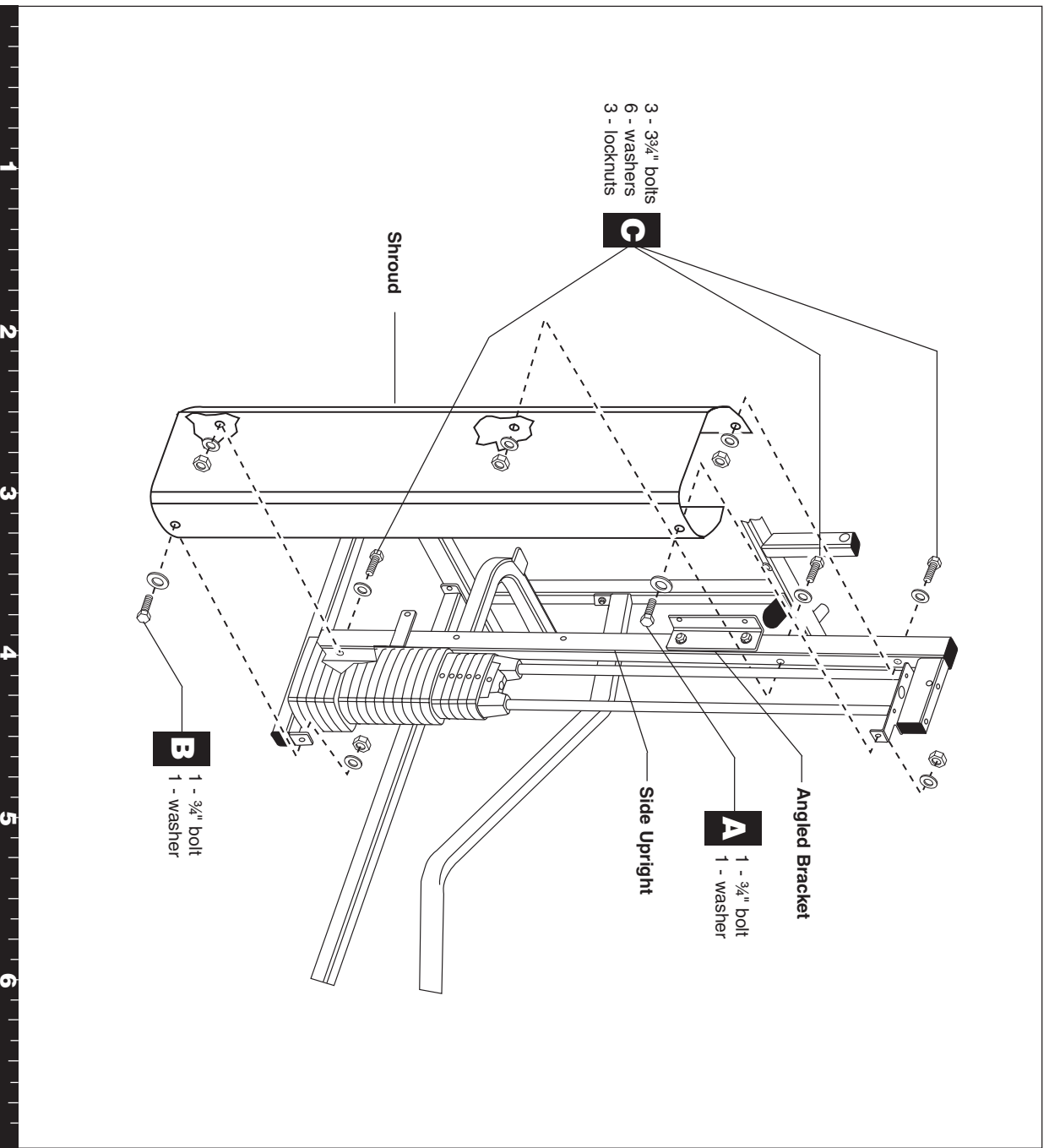
**Step 21. Attach Accessories, Continued**



## 22. Attach Shroud

**Important:** Before attaching the Shrouds, make any necessary adjustments. Refer to "Adjustments and Maintenance" on page 34.

- A. Attach the Shroud to the Angle Bracket at the top of the Side Upright using  
one 3/4-inch bolt  
one washer  
Finger tighten.
  - B. Attach the Shroud to the angle bracket at the base of the Side Upright using  
one 3/4-inch bolt  
one washer  
Finger tighten.
  - C. Attach the Shroud on the other side of the Side Upright at the top and bottom using  
three 3/4-inch bolts  
six washers  
three locknuts  
Finger tighten.
  - D. Wrench tighten all bolts from this step.
- This completes the assembly of your Precor S3.21.



