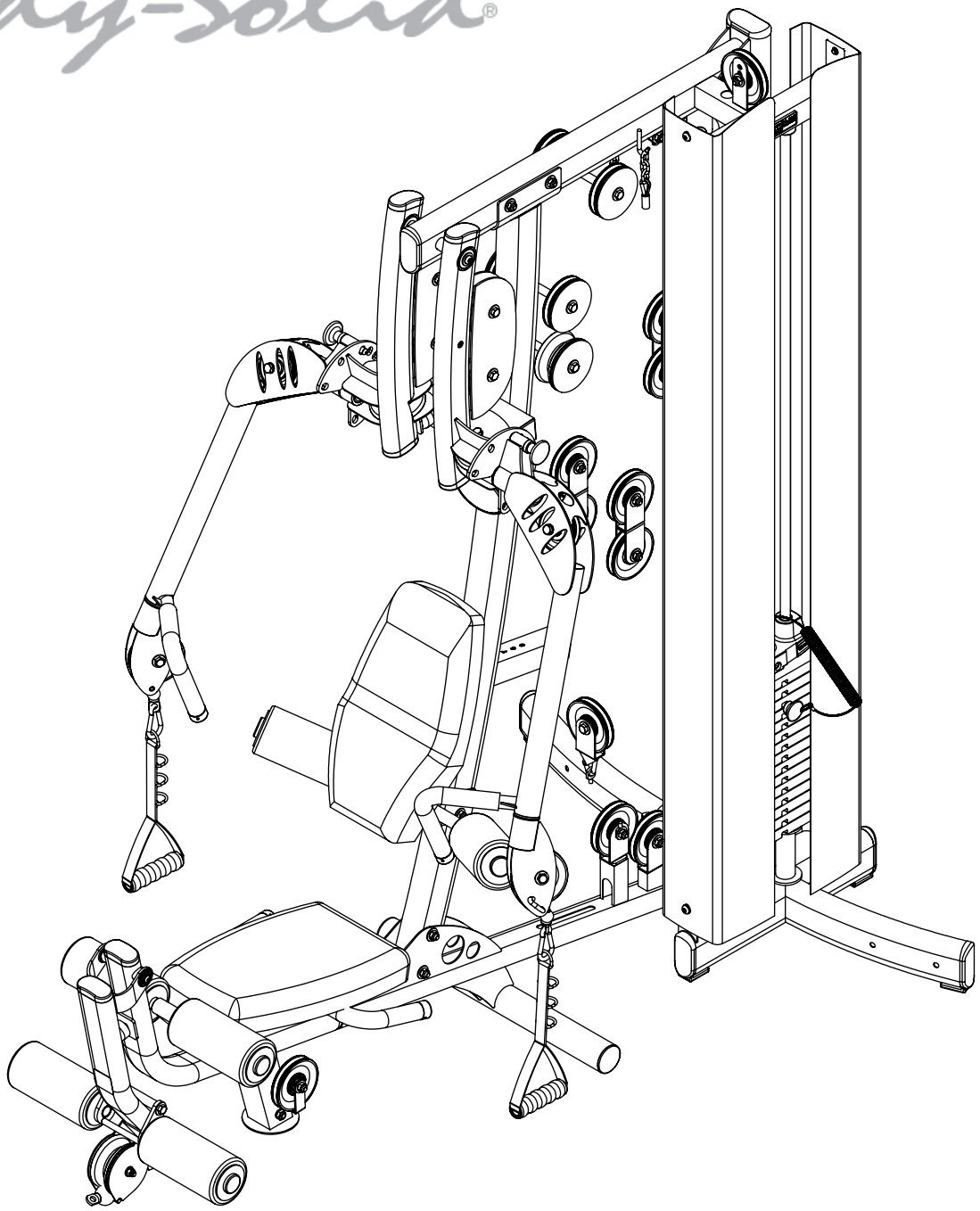
Body-Solid®

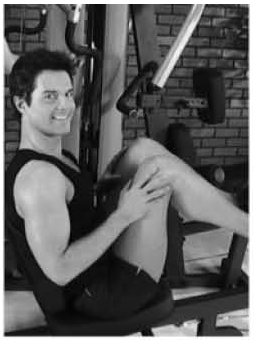


FUSION400
PERSONAL TRAINER

Assembly & Instructions

OWNER'S MANUAL

Total Body Workout DVD



Follow the lead of international fitness presenter Geoff Bagshaw as he guides you step by step through a total health and conditioning program. Includes thorough explanations and demonstrations of over 50 exercises targeting all major muscle groups. The Body-Solid Total Body Workout is a "must have" for anyone truly serious about in-home training.

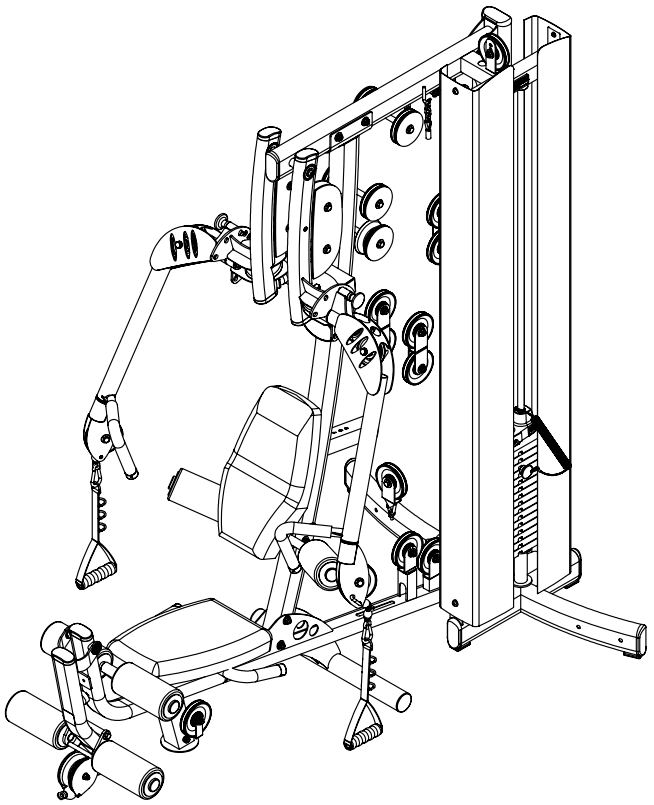
Also includes:

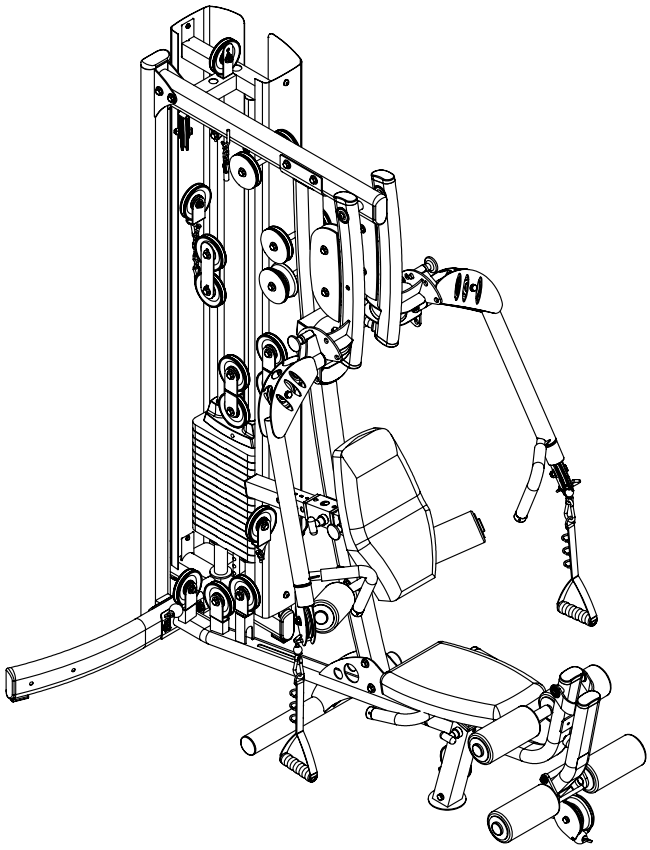
- Complete stretching routine
- Importance of cardio training
- Body-Solid company profile

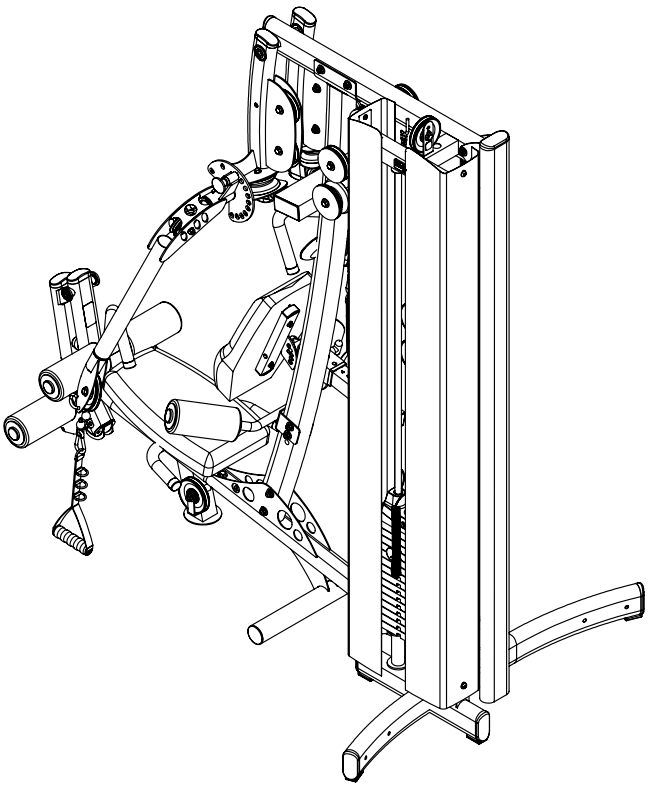
Body-Solid

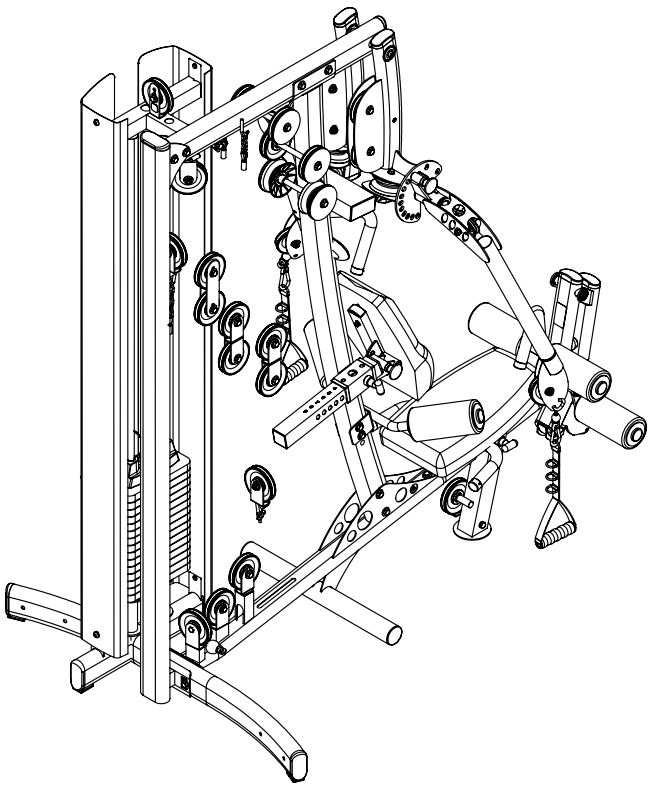
Total Body Workout DVD

Fusion 400
Reference Drawings









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.

Important Safety Instructions

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

Il est conseille de subir un examen medical complet avant d'entreprendre tout programme d'exercise. Si vous avez des etourdissements ou des faiblesses, arretez les exercices immediatement.

Antes de comenzar cualquier programma de ejercicios, deberias tener un examen fisico con su doctor.

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

- Read all instructions before using the Fusion 400. 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 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 or near water.

Personal Safety During Assembly

- It is strongly recommended that a qualified dealer assemble the equipment. Assistance is required.

- 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 Fusion 400 on a solid, level surface. Locate the unit a few feet from the walls or furniture to provide easy access.

The Fusion 400 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 Fusion 400.

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
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.

Dimensions

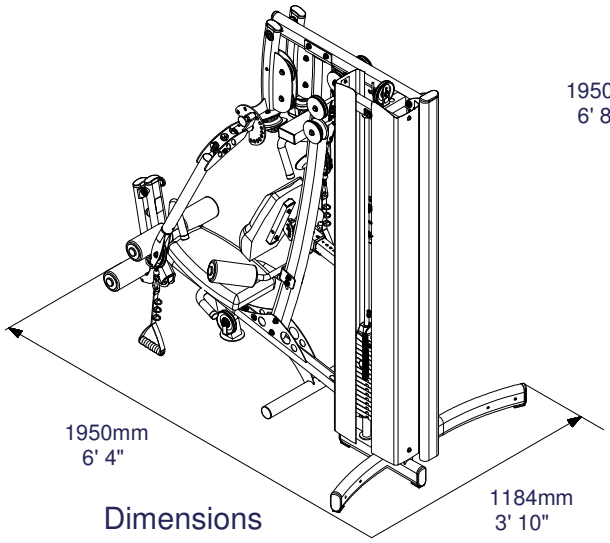
The room layout diagram below will help you decide the best placement for your Fusion 400.

The dimensions of the Fusion 400 are: width 3’ 10” X length 6’ 4”.

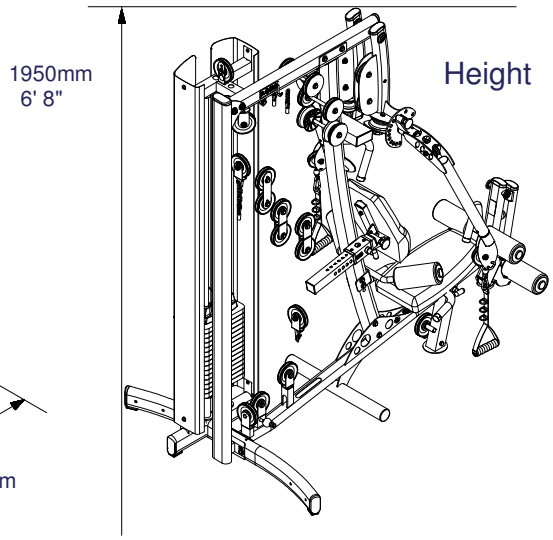
The ceiling height requirement for the Fusion 400 is 6’ 8”.

The usage space is: width 6’ X length 10’ (The usage space is the overall space needed for operation.)

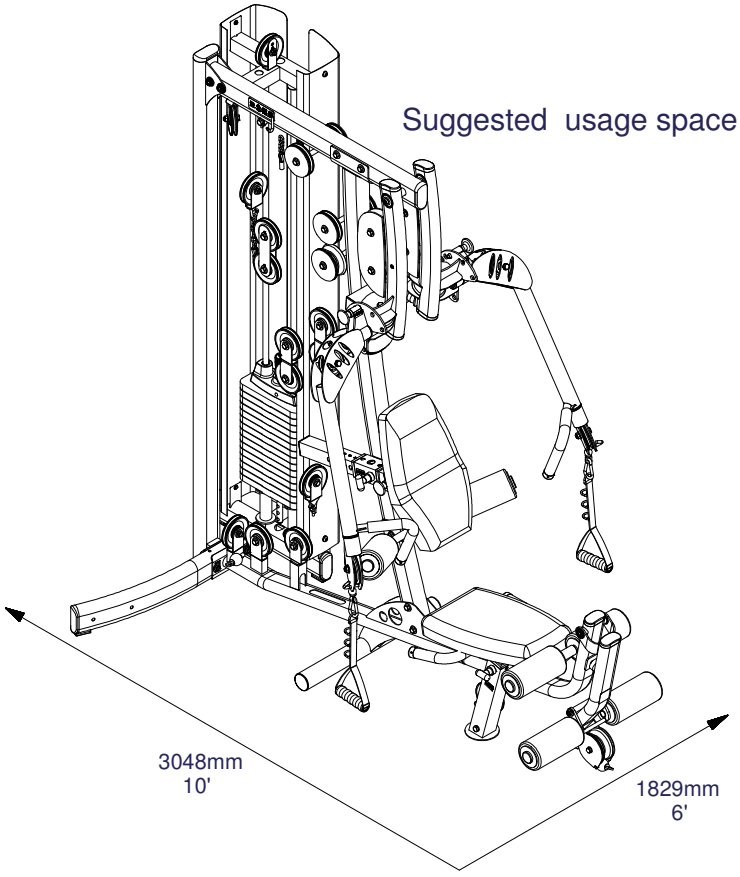
The usage space needed for the Fusion 400 could be more, depending on the user, allow enough room for the Low Row Station.



