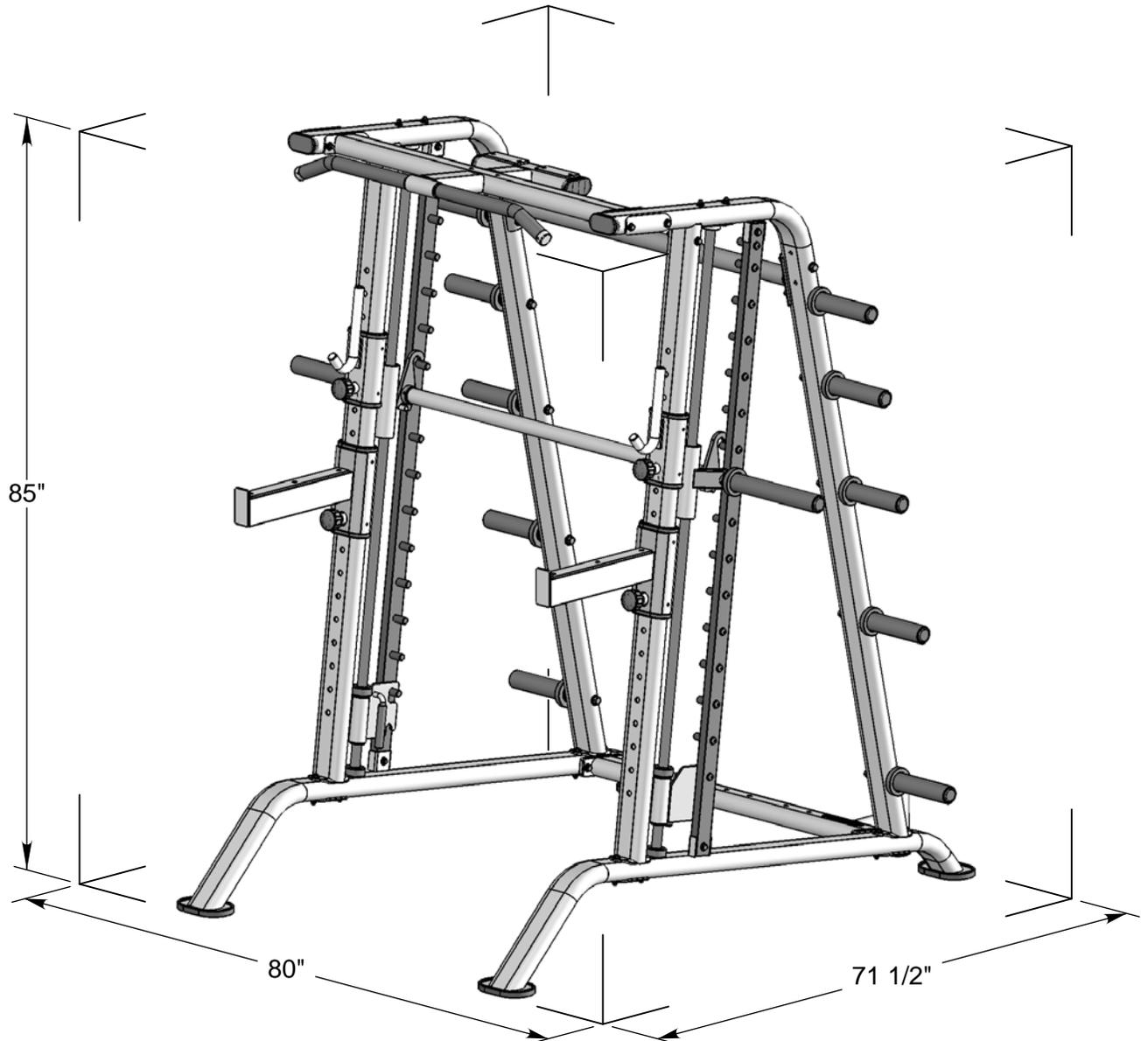


# OWNER'S MANUAL



**RSM-600**

**Basic Smith-Half Cage**



**TuffStuff Fitness Equipment, Inc.**

1325 E. Franklin Avenue  
Pomona, CA 91766, USA

Ph: 909-629-1600 Fax: 909-629-4967

E-mail: [service@tuffstuff.net](mailto:service@tuffstuff.net) Net: [www.tuffstuff.net](http://www.tuffstuff.net)

**AMERICA'S PREMIER EXERCISE EQUIPMENT**

## Introduction

### About the RSM-600 Basic Smith-Half Cage

Congratulations on your new purchase of the **Basic Smith-Half Cage**. We hope you are completely satisfied with this product and wish you many years of enjoyment.

### TuffStuff Equipment

This Tuffstuff product has been built to precise quality standards and has been carefully packaged to ensure that damage will not occur during shipment. The Home Lifetime Warranty and signature indicating final inspection has been conducted by our line foreman, is an expression of our confidence in the completeness, the materials, and workmanship of this product.

### Warranty

SEE A COPY OF WARRANTY ON BACK PAGE.

### Registration Card

To avoid unnecessary delays in warranty service and to insure that a permanent record of your purchase is on file with our factory, be sure to complete the warranty registration card and send it to TuffStuff Fitness Equipment today.

### Specifications

1. Maximum Wt. Capacity - 500 lbs.
2. Total Machine Weight - 680 lbs.
3. Footprint (LWH) - See Front Cover.

**Note:** Due to continuing product improvements, specifications and designs are subject to change without notice.



## Maintenance

### TuffStuff Basic Strength Equipment Safety and General Maintenance

All TUFFSTUFF strength equipment is designed and manufactured to offer maximum, long-life service with minimal maintenance. However, safety inspection and routine maintenance in your facility should be the utmost importance in your daily operation. Information presented in these pages will serve as a basic guideline to design your own inspection procedures.

#### Part One: General Inspection and Cleaning

Equipment should be wiped down with a damp cloth and dried on a daily basis. The powder coat finish should be polished with a good car wax on a monthly basis. A daily wipe down of the upholstery with a lanolin based hand cleaner or Naugahyde Cleaner. Do not use cleaners such as Lysol or Windex as they will dry out and crack the vinyl. Lanolin hand cleaner dissolves the sweat and lubricates the vinyl, maintaining its natural flexibility. Sweat is corrosive and when left on the frame and components will eventually cause corrosion or rust. When performing these cleaning sessions, it is the perfect time to inspect the equipment and note any problems for the maintenance personnel to correct.

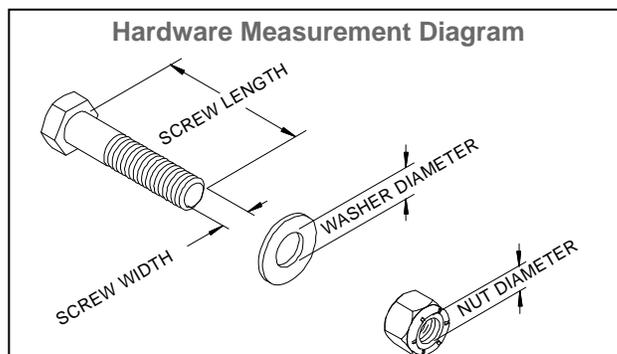
1. Check equipment if it is operating properly.
2. Check the cable for loose fittings or frayed cable and is seating properly on the pulleys and cams.
3. Make sure that the proper weight stack selector pin is with each machine and that the pin functions properly.
4. If something appears loose be sure to have it tightened immediately.
5. If a piece of equipment appears damaged or not operation properly, place the piece out-of-service immediately.

### Prior to the Assembly of the Basic Smith-Half Cage

We advise you to consult your local TuffStuff retailer if you should have a question or problem regarding the proper assembly of this unit.