## Step 22. Attach Shroud

# 4

## Adjustments and Maintenance

### 1. Cable Adjustments

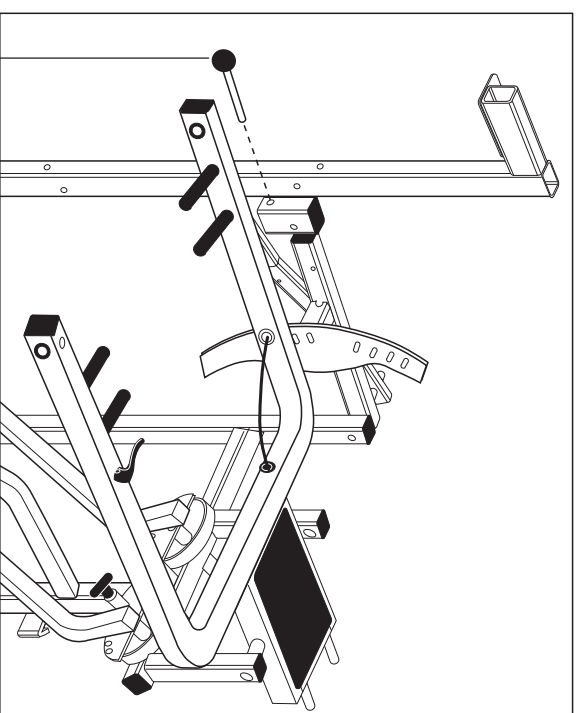
After the S3.21 is completely assembled, you must check the Cables for proper tension. Obvious signs that Cable problems exist include:

- ✓ The Top Cap Weight does not rest squarely on the top weight of the Weight Stack.
- ✓ The Cable rubs the inside edges of the pulleys.
- ✓ Excess slack exists in the Cable.
- ✓ The Pop Pin does not slide in and out freely from under the Selector Cam Arm.

**CAUTION: Take the time to perform the following steps. If the Cables do not have the proper tension, you could void the Precor limited warranty.**

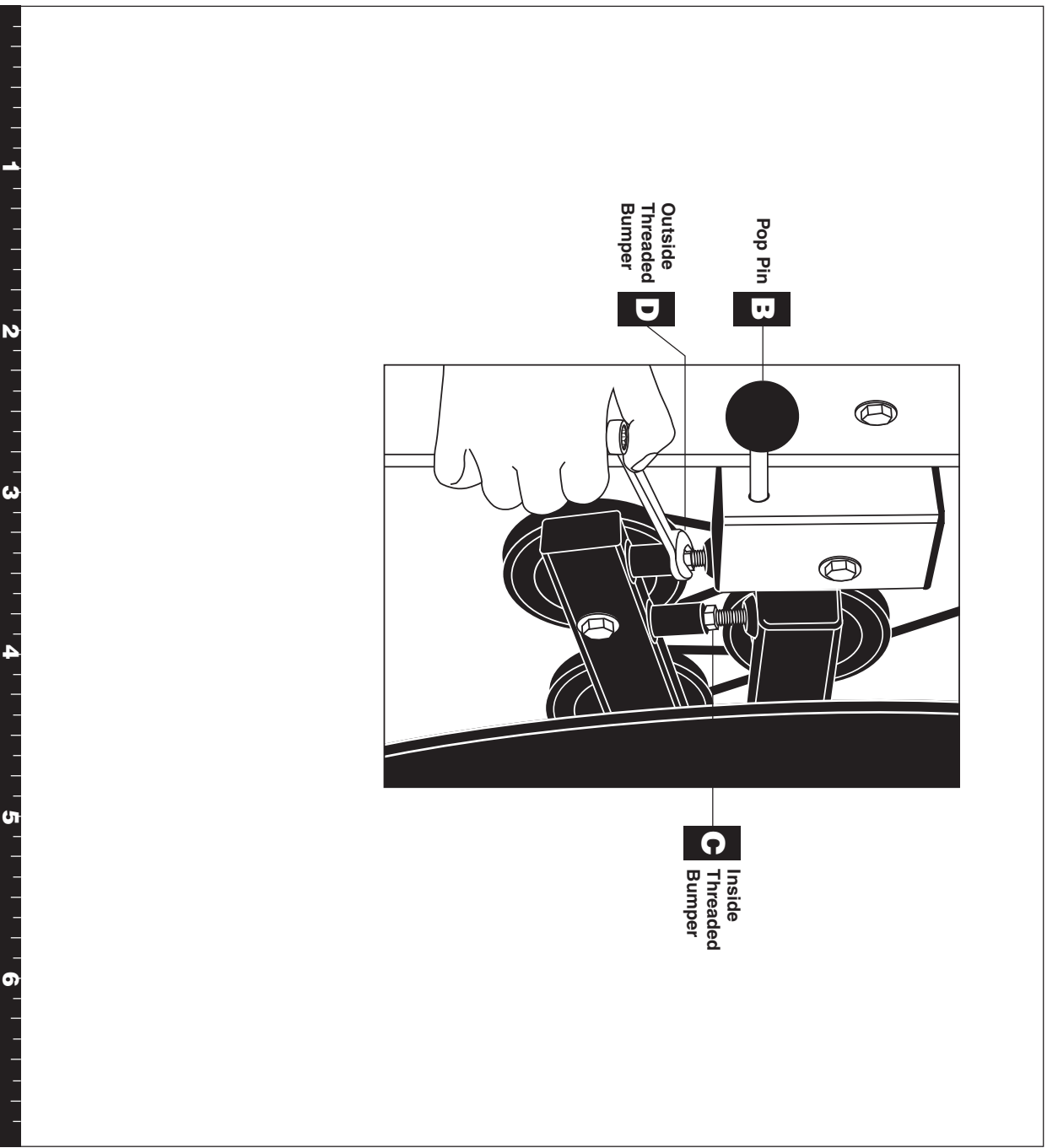
If you experience any signs of cable problems, make the adjustment as follows:

- A. Pull the Pop Pin out from under the Selector Cam Arm. Pin as much weight as can be safely lifted. Pull down on the Press Arm. This will seat the pulleys in the cable system.



