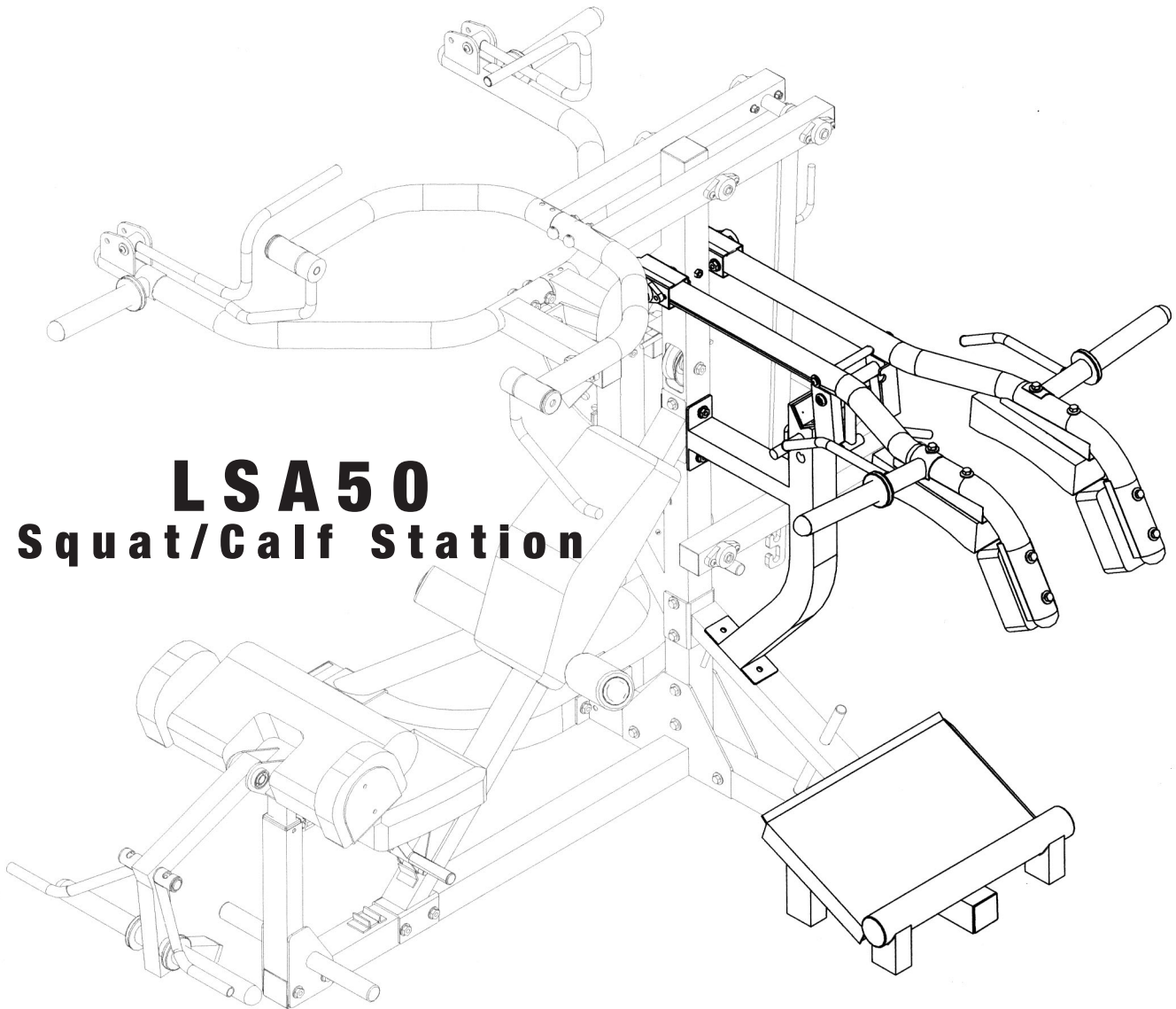


POWERLIFT™

Freeweight Leverage Gym System

by *Body-Solid®*



LSA 50 Squat/Calf Station

LSA 50 Assembly Instructions

OWNER'S & MANUAL

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.

Antes de comenzar cualquier programa de ejercicios, deberías tener un examen físico con su doctor.

When using exercise equipment, you should always take basic precautions, including the following:

- Read all instructions before using the PowerLIFT Squat/Calf Station. 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 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.
- Always check the unit before each use. Make sure that all bolts, nuts, pads and spring are secure and in good working condition.
- Do not use the equipment outdoors or near water.
- Always use collars on weight plate posts.

Personal Safety During Assembly

- It is recommended that a qualified dealer assemble the equipment.
- Before beginning assembly, please take the time to read the instructions thoroughly.
- 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 PowerLIFT Squat/Calf Station on a solid, level surface. Locate the unit a few feet from the walls or furniture to provide easy access.

The PowerLIFT Squat/Calf Station 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 Body-Solid machine.

After assembly, you should check all functions to ensure correct operation. If you experience problems, first recheck the assembly instructions to locate any possible errors made during assembly. If you are unable to correct the problem, call the dealer from whom you purchased the machine or call 1-800-556-3113 for the dealer nearest you.

Obtaining Service

Please use this Owner's Manual to make sure that all parts have been included in your shipment. When ordering parts, you must use the part number and description from this Owner's Manual. Use only Body-Solid replacement parts when servicing this machine. Failure to do so will void your warranty and could result in personal injury.

For information about product operation or service, check out the official Body-Solid website at www.bodysolid.com or contact an authorized Body-Solid dealer or a Body-Solid factory-authorized service company or contact Body-Solid customer service at one of the following:

Toll Free: 1-800-556-3113
Phone: 1-708-427-3555 ext. 5
Fax: 1-708-427-3598
E-mail: service@bodysolid.com

Or write to: Body-Solid, Inc.
Service Department
1900 S. Des Plaines Ave.
Forest Park, IL 60130 USA

Retain this Owner's Manual for future reference. Part numbers are required when ordering parts.

Be careful to assemble all components in the sequence presented in this guide.

Assembly Instructions

You must review and follow the instructions in this Owner's Manual. If you do not assemble and use the PowerLIFT Squat/Calf Station according to these guidelines, you could void the Body-Solid warranty.

Assembly of the PowerLIFT Squat/Calf Station takes professional installers about 30 minutes to complete. If this is the first time you have assembled this type of equipment, plan on significantly more time.

Professional installers are recommended.