Dimensions



Height



Suggested usage space

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. **Breath 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.**

Assembly Instructions

Assembly of the Fusion 400 takes professional installers about 3 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.

Assembly Tips

Read all “Notes” on each page before beginning each step.

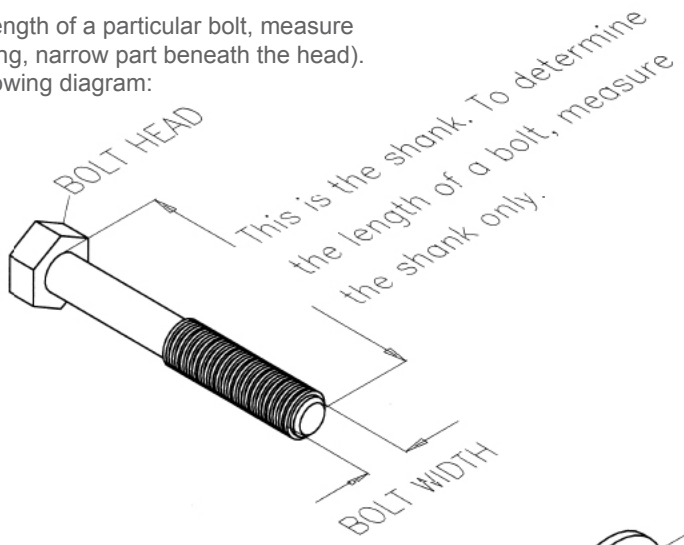
While you may be able to assemble the Fusion 400 using the illustrations only, important safety notes and other tips are included in the text.

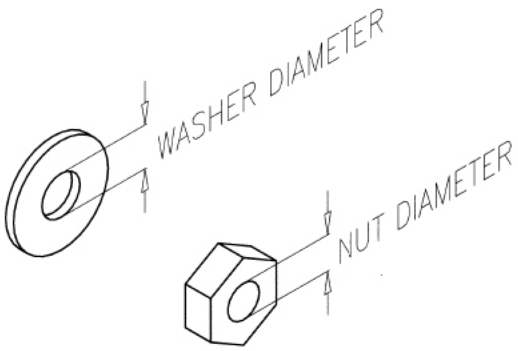
Some pieces may have extra holes that you will not use. Use only those holes indicated in the instructions and illustrations.

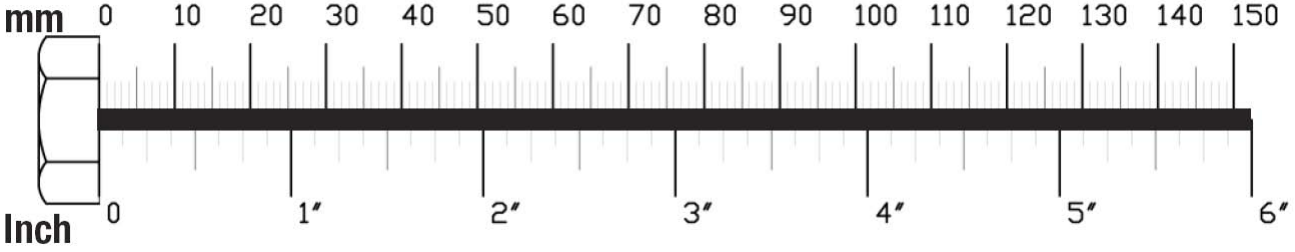
NOTE: To find out the length of a particular bolt, measure its shank (the long, narrow part beneath the head). Refer to the following diagram:

Do not fully tighten bolts until instructed to do so.

Note: 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.







STEP 1

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

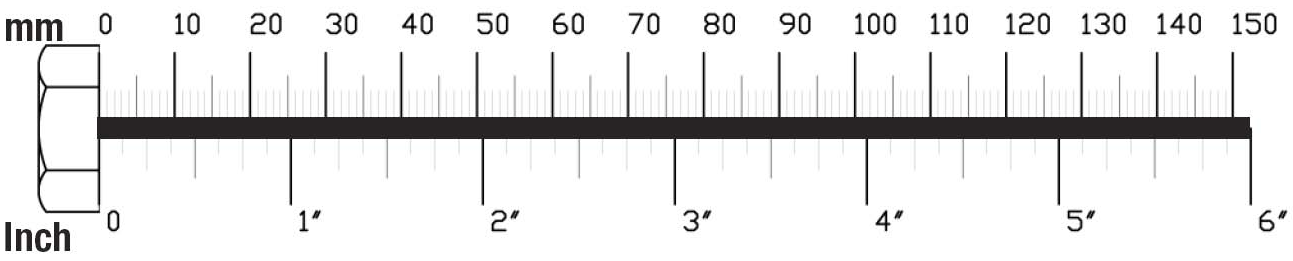
A. Slide Main Base Frame (A) into Main Base Frame (B) and connect using:
Four 68 (M10x15 allen head bolt)
Four 79 (M10 washer)

B. Insert Round End Caps (33) into Main Base Frame (B).

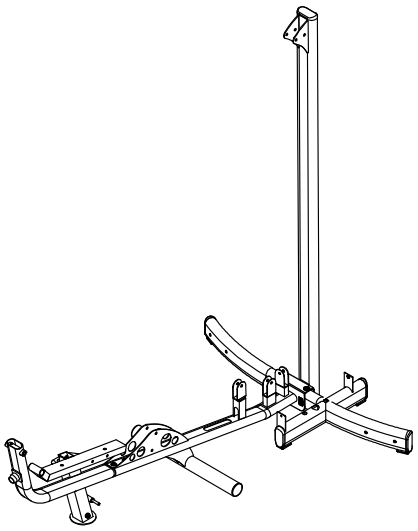
C. Attach Main Base Frame (B) and Rear Upright Frame (D) to Press Arm Pivot (C) by using:
Two 62 (M10x75 partial thread hex head bolt)
Four 79 (M10 washer)
Two 84 (M10 nylon lock nut)
Two 68 (M10x15 allen head bolt)
Two 79 (M10 washer)

D. Insert Round End Caps (38) into Press Arm Pivot (C).

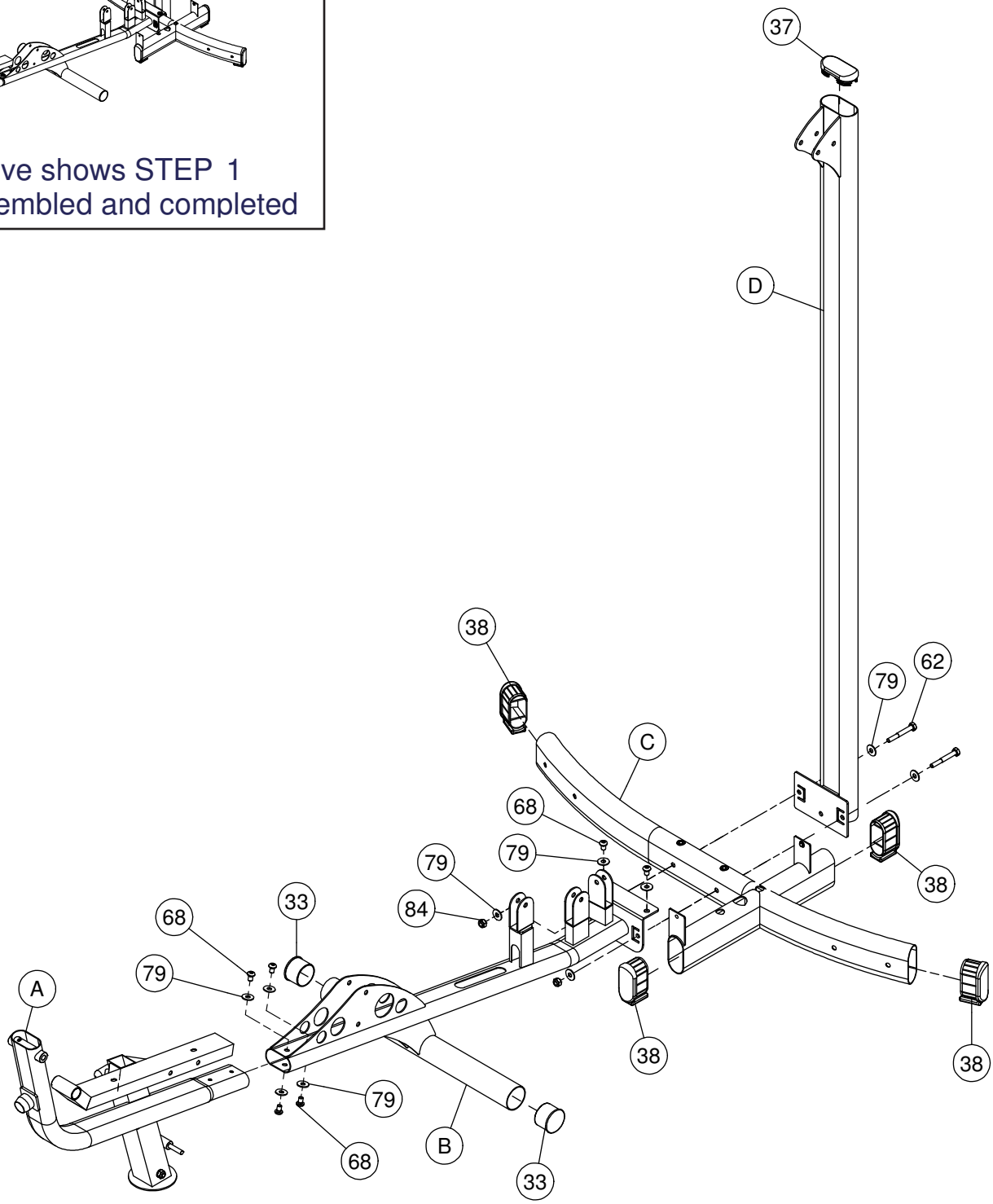
E. Insert Convex End Cap (37) into Rear Upright Frame (D).



STEP 1



Above shows STEP 1 assembled and completed



STEP 2

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Connect Main Front Frame (F) to Main Base Frame (B) by using:
Two 62 (M10x75 partial thread hex head bolt)
Four 79 (M10 washer)
Two 84 (M10 nylon lock nut)

B. Insert Flat End Caps (27) into Main Front Frame (F).

C. Connect Main Top Frame (E) to Main Front Frame (F) by using:
Two 62 (M10x75 partial thread hex head bolt)
Four 79 (M10 washer)
Two 84 (M10 nylon lock nut)

D. Connect Main Top Frame (E) to Rear Upright Frame (D) by using:
Two 62 (M10x75 partial thread hex head bolt)
Four 79 (M10 washer)
Two 84 (M10 nylon lock nut)

E. Insert Convex End Cap (37) into Main Top Frame (E).

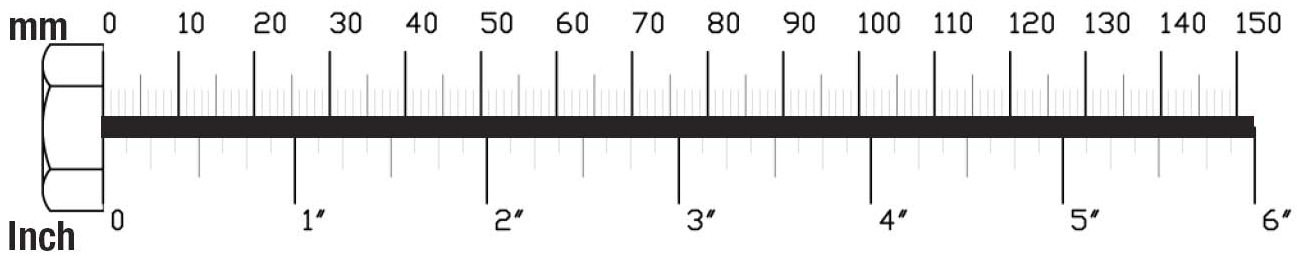
F. Slide Chrome Guide Rod (Y) through Rubber Donut (43), Weight Stack Risers (G) and Press Arm Pivot (C) as shown in the diagram.

G. Load Weight Plates (44) onto Chrome Guide Rod (Y) one at a time.

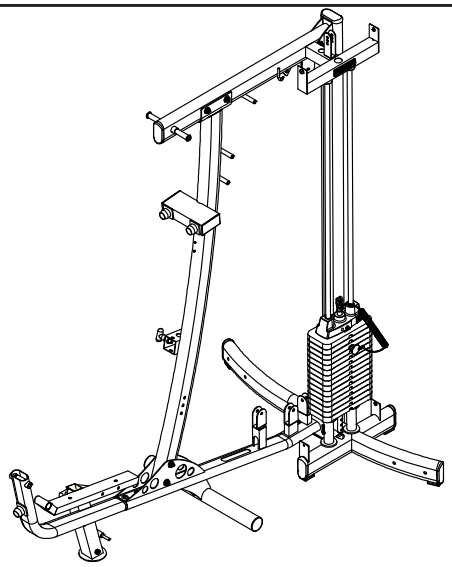
H. Connect Selector Rod (88) to Top Plate (21) using:
One 70 (3/8"x2" partial thread socket head bolt)
One 108 (spring lock washer)

I. Connect Selector Rod Top Bolt (102), Jam Nut (103), Spring Lock Washer(104) to Selector Rod (88).

J. Secure Chrome Guide Rod (Y) to Main Top Frame (E) by using:
Two 76 (M8x8 allen screw)
Two 31 (shaft collar)



STEP 2



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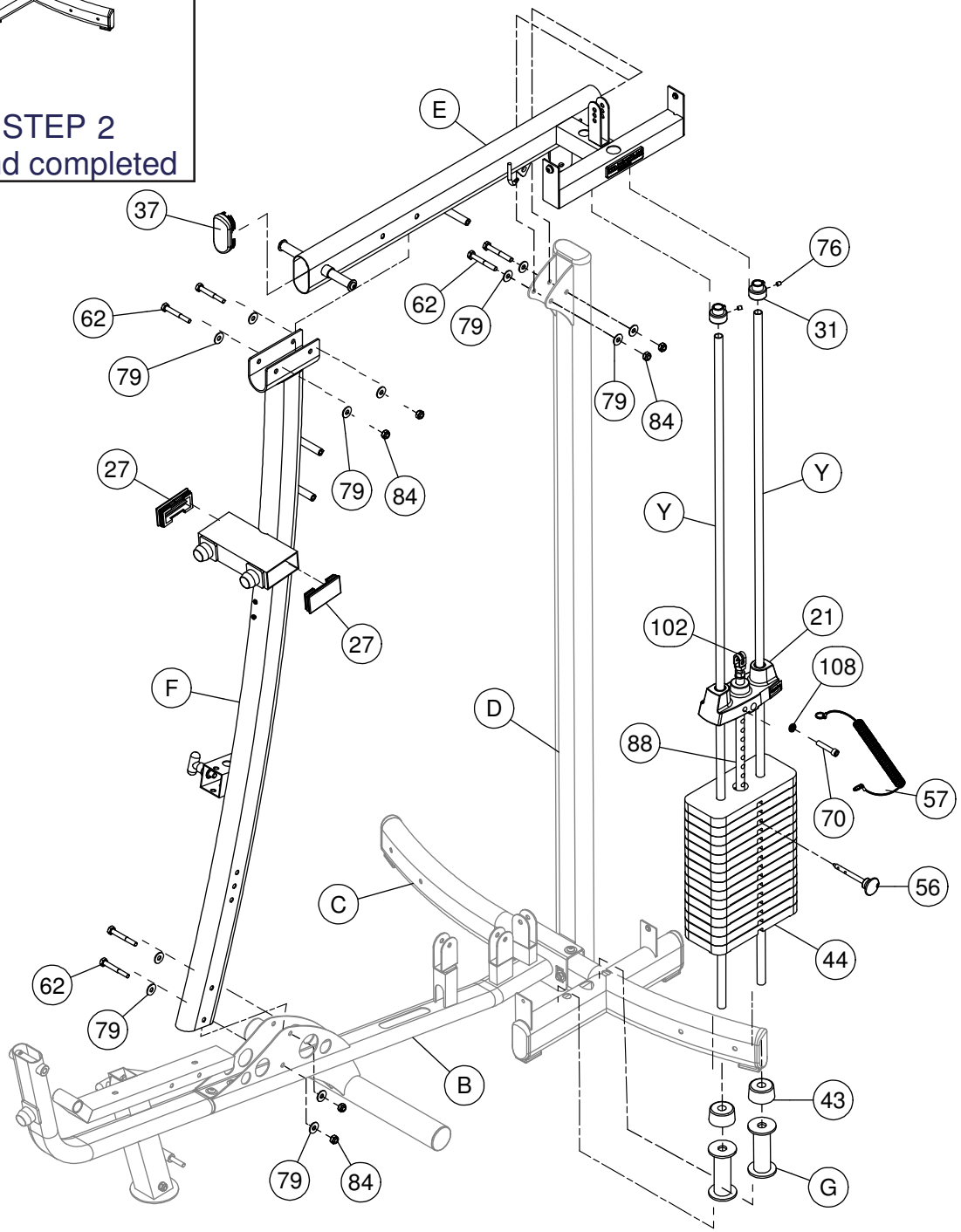


STEP

3

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

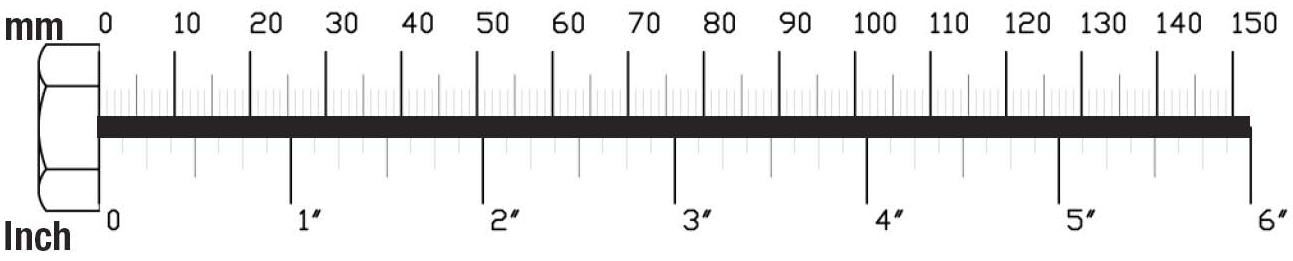
A. Attach Leg Hold Down Frame (P) to Main Front Frame (F) by using:
Two 62 (M10x75 partial thread hex head bolt)
Four 79 (M10 washer)
Two 84 (M10 nylon lock nut)

NOTE 1:
The position of Leg Hold Down Frame (P) may be adjusted in a higher or lowerposition depending on the user's needs. Cover unused holes with Round End Cap (29) as shown in the diagram.