## Adjustments and Maintenance

- B. Replace the Pop Pin in the Pin Block under the Selector Cam Arm.
- C. Unscrew (lengthen) the Inside Threaded Bumper on the Swing Arm until it touches the Selector Cam Arm and the Pop Pin slides freely from under the Selector Cam Arm. Ensure that the Top Cap Weight rests on the Weight Stack with the Weight Pin operating correctly in each hole. Tighten the jam nut while maintaining the Bumper in this position. Insert the Pop Pin.
- D. Unscrew (lengthen) the Outside Threaded Bumper on the Swing Arm so that it touches the underside of the Pin Block. Tighten the jam nut while maintaining the Bumper in this position.

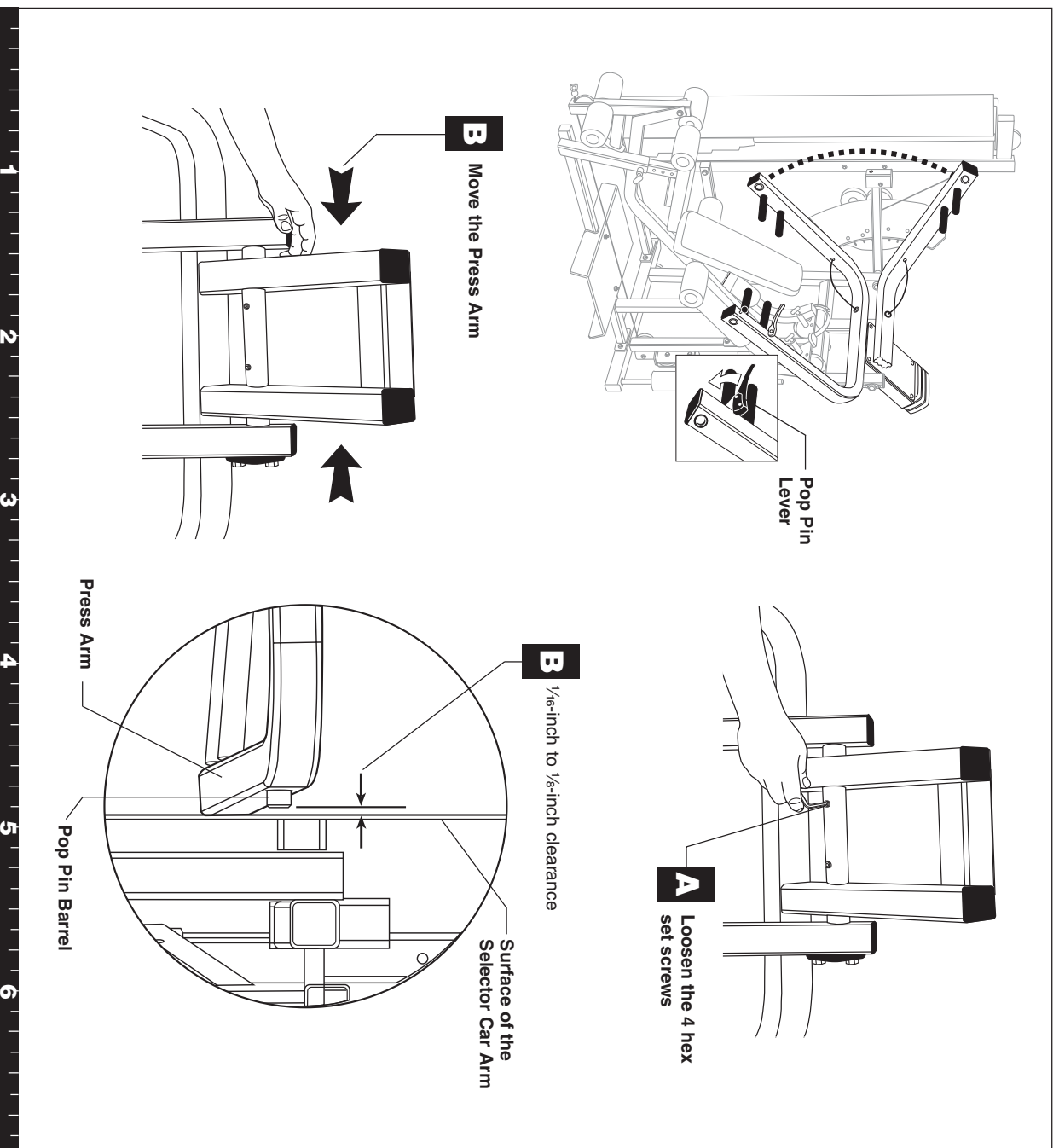


## Step 1. Cable Adjustments, Continued

## 2. Press Arm Adjustment

Check the gap between the surface of the Selector Cam Arm and the end of the pop pin barrel on the Press Arm. To do this, press on the Pop Pin Lever to disengage the Pop Pin and rotate the Press Arm through its full range of motion. The distance between the Pop Pin Barrel and the Selector Cam Arm may vary during the rotation of the Press Arm, but there should be  $\frac{1}{16}$ -inch to  $\frac{1}{8}$ -inch of clearance at the narrowest point. If there isn't, make the adjustment as follows:

- A. Loosen the four hex set screws on the back side of the Press Arm.
- B. Move the Press Arm until there is from  $\frac{1}{16}$ -inch to  $\frac{1}{8}$ -inch between the barrel of the Pop Pin and the surface of the Selector Cam Arm.
- C. Tighten the set screws.