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

Required Tools

The tools that you must obtain before assembling the PowerLIFT Squat/Calf Station include:

- 2.5mm Hex Key
- 5mm Hex Key
- 6mm Hex Key
- 10mm Open-End Wrench
- 17mm Open-End Wrench
- 19mm Open-End Wrench
- 17mm Box Wrench
- 19mm Box Wrench
- Rubber Mallet

Installation Requirements

Follow these installation requirements when assembling the PowerLIFT Squat/Calf Station:

- Fill out and mail warranty card.
- Set up the PowerLIFT machine on a solid, flat surface. A smooth, flat surface under the machine helps keep it level. A level machine 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 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.

Do not fully tighten bolts until instructed to do so.

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

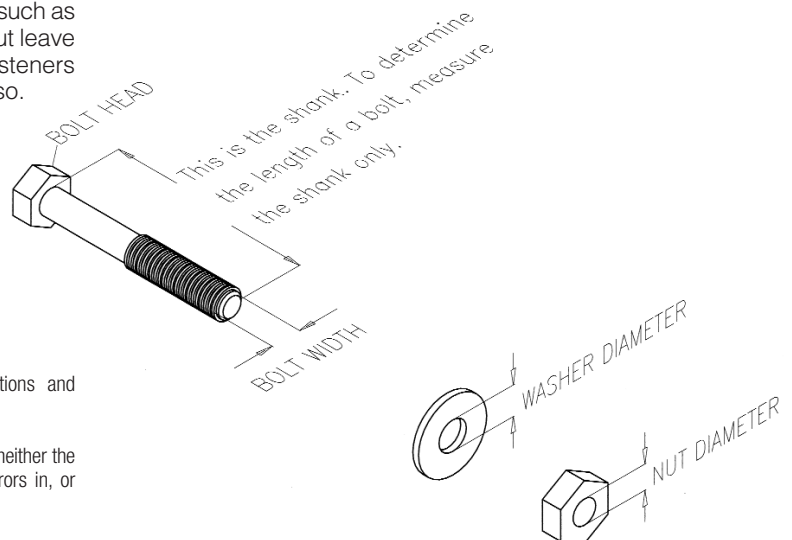
Even though we have prepared this manual with extreme care, neither the publisher nor the author can accept responsibility for any errors in, or omission from, the information given.

Assembly Tips

- The PowerLIFT Squat/Calf Station comes in one box. Be careful to assemble components in the sequence presented in this guide.
- With so many assembled parts, proper alignment and adjustment is critical. While tightening the nuts and bolts, be sure to leave room for adjustments.
- Read all "Notes" on each page before beginning each step.
- While you may be able to assemble this PowerLIFT unit using the illustrations only, important safety notes and other tips are included in the text.

IMPORTANT!

- Before you begin you should look at pages 11 and 12. This is a quick reference guide that shows all hardware parts (in actual size) along with the corresponding key numbers on the assembly instructions.



STEP**1**

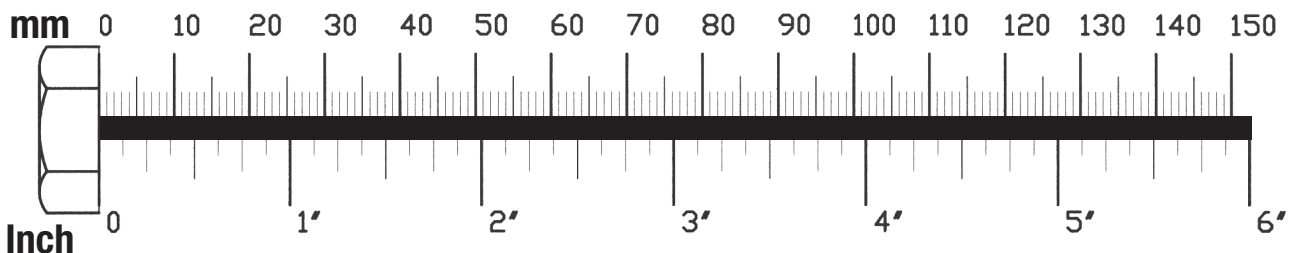
Be careful to assemble all components in the sequence they are presented.

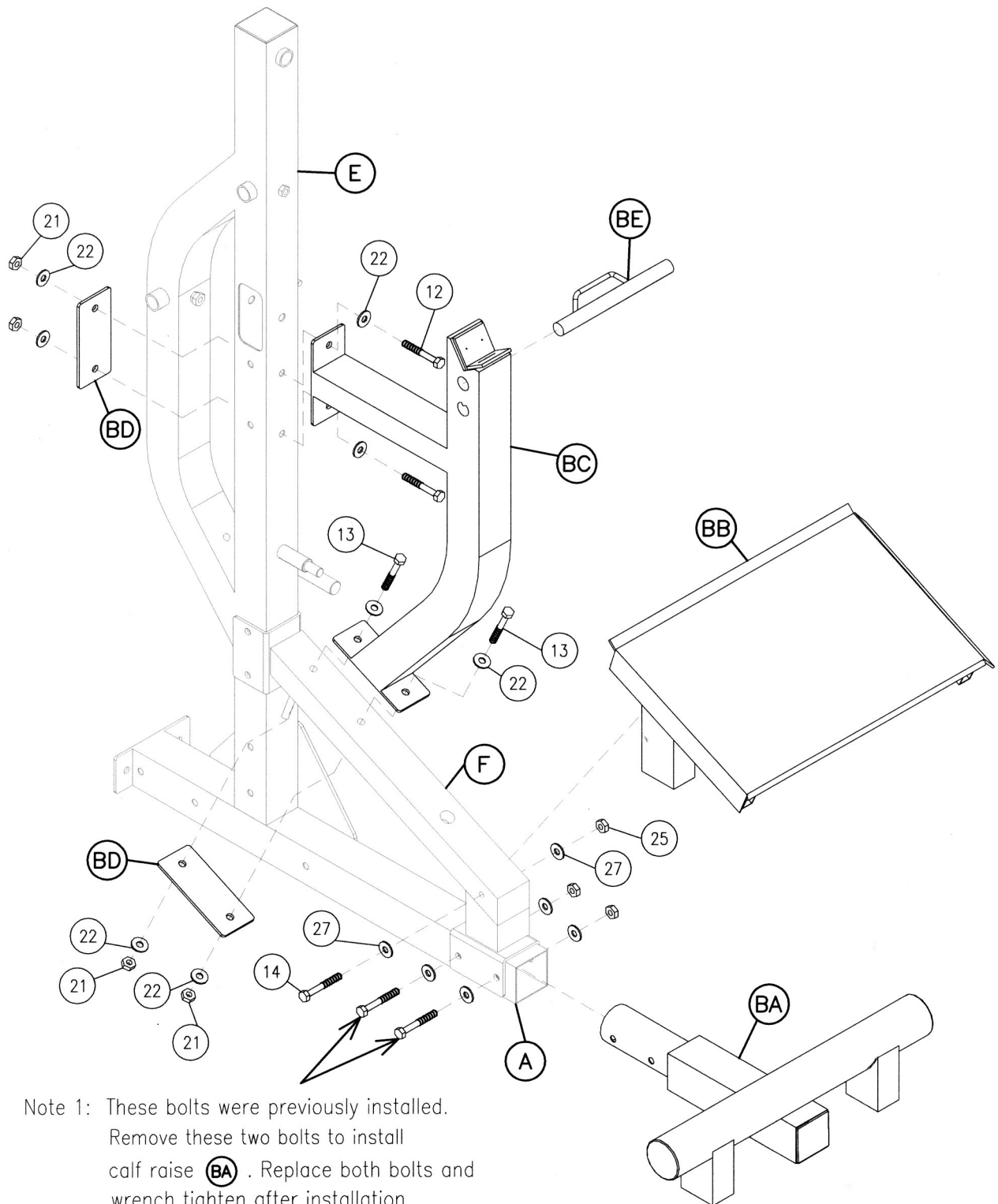
IMPORTANT! Before you begin you should look at pages 11 and 12.