### Tool Requirements

1. One 3/4" combination wrench
2. One 9/16" combination wrench
3. One ratchet
4. One 3/4" socket
5. One 9/16" socket
6. Rubber Mallet
7. Windex or household glass cleaner
8. Measuring tape
9. Utility knife



In this paragraph, we will discuss the inspection of the cables, pulleys and their associated components. If there exists the potential for injury to occur on a machine, it will most likely lie in the cable system. It is important to inspect the cables frequently and let it be known to all users that it is their responsibility to report any worn-out cable to prevent a sudden failure that can result in an injury. Cables are moving parts, meaning cable-wear will occur regardless of the type or size used. In the advent of the 3/16" mill-spec cable this wear takes longer to become apparent and this is why frequent inspections are so important.

1. Check the cable termination at the weight stack. To perform any cable tension adjustment, loosen the hex jam nut and thread the hex tap bolt in or out to give cable the proper tension. Re-tightened the hex jam nut when adjustment is complete and make sure the hex tap bolt is threaded 1/2" into the socket of the selector bar top plate.
2. Check the cable as it terminates at the cam. Check the end fitting for any signs of fraying in this area. Inspect the bolt and nut and/or screw holding the fitting and be sure that it is tight.
3. Check the cables as it passes over all pulley wheels. Visually inspect the cables and pulleys. A cable that is wearing will exhibit a ballooned surface that passes over the pulley. This is an early warning sign to replace the cable.

## **Part Three: Lubrication**

Bearing and linear bearings systems have advanced over the years but they must be maintained on a regular basis if you expect them to last and perform efficiently. TuffStuff uses only the highest quality bearings and linear motion components that are virtually trouble-free but requires the regular preventive maintenance to insure long-lasting performance.

1. Bronze and nylon bushings, we recommend on a monthly basis to spray a teflon-base lubricant (silicone-free) directly onto the shaft as it passes through these bushings. Spray a small amount onto the shaft and rotate it through its complete movement and wipe off any excess.
2. Weight stack guide rods and bushings, again use teflon spray lubricant and this time spray onto a rag and wipe the guide rods down with this rag on a weekly basis. Do not use WD-40 or other lubricants as they attract dirt and will create a mess between the weight plates and bushings.
3. Sealed bearings pivot points, as the name implies are protected from the outside environment and require no lubrication. During the machine wipe down, wipe the external bearing surfaces with the damp rag and dried to prevent the build up of dust and sweat.
4. Linear bearing systems are precision, high load components that require regular maintenance. Dirt and corrosion are the major culprits in linear bearing failure. The hardened shafts must be wiped down weekly and lubricated with a light layer of teflon grease. We recommend a teflon-base (silicone-free) gel/grease for this purpose. Lack of care and maintenance will result in corrosion of the linear shaft causing the bearings to clogged and jammed.

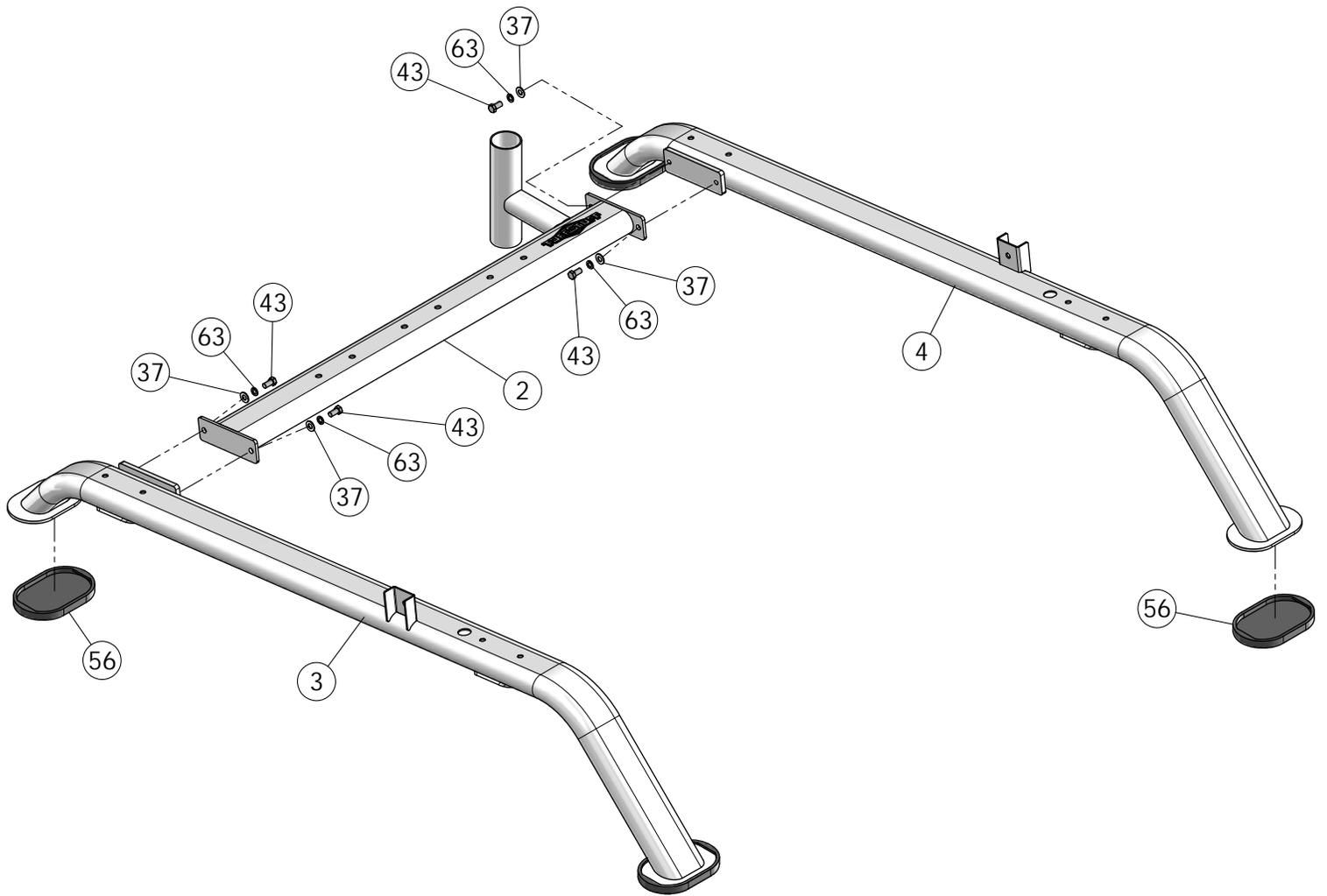
If you religiously perform the maintenance procedures, you will increase the life of the machine and ultimately lower your maintenance costs with fewer replaced components and downtime.