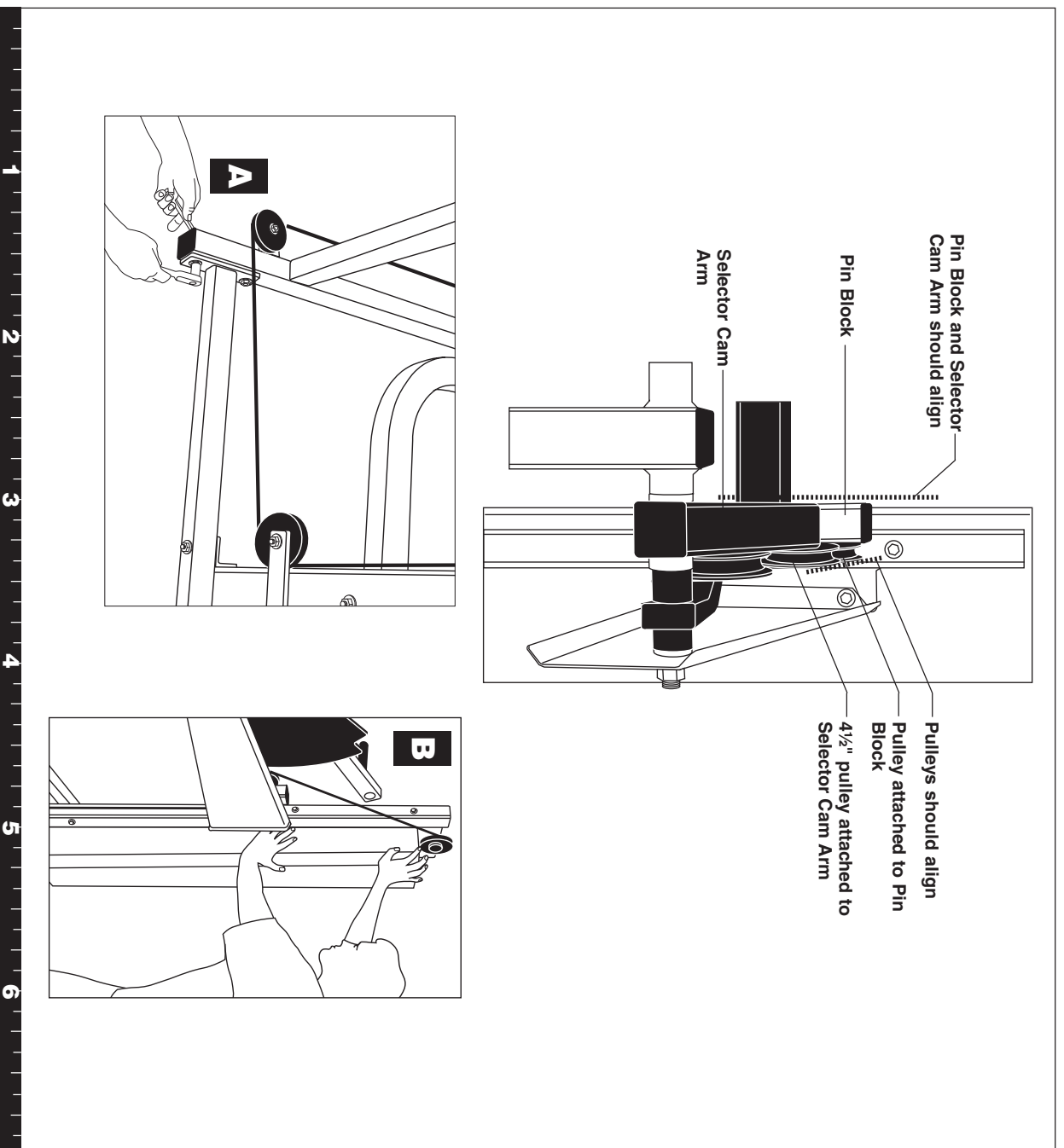


## Step 2. Press Arm Adjustment

### 3. Horizontal Pivot Arm Adjustment

Check alignment of the Selector Cam Arm and the Pin Block. The Pin Block and the Selector Cam Arm should be squarely aligned. If they aren't, make the adjustments as follows:

- A. Loosen the bolts that connect the Base and the Main Upright.
- B. Push on the upper part of the Side Upright until the Pin Block and the Selector Cam Arm line up. The pulley attached to the Pin Block and the 4½-inch pulley on the Selector Cam Arm should be aligned.
- C. Retighten the bolts connecting the Base to the Main Upright.