This is a quick reference guide that shows all hardware parts (in actual size) along with the corresponding key numbers on the assembly instructions.

- A. See Note 1. Slide the calf raise (BA) all the way into the bottom portion of the main base frame (A) and wrench tighten both bolts.
- B. Attach support frame (BC) to squat support frame (F) and vertical mainframe (E) using two brace plates (BD) and the following hardware:
two 13 (hex bolt 12mm x 80mm partial thread)
two 12 (hex bolt 12mm x 105mm partial thread)
eight 22 (flat washer 12mm)
four 21 (nylon lock nut 12mm)
- Note: You should now insert chrome safety bar (BE) into support frame (BC). This is an adjustable safety stop bar for your squat exercises. The two holes allow the user to adjust the safety stop point of the squat exercise.**
- C. Attach foot brace (BB) to squat support frame (F) as shown using:
one 14 (hex bolt 10mm x 100mm partial thread)
two 27 (flat washer 10mm)
one 25 (nylon lock nut 10mm)

You should now wrench tighten all bolts and nuts in this step.





Note 1: These bolts were previously installed. Remove these two bolts to install calf raise **BA**. Replace both bolts and wrench tighten after installation of the calf raise.

STEP**2**

Be careful to assemble all components in the sequence they are presented.

You will need assistance in this step to properly align all parts.

- A. Insert pivot shaft (BF) into vertical mainframe (E) as shown using:
one 24 (standard nut 10mm)
one 16 (square head bolt 10mm x 50mm with dog point)

Note: Be sure that (16) bolt goes into the hole in the center of the pivot shaft (BF) and wrench tighten (16) bolt first and then wrench tighten (24) nut last. It may be necessary to “feel” for the hole in the center of the shaft by sliding a very small diameter allen wrench all the way thru first, to help you line up all parts.

- B. See Note 1. Slide the left shoulder beam (BG) onto the pivot shaft (BF) and allow it to rest on top of the chrome safety bar (BE). Install pillow block bearing (9) on to left shoulder beam (BG) as shown. Install using:
two 18 (round allen head 10mm x 90mm partial thread bolt)
two 26 (spring lock washer 10mm)
two 27 (flat washer 10mm)
two 25 (nylon lock nut 10mm)

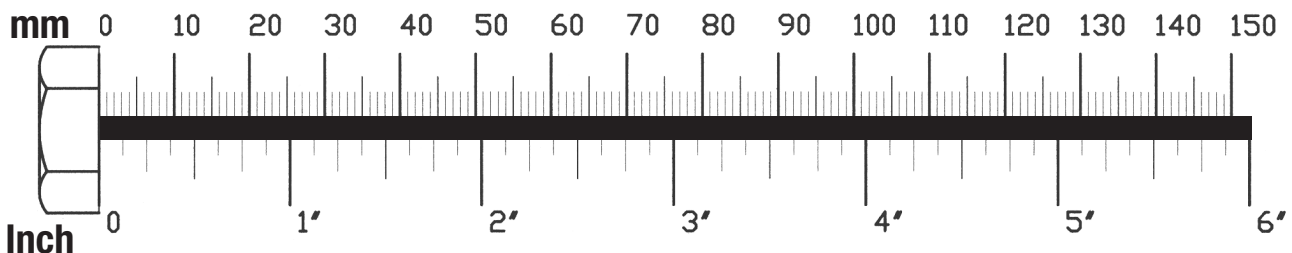
- C. See Note 1. Slide right shoulder beam (BH) on to the pivot shaft (BF) and allow it to rest on top of chrome safety bar (BE). Install pillow block bearing (9) on to right shoulder beam (BH) as shown. Install using:
two 18 (round allen head 10mm x 90mm partial thread bolt)
two 26 (spring lock washer 10mm)
two 27 (flat washer 10mm)
two 25 (nylon lock nut 10mm)

- D. Install gray beam connector bar (BJ) as shown using:
two 13 (hex bolt 12mm x 80mm partial thread)
two 31 (spring lock washer 12mm)
two 22 (flat washer 12mm)

