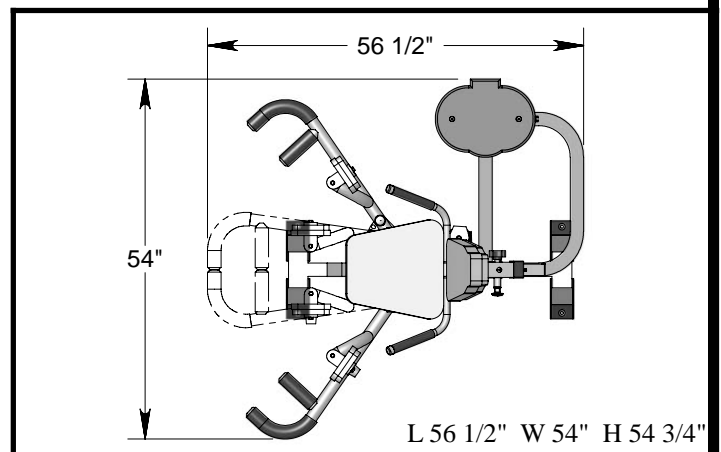


TUFFSTUFF

AMERICA'S PREMIER EXERCISE EQUIPMENT



SP-4415
INNER/OUTER THIGH
ASSEMBLY MANUAL
REV. 0



Simplex PLATINUM

Introduction

About the Inner/Outer Thigh SP-4415

Congratulations on your new purchase of the **Inner/Outer Thigh**. We hope you are completely satisfied with this product and wish you many years of enjoyment.

Tuff Stuff 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 TuffStuff 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 - 150 lbs.
2. Total Machine Weight - 487 lbs.
3. Footprint (LWH) - See Front Cover.

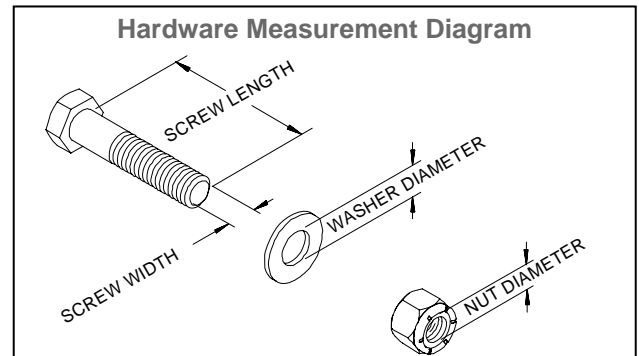
Note: Due to continuing product improvements, specifications and designs are subject to change without notice.

Prior to the Assembly of the Inner/Outer Thigh

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

Tool Requirements

1. One 7/8" combination wrench
2. One 3/4" combination wrench
3. One 9/16" combination wrench
4. One 7/16" combination wrench
5. One ratchet
6. One 3/4" socket
7. One 9/16" socket
8. One 7/16" socket
9. External Retaining-ring pliers
10. One rubber mallet
11. Windex or household glass cleaner
12. Measuring tape
13. Utility knife