Any doubts, equipment with mechanical problems should be placed "Out-of-Service" until all problems are corrected. If replacement parts are required or maintenance questions, please contact TuffStuff Service Department:

Phone: 909-629-1600 Fax: 909-629-4967 e-mail: [service@tuffstuff.net](mailto:service@tuffstuff.net)

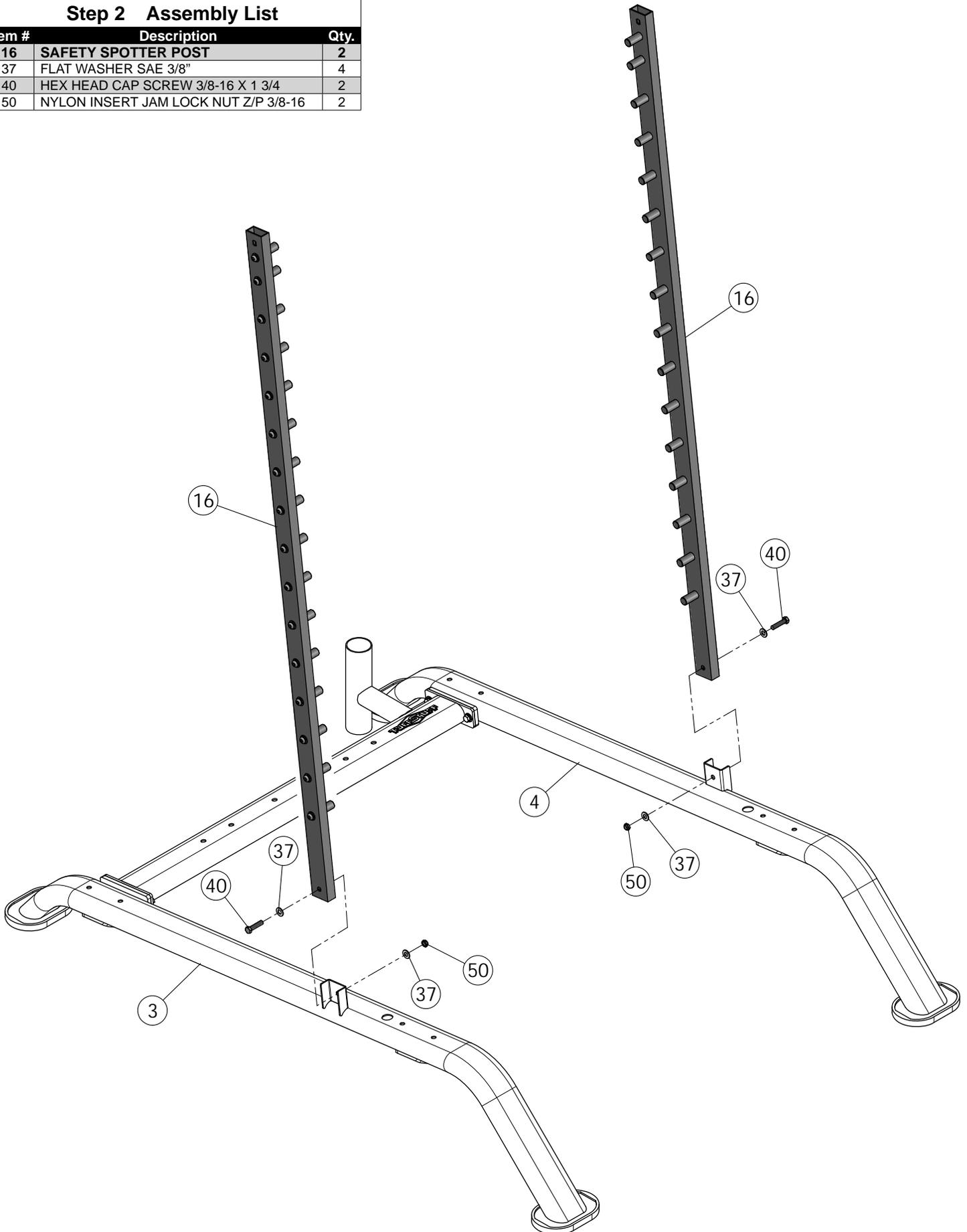
**Step 1 Assembly List**

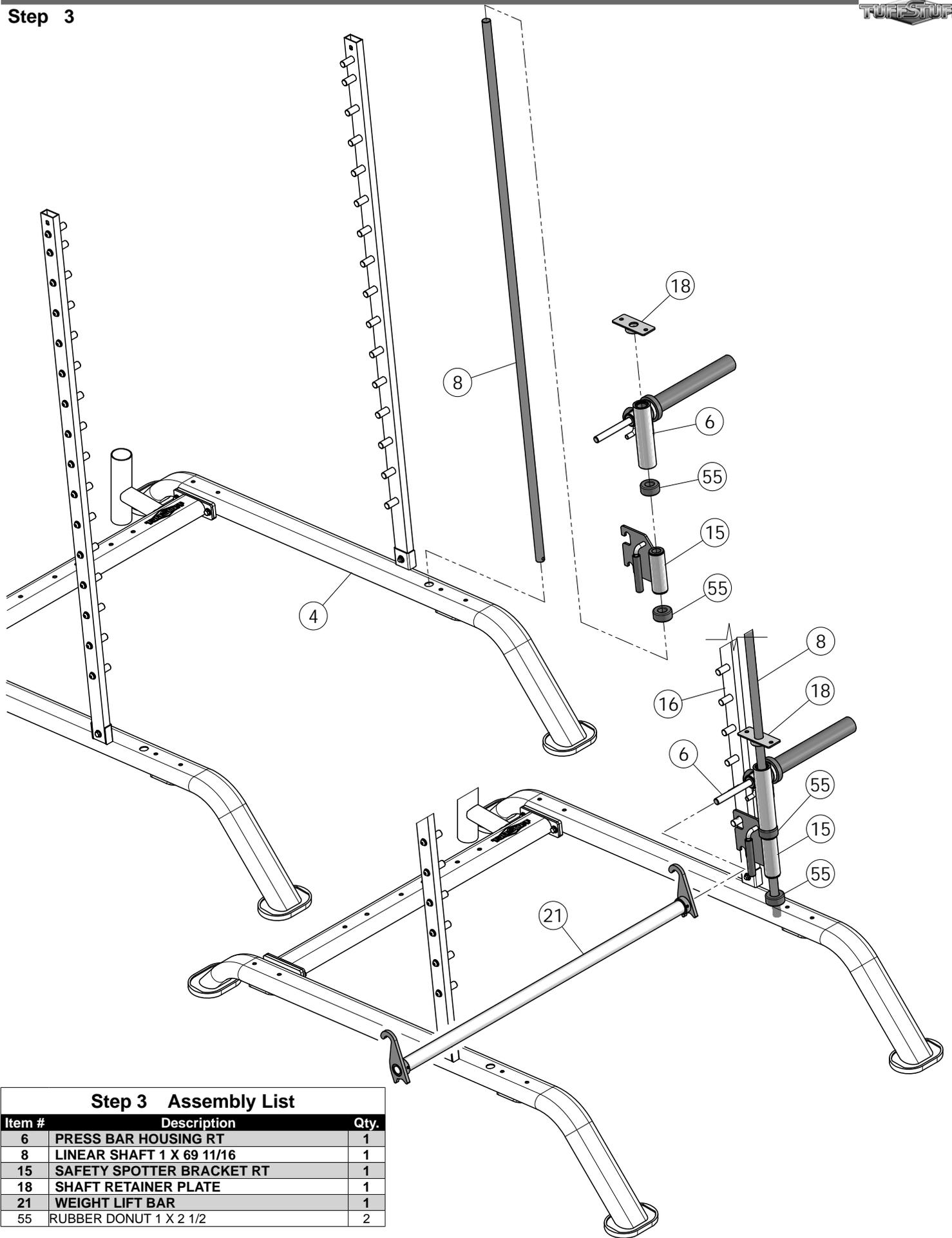
Item #	Description	Qty.
2	BOTTOM CROSS BRACE	1
3	BOTTOM SIDE FRAME LT	1
4	BOTTOM SIDE FRAME RT	1
37	FLAT WASHER SAE 3/8"	4
43	HEX HEAD CAP SCREW 3/8-16 X 3/4	4
56	RUBBER FOOT FOR 6 X 4 1/4 PLATE	4
63	SPLIT LOCK WASHER Z/P 3/8"	4



Step 2 Assembly List

Item #	Description	Qty.
16	SAFETY SPOTTER POST	2
37	FLAT WASHER SAE 3/8"	4
40	HEX HEAD CAP SCREW 3/8-16 X 1 3/4	2
50	NYLON INSERT JAM LOCK NUT Z/P 3/8-16	2