### Step 3. Horizontal Pivot Arm Adjustment

## 4. Selector Stem Adjustments

To prevent the Selector Stem from contacting the inside of the Weight Stack when the machine is in use, you need to check the vertical angle of the Selector Stem (steps A and B). If the stem slides smoothly without contacting the inside of the weight plates, assembly of the unit is complete.

### CAUTION: Performing the following tasks requires two people.

- A. Remove the Weight Pin from the Weight Stack.
- B. Perform an exercise using each part of the S3.21. When the base of the Selector Stem is clear of the Weight Stack, observe the position of the Selector Stem.

The following sections describe how to adjust the Selector Stem when contact does occur.

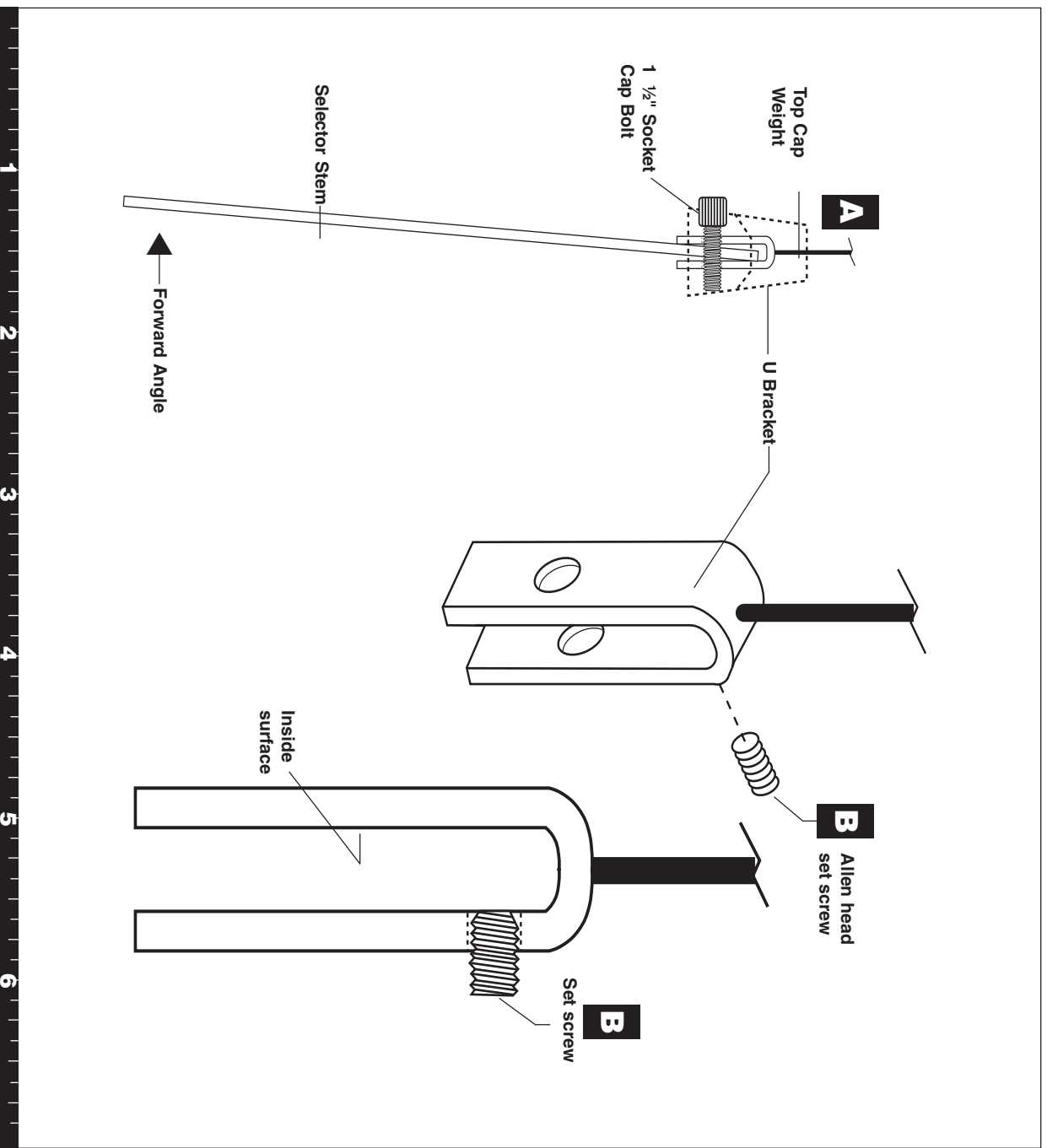
The Selector Stem can be adjusted forward, backward, and vertically depending on the area of contact.

### Forward Angle Adjustment

When the Selector Stem angles forward (toward the seat) and contacts the inside of the Weight Stack during use, adjust it by following these steps:

### CAUTION: This adjustment requires two people.

- A. Completely disassemble the Top Cap Weight, Selector Stem, and U bracket.
- B. Thread the Allen head set screw into the hole closest to the top of the U bracket and turn it clockwise until the end of the screw is flush with the inside surface of the U bracket.
- C. Turn the set screw clockwise another one-half turn (see diagram).