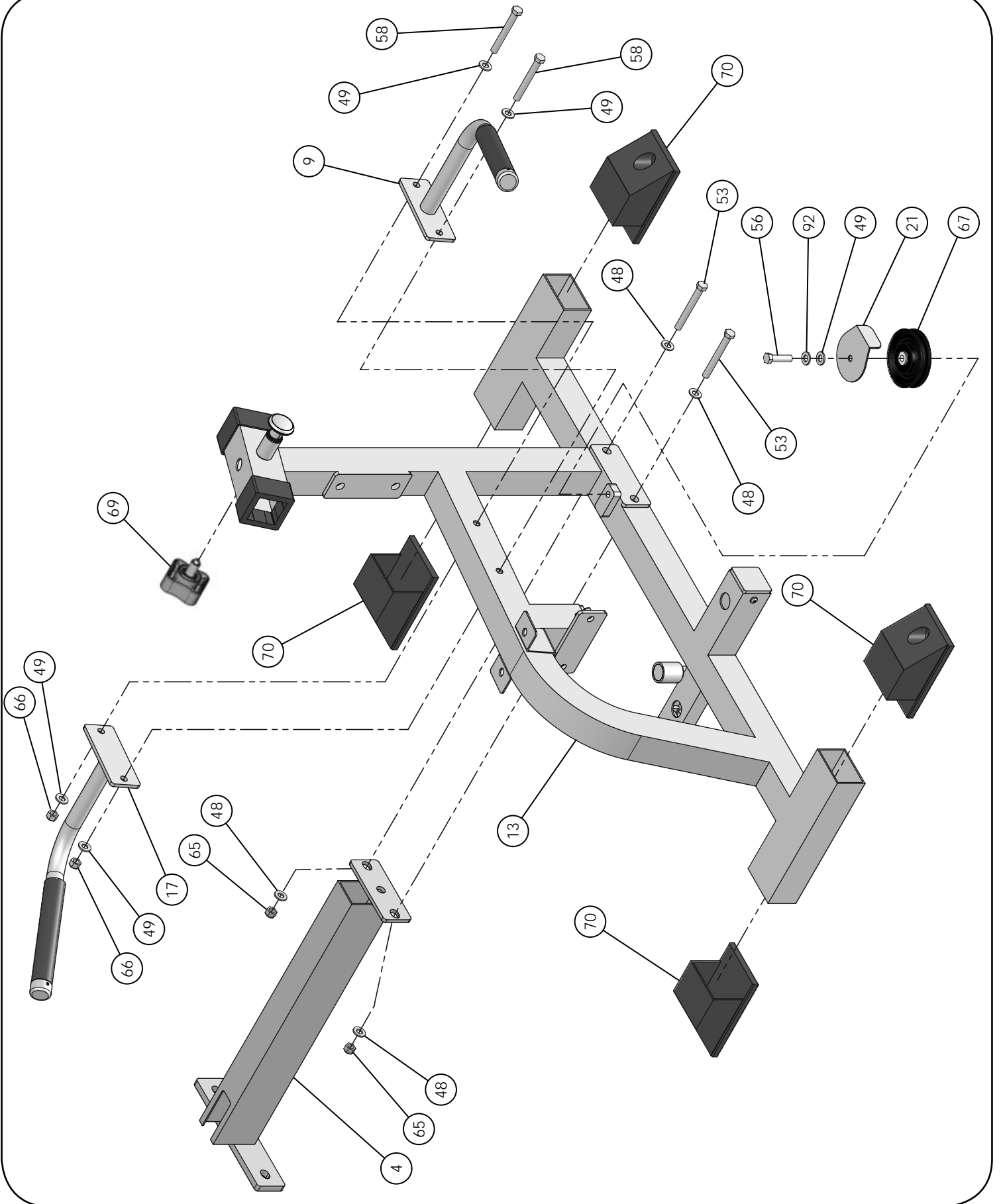
Safety Precautions

Safety First

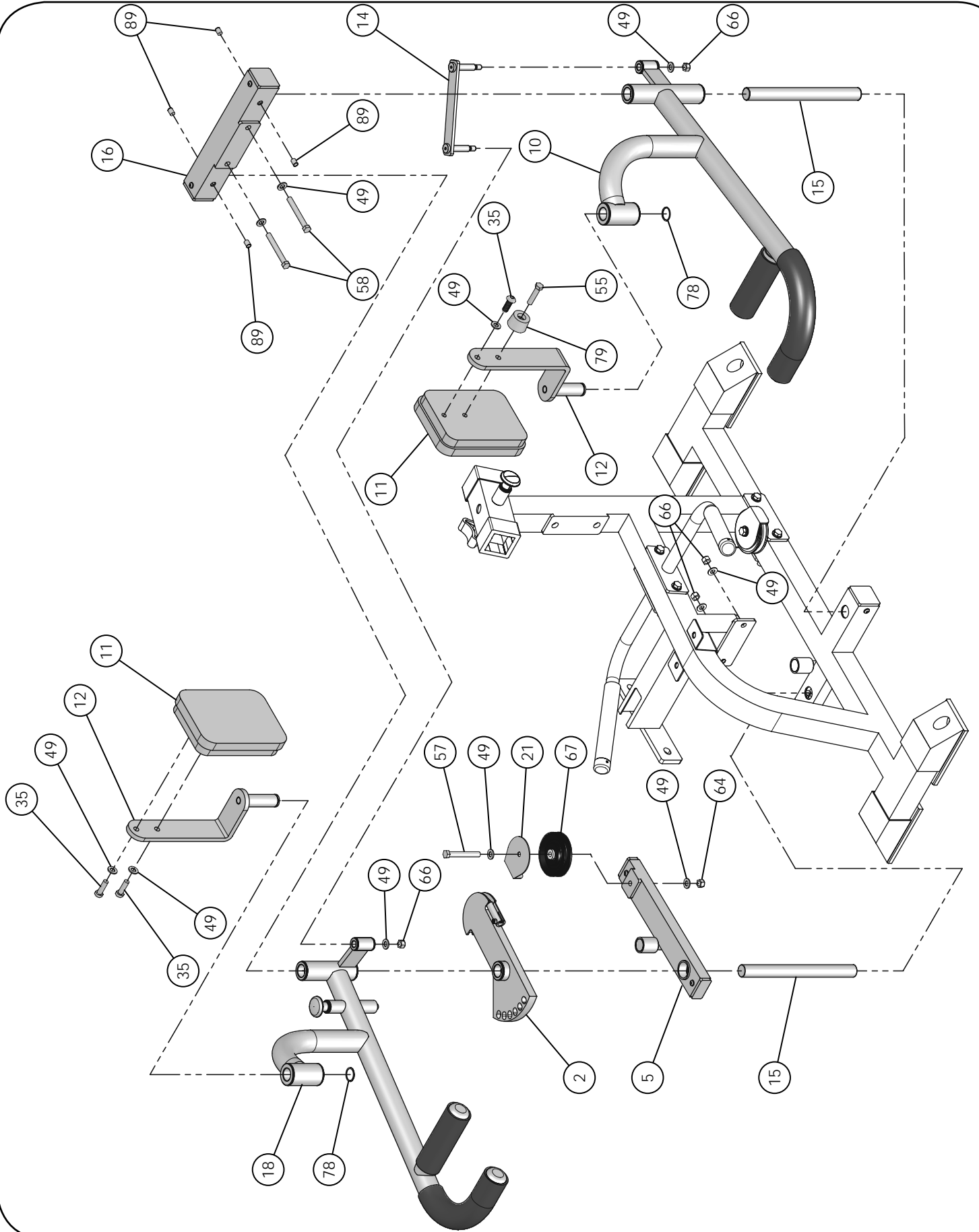
Regardless of how enthusiastic you may be about getting on your equipment and exercising, take the time to ensure that your safety is not jeopardized. A moment's lack of attention can result in an accident, as can failure to observe certain simple safety precautions.