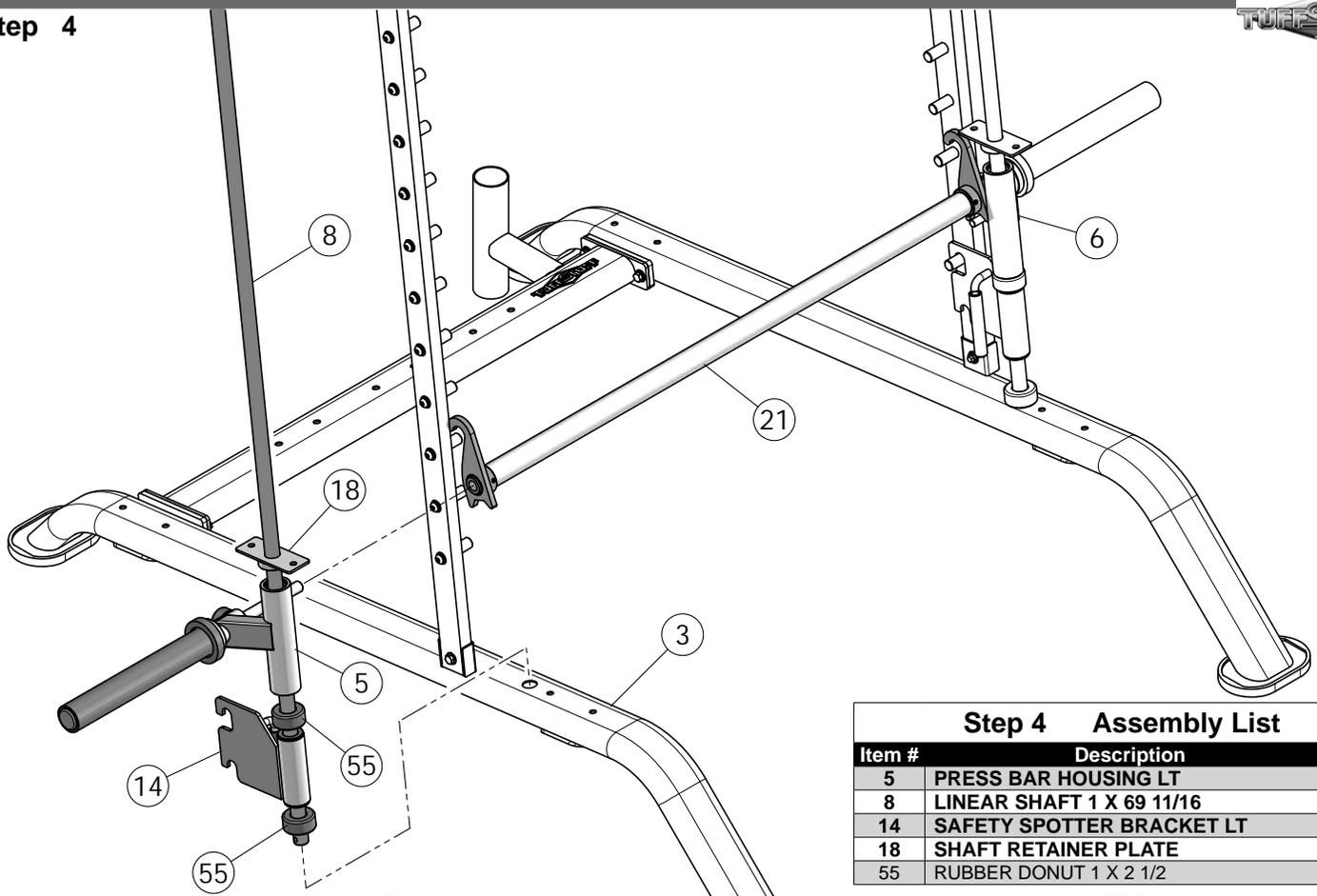




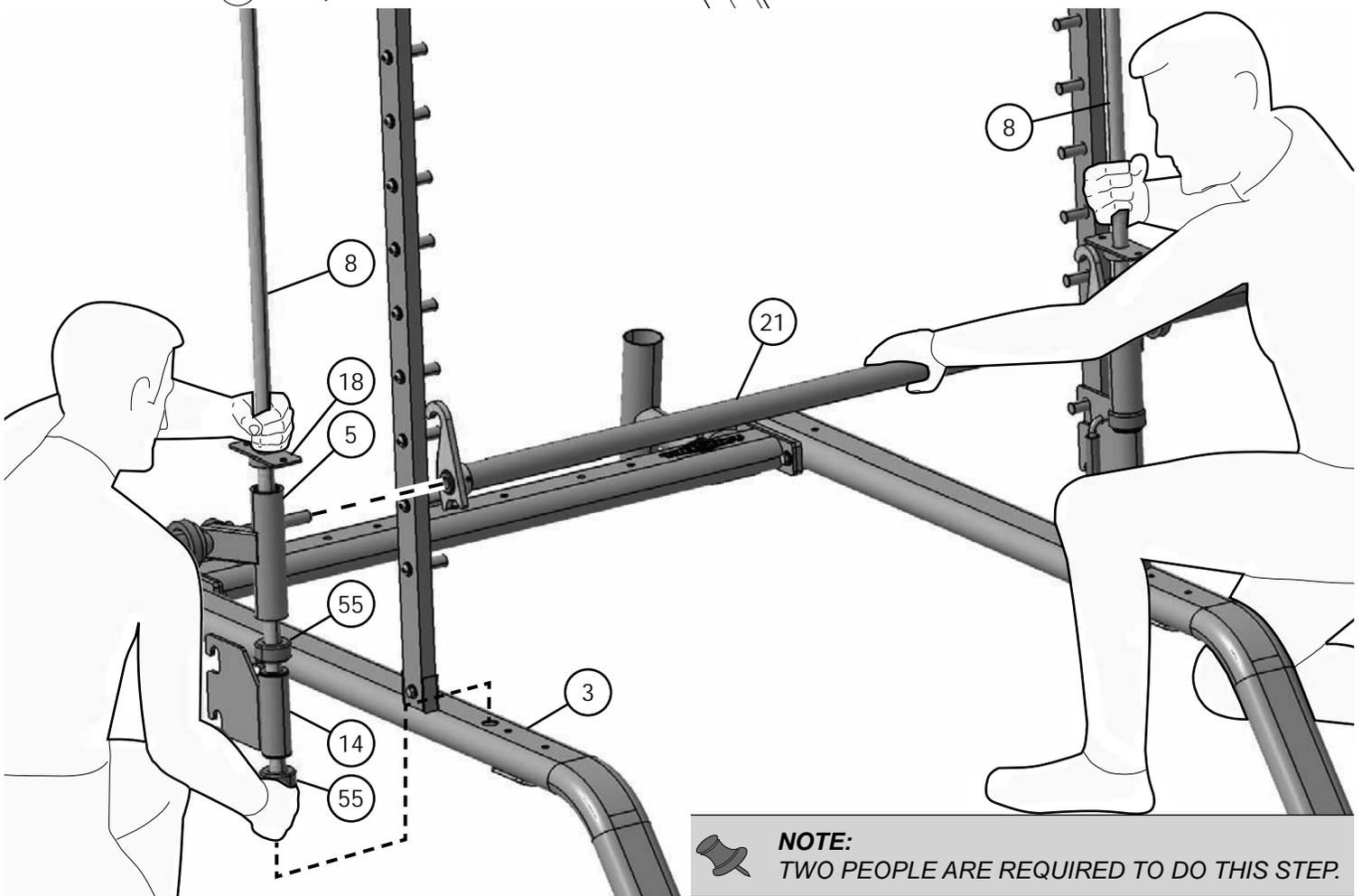
**Step 3 Assembly List**

Item #	Description	Qty.
6	PRESS BAR HOUSING RT	1
8	LINEAR SHAFT 1 X 69 11/16	1
15	SAFETY SPOTTER BRACKET RT	1
18	SHAFT RETAINER PLATE	1
21	WEIGHT LIFT BAR	1
55	RUBBER DONUT 1 X 2 1/2	2