## Step 4. Selector Stem Adjustments

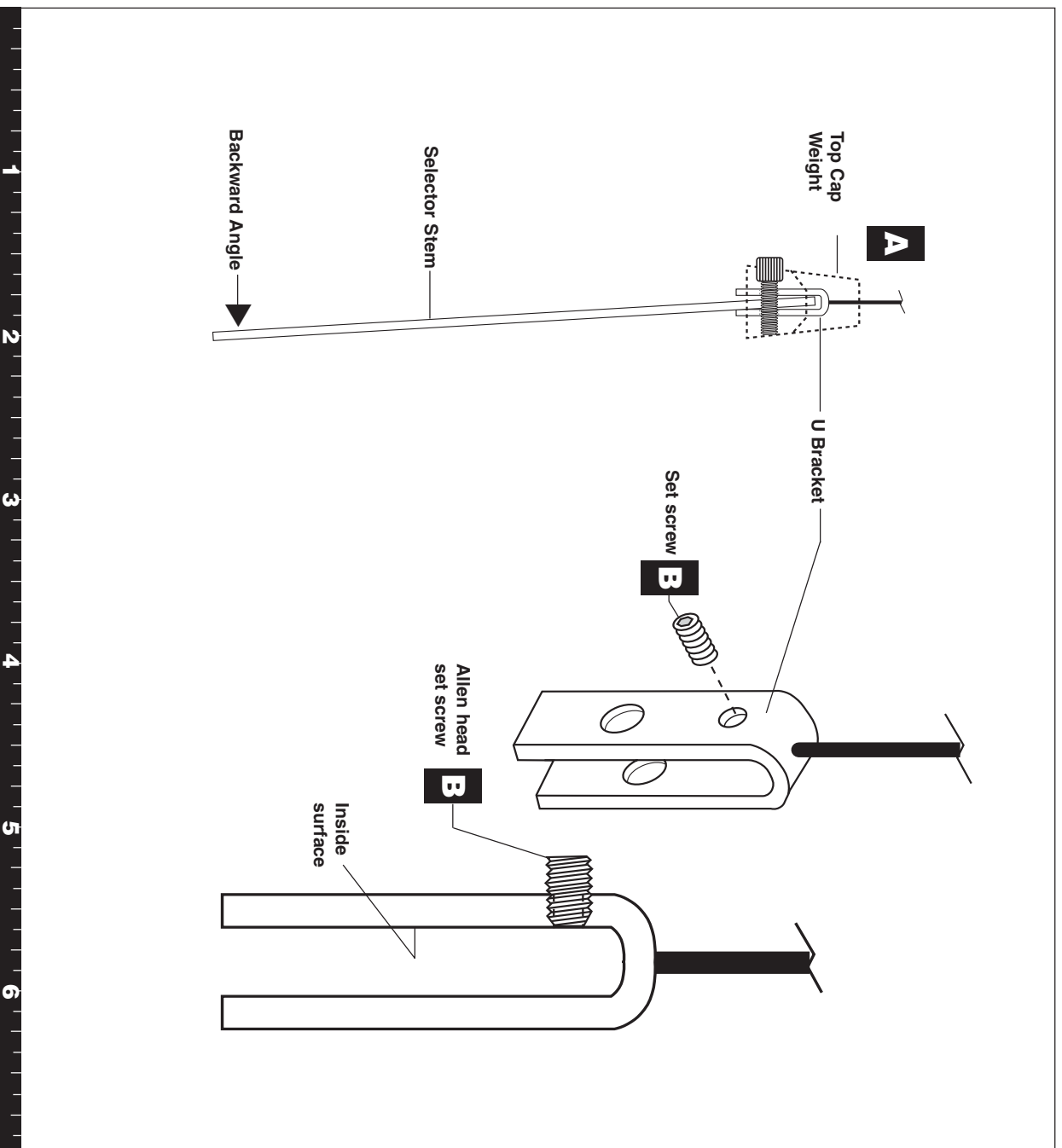
- D. Reassemble the Top Cap Weight, Selector Stem, and U bracket.
- E. Test again the movement of the Selector Stem inside the Weight Stack.
- F. If the Selector Stem continues to contact the plates, repeat steps A through E until the Selector Stem slides through the Weight Stack without contacting the plates.

**Backward Angle Adjustment**

When the Selector Stem angles backward (away from the seat) and contacts the inside of the Weight Stack during use, adjust it by following these steps:

**CAUTION: This adjustment requires two people.**

- A. Completely disassemble the Top Cap Weight, Selector Stem, and U bracket.
- B. Thread an Allen head set screw into the hole closest to the top of the U bracket and turn it clockwise until the end of the screw is flush with the inside surface of the U bracket.
- C. Turn the set screw clockwise another one-half turn (see diagram).
- D. Reassemble the Top Cap Weight, Selector Stem, and U bracket.
- E. Test again the movement of the Selector Stem inside the Weight Stack.
- F. If the Selector Stem continues to contact the plates, repeat steps A through E until the Selector Stem slides through the Weight Stack without contacting the plates.