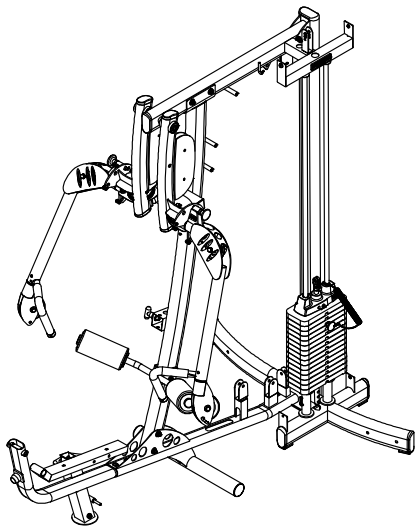
B. Slide Foam Roller (22), Nylon Washer (40) and Roller End Cap (23) to the ends of Leg Hold Down Frame (P) as shown in the diagram.

C. Connect Left Functional Training Arm (J) and Right Functional Training Arm (H) to
Main Top Frame (E) as shown by using:
Two 69 (M10x20 allen head bolt)
Two 79 (M10 washer)

D. Insert Convex End Caps (36) to Left Functional Training Arm (J) and Right Functional Training Arm (H).



STEP
3



Above shows STEP 3
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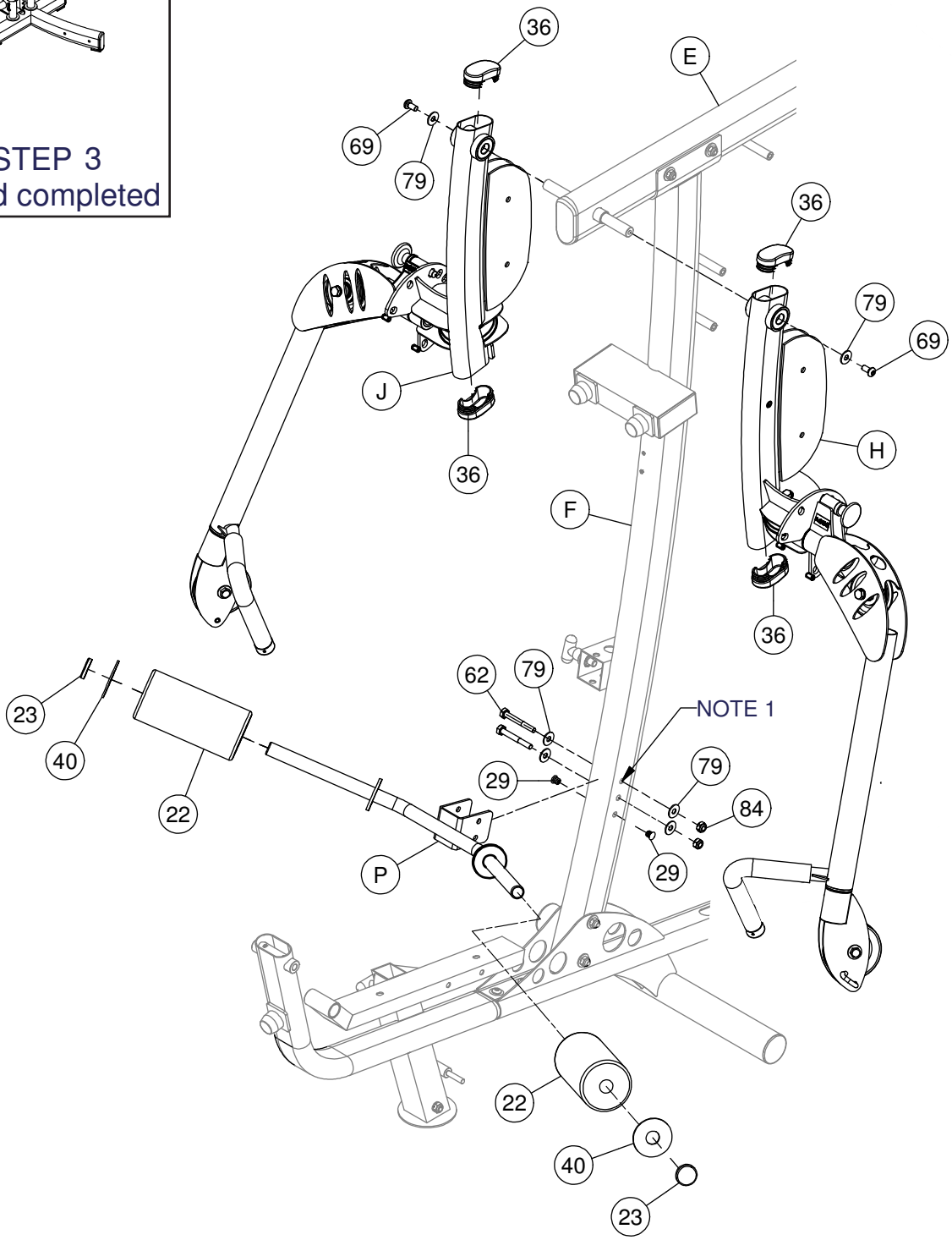


STEP

4

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Insert Pulley Holder With Stop (Q) into Nylon Bushing (30) as shown in the diagram.

B. Insert Flat End Cap (26) into Pulley Holder With Stop (Q).

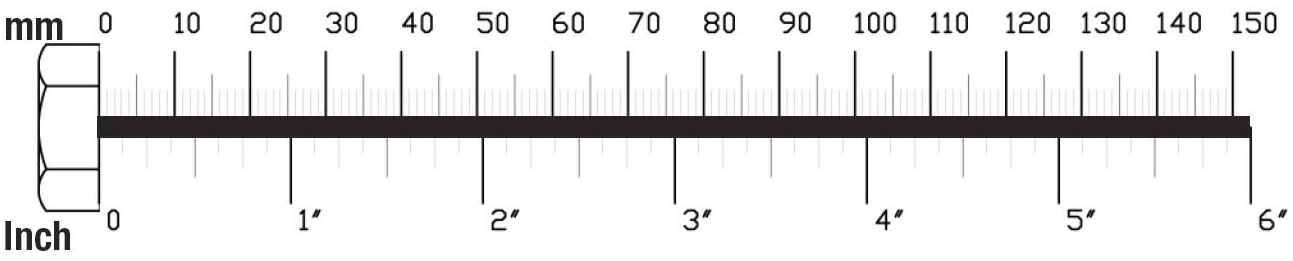
C. Secure Pulley Holder With Stop (Q) by installing:
One 75 (M8x10 partial thread socket head bolt)
One 82 (M8 spring lock washer)

D. Connect Pivoting Back Rest Frame (R) to Pulley Holder With Stop (Q) by using:
One 68 (M10x15 allen head bolt)
One 80 (M10 washer)

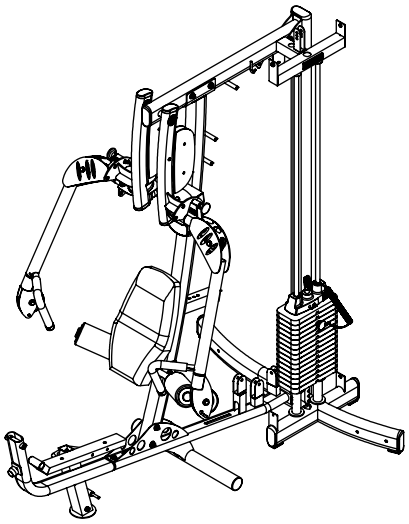
E. Insert Flat End Caps (35) into Pivoting Back Rest Frame (R).

F. Connect Back Pad (98) to Pivoting Back Rest Frame (R) by using:
Two 73 (M8x45 allen head bolt)
Two 82 (M8 spring lock washer)
Two 81 (M8 washer)

G. Install Nameplate Seat (39) to the F400 by using:
Two 89 (M5x10 tapered crosshead screw)
Apply Nameplate (45) to Nameplate Seat (39) after secured.



STEP
4



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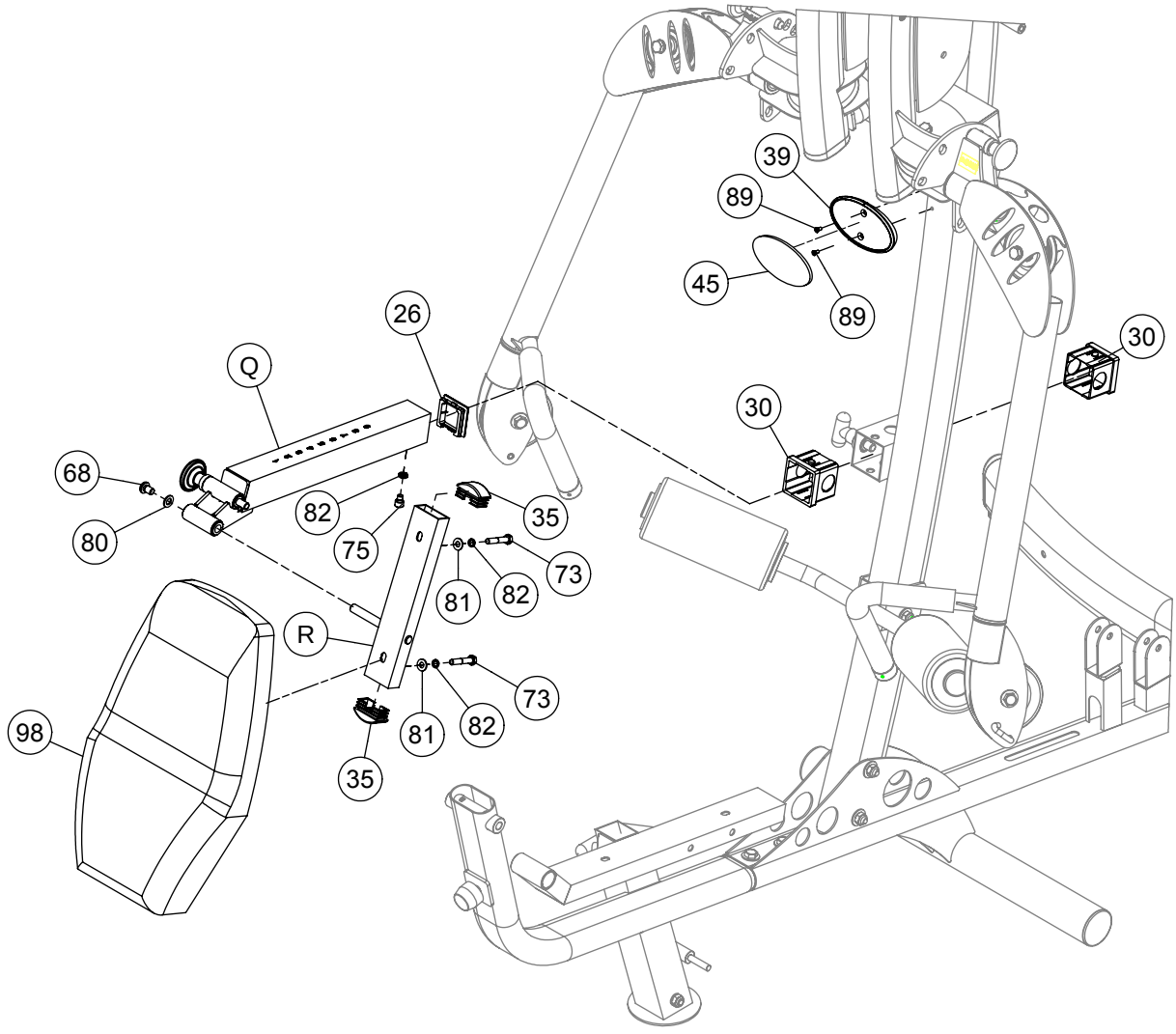
assembled and completed



STEP

5

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

NOTE:

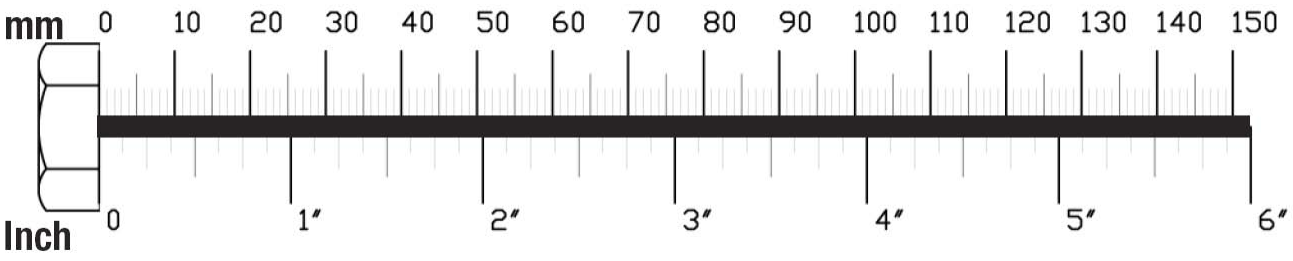
Finger tighten all hardware in this step. <u>Do Not</u> wrench tighten until end of step 13.

A. Connect both Armrest (S) to Main Base Frame (B) using:
Two 61 (M10x85 partial thread hex head bolt)
Four 80 (M10 washer)
Two 84 (M10 nylon lock nut)

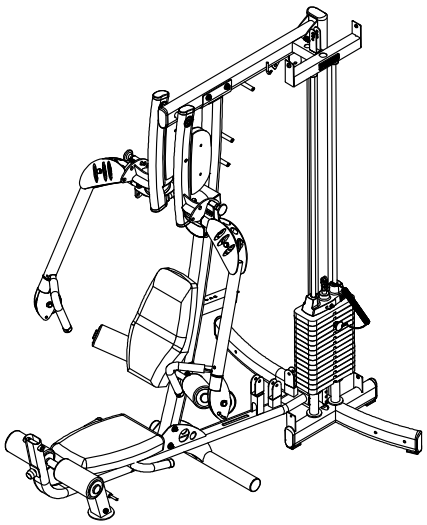
B. Insert Flat End Cap (34) into Main Base Frame (B) as shown.