Step 4



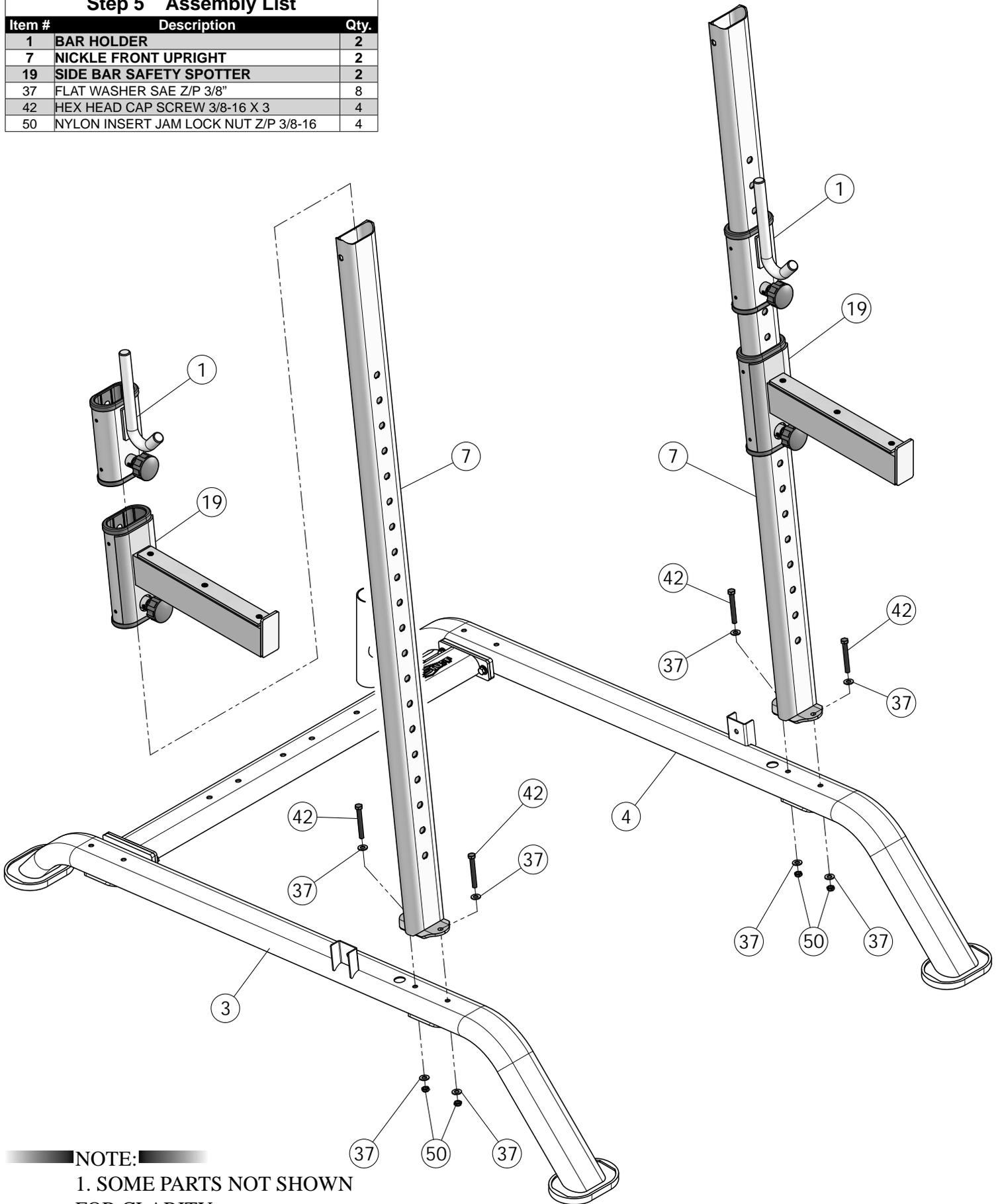
Step 4 Assembly List		
Item #	Description	Qty.
5	PRESS BAR HOUSING LT	1
8	LINEAR SHAFT 1 X 69 11/16	1
14	SAFETY SPOTTER BRACKET LT	1
18	SHAFT RETAINER PLATE	1
55	RUBBER DONUT 1 X 2 1/2	2



**NOTE:**  
TWO PEOPLE ARE REQUIRED TO DO THIS STEP.

Step 5 Assembly List

Item #	Description	Qty.
1	BAR HOLDER	2
7	NICKLE FRONT UPRIGHT	2
19	SIDE BAR SAFETY SPOTTER	2
37	FLAT WASHER SAE Z/P 3/8"	8
42	HEX HEAD CAP SCREW 3/8-16 X 3	4
50	NYLON INSERT JAM LOCK NUT Z/P 3/8-16	4



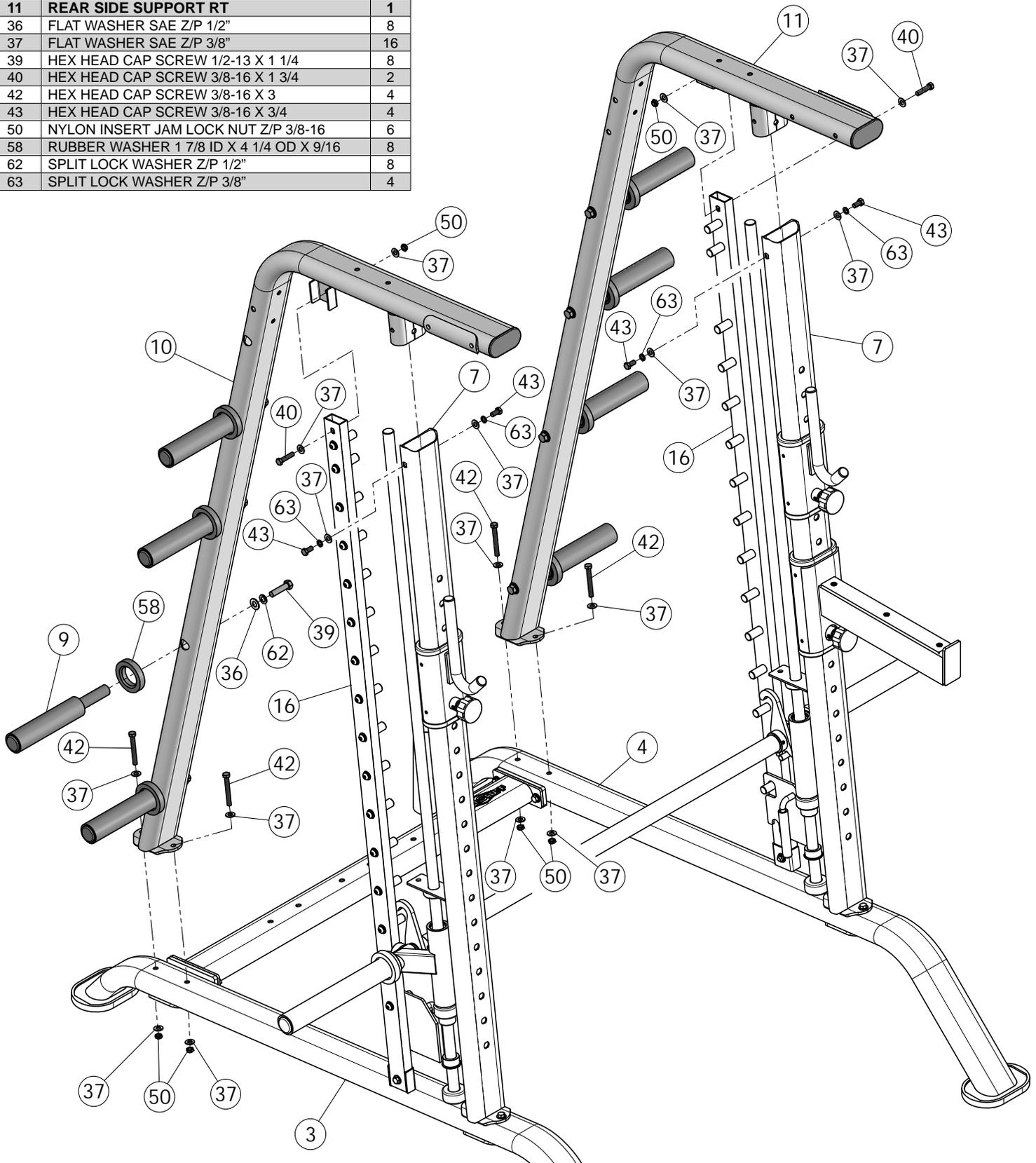
NOTE:  
1. SOME PARTS NOT SHOWN  
FOR CLARITY.