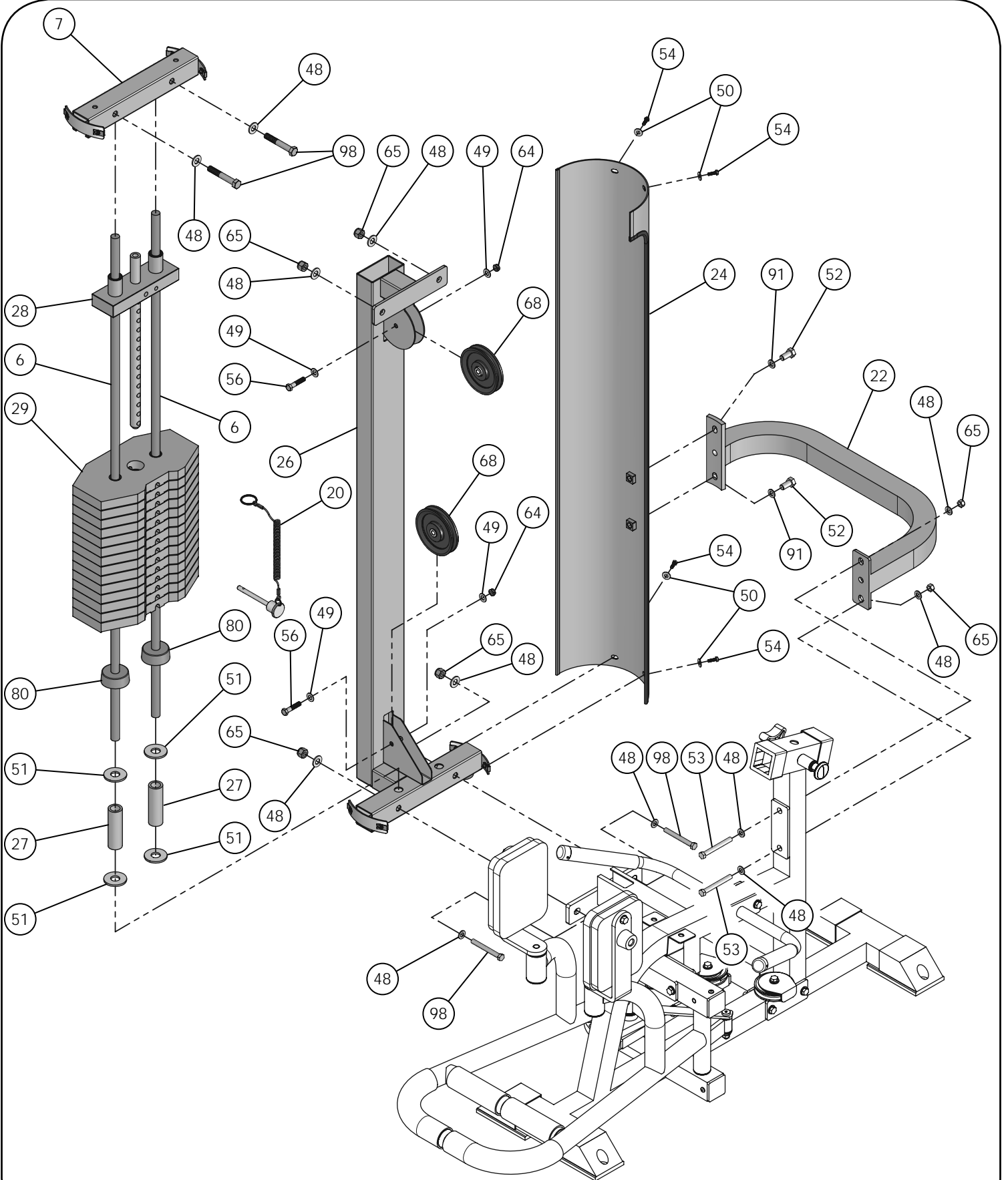
1. Read, study and understand the Assembly Instructions and all the warning labels on this product. Furthermore, it is recommended to familiarize yourself and others with the proper operation and workout recommendations for this Tuff Stuff product prior to use.
2. It is imperative that you retain this Assembly Instructions and be sure all warning labels are legible and intact. Replacement Assembly Instructions and labels are available from your local Tuff Stuff retailer.
3. Consult with your physician before beginning any exercise program.