C. Connect Seat Pad (97) to Main Base Frame (B) by using:
Two 72 (M8x50 allen head bolt)
Two 82 (M8 spring lock washer)
Two 81 (M8 washer)

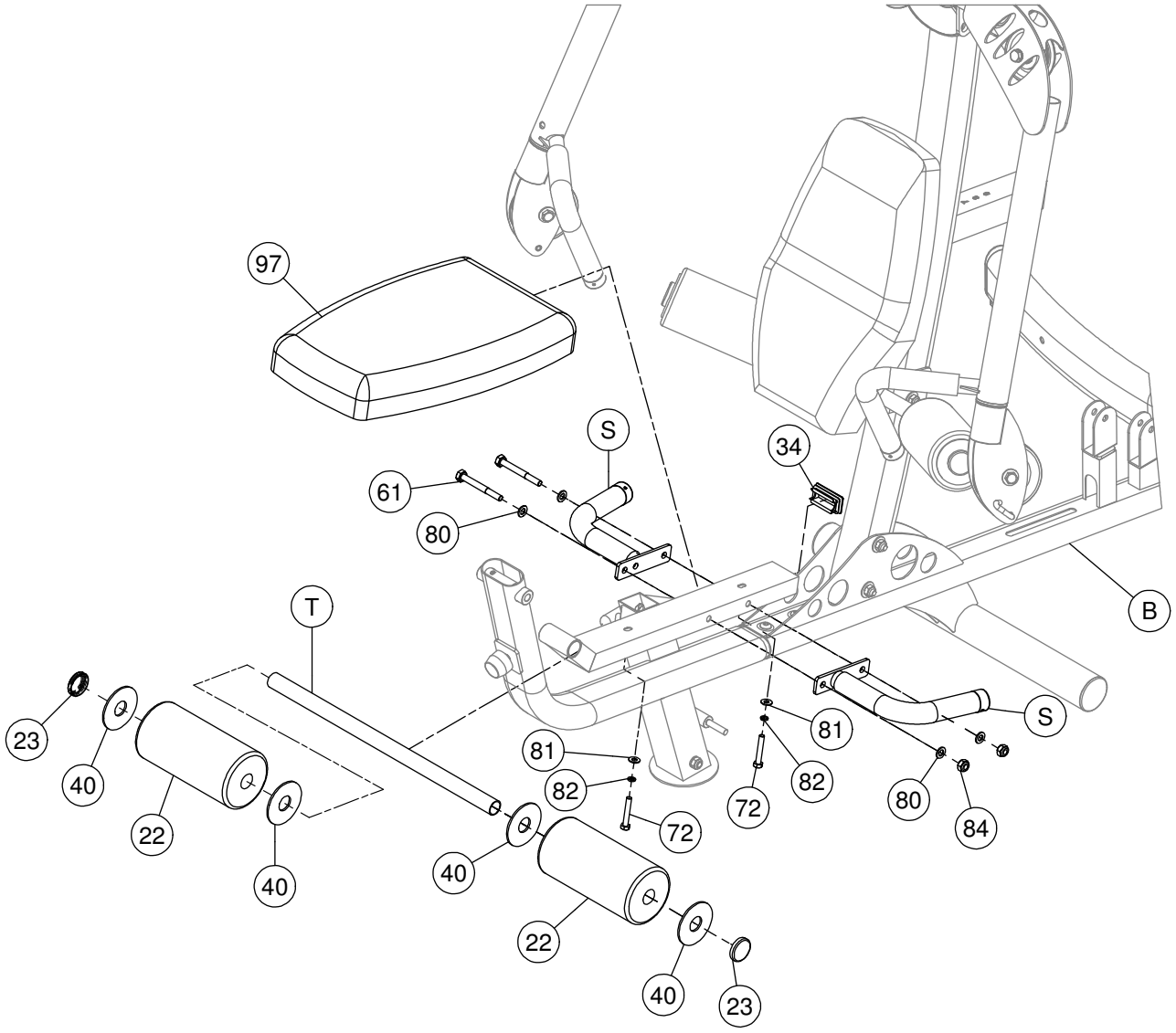
D. Slide Foam Roller Shaft (T) through Main Base Frame (B) as shown in the diagram and insert Foam Rollers (22), Nylon Washer (40) and Roller End Cap (23).



STEP
5



Above shows STEP 5
assembled and completed



STEP

6

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

NOTE:

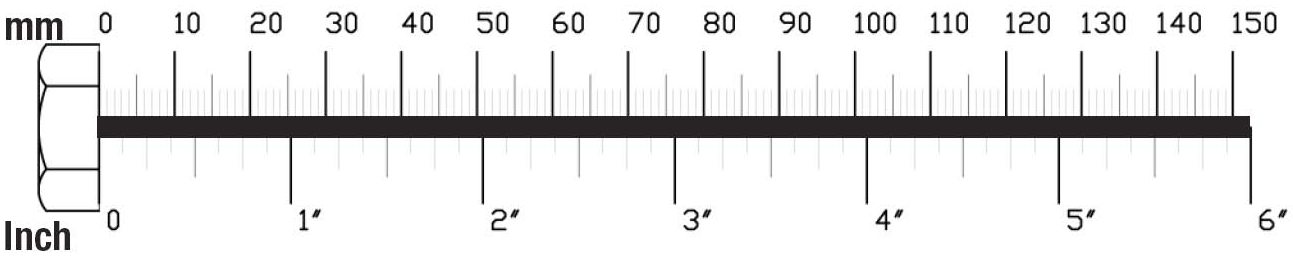
Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Connect Leg Extension Arm (U) to Main Base Frame (B) using:
One 1 (shaft)
Two 6 (bearing)
Two 81 (M8 washer)
Two 74 (M8x15 allen head bolt)

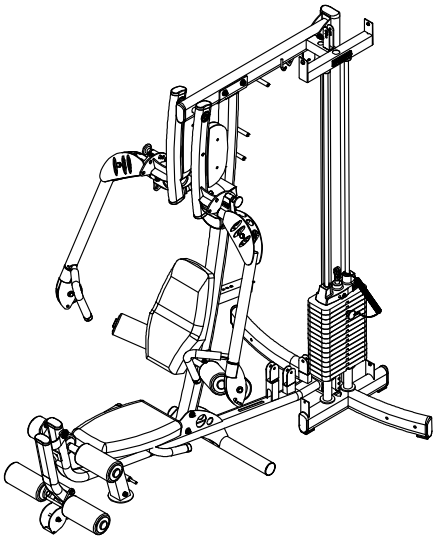
B. Insert Convex End Cap (36) into Leg Extension Arm (U) and Main Base Frame (B) as shown in the diagram.

C. Connect Pivoting Roller Frame (V) to Leg Extension Arm (U) using:
One 60 (M10x140 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

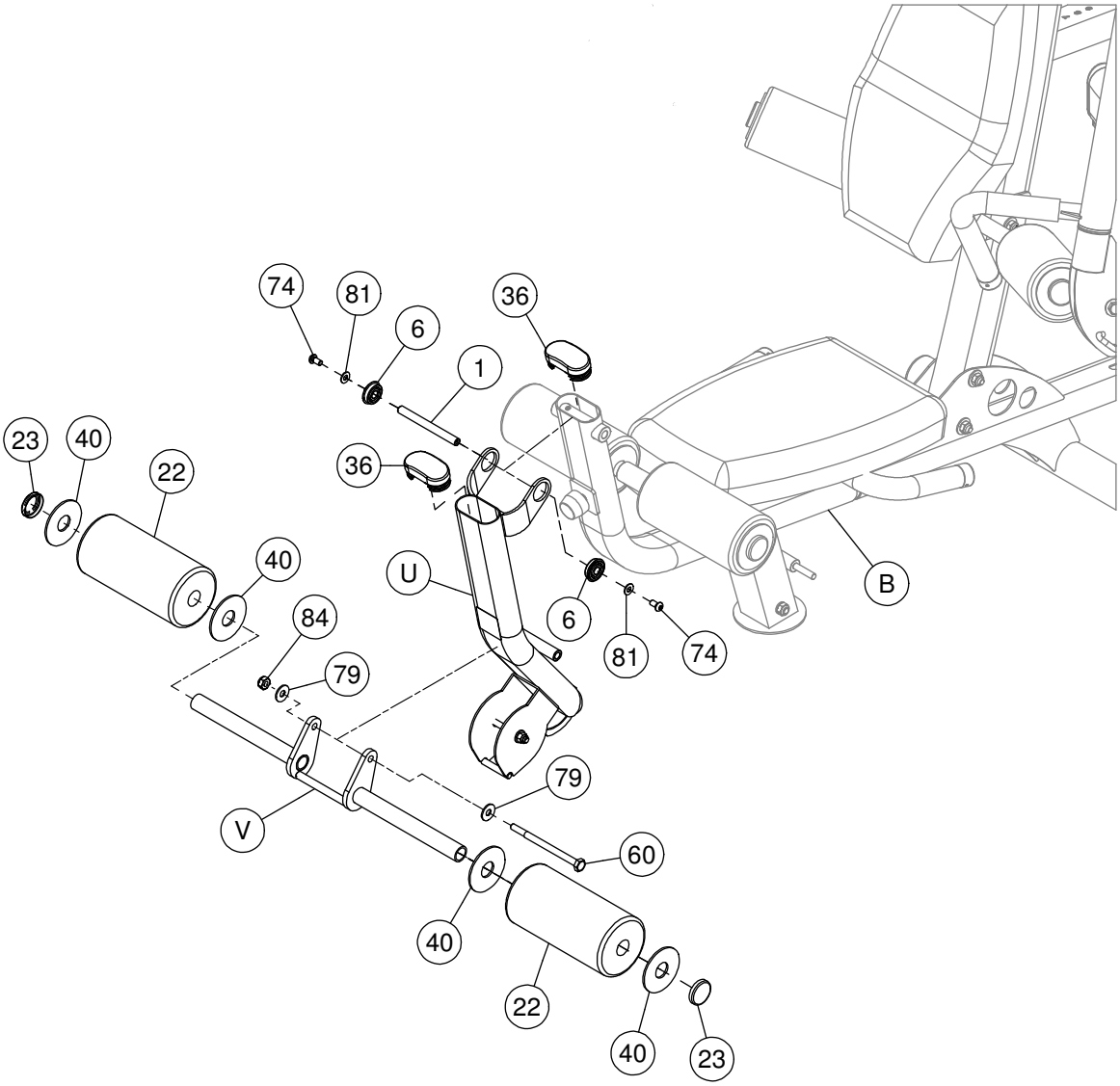
D. Slide Foam Rollers (22) onto Pivoting Roller Frame (V) and secure using:
Four 40 (nylon washers)
Two 23 (roller end cap)



STEP
6



Above shows STEP 6
assembled and completed



STEP

7

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

NOTE:

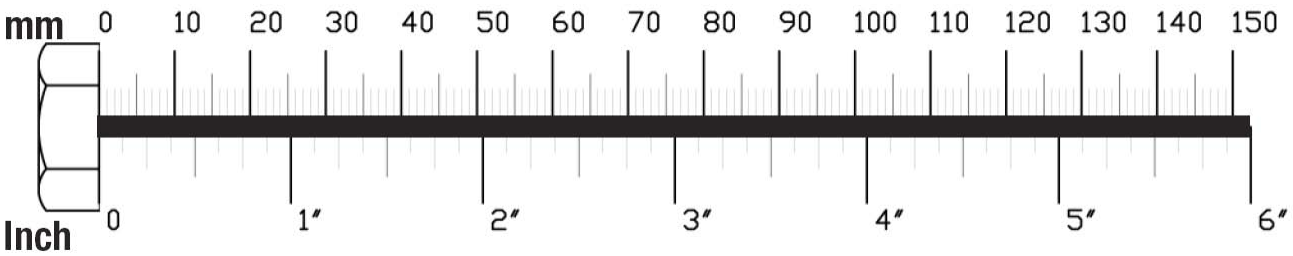
Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Insert Pulley (A1) into Functional Training Arm (L) as shown using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

B. Insert Pulley (A2) into Functional Training Arm (L) as shown using:
One 62 (M10x75 partial thread hex head bolt)
Two 6 (bearing)
One 84 (M10 nylon lock nut)

C. Insert Pulley (A3) into Functional Training Arm (H) by using:
One 71 (3/8"x75 allen head bolt)
Two 83 (3/8" washer)
One 86 (3/8" nylon lock nut)

D. Route Functional Training Arm Cable (55) from Pulley (A1) up Functional Training Arm (L) and around Pulley (A2) as shown in Diagram 2. Please leave Functional Training Arm Cable (55) hang until Step 8B.



STEP 7

Diagram 1
Pulley Installation

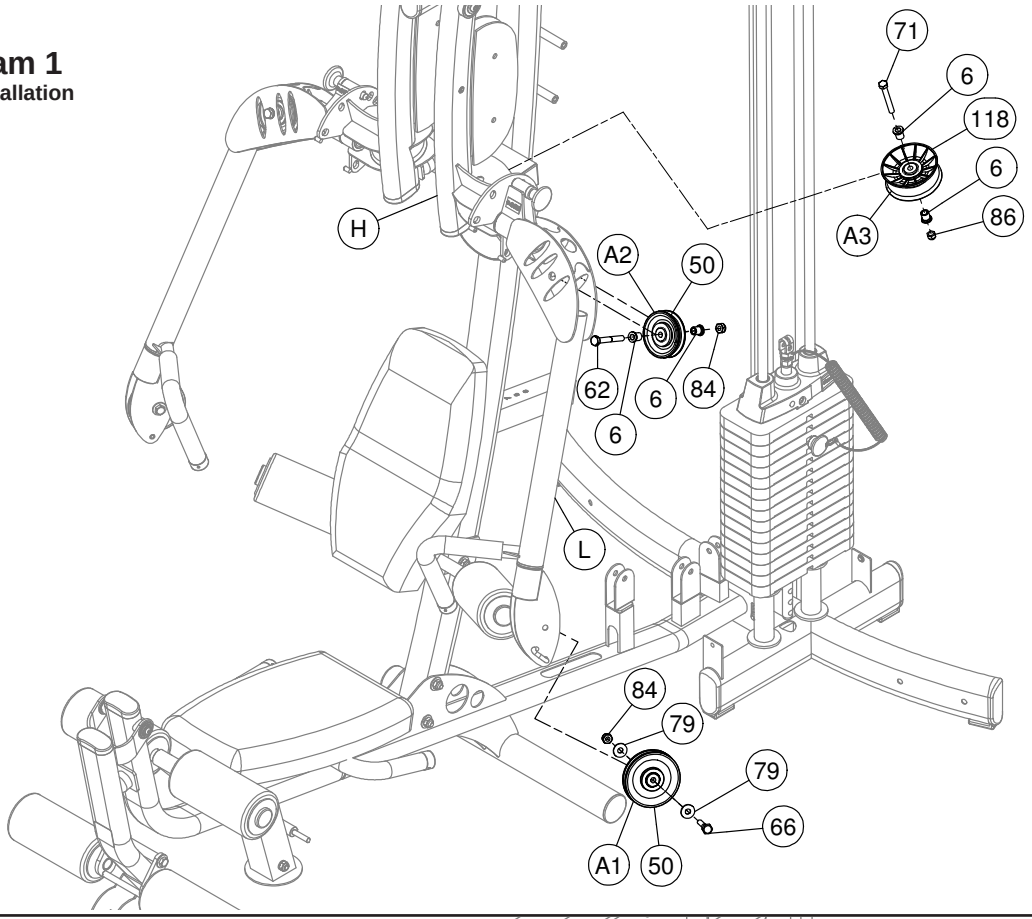
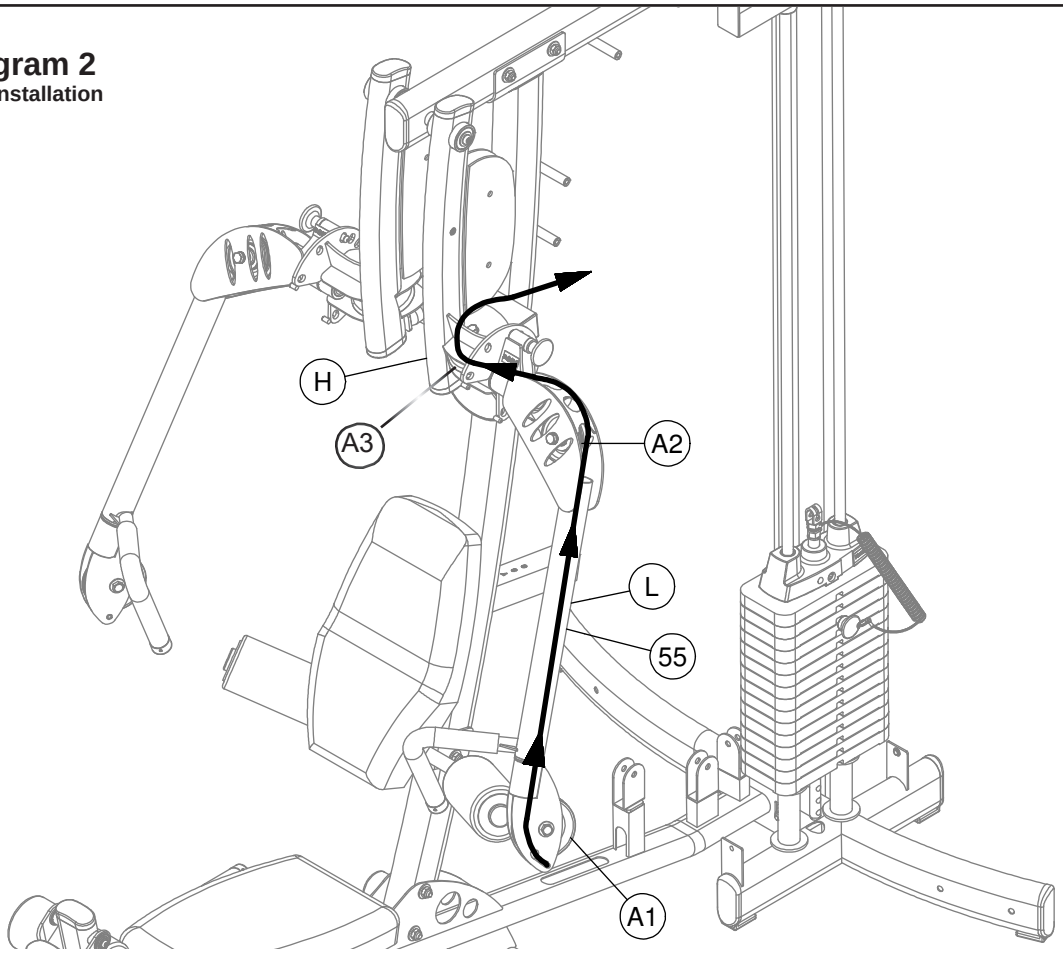