# Step 6



## Step 6 Assembly List

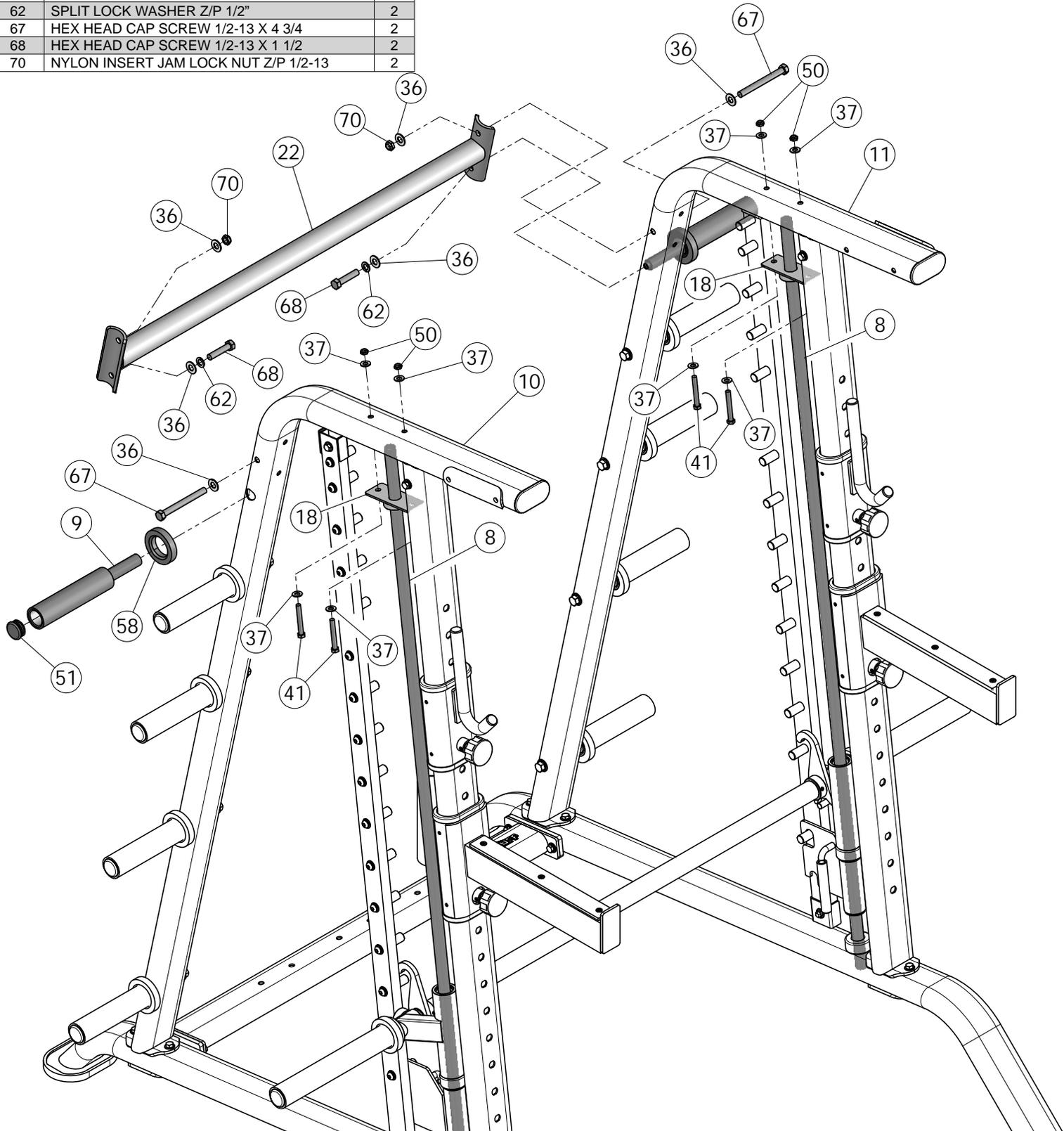
Item #	Description	Qty.
9	OLYMPIC ADAPTER 1 X 8	8
10	REAR SIDE SUPPORT LT	1
11	REAR SIDE SUPPORT RT	1
36	FLAT WASHER SAE Z/P 1/2"	8
37	FLAT WASHER SAE Z/P 3/8"	16
39	HEX HEAD CAP SCREW 1/2-13 X 1 1/4	8
40	HEX HEAD CAP SCREW 3/8-16 X 1 3/4	2
42	HEX HEAD CAP SCREW 3/8-16 X 3	4
43	HEX HEAD CAP SCREW 3/8-16 X 3/4	4
50	NYLON INSERT JAM LOCK NUT Z/P 3/8-16	6
58	RUBBER WASHER 1 7/8 ID X 4 1/4 OD X 9/16	8
62	SPLIT LOCK WASHER Z/P 1/2"	8
63	SPLIT LOCK WASHER Z/P 3/8"	4



**NOTE:**  
TWO PEOPLE ARE REQUIRED TO DO THIS STEP.

**Step 7 Assembly List**

Item #	Description	Qty.
9	OLYMPIC ADAPTER 1 X 8	2
18	SHAFT RETAINER PLATE	2
22	TOP STABILIZER	1
36	FLAT WASHER SAE Z/P 1/2"	6
37	FLAT WASHER SAE Z/P 3/8"	8
41	HEX HEAD CAP SCREW 3/8-16 X 2 3/4	4
50	NYLON INSERT JAM LOCK NUT Z/P 3/8-16	4
58	RUBBER WASHER 1 7/8 ID X 4 1/4 OD X 9/16	2
62	SPLIT LOCK WASHER Z/P 1/2"	2
67	HEX HEAD CAP SCREW 1/2-13 X 4 3/4	2
68	HEX HEAD CAP SCREW 1/2-13 X 1 1/2	2
70	NYLON INSERT JAM LOCK NUT Z/P 1/2-13	2