4. Frayed or worn cables can be dangerous and may cause injury. Periodically check the cable for any indication of wear.
5. Use proper discretion when children are present.
6. Keep hands, limbs, loose clothing and long hair well out of the way of moving parts.
7. Do not attempt to lift more weight than you can control safely.
8. Inspect the Unit for any sign of wear on parts, hardware becoming loose or cracks on welds. If a problem is found **do not use or allow the machine to be used** until the defective part is repaired or replaced.



Step 2





Step 4 Cable Mapping Diagram

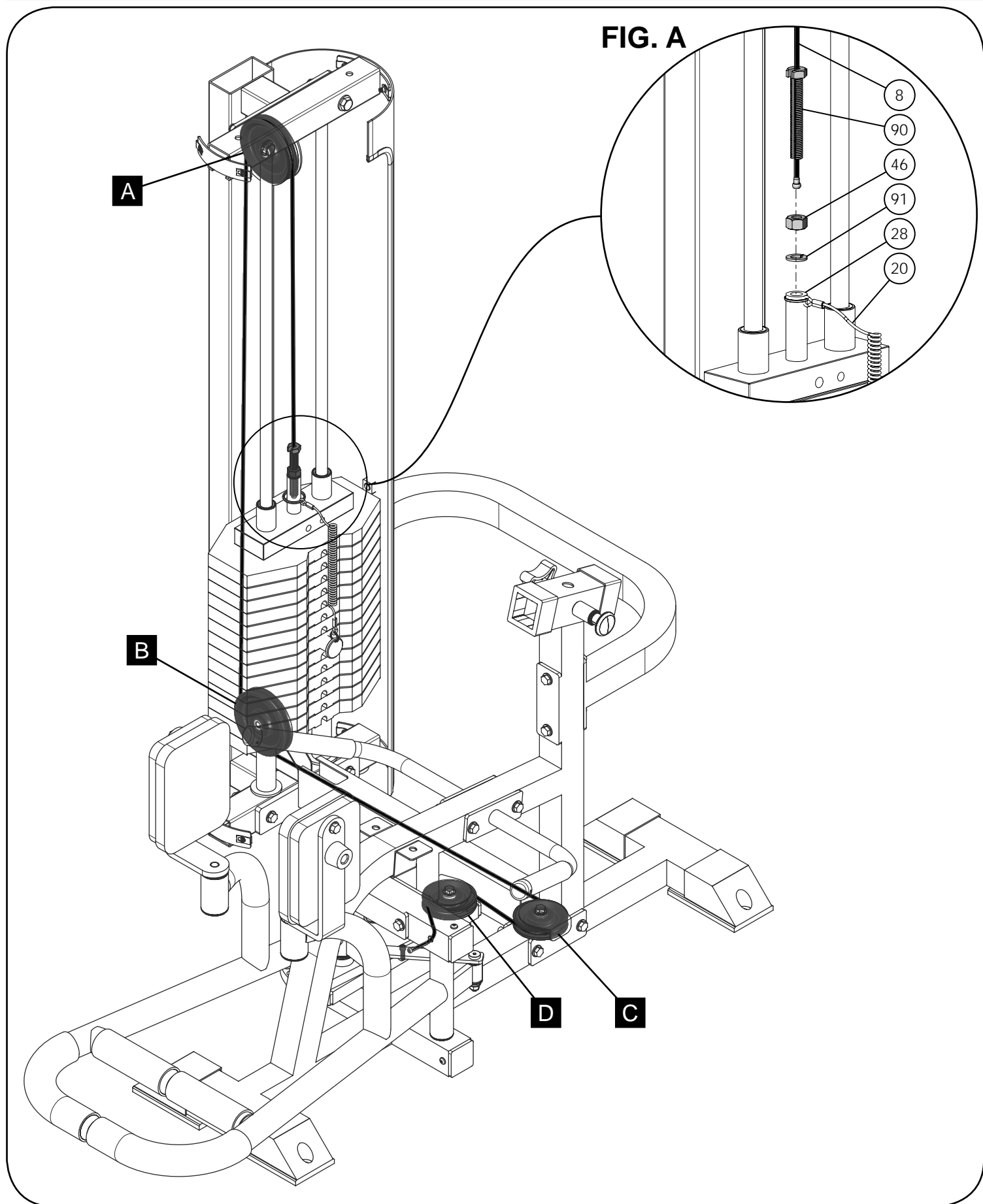
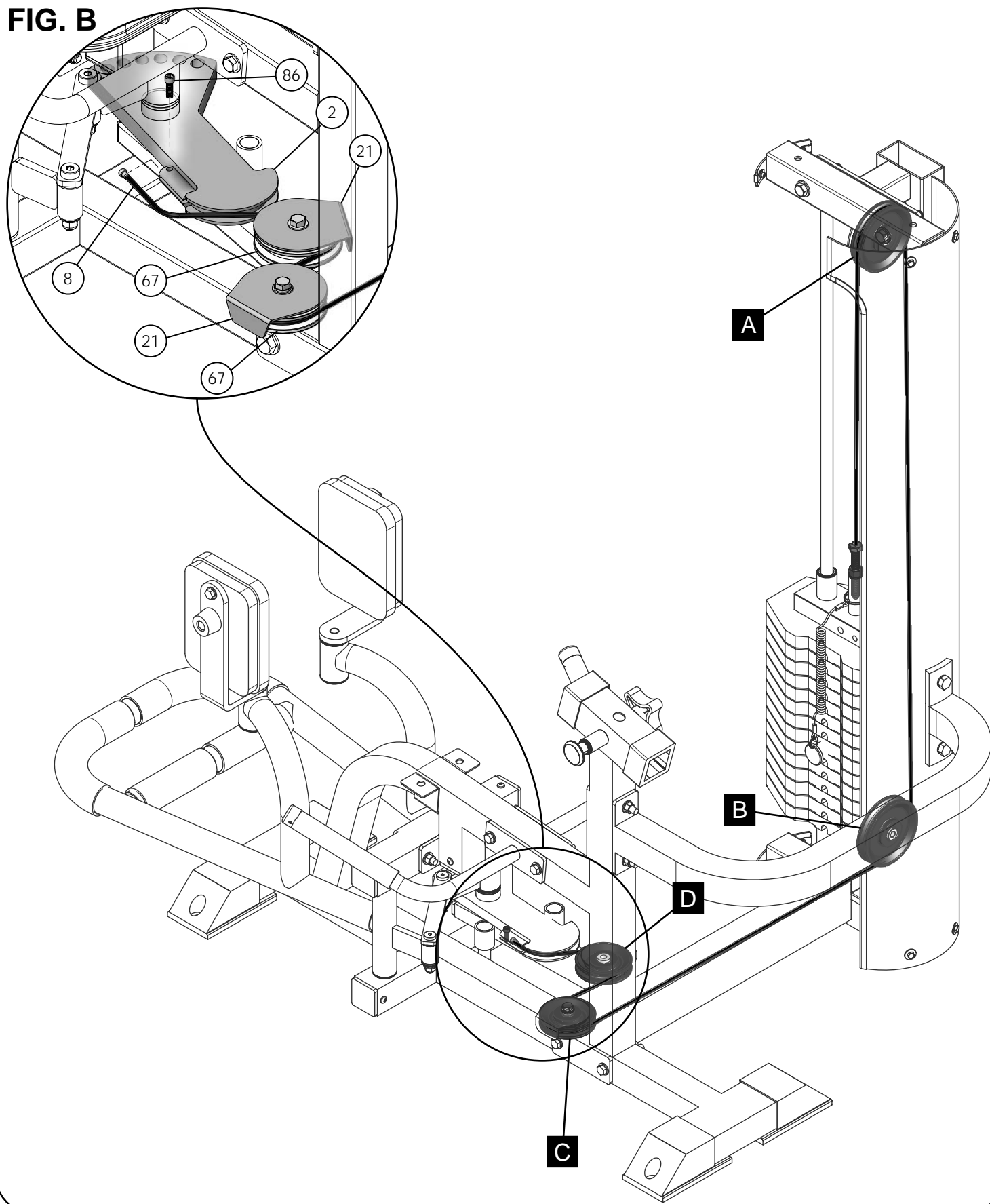
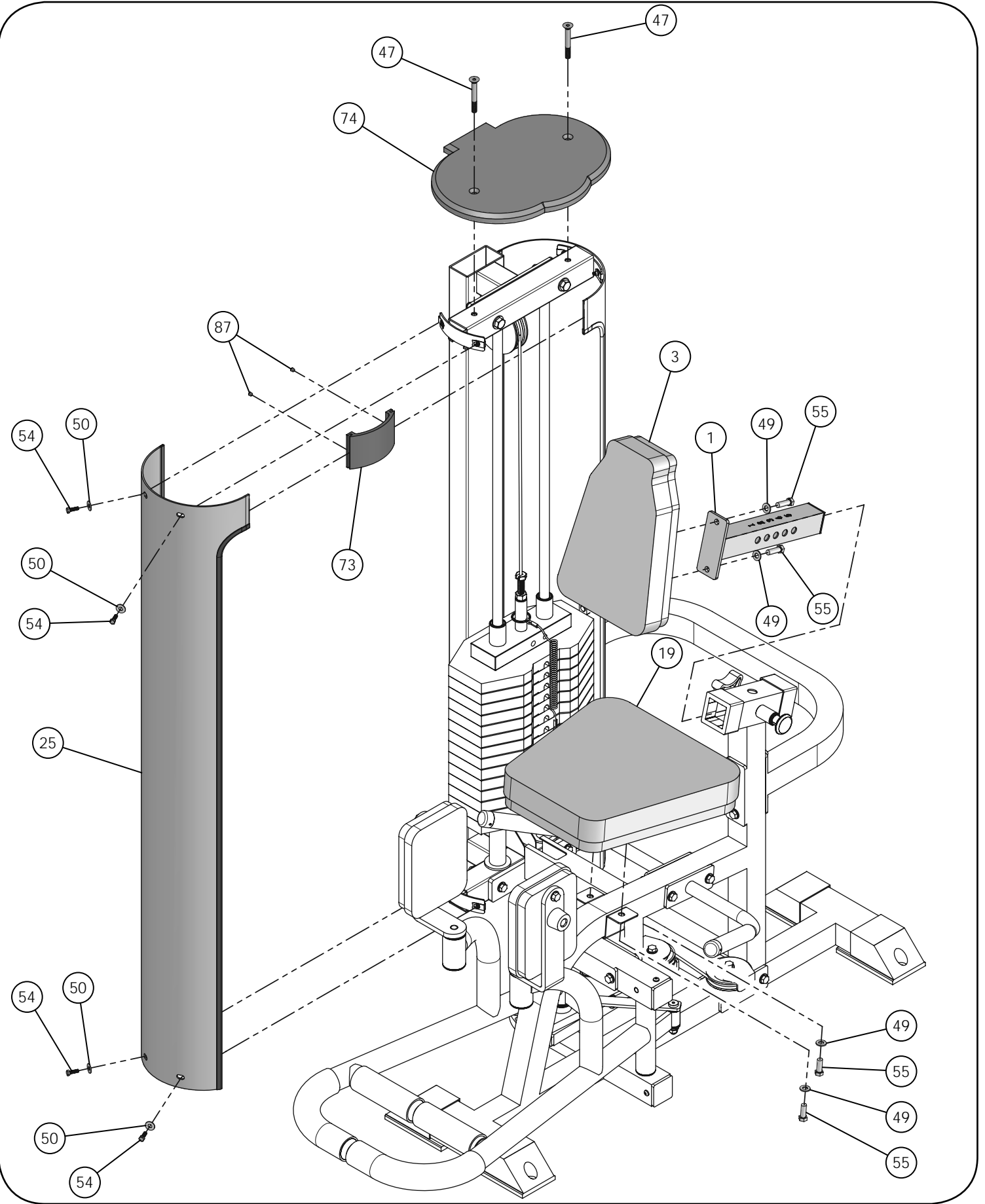