Diagram 2
Cable Installation



STEP

8

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Install Pulley (A7) and Pulley (A5) as shown in Diagram 1 by using:
Two 66 (M10x45 partial thread hex head bolt)
Four 79 (M10 washer)
Two 84 (M10 nylon lock nut)

B. Install Pulley (A6) as shown in Diagram 1 by using:
One 66 (M10x45 partial thread hex head bolt)
One 79 (M10 washer)
One 19 (plate)

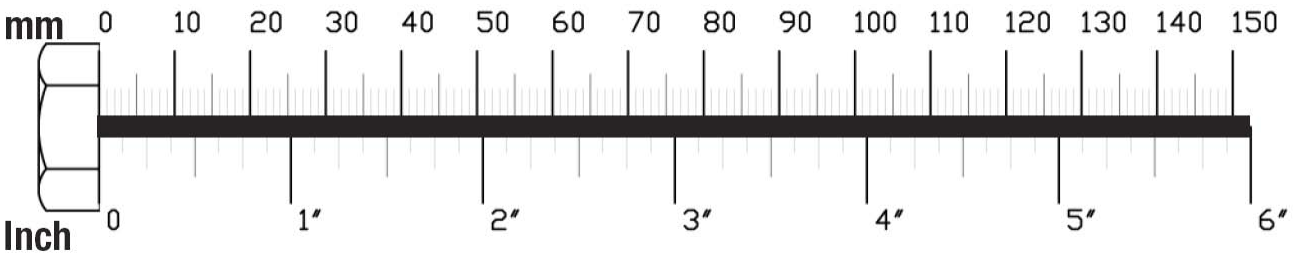
C. Install Pulley (A4) as shown in Diagram 1 by using:
One 62 (M10x75 partial thread hex head bolt)
One 79 (M10 washer)
One 19 (plate)

D. Install Pulley (A8) as shown in Diagram 1 by using:
One 66 (M10x45 partial thread hex head bolt)
One 79 (M10 washer)
One 19 (plate)

E. Connect Pulley (A9) to Holder for Double Crossed Pulleys (W) by using:
One 66 (M10x45 partial thread hex head bolt)
One 79 (M10 washer)
One 84 (M10 nylon lock nut)

F. Bring Functional Training Arm Cable (55) up and around Pulley (A4), Pulley (A5), Pulley (A6), Pulley (A7) and Pulley (A8) then down towards Pulley (A9) as shown in Diagram 2.

G. Route cable up from Pulley (A9) and terminate on the chain hook provided on Main Top Frame (E).



STEP 8

Diagram 1
Pulley Installation

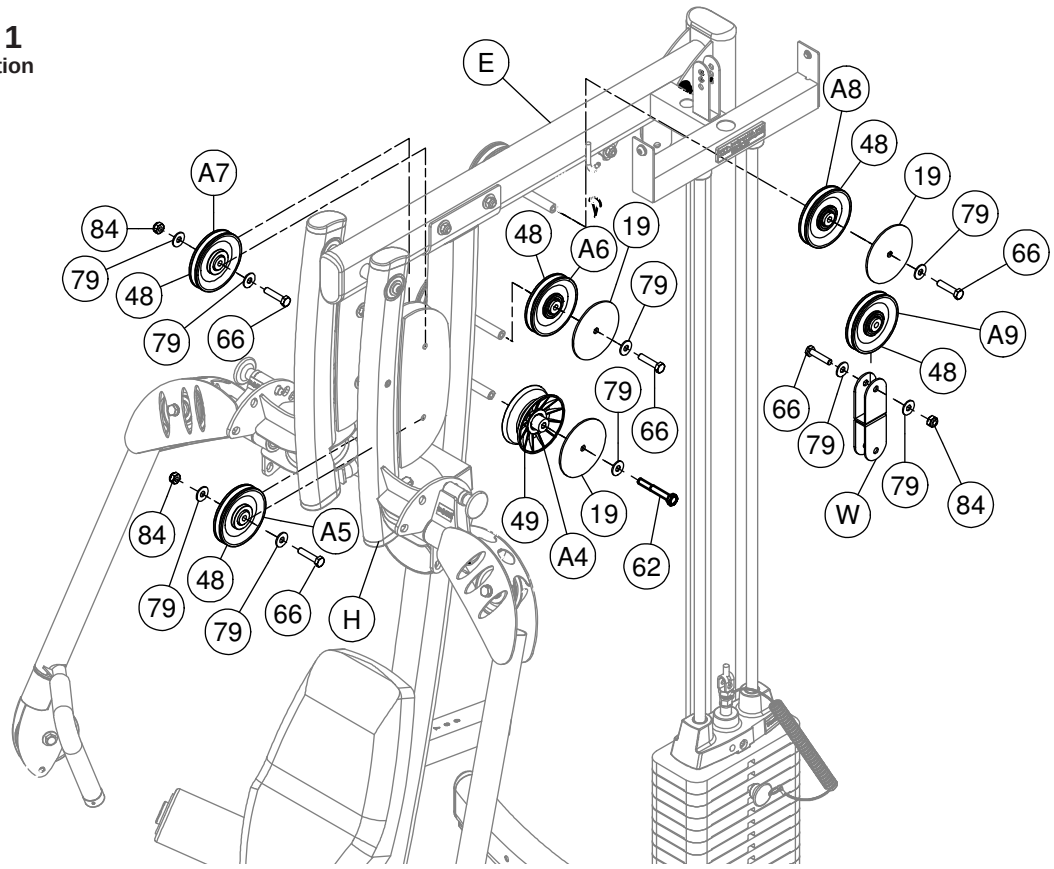
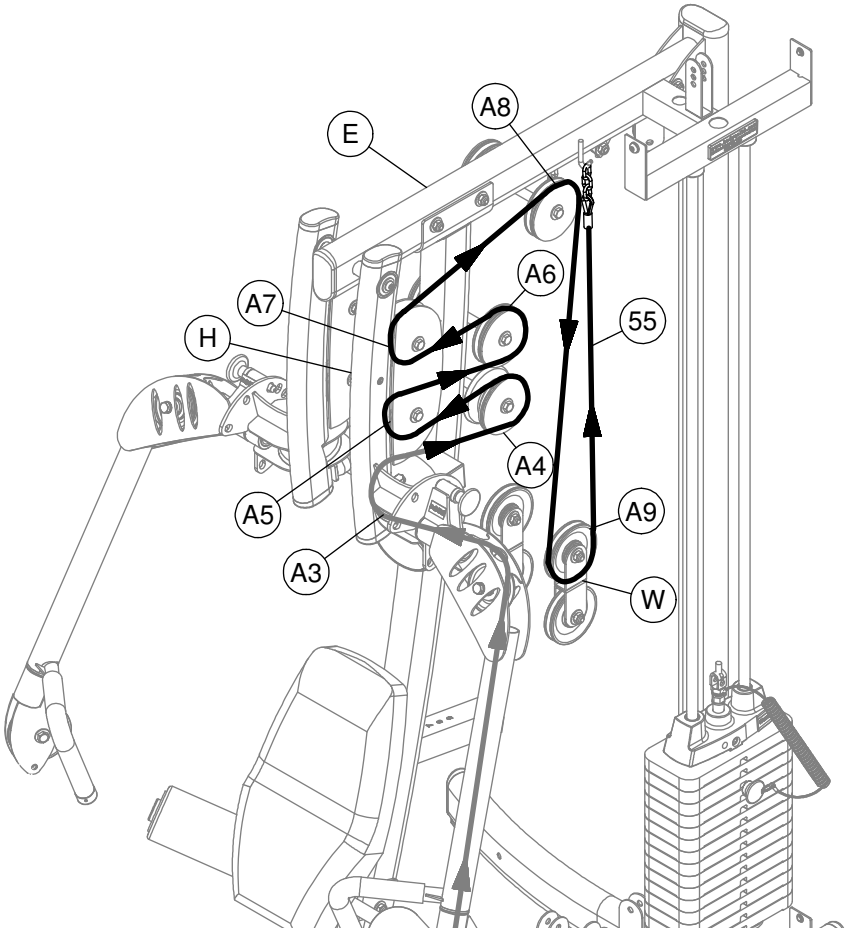


Diagram 2
Cable Installation



STEP

9

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Connect Pulley (B1) to both Plates (18) by using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

B. Insert Pulley (B3) into Pulley Holder with Stop (X) and connect using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

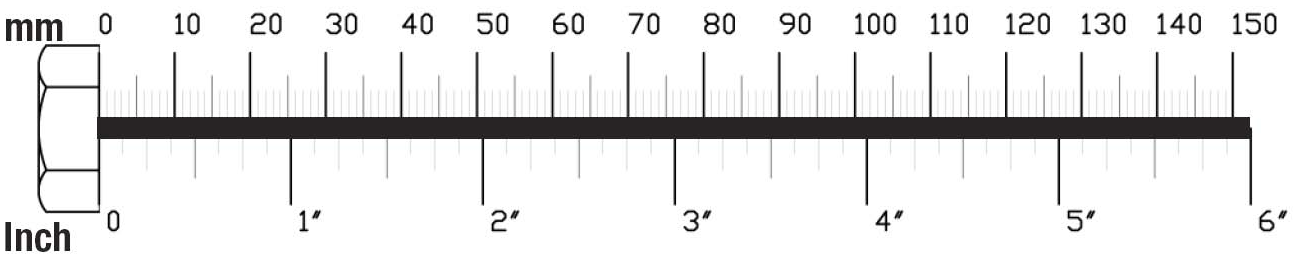
C. Insert Pulley (B4) as shown in Diagram 1 by using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

D. Insert Pulley (B2) to Main Top Frame (E) as shown in Diagram 1 by using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

E. Terminate the Chain End of Cable (52) to Main Top Frame (E) as shown in Diagram 1 by using:
One 67 (M10x25 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

F. Route the cable down and around Pulley (B1), back up to Pulley (B2), then down to Pulley (B3) and finally back up to Pulley (B4).

G. Bring the cable down and terminate at Selector Rod Top Bolt (102) as shown in Diagram 1A.



STEP 9

Diagram 1
Pulley Installation

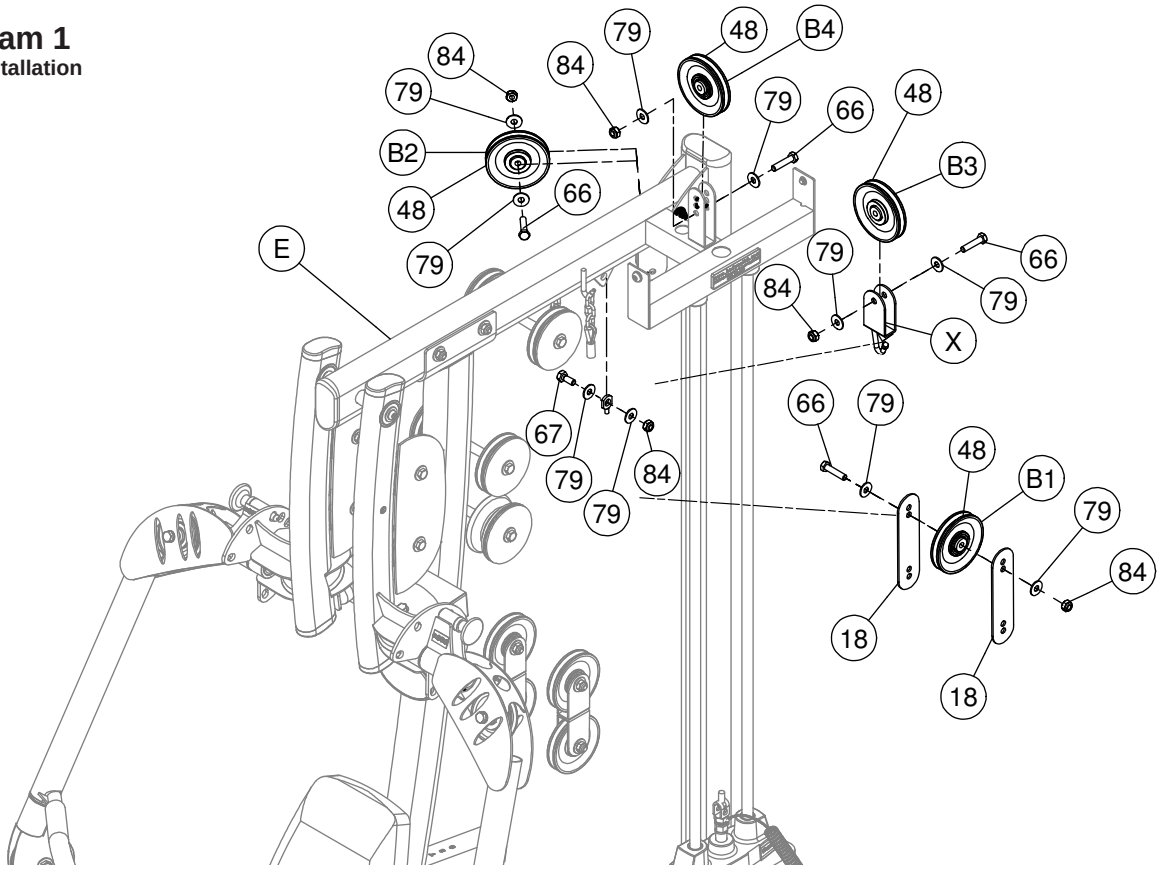
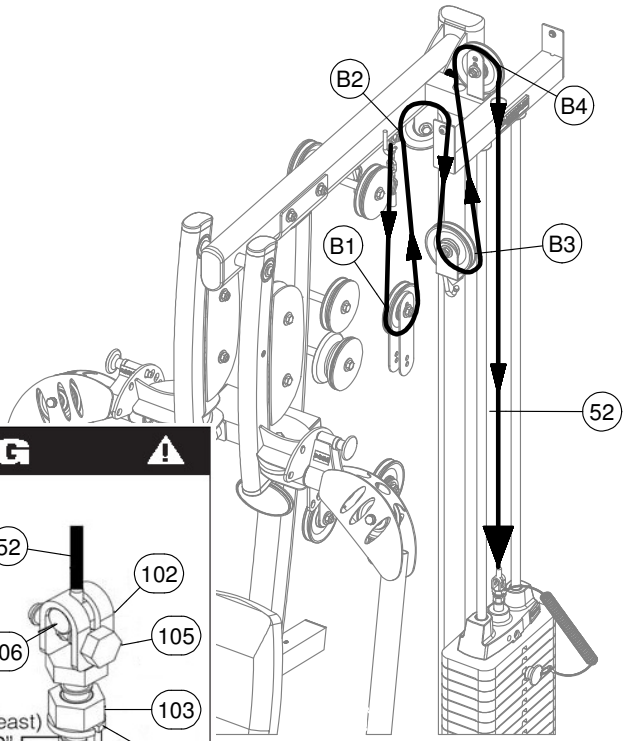
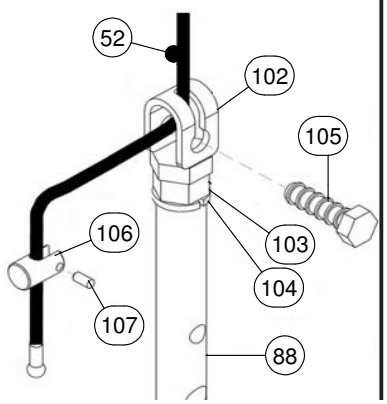


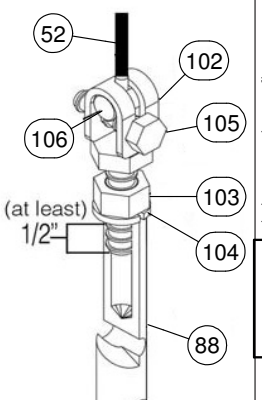
Diagram 2
Cable Installation



⚠ WARNING ⚠

Diagram 1A





Selector Rod Top Bolt (102) must be threaded a minimum of 1/2" into the Selector Rod (88), and Jam Nut (36) tightened securely against spring lock washer (104) to ensure proper connection. check the Jam Nut (103) once a week to make sure it is tight.