**Step 4. Selector Stem Adjustments, Continued**

**Side-to-Side Vertical Adjustment**

If the Selector Stem contacts the inside of the Weight Stack during use or the Weight Pin becomes difficult to insert in the Weight Stack, the Selector Stem may be out of alignment vertically side to side. Adjust the Selector Stem by following these steps:

**CAUTION: This procedure requires two people.**

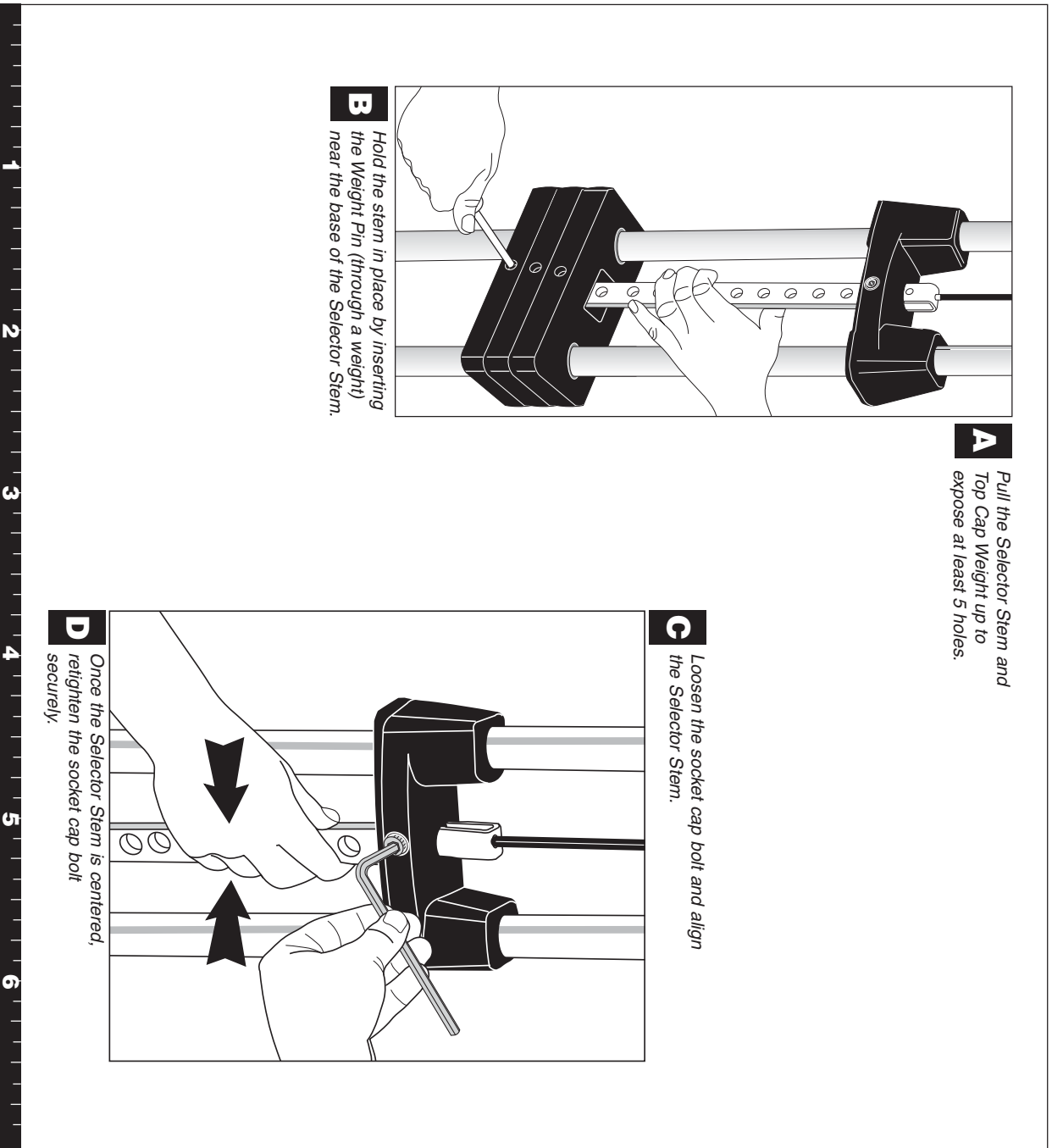
- A. Pull the Selector Stem and Top Cap Weight up to expose at least five Selector Stem holes.
- B. Insert the Weight Pin near the base of the Selector Stem to hold it in place.
- C. To center the Selector Stem, loosen the socket cap bolt that attaches the Top Cap Weight to the U bracket.
- D. Once the Selector Stem is centered, retighten the socket cap bolt securely.
- E. Lower the Selector Stem into the Weight Stack. Test the movement of the Selector Stem inside the Weight Stack.
- F. Make certain that the Weight Pin can be inserted into every hole in the Weight Stack. If the Selector Stem continues to contact the plates, repeat steps A through E until the Selector Stem slides through the Weight Stack without contacting the plates.

After completing the adjustments, fill out the warranty card and mail it in.

**5. Maintenance**

Lubricate the Guide Rods every six months.

Use a silicon lubricant to lubricate the rods; you can purchase this lubricant from any hardware store.



**Step 4. Selector Stem Adjustments, Continued**



# Residential Equipment Limited Warranty

Precor Incorporated warrants that all new Precor products are free of manufacturing defects in workmanship and materials. Parts repaired or replaced under the terms of this warranty will be warranted for the remainder of the original warranty period only. This warranty becomes effective at the invoice date of the original purchase.