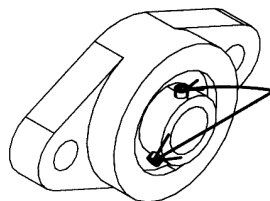
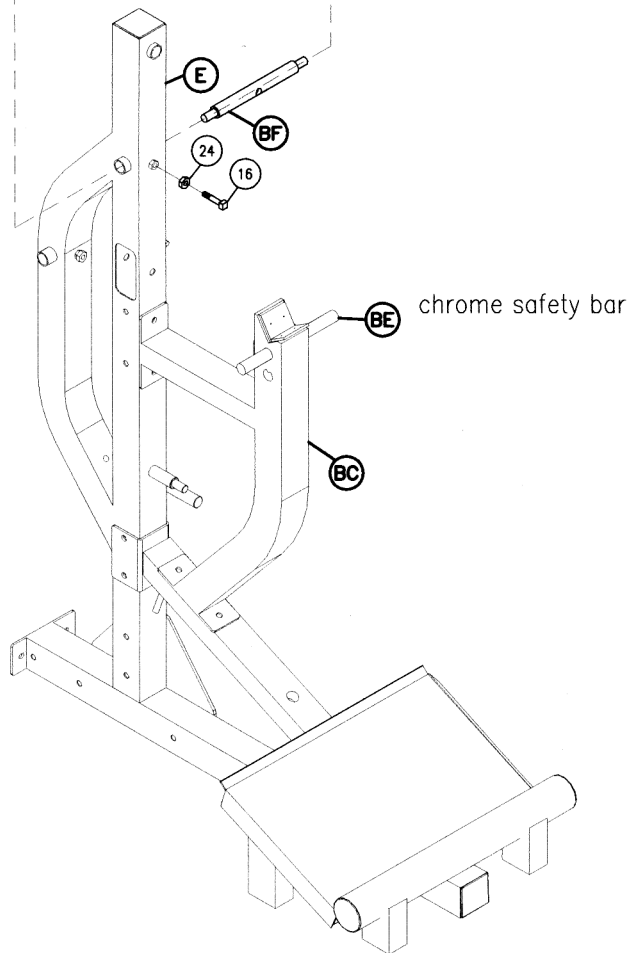
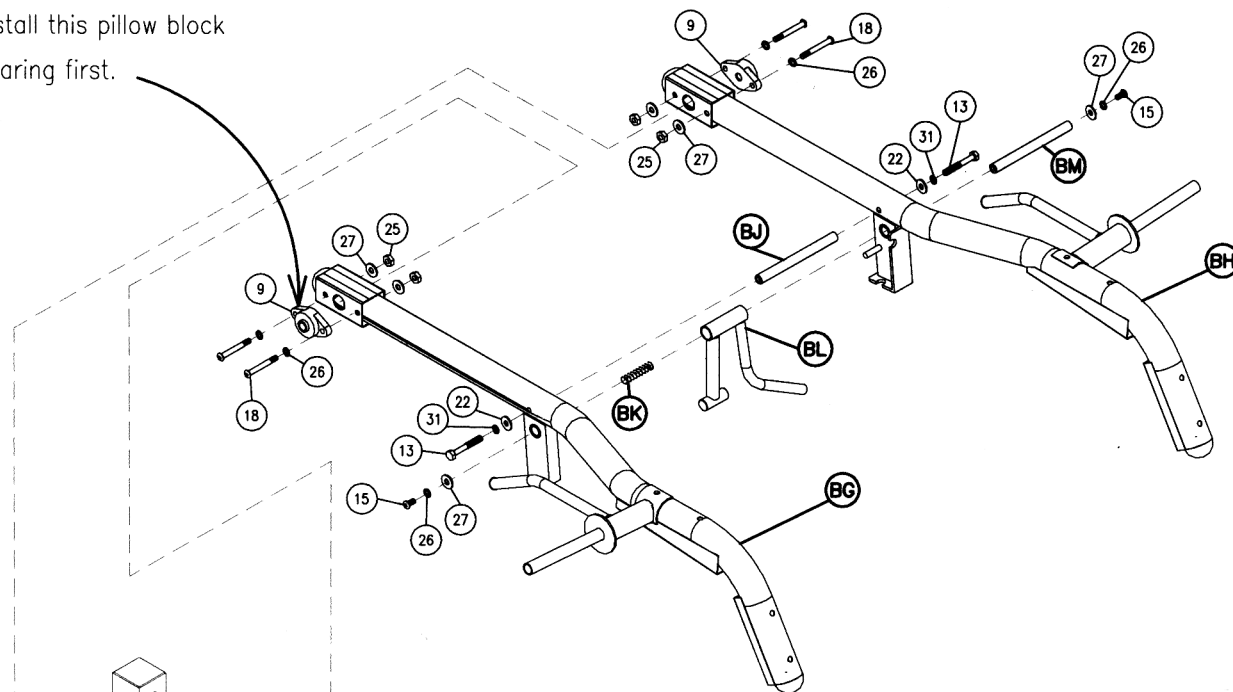
- E. See Note 2. Insert chrome shaft (BM) through right shoulder beam (BH) from the outside of the right shoulder beam. The chrome shaft (BM) should go through the right shoulder beam (BH) and then through the squat brace (BL) and then through the spring (BK) and then through the left shoulder beam (BG). Install hardware as shown using:
two 15 (round allen head 10mm x 20mm full thread bolt)
two 26 (spring lock washer 10mm)
two 27 (flat washer 10mm)

Note: At this point you should close all gaps between the two shoulder beams and the vertical mainframe at their connection points. Use a rubber mallet to knock the parts together tightly.

You can now wrench tighten all bolts, nuts and the four pillow block bearing set screws mentioned in Note 1.



Install this pillow block bearing first.

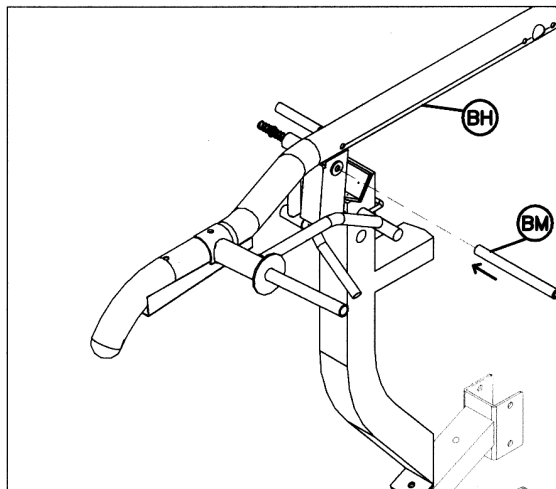


Note 1:

There are two small allen set screws in each pillow block bearing (9).

For best alignment of this system you should loosen all allen set screws before installing the pillow block bearings.

The last and final step of the assembly process is to wrench tighten all of these allen set screws in all the pillow block bearings.



Note 2:

STEP**3**

- A. Install both Olympic adapter sleeves (2) as shown using:
two 23 (flat washer 10mm x 30mm)
two 26 (spring lock washer 10mm)
two 15 (round allen head 10mm x 20mm full thread bolt) Wrench Tighten these bolts now
two 3 (plastic ball-end cap 2")
two 8 (rubber donut)
- B. See Note 1. Install shoulder pads (BP) and (BN) to left and right shoulder beams. Tighten pad bolts to a snug fit. Do not over-tighten any pad bolts. Over-tightening pad bolts will cause T-nuts in pads to strip out.