FIG. B



Step 6



SP-4415

Parts List

CHART

BOLD FONT = SUB-ASSEMBLY PARTS

REGULAR FONT = HARDWARE

ITEM #	DESCRIPTION	PART #	QTY.	ITEM #	DESCRIPTION	PART #	QTY.
1	ADJUSTABLE BACK PAD TUBE	UP5132	1	51	FLAT WASHER USS B/O 3/4 X 2"	BNH0878	4
2	ADJUSTABLE CAM	UP0846	1	52	HEX HEAD CAP SCREW GR-5 B/O 1/2 13 X 1	BNH0259	2
3	BACK PAD	UP5134	1	53	HEX HEAD CAP SCREW GR-5 B/O 1/2-13 X 3 5/8	BNH0263	4
4	BOTTOM CROSS BRACE	UP0849	1	54	HEX HEAD CAP SCREW GR-5 B/O 1/4-20 X 3/4	BNH0890	8
5	CAM SUPPORT TUBE	UP5138	1	55	HEX HEAD CAP SCREW GR-5 B/O 3/8-16 X 1 1/2	BNH0303	5
6	GUIDE ROD 3/4 X 53 3/4	UP0783	2	56	HEX HEAD CAP SCREW GR-5 B/O 3/8-16 X 1 3/4	BNH0274	3
7	GUIDE ROD RETAINER	UP5068	1	57	HEX HEAD CAP SCREW GR-5 B/O 3/8-16 X 3	BNH0282	1
8	INNER/OUTER CABLE	UP5139	1	58	HEX HEAD CAP SCREW GR-5 B/O 3/8-16 X 3 1/4	BNH0312	4
9	LEFT HANDLE	UP2178	1	59	HEX KEY 1/8"	BNH0767	1
10	LEFT LEG ARM	UP0352	1	60	HEX KEY 3/16"	BNH0371	1
11	LEG PAD	UP5136	2	61	HEX KEY 3/32"	BNH0372	1
12	LEG PAD PIVOT BRACKET	UP5135	2	62	HEX KEY 5/32"	BNH0373	1
13	MAIN FRAME	UP5131	1	63	HEX KEY 7/32"	BNH0575	1
14	PIVOT ACTUATOR PLATE	UP0357	1	64	NYLON INSERT JAM LOCK NUT B/O 3/8-16	BNH0365	3
15	PIVOT AXLE	UP0363	2	65	NYLON INSERT LOCK NUT B/O 1/2-13	BNH0212	8
16	PIVOT AXLE SUPPORT TUBE	UP5137	1	66	NYLON INSERT LOCK NUT B/O 3/8-16	BNH0214	6
17	RIGHT HANDLE	UP2179	1	67	NYLON PULLEY 3/8 X 1 X 3 1/2 BLACK	BNH0553	2
18	RIGHT LEG ARM	UP0852	1	68	NYLON PULLEY 3/8 X 1 X 4 1/2 BLACK	BNH0506	2
19	SEAT PAD	UP5133	1	69	PLASTIC BLACK KNOB W/NYLON STUD 1/2-13	BNH0796	1
20	SELECTOR PIN W/COIL 3/8 X 4	UP3035	1	70	PLASTIC END CAP 2 X 3	BNH0606	4
21	SMALL COVER PLATE	UP1000	2	71	PLASTIC INSERT CAP 1 3/4" RD.	BNH0011	4
22	TOP CROSS BRACE	UP0891	1	72	PLASTIC INSERT CAP 1 3/4" SQ.	BNH0053	1
24	WEIGHT SHROUD W/HOLES 54"	UP5030	1	73	PLASTIC SHROUD GAP COVER 3"	BNH1829	1
25	WEIGHT SHROUD 54"	UP5029	1	74	PLASTIC SHROUD LID 5/8 X 14 1/8 X 10	BNH0185	1
26	WEIGHT STACK FRAME 54"	UP5067	1	75	PLASTIC TUBE GUIDE W/LIP-TEETH 2 1/4" SQ.	BNH0059	2
27	WEIGHT STACK SPACER 4"	UP0786	2	76	PULL PIN 1/2 X 2 7/8 LIGHT SPRING	BNH0641	1