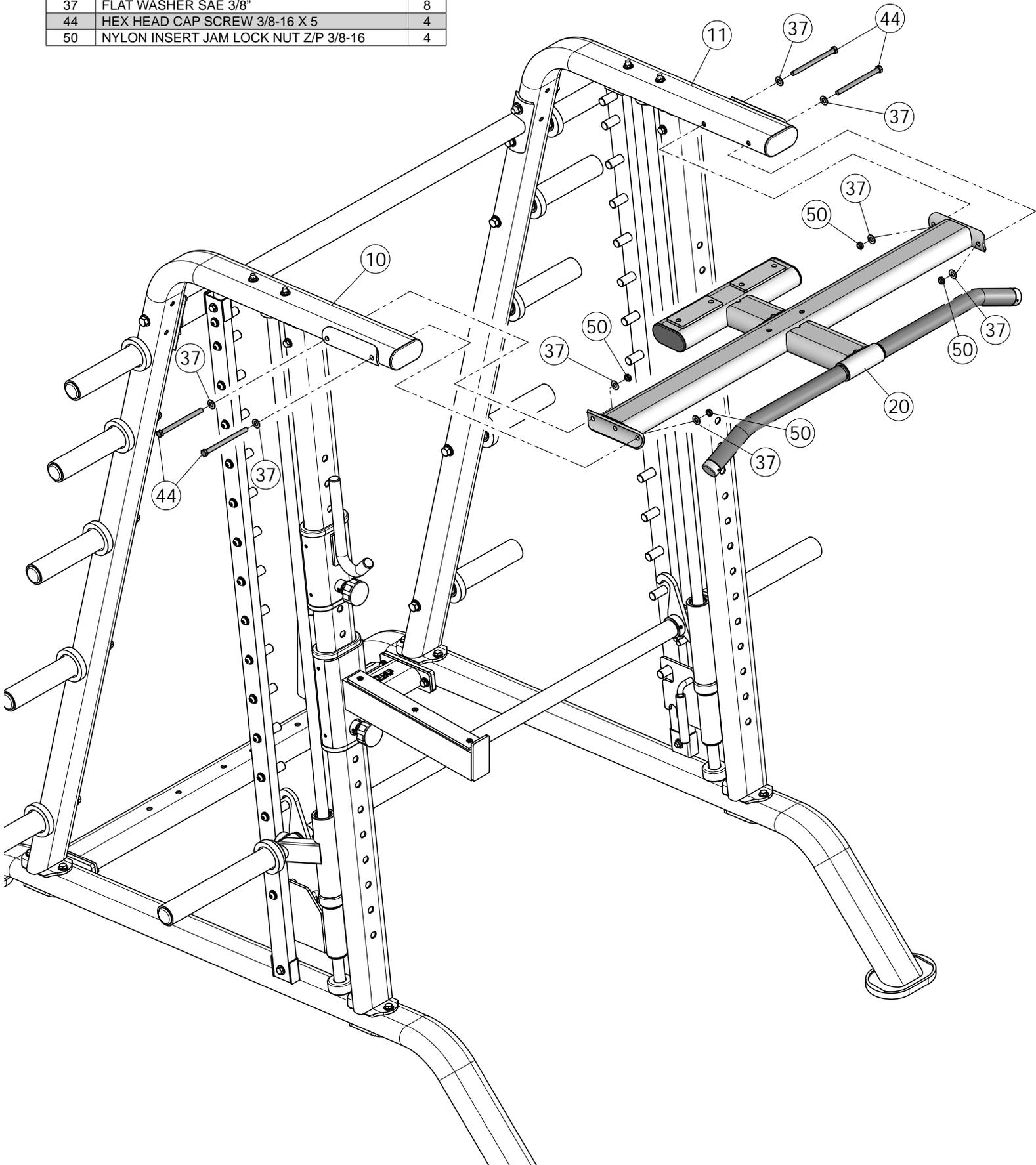


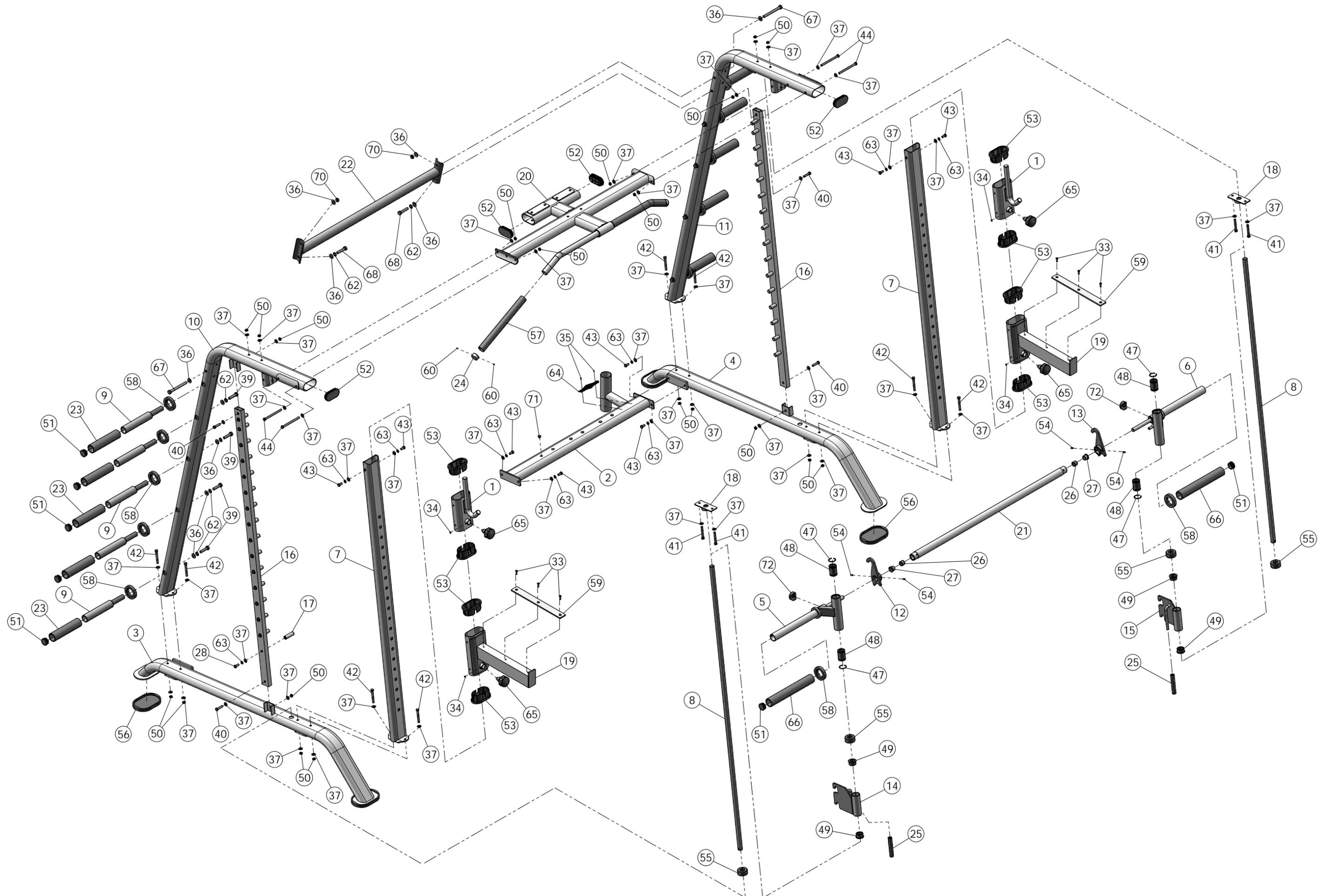
# Step 8



## Step 8 Assembly List

Item #	Description	Qty.
20	TOP CROSS BRACE	1
37	FLAT WASHER SAE 3/8"	8
44	HEX HEAD CAP SCREW 3/8-16 X 5	4
50	NYLON INSERT JAM LOCK NUT Z/P 3/8-16	4