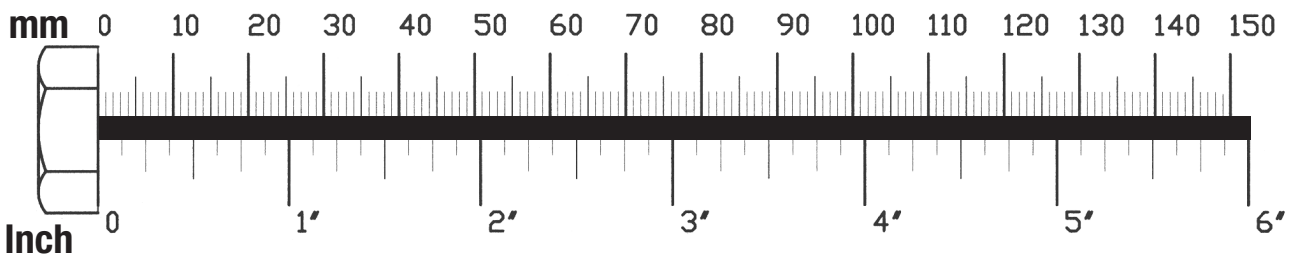
Install using:

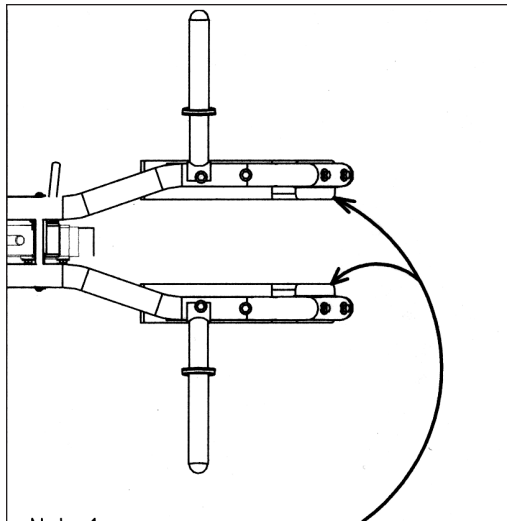
four 19 (round allen head 8mm x 90mm partial thread bolt)
four 28 (spring lock washer 8mm)
four 30 (flat washer 8mm)

- C. See Note 1. Install back pads (BR) and (BQ) in the same manner that you installed the shoulder pads. Do NOT over-tighten any pad bolts. Install using:
four 20 (round allen head 8mm x 80mm partial thread bolt)
four 28 (spring lock washer 8mm)
four 30 (flat washer 8mm)

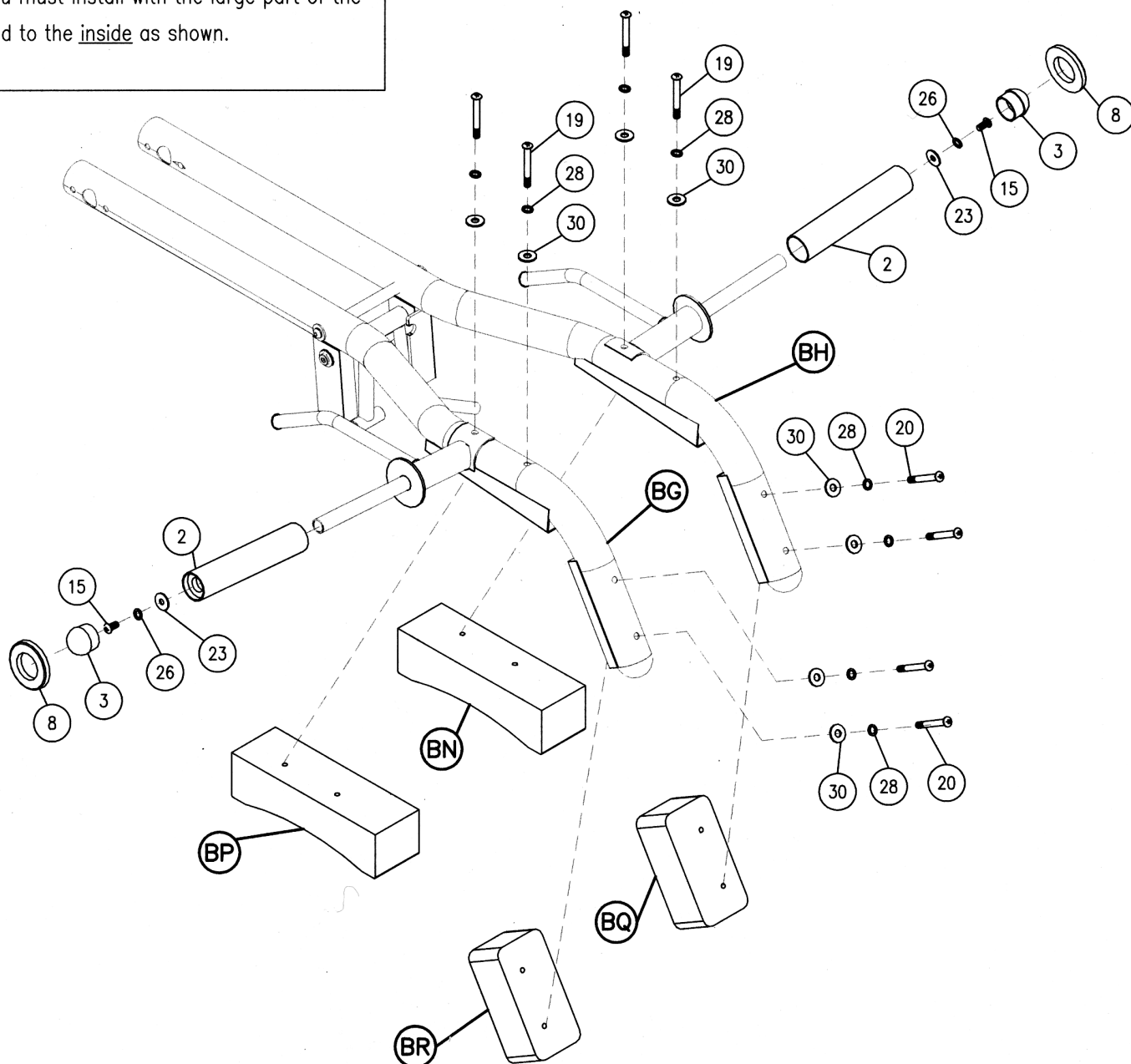
You should now examine the squat/calf station and make sure that all hardware (other than upholstery hardware) is wrench tightened and secure.

Congratulations! You are done. After assembly, you should check all functions to ensure correct operation. If you experience problems, first recheck the assembly instructions to locate any possible errors made during assembly. If you are unable to correct the problem, call the dealer from whom you purchased the machine or call 1-800-556-3113 for the dealer nearest you.