**Elliptical Fitness Crosstrainers and Motorized Treadmills (excluding EFYS.17 and Treadmills: 9.2 and 9.4 series)** — Labor is covered for one year, parts are covered for five years plus a lifetime frame weld warranty covering parts-only repair or replacement parts. (Labor is not covered on frame replacement after one year.)

**Products (StretchTrainer, Strength Equipment** — formerly Pacific Fitness) other than Elliptical Fitness Crosstrainer and Motorized Treadmills (except options)

**StretchTrainer** — Labor is covered for a period of 90 days, parts are covered for a period of one year plus a lifetime frame weld warranty covering parts-only repair or replacement parts. (Labor is not covered on frame replacement after one year.)

**Pacific Fitness Branded Strength Products and Precor Strength Products S3.xx**

This is a parts only warranty. Labor costs are not covered.

1. Frame & Welds: Defective parts pertaining to frame structure, including all welded assembly parts, will be warranted for Lifetime.
2. Bearings, Guide rods, Cams, Pulleys, Belts, Cables, Hand grips, and Miscellaneous parts will be warranted for a period of three years. **Note that for the Precor Strength Products S3.xx, and the Pacific Fitness Solana and Zuma, the warranted period is five years.**
3. Upholstery will be warranted for a period of one year. A three month warranty applies to Naugahyde upholstery for Pacific Fitness Branded Strength Products only.

**Return Policy:** Proof of purchase is required to determine whether service on a Precor Strength Product/Pacific Fitness Product during its warranty period will commence. Claims should be made to the dealer from whom you purchased the product. The purchaser is responsible for all transportation and insurance costs on returned or replaced equipment or parts. The purchaser also assumes any costs associated with the disassembling or reassembling of the replacement parts. **WARRANTY BECOMES VOID IF PRECOR FINDS THE DEFECT A RESULT OF INCORRECT INSTALLATION, MISUSE, LACK OF PROPER MAINTENANCE OR ANY MODIFICATION NOT APPROVED BY PRECOR.**

**Options / Accessories / Battery-powered or Self-Operated Devices**

Many options or accessories have components that are connected internally or mounted inside the electronic console. The following guidelines determine the warranty for these components. If the internal components are installed by the factory or by an authorized dealer as part of the original sale and delivery, they have a warranty that is identical to the warranty of the equipment in which they are connected or mounted. If the internal components are not installed by the factory or by an authorized dealer as part of the original sale and delivery, they have a 90 days parts and labor limited warranty. All components that are not internally connected have a 90 days parts only limited warranty. Satisfactory proof of purchase is required in all cases.

PRECOR'S SOLE LIABILITY IS LIMITED TO REPAIR OR REPLACEMENT OF PARTS ACCORDING TO THE TERMS AND CONDITIONS OF THESE LIMITED WARRANTIES, AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THE ABOVE WRITTEN WARRANTIES. IN NO EVENT WILL PRECOR OR THE SELLING DEALER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR DAMAGE TO OTHER PROPERTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Keep this for your records.** Purchased From: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Product/Model: \_\_\_\_\_

Serial #: \_\_\_\_\_

Effective 01 August 2001

P/N 36287-108

Please fill out the Warranty Registration and mail it to Precor.



The undersigned hereby acknowledges receipt of the Precor Limited Warranty and affirms that the date of purchase was \_\_\_\_\_; further, that the undersigned has read and understands the conditions and terms of the Precor Limited Warranty in its entirety. For your protection, complete the Precor Limited Warranty registration card within 10 days from date of purchase and mail it to Precor. In the event of a safety modification or for other reasons Precor might deem necessary, we will contact you directly.

Name of Facility \_\_\_\_\_

Contact Person  Ms.  Mr. \_\_\_\_\_

Phone Number \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Purchased From \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Serial # \_\_\_\_\_

Purchaser's Signature \_\_\_\_\_

Please detach and return this portion.

# Residential Equipment Limited Warranty

Thank you for purchasing a PRECOR product. In order that we may continue to serve you in the future, please take a few minutes to complete and return this warranty registration.

Please fill out the Warranty Registration and mail it to Precor.



### S3.21 Specifications

Length: 77 inches (196 cm)

Height: 80 inches (203 cm)

Width: 56 inches (142 cm) Leg press option adds 30 inches (76 cm)

Shipping weight: 347 lb (156 kg)

## Warranty Registration Card

**PRECOR**<sup>®</sup> USA

Precor Incorporated  
20031 142nd Avenue NE

P.O. Box 7202

Woodinville, WA USA 98072-4002

PLACE  
STAMP  
HERE

**PRECOR**<sup>®</sup> USA

Precor Incorporated

20031 142nd Avenue NE

P.O. Box 7202

Woodinville, WA USA 98072-4002

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Precor is widely recognized for its innovative, award winning designs of exercise equipment. Precor aggressively seeks U.S. and foreign patents for both the mechanical construction and the visual aspects of its product design. Any party contemplating the use of Precor's product designs is hereby forewarned that Precor considers the unauthorized appropriation of its proprietary rights to be a very serious matter. Precor will vigorously pursue all unauthorized appropriation of its proprietary rights.

#### Literature Kit# 42927-102

Owner's Manual# 42929-103

Warranty Card# 36287-108

Exploded Views# 42928-102

Effective date: July 10, 2002