**COLOR CHART****BOLD FONT = SUB-ASSEMBLY PARTS**

BLACK= HARDWARE

## RSM-600 Parts List

REV2

ITEM	DESCRIPTION	REV	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	BAR HOLDER	0	UP5180	2	36	FLAT WASHER SAE Z/P 1/2"	BNH2031	14
2	BOTTOM CROSS BRACE	0	UP5181	1	37	FLAT WASHER SAE Z/P 3/8"	BNH2030	80
3	BOTTOM SIDE FRAME LT	0	UP7043	1	39	HEX HEAD CAP SCREW GR-5 Z/P 1/2-13 X 1 1/4	BNH2167	8
4	BOTTOM SIDE FRAME RT	0	UP7044	1	40	HEX HEAD CAP SCREW GR-5 Z/P 3/8-16 X 1 3/4	BNH2040	4
5	PRESS BAR HOUSING LT	0	UP7045	1	41	HEX HEAD CAP SCREW GR-5 Z/P 3/8-16 X 2 3/4	BNH2045	4
6	PRESS BAR HOUSING RT	0	UP7046	1	42	HEX HEAD CAP SCREW GR-5 Z/P 3/8-16 X 3	BNH2046	8
7	NICKEL FRONT UPRIGHT	0	UP5270	2	43	HEX HEAD CAP SCREW GR-5 Z/P 3/8-16 X 3/4	BNH2036	8
8	LINEAR SHAFT 1 X 69 11/16	0	UP5187	2	44	HEX HEAD CAP SCREW GR-5 Z/P 3/8-16 X 5	BNH2051	4
9	OLYMPIC ADAPTER 1 X 8	0	UP5188	10	45	HEX KEY ALLOY 3/32"	BNH0372	1
10	REAR SIDE SUPPORT LT	0	UP7047	1	46	HEX KEY ALLOY 7/32"	BNH0575	1
11	REAR SIDE SUPPORT RT	0	UP7048	1	47	INTERNAL RETAINING RING 1 9/16"	BNH0095	4
12	SAFETY HOOK LT	0	UP7049	1	48	LINEAR BEARING	BNH0770	4
13	SAFETY HOOK RT	0	UP7050	1	49	NYLON BUSHING 1 X 1 1/2 X 7/8 X 1 3/4 X 1/8	BNH0531	4
14	SAFETY SPOTTER BRACKET LT	0	UP7051	1	50	NYLON INSERT JAM LOCK NUT Z/P 3/8-16	BNH2026	20
15	SAFETY SPOTTER BRACKET RT	0	UP7052	1	51	PLASTIC INSERT CAP 1 7/8" RD.	BNH0003	12
16	SAFETY SPOTTER POST	0	UP7053	2	52	PLASTIC INSERT CAP ELLIPTICAL 2 X 4	BNH1794	4
17	SAFETY SPOTTER PIN	0	UP5196	32	53	PLASTIC INSERT ELLIPTICAL GUIDE (2 3/8 X 4 3/4)	BNH2062	8
18	SHAFT RETAINER PLATE	0	UP5197	2	54	ROLL PIN Z/P 1/4 X 9/16	BNH2090	4
19	SIDE BAR SAFETY SPOTTER	0	UP5198	2	55	RUBBER DONUT 1 X 2 1/2	BNH0062	4
20	TOP CROSS BRACE	0	UP5199	1	56	RUBBER FOOT FOR 6 X 4 1/4 PLATE	BNH1647	4
21	WEIGHT LIFT BAR	0	UP7054	1	57	RUBBER GRIP 1.1875 ID X .125 X 17	BNH0953	2
22	TOP STABILIZER	0	UP5256	1	58	RUBBER WASHER 1 7/8 ID X 4 1/4 OD X 9/16 TK	BNH0933	12
23	ABS SLEEVE 1 1/2 X 8 1/8		BNH1527	10	59	SAFETY SPOTTER PLASTIC STRIP	BNH2078	2
24	ALUMINUM CAP 1.270" RD		BNH0538	2	60	SOCKET SET SCREW Z/P 10-32 X 1/8	BNH2088	4
25	BLACK RUBBER GRIP 1/2 X 4 7/8		BNH1818	2	62	SPLIT LOCK WASHER Z/P 1/2"	BNH0572	10
26	BRONZE BUSHING Ø25 X Ø19 X 20 mm		BNH1926	2	63	SPLIT LOCK WASHER Z/P 3/8"	BNH2032	40
27	BRONZE BUSHING Ø31 X Ø25.4 X Ø19 X 20 mm		BNH1925	2	64	TUFFSTUFF LOGO ALUMINUM SMALL	BNH1323	1
28	BUTTON HEAD SOCKET CAP SCREW B/O 3/8-16 X 1		BNH0115	32	65	TURN/PULL PIN W/KNOB AND LOCK	BNH0989	4
29	DECAL-DANGER ENGAGE SAFETY SPOTTER...		BNH1848	2	66	ABS SLEEVE 1 1/2 X 13	BNH2260	2
30	DECAL-IMPORTANT FOR BEST PERFORMANCE...		BNH1894	2	67	HEX HEAD CAP SCREW GR-5 Z/P 1/2-13 X 4 3/4	BNH2168	2
31	DECAL-CAUTION WEIGHT TRAINING SAFETY...		BNH0126	1	68	HEX HEAD CAP SCREW GR-5 Z/P 1/2-13 X 1 1/2	BNH2171	2
32	DECAL-WARNING ATTENTION USERS! MOVING...		BNH1895	2	69	HEX KEY ALLOY 5/32"	BNH0373	1
33	FLAT HEAD SOCKET CAP SCREW Z/P M7X1.0		BNH2079	6	70	NYLON INSERT JAM LOCK NUT Z/P 1/2-13	BNH2027	2
34	FLAT PHILLIPS MACHINE SCREW 8-32 X 1/4		BNH0408	4	71	NYLON SNAP-IN FINISHING PLUG 3/8"	BNH0720	20
35	FLAT PHILLIPS SCREW ZINC # 2 X 1/2		BNH1480	2	72	URETHANE BUMPER 962	BNH0244	2

**DO NOT DISCARD THIS MANUAL**



## HOME LIFETIME WARRANTY

TuffStuff products are warranted to the retail purchaser to be free from defects in materials and workmanship. TuffStuff exclusive Home Lifetime Warranty coverage extends for the life of the product while owned by the original retail purchaser, and used only in a home or residential setting unless otherwise noted in the owner's manual.

This warranty does not cover:

1. TuffStuff products sold for and used in a commercial or institutional setting.
2. Any damage, failure or loss caused by accident, misuse, neglect, abuse, improper assembly, improper maintenance, or failure to follow instructions or warnings in the owner's manual and warning labels posted on the machine.
3. Use of products in a manner for which they were not designed.
4. Original product that is altered, or the use of replacement parts and components of another manufacturer other than TuffStuff.

Limitations:

The foregoing shall constitute the sole remedy of the purchaser and the sole liability of TuffStuff with regard to warranty, whether express or implied by operation of law or otherwise, including but not limited to any implied warranties of merchantability or fitness. TuffStuff shall in no event be liable for incidental or consequential losses, damages or expenses in connection with exercise products. TuffStuff's liability hereunder is expressly limited to the repairs or replacements of warranted defective parts.

Procedures:

Warranty service will be performed at TuffStuff's facility in Pomona, California. TuffStuff will have the option of either repair or replacement at no charge for any defective product. Purchaser is responsible for installation of repaired or replaced parts and all transportation and insurance costs on returned or replaced equipment to and from TuffStuff's facility in Pomona.

This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state. Effective July 1, 2004.

This warranty is the final, complete and exclusive agreement of the parties with respect to the quality or performance of the equipment and no action for breach of this written warranty or any implied warranty shall be commenced more than one (1) year after the accrual of the cause of action. No modification of this warranty or waiver of its terms shall be binding on either party unless approved in writing by an authorized representative of the party. Contact TuffStuff at 1325 E. Franklin Avenue, Pomona, California 91766, before returning any defective equipment.

**Note:** Retain your sales receipt and be sure to mail in the warranty registration card to insure that a permanent record of your purchase is on file with the factory and to avoid unnecessary delays in warranty service.

### **TuffStuff Fitness Equipment, Inc.**

1325 E. Franklin Avenue

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