Note 1:
Shoulder and back pads are off-center.
You must install with the large part of the pad to the inside as shown.



LSA 50 Mainframe Parts List

KEY#	QTY	PART#	DESCRIPTION
BA	1	SLA50CR-BA	CALF RAISE
BB	1	SLA50FB-BB	FOOT BRACE
BC	1	SLA50SF-BC	SUPPORT FRAME
BD	2	SLA50BP-BD	BRACE PLATE
BE	1	SLA50SB-BE	SAFETY BAR
BG	1	SLA50PS-BF	PIVOT SHAFT
BH	1	SLA50LSB-BG	LEFT SHOULDER BEAM
BH	1	SLA50RSB-BH	RIGHT SHOULDER BEAM
BJ	1	SLA50CB-BJ	CONNECTOR BAR
BK	1	SLA50S-BK	SPRING
BL	1	SLA50SB-BL	SQUAT BRACE
BM	1	SLA50CS-BM	CHROME SHAFT

LSA 50 Hardware List

KEY#	QTY	PART#	DESCRIPTION
1	4	BEC250	PLASTIC BALL-END CAP 2.5"
2	2	OASC2	OLY ADAPTER SLEEVE
3	2	BC2	PLASTIC BALL-END CAP 2"
4	2	PREC3	PLASTIC ROUND END CAP 3"
5	1	PSEC33	PLASTIC SQUARE END CAP 3"X3"
6	2	FG1.5	FOAM GRIP 1.5" OD (VARIOUS LENGTHS)
7	2	REC1	PLASTIC ROUND END CAP 1"
8	2	RDOP2	RUBBER DONUT (FOR OLY. WEIGHT POST)
9	2	PBB17	PILLOW BLOCK BEARING 17mm ID
10	1	RP5575	RUBBER PAD
11	1	RP3775	RUBBER PAD
12	2	HEX12105PTB	HEX BOLT 12mmX105mm PARTIAL THREAD
13	4	HEX1280PTB	HEX BOLT 12mmX80mm PARTIAL THREAD
14	1	HEX10100PTB	HEX BOLT 10mm X 100mm PARTIAL THREAD
15	4	RAH1020FTB	ROUND ALLEN HEAD 10mmX20mm FULL THREAD BOLT
16	1	SHB1050DP	SQUARE HEAD BOLT 10mmX50mm WITH DOG POINT
18	4	RAH1090PTB	ROUND ALLEN HEAD 10mmX90mm PARTIAL THREAD BOLT
19	4	RAH890PTB	ROUND ALLEN HEAD 8mmX90mm PARTIAL THREAD BOLT
20	4	RAH880PTB	ROUND ALLEN HEAD 8mmX80mm PARTIAL THREAD BOLT
21	4	NLN12	NYLON LOCK NUT 12mm
22	10	WFLT12	FLAT WASHER 12mm
23	2	WFLT1030	FLAT WASHER 10mm X 30mm
24	1	SNUT10	STANDARD NUT 10mm
25	5	NLN10	NYLON LOCK NUT 10mm
26	8	WSW10	SPRING LOCK WASHER 10mm
27	8	WFLT10	FLAT WASHER 10mm
28	8	WSW8	SPRING LOCK WASHER 8mm
30	8	WFLT8	FLAT WASHER 8mm
31	2	WSW12	SPRING LOCK WASHER 12mm
32	2	OLYCLR1.84	OLYMPIC SPRING COLLAR 1 7/8"

LSA 50 Pads List

KEY#	QTY	PART#	DESCRIPTION
BN	1	SLA50RSP-BN	RIGHT SHOULDER PAD
BP	1	SLA50LSP-BP	LEFT SHOULDER PAD
BQ	1	SLA50RBP-BQ	RIGHT BACK PAD
BR	1	SLA50LBP-BR	LEFT BACK PAD

Part numbers are required when ordering parts.

Safety Guidelines

Successful resistance training programs have one prominent feature in common...safety. Resistance training has some inherent dangers, as do all physical activities. The chance of injury can be greatly reduced or completely removed by using correct lifting techniques, proper breathing, maintaining equipment in good working condition, and by wearing the appropriate clothing.

1. It is highly recommended that you consult your physician before beginning any exercise program. This is especially important for individuals over the age of 35, or persons with pre-existing health problems.
2. Always warm up before starting a workout. Try to do a total body warm up before you start. It is especially important to warm up the specific muscle groups you are going to be using. This can be as simple as performing a warm up set of high repetitions and light weight for each exercise.
3. Use proper form. Focus on only working the muscle groups intended for the exercise you are doing. If there is strain elsewhere, you may need to re-evaluate the amount of weight that is involved with the lift. Keeping proper form also includes maintaining control through an entire range of motion.
4. Breathe properly. Inhale during the eccentric phase of the exercise, and exhale during the lifting, or concentric phase. Never hold your breath during any part of an exercise.
5. Always wear the appropriate clothing and shoes when exercising. Wearing comfortable athletic shoes with good support and loose fitting, breathable clothing will reduce the risk of injury.
6. Maintaining equipment in proper operating condition is of utmost importance for a safe resistance training program. Pulleys and cables should be checked for wear frequently and replaced as needed. Equipment should be lubricated as indicated by the manufacturer.
7. Read and study all warning labels on this machine. It is absolutely necessary that you familiarize yourself and all others with the proper operation of this machine prior to use.
8. Keep hands, limbs, loose clothing and long hair well out of the way of all moving parts.
9. Do not attempt to lift more weight than you can control safely.
10. Inspect the machine daily for loose or worn parts. If a problem is found do not allow the machine to be used until all parts are tightened or worn or defective parts are repaired or replaced.

Warning, Safety & Maintenance

Be sure that all users carefully read and understand all warning, safety and maintenance labels on the machine before each use. Failure to do so may cause serious injury. It is imperative that you retain this Owner's Manual and be sure all warning labels are legible and intact. Replacement Owner's Manuals and labels are available from your local Body-Solid dealer. If you have any questions about the operation, set up or maintenance of this machine please call our customer service department at 1 (800) 556-3113.