STEP

10

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

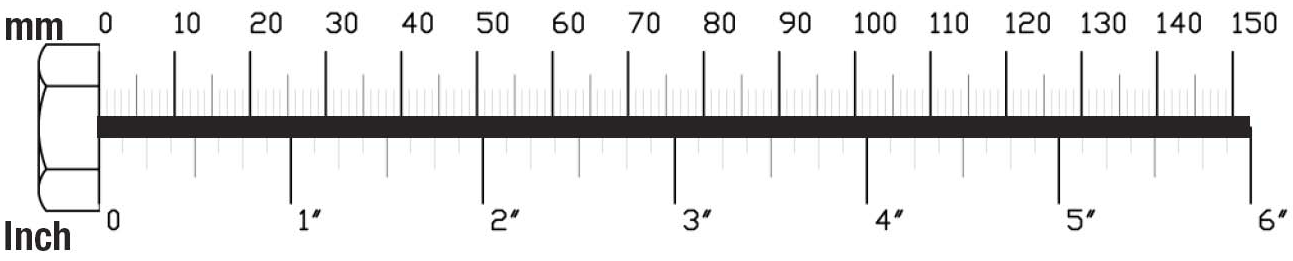
A. Insert Pulley (C3) and Pulley (C1) into Holder for Double Crossed Pulleys (W) and install using:
Two 66 (M10x45 partial thread hex head bolt)
Four 79 (M10 washer)
Two 84 (M10 nylon lock nut)

B. Insert Pulley (C2) into Pulley Holder with Stop (X) and install using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

C. Insert Pulley (C4) into Main Base Frame (B) as shown in Diagram 1 by using:
One 64 (M10x55 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

D. Terminate one end of Short Cable (51) as shown in Diagram 1.

E. Route the cable up and around Pulley (C1) then back down to Pulley Holder with Stop (X), up towards Holder for Double Crossed Pulleys (W) then back down to terminate again as shown in Diagram 1.



STEP 10

Diagram 1
Pulley Installation

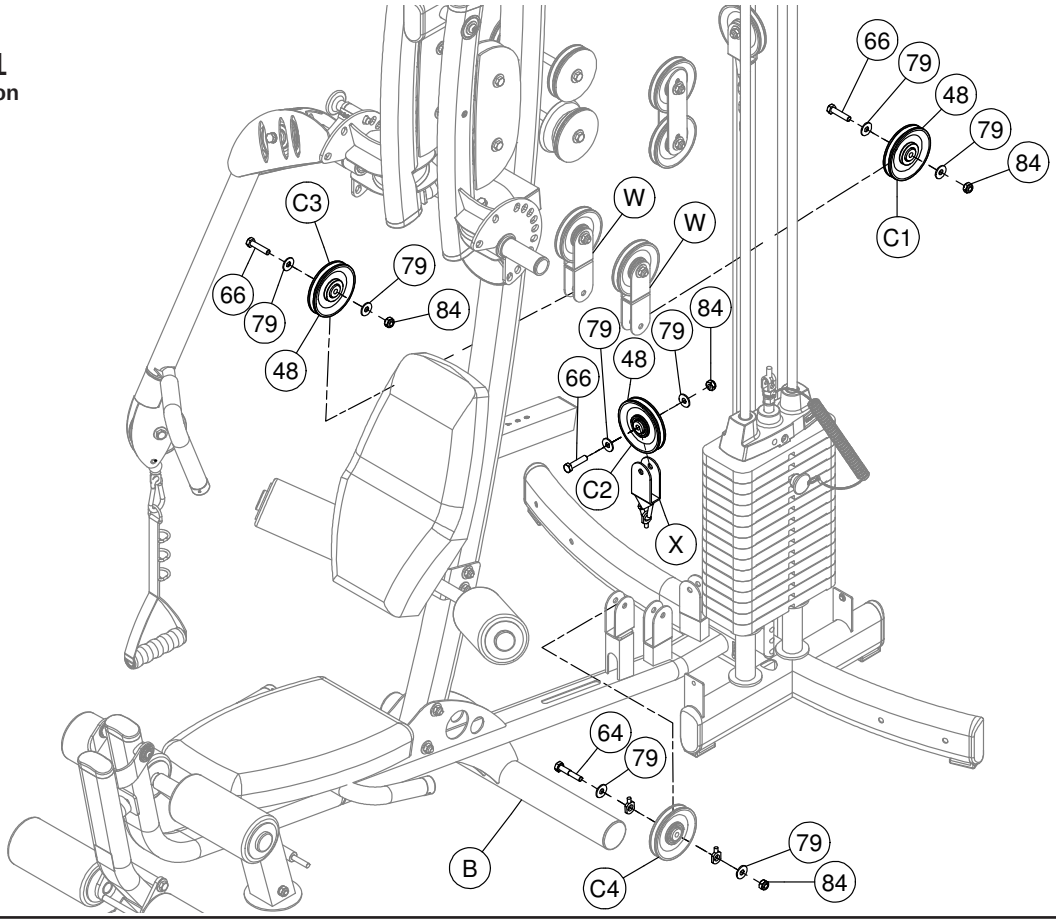
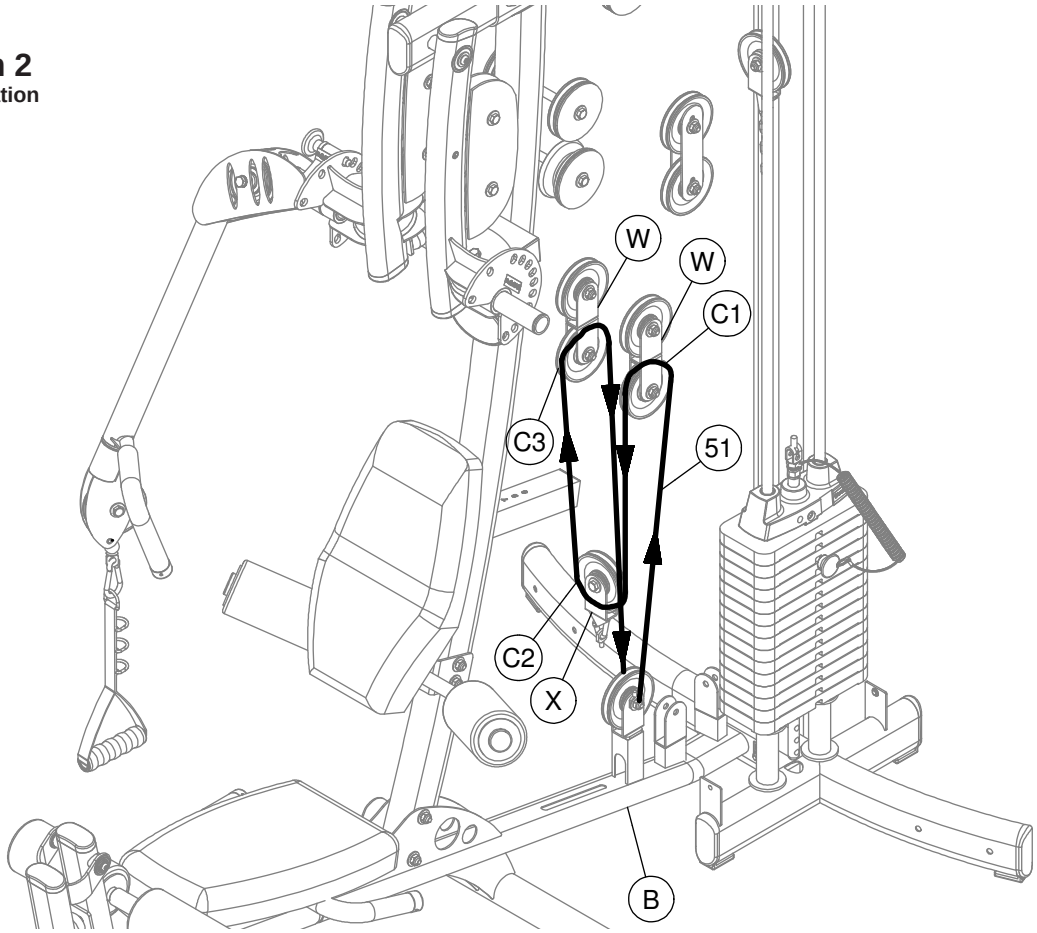


Diagram 2
Cable Installation



STEP

11

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

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Install Pulley (D4) to Plate (18) by using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

B. Insert Pulley (D3) as shown in Diagram 1 using:
One 66 (M10x45 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

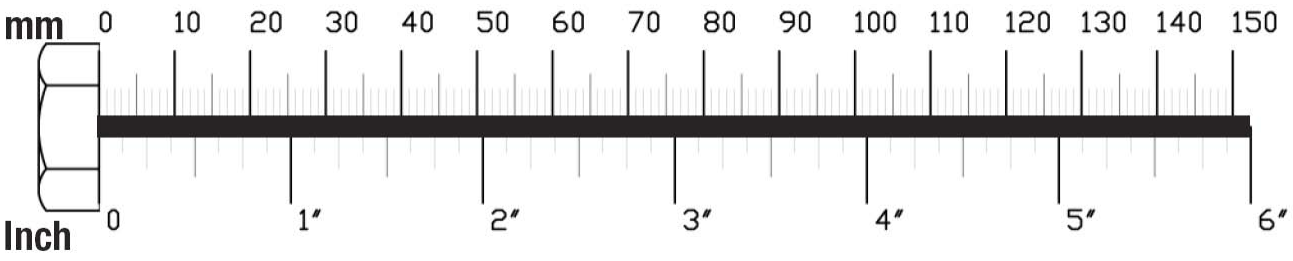
C. Insert Pulley (D5) as shown in Diagram 1 using:
One 64 (M10X55 partial thread hex head bolt)
Two 79 (M10 washer)
One 84 (M10 nylon lock nut)

D. Connect Pulley (D2) to Main Base Frame (B) by using:
One 84 (M10 nylon lock nut)
One 79 (M10 washer)
One 20 (L-Plate)

E. Connect Pulley (D1) to Leg Extension Arm (U) by using:
One 71 (3/8"x75 allen head bolt)
Two 83 (3/8" washer)
One 86 (3/8" nylon lock nut)

F. Route cable (54) as shown in Diagram 2 by starting at Pulley (D1) through Pulley (D2) and around and up from Pulley (D3).

G. Bring the cable around Pulley (D4) then back down and around Pulley (D5) and terminate at Pulley Holder with Stop (X) as shown in Diagram 2.



STEP 11

Diagram 1
Pulley Installation

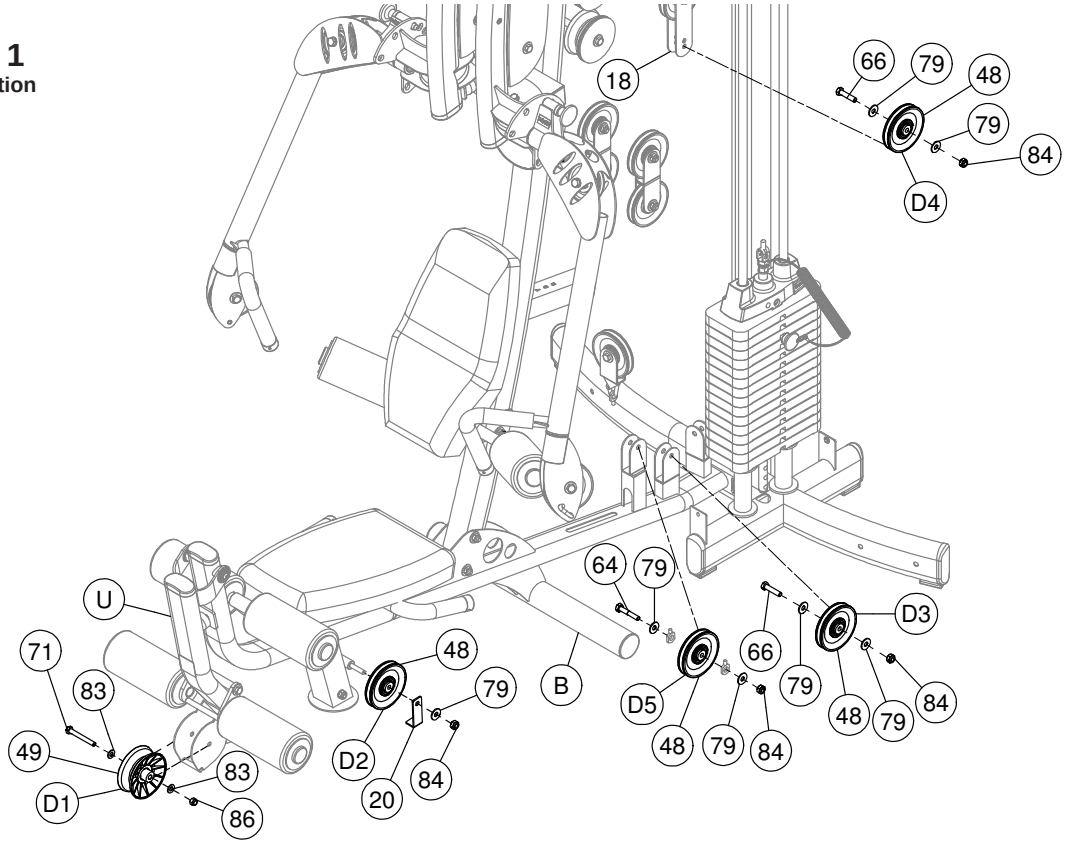
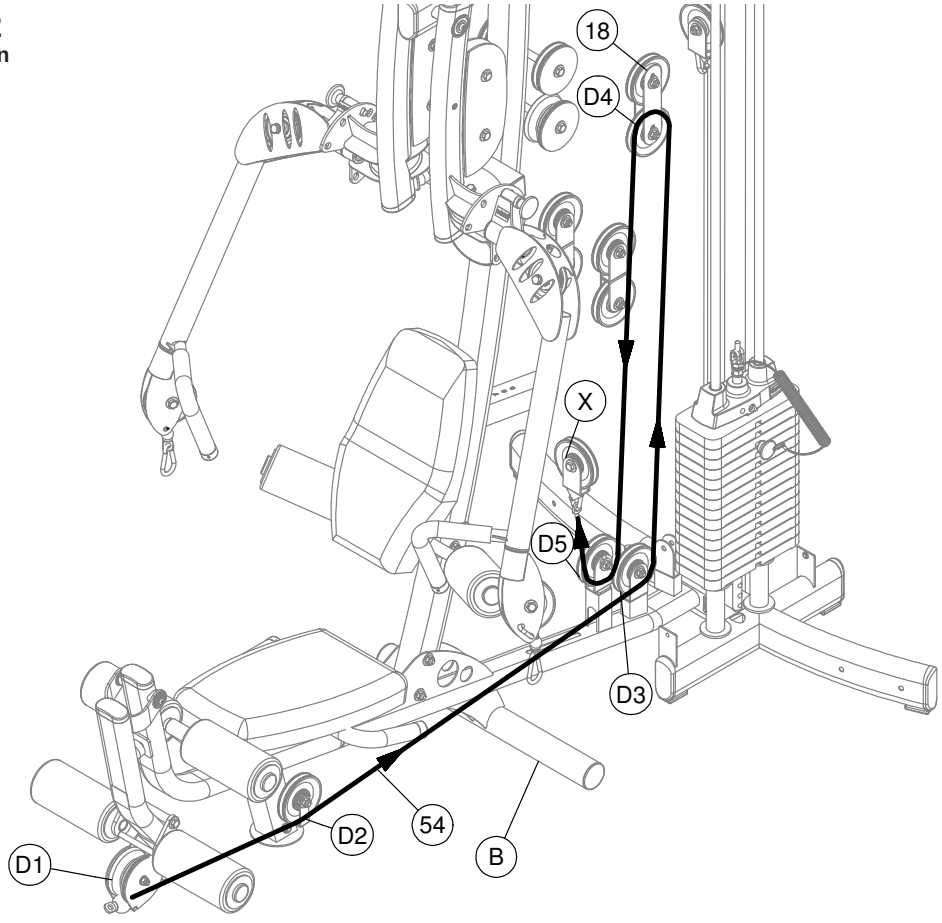


Diagram 2
Cable Installation



STEP

12

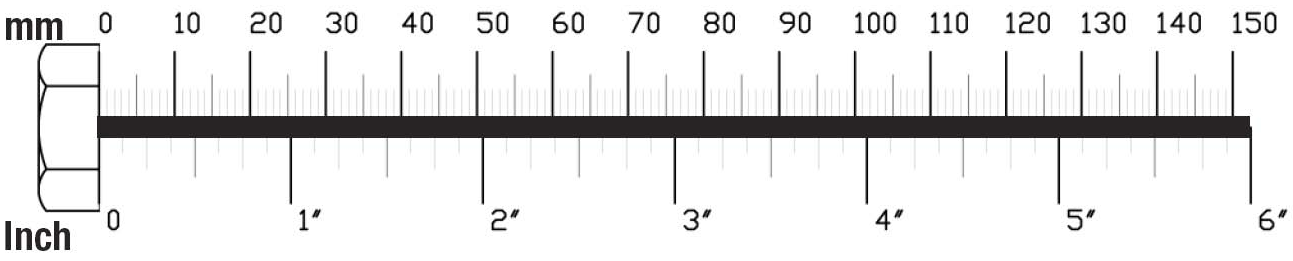
Be careful to assemble all components in the sequence they are presented.

NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

A. Insert Pulley (E1) by terminating the Ball End at Pulley (E1) and bringing the Chain End of Left Attachment Cable (53) up to and terminated at Pulley Holder with Stop (X).

B. Route Left Attachment Cable (53) by terminating the Ball End at Pulley (E1) and bringing the Chain End of Left Attachment Cable (53) up to and terminated at Pulley Holder with Stop (X).



STEP 12

Diagram 1
Pulley Installation

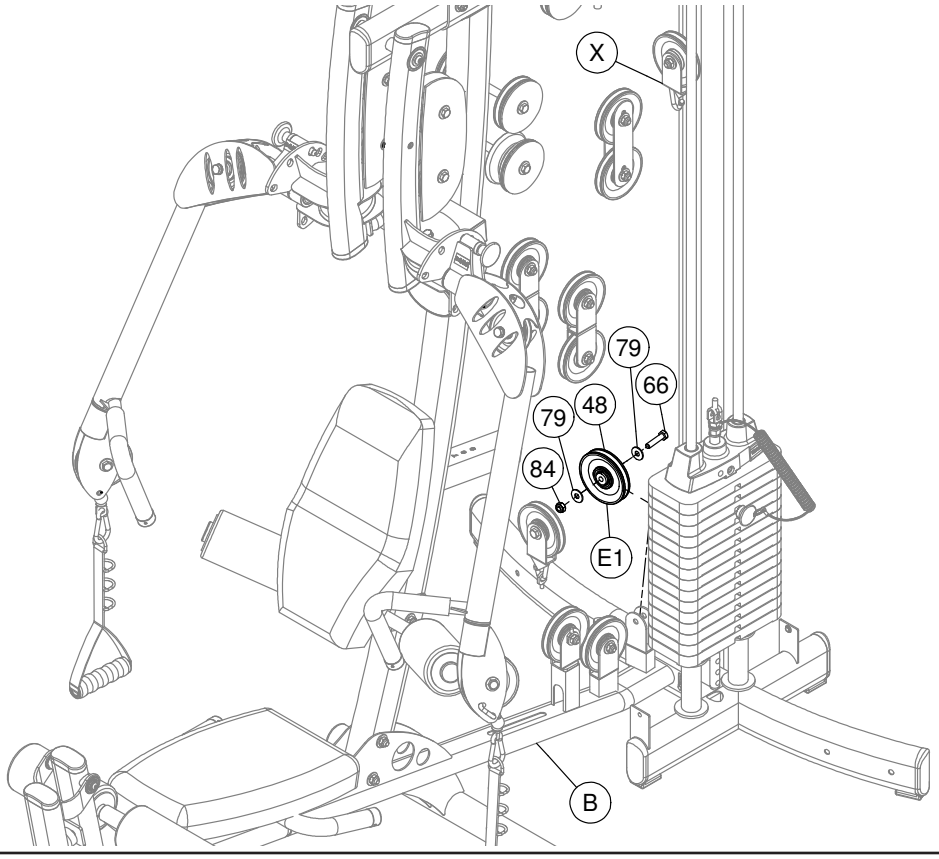
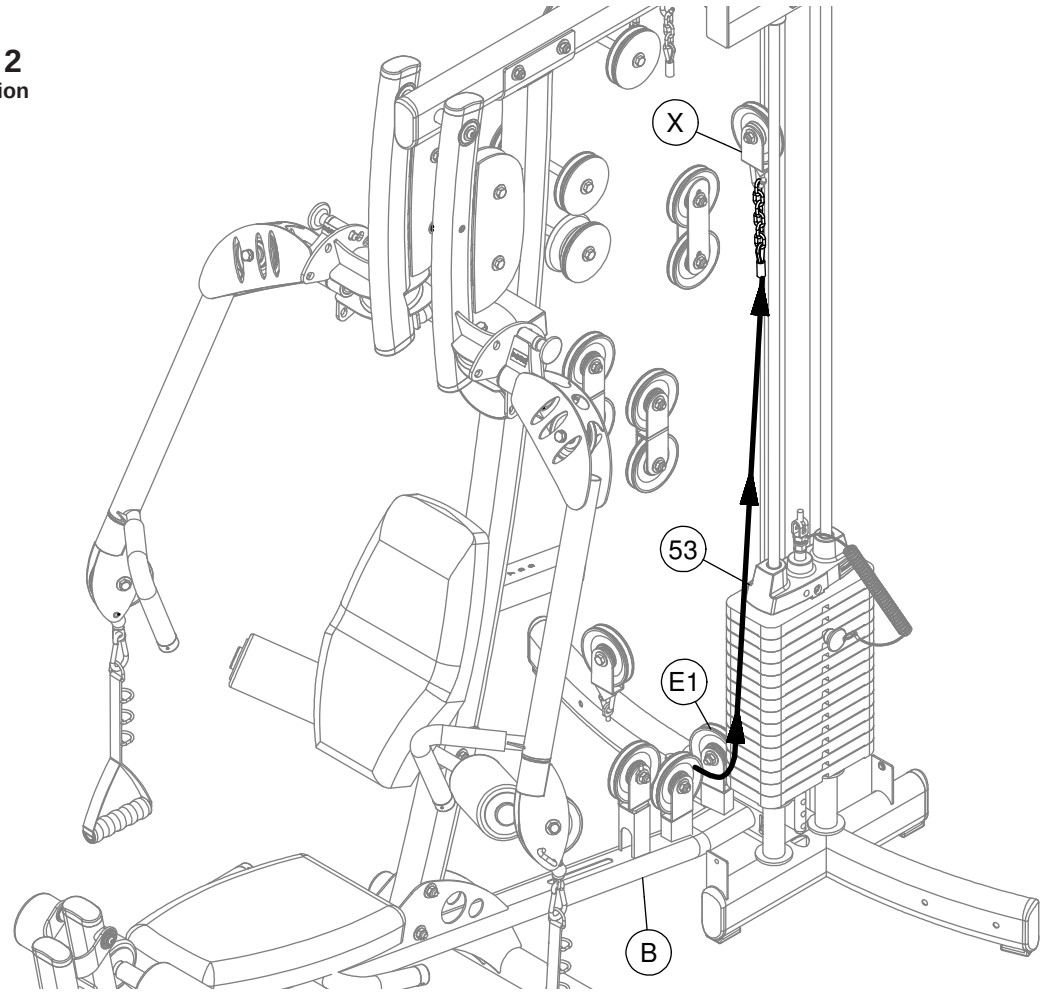


Diagram 2
Cable Installation



STEP

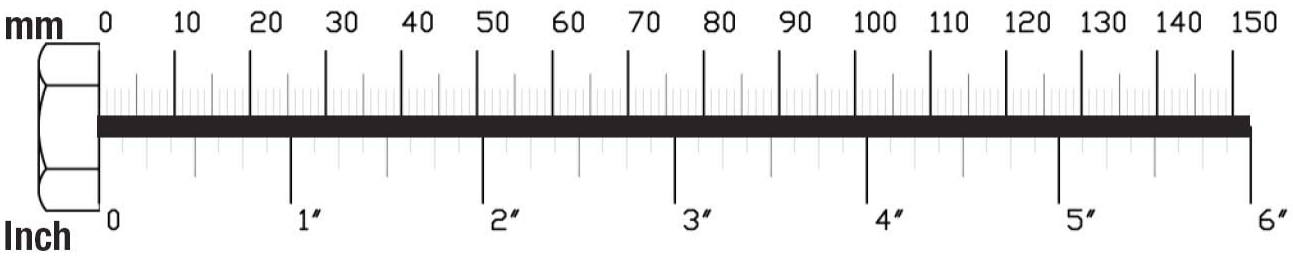
13

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

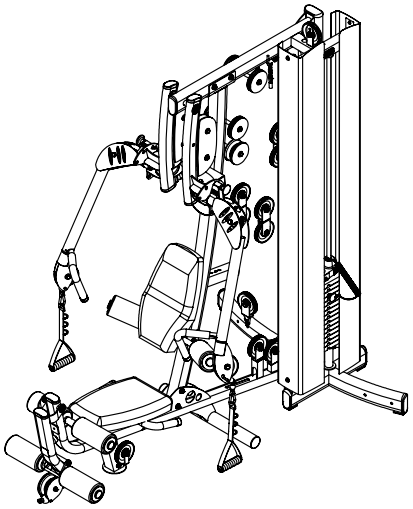
NOTE:

Finger tighten all hardware in this step. Do Not wrench tighten until end of step 13.

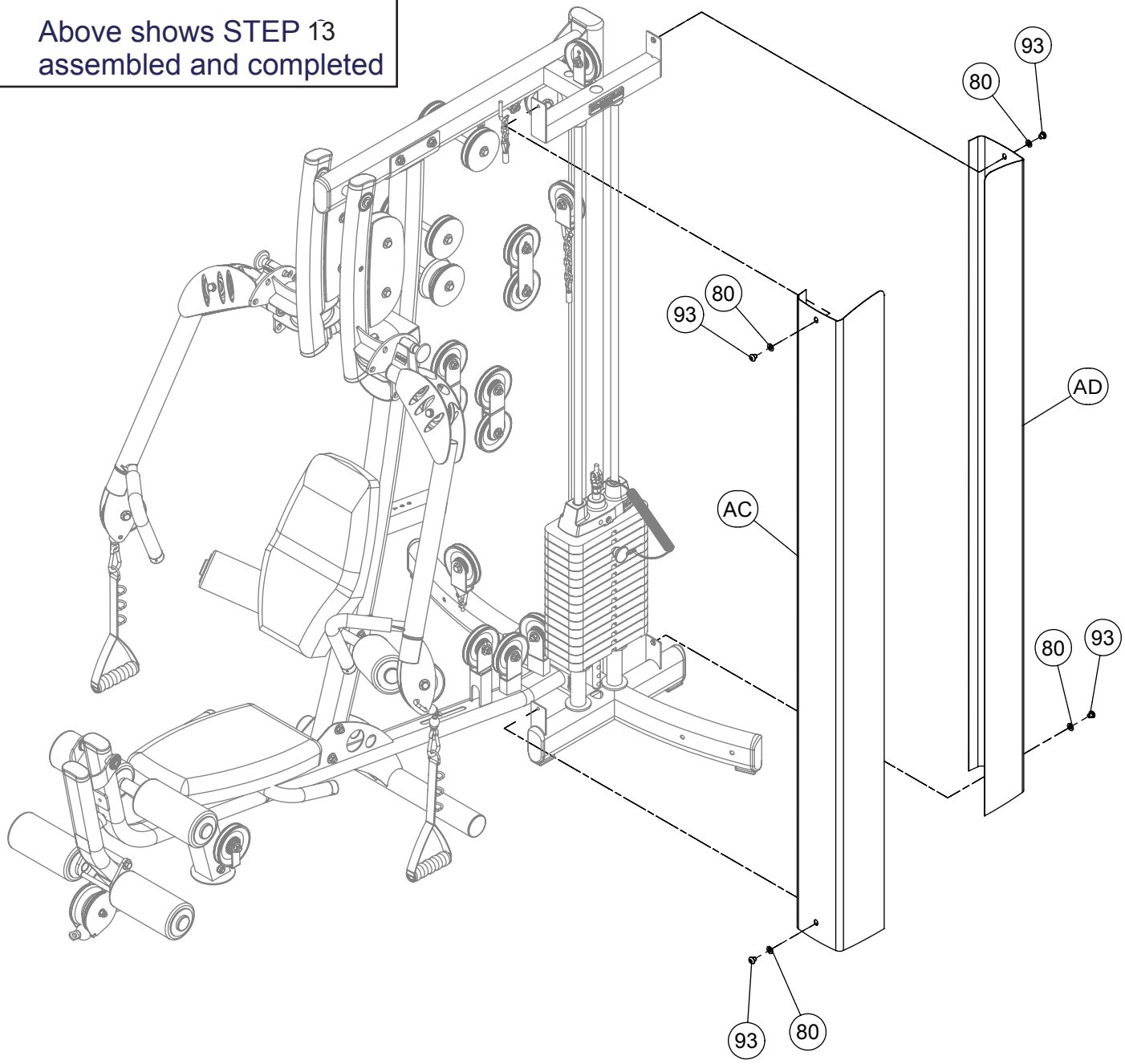
A. Install Front Shroud (AC) and Back Shroud(AD) to the F400 by using:
Four 93 (M10x10 allen head bolt)
Four 80 (M10 washer)



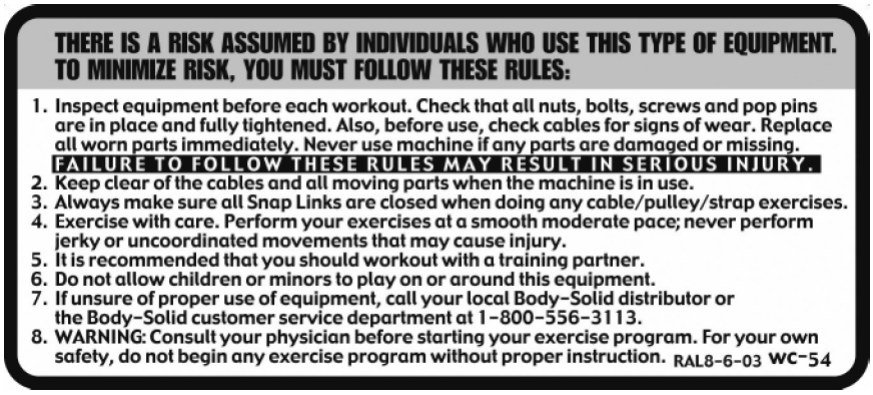
STEP
13



Above shows STEP 13 assembled and completed



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 result in 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



#DWRULE-4
Warning Label for Rules

#DWSM-5
Warning Label for Maintenance

Precision craftsmanship assures Body-Solid's ability to consistently deliver products of the highest standards. Our products have been carefully designed to ensure safe, efficient long term operation.

However, it must be realized that safe use of this equipment requires that owners carefully read and follow the Body-Solid use recommendations, warnings, and maintenance guidelines in this Owners Manual.

Routine inspection and maintenance is of critical importance to ensure the maximum safety and performance of the Fusion 400. Body-Solid uses the highest quality materials available, but wear is inevitable. Therefore, you must carefully inspect your equipment as outlined in the Maintenance Schedule on the next page.

Be advised that dangerous conditions can arise even during a warranty period. A warranty does not negate the owner's responsibility to thoroughly, carefully and daily inspect the machine.

Including maintaining the equipment the owner's responsibility is also to:

- Be sure to always provide adequate supervision to all end-users.
- Be sure to instruct all end-users of proper usage.
- Be sure all supervisors and personal trainers who instruct end-users on equipment are properly trained and know the function and importance of every adjustment and setting. Also, be sure these trainers provide proper instruction to end-users on the fundamentals of strength training.

CABLES:

- While the machine is not in use. Carefully run your fingers along the cable to feel for thinning or bulging areas. Replace cables immediately at the first sign of damage or wear. Do not use equipment until damaged cable has been replaced.
- Visually inspect the cables for fraying, cracking, peeling or discoloration.
- Check slack in cables and re-adjust cable tension if needed.
- Check that jam nut at Weight Stack is tight.

UPHOLSTERY:

- Wipe down after every workout.
- Periodically take the time to use a mild soap or a mild vinyl upholstery cleaner. Avoid using any abrasive cleaner not intended for use on vinyl.
- Keep sharp or pointed objects out of your pockets and clear of all upholstery.