28	10 LB TOP PLATE W/ADJ. SLTR BAR 14 WTS	BNH1097	1	77	PULL PIN 1/2 X 5 5/8 LIGHT SPRING	BNH0701	1
29	15 LB WEIGHT PLATE	BNH0926	14	78	RETAINING SNAP RING EXT. PLAIN .925 X 1	BNH0419	2
30	ALUMINUM CAP 1" RD. (CAP-100)	BNH0537	2	79	RUBBER BUMPER 3/8 X 1 1/2	BNH0514	1
31	BRONZE BUSHING 0.516 X 0.763 X 0.503 X 1	BNH1827	4	80	RUBBER DONUT 3/4 X 2 1/2	BNH0068	2
32	BRONZE BUSHING 0.983 X 1 1/2 X 0.863 X 1 3/4	BNH1821	4	81	RUBBER GRIP 1 ID X .125 X 7 1/4	BNH0963	2
33	BRONZE BUSHING 1 X 1 1/4 X 3/4 X 1 1/2 X 1/8	BNH0527	8	82	RUBBER GROMMET 3/4" ID (2867-012)	BNH0401	2
34	BUTTON HEAD SOC CAP SCREW 1/4-20 X 3/8	BNH1346	14	83	RUBBER STOPPER 7/8 ID X 1 1/8 OD X 1 3/8	BNH1838	2
35	BUTTON HEAD SOC CAP SCREW 3/8-16 X 1 1/4	BNH0896	3	84	RUBBER TUBE 1.625 X 1.875 X 11 3/4	BNH0980	2
36	CHROME INSERT CAP 1 X 2	BNH1500	3	85	RUBBER TUBE 1.625 X 1.875 X 6	BNH0978	2
37	CHROME INSERT CAP 2 SQ	BNH1502	3	86	SOCKET HEAD CAP SCREW B/O 1/4-20 X 3/4	BNH0452	1
38	DECAL-ADJUST CABLE HERE	BNH0789	1	87	SOCKET SET SCREW 1/4-20 X 1/4	BNH0790	2
39	DECAL-CAUTION 1 3/4 X 5 1/2	BNH0126	1	88	SOCKET SET SCREW 10-32 X 1/8	BNH0473	4
40	DECAL-DANGER TIGHTEN..., 3/4 X 1 1/2	BNH0142	2	89	SOCKET SET SCREW 3/8-16 X 1/2	BNH0474	4
41	DECAL-EXERCISE SP-4415 INNER/OUTER	BNH1691	1	90	SPLIT HEX TAP BOLT GR-5 B/O 1/2-13 X 3 1/2	BNH1131	1
42	DECAL-FOR BEST PERFORMANCE 1 1/4 X 1 1/2	BNH0143	1	91	SPLIT LOCK WASHER B/O 1/2"	BNH0653	3
43	DECAL-WARNING KEEP HANDS AND FINGERS...	BNH0620	1	92	SPLIT LOCK WASHER B/O 3/8"	BNH0658	1
44	DECAL-WEIGHT NUMBERS REF TP-15 (150 lbs)	BNH1544	1	93	SUPER LUBE TEFLON LUBRICANT 82340	BNH0704	2
45	EDGE PROTECTOR CHROME 11 GA	BNH1724	4	94	TUFFSTUFF LOGO ALUMINUM SMALL	BNH1323	1
46	FINISHED HEX NUT B/O 1/2-13	BNH0201	1	95	URETHANE BUMPER 1 3/4	BNH0229	3
47	FLAT HEAD SOC CAP SCREW B/O 3/8-16 X 3	BNH0787	2	96	U-STYLE TAPPED HOLE NUT 1/4-20	BNH0708	8
48	FLAT WASHER SAE B/O 1/2"	BNH0238	17	97	U-STYLE TAPPED HOLE NUT 3/8-16	BNH1211	2
49	FLAT WASHER SAE B/O 3/8"	BNH0239	26	98	HEX HEAD CAP SCREW GR-5 B/O 1/2-13 X 3 3/8	BNH1841	4
50	FLAT WASHER USS B/O 1/4"	BNH0233	8				