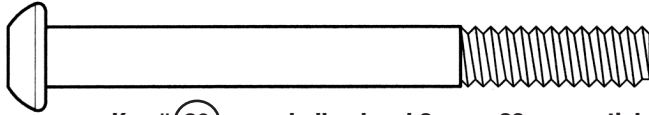
THERE IS A RISK ASSUMED BY INDIVIDUALS WHO USE THIS TYPE OF EQUIPMENT. TO MINIMIZE RISK, YOU MUST FOLLOW THESE RULES:

1. Inspect equipment before each workout. Check that all nuts, bolts, screws and pop pins are in place and fully tightened. Also, before use, check cables for signs of wear. Replace all worn parts immediately. Never use machine if any parts are damaged or missing. **FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS INJURY.**
2. Keep clear of the cables and all moving parts when the machine is in use.
3. Always make sure all Snap Links are closed when doing any cable/pulley/strap exercises.
4. Exercise with care. Perform your exercises at a smooth moderate pace; never perform jerky or uncoordinated movements that may cause injury.
5. It is recommended that you should workout with a training partner.
6. Do not allow children or minors to play on or around this equipment.
7. If unsure of proper use of equipment, call your local Body-Solid distributor or the Body-Solid customer service department at 1-800-556-3113.
8. **WARNING:** Consult your physician before starting your exercise program. For your own safety, do not begin any exercise program without proper instruction. RAL8-6-03 WC-54

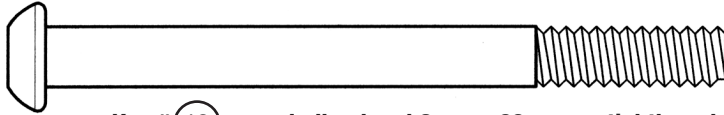
MAINTENANCE SCHEDULE		D	W
Check the function and integrity of the following components. As noted, Inspect equipment before each workout. Replace all damaged, broken or worn components immediately.		A	E
		I	K
		L	L
		Y	Y
Cables:	Check tension, end fittings, and coating	✓	
	Check that locking nut at weight stack is tight		✓
Upholstery:	Wipe down and dry	✓	✓
	Clean and condition		✓
Frame:	Wipe down and dry	✓	✓
	Polish / Wax		✓
Chrome:	Wipe down and dry	✓	✓
	Polish / Lubricate		✓
Nuts / Bolts / Fasteners:	Tighten and / or adjust as needed		✓
Guide Rods:	Lubricate and clean		✓
Linear Rods:	Lubricate and clean		✓
Seat Sleeves:	Lubricate and clean		✓
Adjustments / Locking Pins / Tightening Knobs			✓
Weight Stack Pins			✓
Warning Instruction Labels			✓
Springs / Pop Pins		✓	
Anti Skid Surfaces			✓
Hand Grips / Rollers			✓
For Body-Solid Customer Service Call 1-800-556-3113 #MSSTR0803			

LSA 50 Hardware

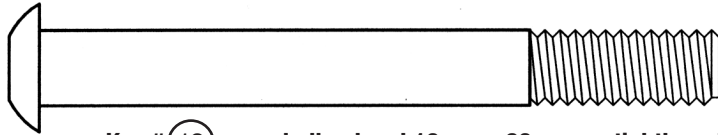
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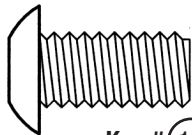
Key # (20) round allen head 8mm x 80mm partial thread bolt QTY. 4



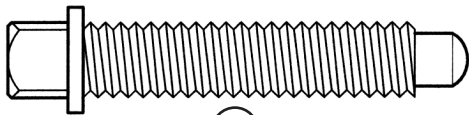
Key # (19) round allen head 8mm x 90mm partial thread bolt QTY. 4



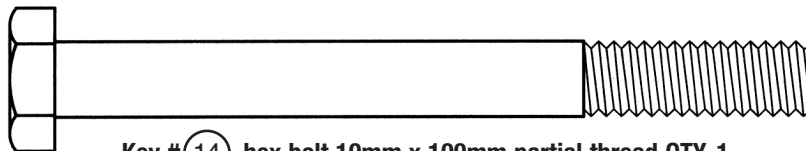
Key # (18) round allen head 10mm x 90mm partial thread bolt QTY. 4



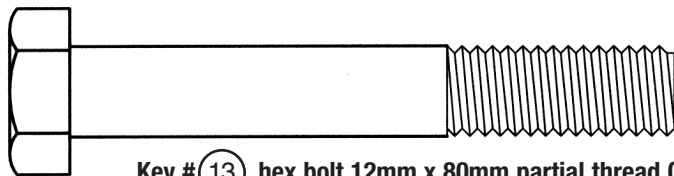
Key # (15) round allen head 10mm x 20mm full thread bolt QTY. 4



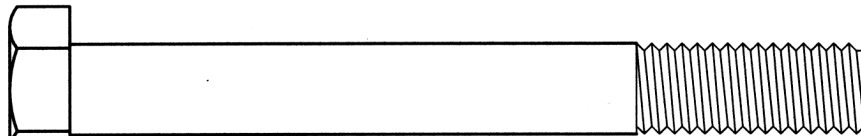
Key # (16) square head bolt 10mm x 50mm with dog point QTY. 1



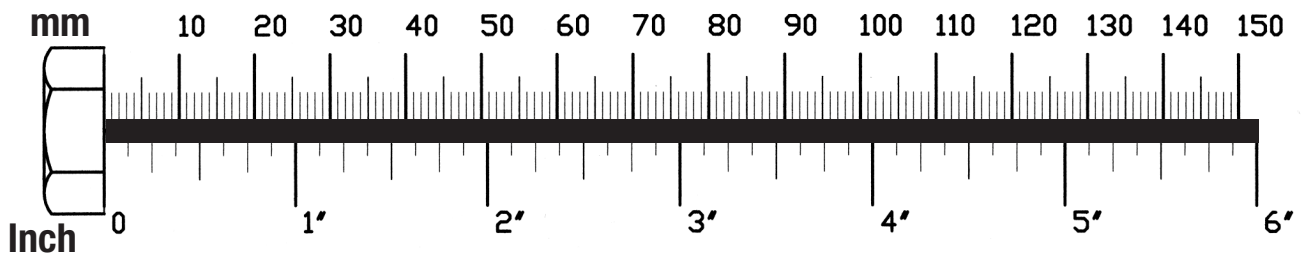
Key # (14) hex bolt 10mm x 100mm partial thread QTY. 1



Key # (13) hex bolt 12mm x 80mm partial thread QTY. 4



Key # (12) hex bolt 12mm x 105mm partial thread QTY. 2

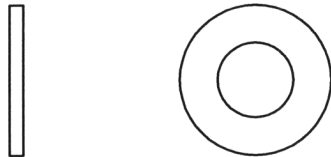


LSA 50 Hardware (continued)

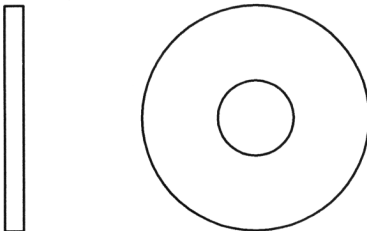
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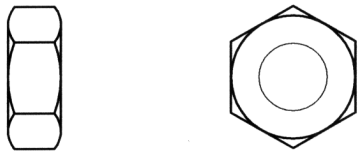
Key # 26 spring lock washer 10mm QTY. 8



Key # 27 flat washer 10mm QTY. 8



Key # 23 flat washer 10mm x 30mm QTY. 2



Key # 24 standard nut 10mm QTY. 1



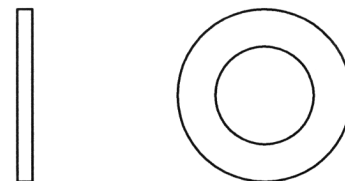
Key # 25 nylon lock nut 10mm QTY. 5



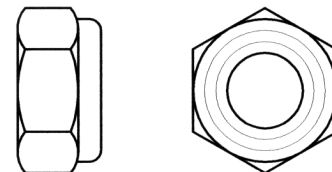
Key # 28 spring lock washer 8mm QTY. 8



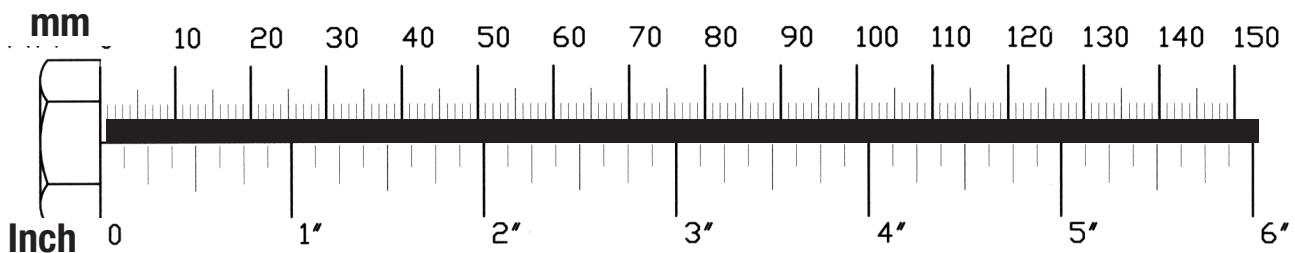
Key # 30 flat washer 8mm QTY. 8

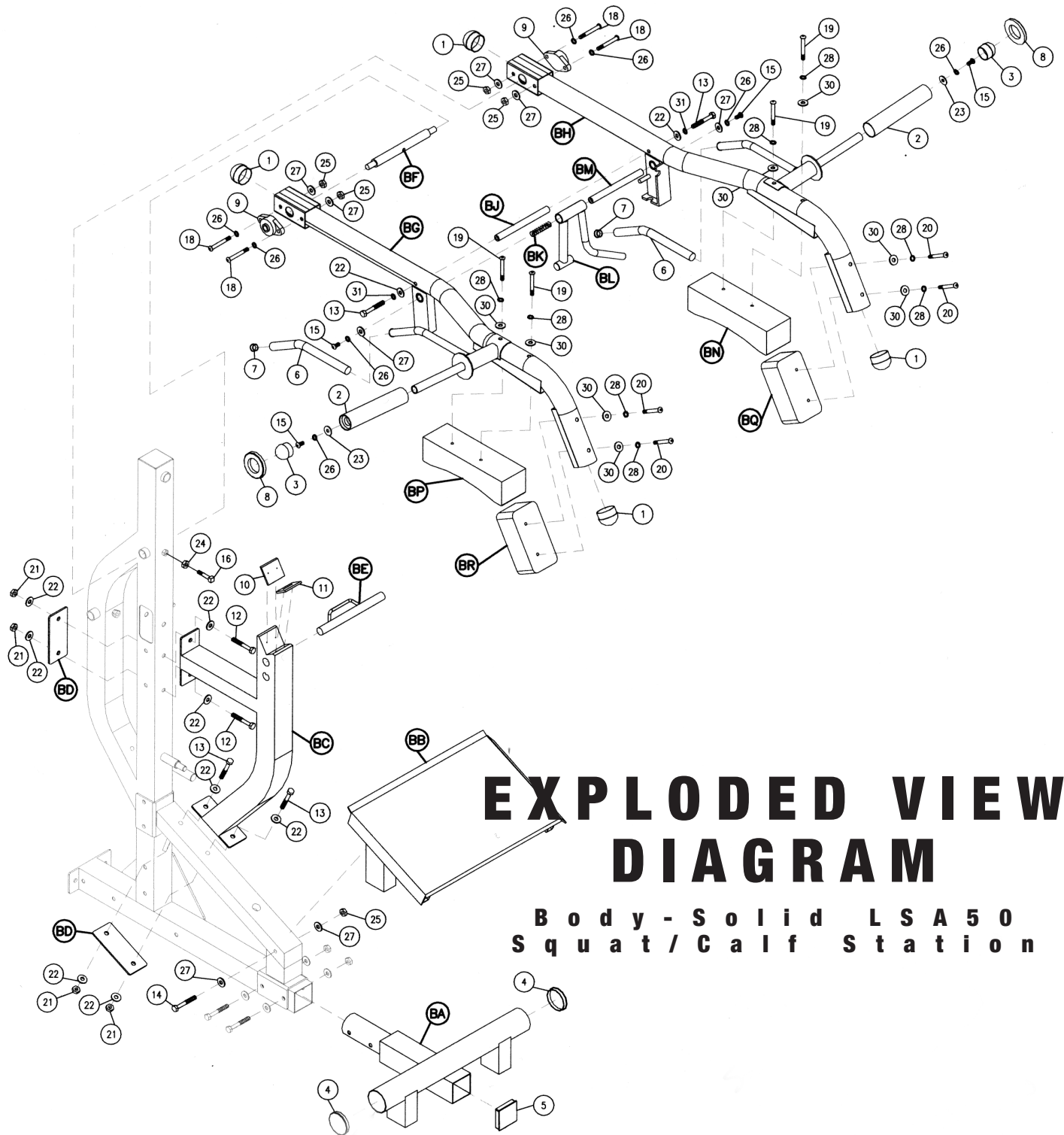


Key # 22 flat washer 12mm QTY. 10



Key # 21 nylon lock nut 12mm QTY. 4





EXPLODED VIEW DIAGRAM

**B o d y - S o l i d L S A 5 0
S q u a t / C a l f S t a t i o n**

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