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.

Part Two: Maintenance

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.



Maintenance

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 tecon-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 tecon 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 tecon grease. We recommend a tecon-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 Fitness Equipment, Inc.
Service Department
1325 E. Franklin Avenue
Pomona, CA 91766
1-800-961-9377
e-mail: service@tuffstuff.net

DO NOT DISCARD THIS MANUAL



TUFFSTUFF WARRANTY

TuffStuff warrants to the original purchaser that TuffStuff equipment will be free from defects in material and workmanship. All warranty periods begin to run from the date of delivery to the original purchaser. The warranty and remedies set forth herein are conditioned upon proper storage, installation, use and maintenance and conformance with any recommendations of TuffStuff. This warranty does not cover products not manufactured by TuffStuff or products which are altered without the express written consent of TuffStuff. This warranty as specified:

FULL COMMERCIAL WARRANTY (more than 5 hours of use per day): a) Frames, welds, cams and weight plates -- Lifetime, b) Pivot bearings, pulleys, bushings, gas shocks and guide rods -- Five (5) years, c) Belts, linear bearings and pull-pin components -- One (1) year, and d) Upholstery, cables, finish and rubber grips -- Six (6) months.

LIGHT COMMERCIAL WARRANTY (less than 5 hours of use per day): a) Frames, welds, cams and weight plates -- Lifetime, b) Pivot bearings, pulleys, bushings, gas shocks and guide rods -- Five (5) years, c) Linear bearings, finish and pull-pin components -- One (1) year, and d) Upholstery, cables and rubber grips -- Three (3) months, and all other parts not mentioned elsewhere in this warranty will expire one (1) year from the date of delivery to the original purchaser. The obligation of TuffStuff under this warranty is limited to repairing or replacing warranted defective parts, as TuffStuff may elect, at TuffStuff's facility in Pomona, California, without charge to purchaser for either parts or labor. 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.

THE FOREGOING SHALL CONSTITUTE THE SOLE REMEDY OF THE PURCHASER AND THE SOLE LIABILITY OF TUFFSTUFF WITH REGARD TO WARRANTY. NO IMPLIED STATUTORY WARRANTY OR IMPLIED STATUTORY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, NEGLIGENCE OR OTHERWISE, SHALL TUFFSTUFF BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE, LOSS OF USE OF EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTION EQUIPMENT, DOWNTIME COST, OR CLAIMS OF CUSTOMERS OR PURCHASER FROM SUCH DAMAGE.

This written 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 Fitness Equipment, Inc. at 1325 E. Franklin Avenue, Pomona, California 91766, before returning any defective equipment.

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 Net: www.tuffstuff.net