NUTS/BOLTS/FASTENERS:

- Periodically inspect all nuts and bolts. Tighten if needed. If bolts seem to loosen periodically, use Loctite 242 for a long-term cure.
- Go through a re-tightening sequence periodically to ensure that all hardware is properly tensioned.

GUIDE RODS:

- Wipe clean with a dust free rag. Lubricate with a Silicon or Teflon based lubricant.

ADJUSTMENTS / LOCKING PINS / TIGHTENING KNOBS:

- Check all pieces for signs of visible wear or damage.
- Check springs in Snap Links and Pop Pins for proper tension and alignment.
- If the spring sticks or has lost its rigidity, replace it immediately.

ANTI-SKID SURFACES:

- Replace if they appear worn or become slippery.

WARNING INSTRUCTION LABELS:

- Inspect and familiarize yourself with all safety warnings and other user information on decals.

Body-Solid

MAINTENANCE SCHEDULE	DAILY	WEEKLY	LATEST DATE ENTRY						
CABLES: CHECK TENSION, END FITTINGS,AND COATING. CHECK THAT JAM 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:
1-800-556-3113

*Make several copies of this page to keep track of your maintenance.
You can print more copies of this page by going to:
http://www.bodysolid.com/support/docs.html

Body-Solid

PHRASES, TERMS, TIPS

BEGINNER'S GUIDELINES

- Work out at least two times a week.
- Include six to eight exercises that train major muscle groups.
- Perform two or three sets of at least eight to 12 repetitions.

Exercise that primarily uses oxygen to burn fuel at low to moderate levels of intensity. Running

Exercise that primarily uses the body's stored fuel for energy. Intense weightlifting is an example of an anaerobic exercise.

ATROPHY

Decrease of a muscle caused by the decrease in the size of its cells because of inactivity.

BALLISTIC STRETCHING

final position is not held. This is not a recommended stretching technique.

BREATHING

Never hold your breath during any part of an exercise. Holding your breath may cause severe intra-thoracic pressure and raise blood pressure leading to dizziness, blackout or other

exercise.

Referring to the heart, lungs, and other periphery systems involved in the transport of oxygen

CHALLENGE YOUR MUSCLES

All strength training should progress gradually, using increases in weight until your goals are reached. Then, change your workout to include increased reps or a higher weight resistance. Alter the order of your exercises, perform multiple sets or different exercises to maintain results

CHANGE ROUTINE

until about the six to eight week point. Advanced lifters may want to change routines to avoid

CIRCUIT TRAINING

Exercise stations that consist of various combinations of weight training, flexibility, calisthenics, and aerobic exercise.

CONCENTRIC MUSCLE ACTION

ECCENTRIC MUSCLE ACTION

EXERCISE FREQUENCY

muscle group worked. If you are doing a total-body workout, three training sessions per week, performed on every second day, is adequate.

EXERCISE LARGE MUSCLES FIRST

You should work your large muscle groups first (ie. squat, bench press, lat pulldown) before

EXERCISE PROGRAM DURATION

another 20 to 60 minutes when you include stretching, warm-up, aerobics and cool-down.

You'll get the most out of strength training if you give your muscles at least 48 hours rest to recover and rebuild between strength training workouts.

HYPERTROPHY

Enlargement of a muscle caused by an increase in the size of its cells in response to weight

INTENSITY

ISOKINETIC EXERCISE

that moves you through an entire range of motion at a preset speed and will not change no matter how much pressure is put forth by the individual.

ISOMETRIC EXERCISE

Contracts the muscle statically without changing its length. Example: Attempting to lift a weight

ISOTONIC EXERCISE

training with full range of motion.

Fatigue is when you can't possibly do another rep without sacrificing form.

MUSCULAR ENDURANCE

The ability to perform repetitive muscular contractions against some resistance.

MUSCULAR STRENGTH

OSTEOPOROSIS

PLYOMETRIC EXERCISE

eccentrically, followed immediately by a rapid concentric contraction of that muscle for the purpose of facilitating and developing a forceful explosive movement over a short period of time. Examples of these are using medicine balls for upper extremity and depth jumping for lower extremity.

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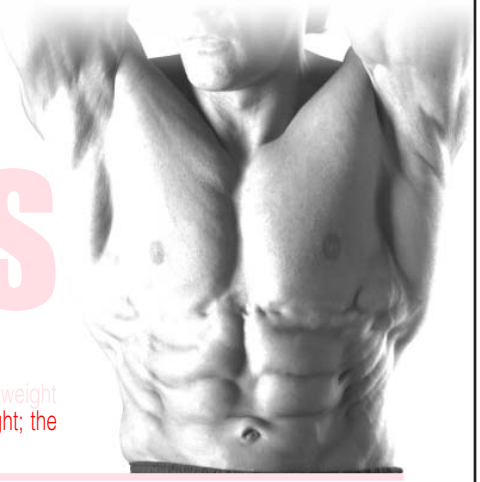
PHRASES, TERMS, TIPS & GUIDELINES



STARTING RESISTANCE LEVEL

which will hinder your efforts and discourage you. Use this as a guideline: if you cannot lift the weight eight times with proper form, the weight is too heavy. Similarly, don't choose too light a weight; the last two or three repetitions of your set should be difficult.

POWER
Power is the rate of performing work. Power during a repetition is defined as the weight lifted times the vertical distance the weight is lifted divided by the time to complete the repetition.

in a shorter period of time. Power can also be increased by lifting a heavier resistance the same vertical distance in the same period of time as a lighter resistance.

PROGRESS GRADUALLY
Increase reps before increasing resistance. Reduce rest intervals between sets to increase intensity.

PROGRESSIVE RESISTANCE
The principle of continually adding more weight to a specific exercise as your muscles become stronger to adapt to the heavier weights.

Focus on the proper motion of the exercise and concentrate on the specific muscles being used. Do not sacrifice proper form to lift heavier weight or to perform more repetitions. Proper form also means lifting in a smooth, fluid motion. If you feel strain elsewhere, you should re-evaluate the amount of weight you are lifting or have a qualified professional critique your exercise motion.

PROPER POSTURE
Maintaining proper posture will greatly reduce chances of injury and maximize exercise benefit. When standing always keep your feet shoulder-width apart. Do not
Locking your knees can put unnecessary strain on them. Keep your back flat and straight, making sure not to twist or arch it in order to complete a repetition.

PROPER TECHNIQUE
To get the most out of strength training and to reduce the chance of injury, use proper weight training techniques. These include working your muscles through their full range of motion (but not locking any joints), lifting at a speed at which you can control the weight and stop

RANGE OF MOTION
Moving through a complete range of motion (ROM) allows the muscles to stretch before contraction and increases the number of muscle fibers being recruited. This produces maximum contraction and force. By working the full ROM, flexibility will be maintained and possibly increased.

REPETITION
A repetition is one complete movement of an exercise. It normally consists of two phases: the concentric muscle action, or lifting of the resistance, and the eccentric muscle action, or

REPETITION MAXIMUM (RM)
This is the maximum number of repetitions per set that can be performed at a given resistance with proper lifting technique. Thus, a set at a certain RM implies the set is performed to momentary voluntary fatigue. 1RM is the heaviest resistance that can be used for one compete repetition of an exercise. 10 RM is a lighter resistance that allows completion of 10 (but not 11) repetitions with proper exercise technique.

REST INTERVAL
Allow a brief pause between sets to give your muscles a chance to partially recover before

interval between sets. For muscular endurance and definition allow a 30 second rest interval. For strength training allow a 60 to 90 second rest interval.

RISK SHOULD NOT EXCEED BENEFIT
If the risk of a specific exercise exceeds its potential benefit, it is best to stay on the conservative side. There are several ways to work specific muscle groups. Choose those that provide minimal risk. Ask a fitness professional for guidance.

ROUTINE
The specific exercises, sets, reps and weight for a specific body part.

This is a group of repetitions performed continuously without stopping. While a set can be made up of any number of repetitions, sets typically range from 1 to 15 repetitions.

SMALL MUSCLE GROUP EXERCISE
Single joint movement and isolation exercises (i.e. bicep curls, tricep pressdowns and leg extensions).

SPEED OF MOVEMENT
Strength training movements should be slow and controlled. Do not use momentum to complete an exercise movement. Momentum puts unnecessary stress on tendons, ligaments and joints. Using momentum in your exercise movements does not develop increased strength.

STATIC STRETCHING
A stretching technique that involves holding a specific muscle or muscle group at a desired length for a certain period of time. This type of stretching is highly recommended.

STOP TRAINING IF YOU FEEL PAIN

Decrease the amount of weight you are lifting. Talk to a qualified personal trainer, health professional or your doctor.

STRENGTH
Strength is the maximal amount of force a muscle or muscle group can generate in a specified movement pattern at a specified velocity of movement.

WARM UP
This cannot be stressed enough. Many workout-related injuries can be avoided by a proper

It is especially important to warm up specific muscle groups you are going to be using. Your muscles need a 5 to 15 minute warm up as well as a brief cool down. This can be as simple as performing a warm up set of high repetitions and light weight (25% to 50% of your training weight) for each exercise.

WORKOUT
The routine, specific exercises, weights, sets, and reps for one or more body parts.

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Good nutrition is a diet in which foods are eaten in proper quantities and with the needed distribution of nutrients to maintain good health. Malnutrition, on the other hand, is the result of a diet in which there is an under consumption, over consumption, or unbalanced consumption of nutrients that leads to disease or an increased susceptibility to disease. What is stated in the above definitions is the fact that proper nutrition is essential to good health. A history of poor nutritional choices will eventually lead to poor health consequences.

There are many substances necessary for the proper functioning of the body. Nutrients are the substances

growth, and to repair tissues. Nutrients can be divided into six classes: carbohydrates, fats, proteins, vitamins, minerals and water. Carbohydrates, or "carbs", are nutrients that are composed of carbon, hydrogen and oxygen, and are essential sources of energy in the body. Grains, vegetables, and fruits are excellent sources of carbohydrates. It is recommended that at least 55% to 60% of the total number of calories con-

Association, Diabetes & Exercise, 1990). It is further recommended that 10% or less of the total calories consumed come from simple sugars like a candy bar.

One of the many benefits of consuming foods that are high in complex carbohydrates, such as rice, pasta, and whole grain breads, is that they also typically contain dietary fiber. Dietary fiber is a term used when referring to substances found in plants that broken down by the human digestive system. Although fiber cannot be digested, it is important in helping to avoid cancers of the digestive system, hemorrhoids, constipation, and diverticular disease because it helps food move quickly and easily through the digestive system. It is recommended that people consume 20 to 30 grams of fiber per day (American Diabetes Association,

dietary fiber are grains, vegetables, legumes, and fruit.

Fats are an essential part of a healthy diet and serve vital functions in the human body. Among the functions performed by fats are temperature regulation, protection of vital organs, distribution of some vitamins,

of cell membranes. Like carbohydrates, fats are composed of carbon, hydrogen, and oxygen. However, their chemical structure is different.

Both animals and plants provide sources of fat. Saturated fats come primarily from animal sources and are typically solid at room temperature. Plant sources of saturated fats are palm oil, coconut oil, and cocoa butter. A high intake of saturated fats is directly related

Unsaturated fats are typically liquid at room temperature. Corn, peanut, canola, and soybean oil are sources of unsaturated fats. It is recommended that no more than 30% of one's diet be composed of fats. Ten percent or less of the total calories consumed should come from saturated fats. One way to reduce saturated fat intake would be

Proteins are substances composed of carbon, hydrogen, oxygen, and nitrogen. Proteins are made by combining amino acids. Amino acids are nitrogen-containing building blocks for proteins that can be used for energy. Amino acids can combine in innumerable ways to form

different types of proteins exist in the body. It is the ordering of the amino acids that provides the unique structure and function of proteins.

There are proteins in both meat products and plant products. Animal sources of protein such as milk, meat and eggs contain the eight essential amino acids (amino acids that the body cannot synthesize and therefore must be ingested). Plant sources of protein

not always contain all eight amino acids. Because of this, vegetarians must consume a variety of protein-containing foods. It is recommended that proteins make up 10% to 15% of one's daily calories. This will ensure adequate protein for growth, maintenance, and the repair of cells. Protein requirements for adults are not as high as those recommended for infants, children, and young adults. Note: individuals who are

requirements.

Vitamins are organic substances that are essential to the normal functioning of the human body. Although vitamins do not contain energy to be used by the body, these substances are essential in the metabolism of fats, carbohydrates and proteins. Because of the critical role vitamins play, it is necessary that they exist in proper quantities in the body.

functions in the human body. The minerals that appear in the largest quantities (calcium, phosphorus, potassium, sulfur, sodium, chloride, and magnesium) are often called macrominerals. Other minerals are also essential to normal functioning of the body, but because they exist in smaller quantities (chromium, iron, copper, fluoride, iodine, manganese, molybdenum, zinc) they are called microminerals.

A mineral that is often consumed in inadequate amounts by Americans is calcium. Calcium is a mineral important in the mineralization of bone, muscle contraction, and the transmission of nerve impulses. Osteoporosis is a disease characterized by a decrease in the total amount of bone mineral in the body and by

condition is most common in the elderly but may also exist in younger people who have diets inadequate in calcium or vitamin D or both.

Iron is another mineral that is often under consumed by Americans. This is especially true of women. The oxygen-carrying properties of hemoglobin (blood) depend on the presence of iron. Anemia is a condition characterized by a decreased capacity to transport

lacking a sufficient amount of iron intake. Red meat and eggs are excellent sources of iron. Additionally spinach, lima and navy beans, and prune juice are excellent vegetarian sources of iron.

Sodium, on the other hand, is a mineral that many Americans over-consume. High sodium intake has been linked with hypertension, as well as high blood pressure. People can substantially reduce their sodium intake by

ing the amount of salt added to foods when cooking.

In conclusion...don't forget hydration. Water is considered an essential nutrient because of its vital role in the normal functioning of the body. Water contributes approximately 60% of the total body weight and is essential in creating an environment in which all metabolic processes occur. Water is necessary to regulate temperature and to transport substances through-

FOLLOW THESE BASIC NUTRITIONAL GUIDELINES FOR GAINS IN STRENGTH AND LEAN MUSCLE MASS:

1. **Choose your foods carefully. Try getting your carbohydrates from sources such as rice, vegetables, beans, whole grains, pasta and fruit. Good protein sources include fish, chicken, turkey, lean meat and low-fat or nonfat dairy products.**
2. **Minimize your fat intake.**
3. **Drink a minimum of 10 eight-ounce glasses of water each day.**
4. **Eat four to six small meals a day, about three hours apart. Small meals are more easily digested and result in greater nutrition absorption.**
5. **Avoid eating junk food and fast food.**
6. **Time your protein intake of 40-55 grams approximately 75 minutes after your workout.**
7. **Immediately following your workout, replenish your glycogen stores with approximately 50-75 grams of carbohydrates.**

For more information on nutrition visit your local library or book store. There are many excellent books available.

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EXERCISE PRESCRIPTION

Sets

of sets used in a workout is directly related to training results. Typically, two to three sets

muscular endurance. Gains will be made at a faster rate by using a multiple-set system than gains achieved through a single-set system. The use of a single set of an exercise is recommended and very effective for individuals who are untrained or just beginning a

nance once you are in shape. It is important to note that low-volume set programs will

higher-volume set training for the best results. Multiple sets of an exercise present a more intense training stimulus to the muscles during each set. Once your desired initial fitness level has been achieved, multiple-set performances of the exercise using the proper resistance (with specific rest periods between sets) will take you to the next

Resistance Used

for each exercise must be chosen. The use of repetition maximums (RM): the exact resistance that allows only a specific number of repetitions to be performed, is probably the easiest method for determining a resistance. Typically, one uses a training RM target or a RM target zone. Example: If your RM zone is 8 to 12 repetitions and you cannot lift the weight at least 8 times using proper form, the weight is too heavy. On the other hand,

needs to be changed. As the strength level of the lifter changes over time, the resistance

One frequently overlooked variable in exercise prescription is the length of the rest period between sets and between different exercises. Your desired fitness goals will normally determine the amount of time you allow your body to rest. Exercises involving high repetitions (15 to 20) and a high number of sets (3 to 4) with short rest periods (30 seconds) between sets will raise metabolic demands. This in turn will burn excess body

weight training, and the resistances used are typically lighter. This type of workout is

method are normally increased muscular strength and mass. If the desired outcome is to gain overall muscle mass, your exercise prescription
weight resistance doing 2 to 6 repetitions per set, with a rest period of 3 to 4 minutes

The amount of rest between training sessions depends on the recovery ability of the individual. Most experts agree that three workouts per week with one day of rest between sessions allows adequate recovery, especially for the beginner. If the resistance train-
of delayed muscular sor

better able to tolerate and recuperate from the resistance exercise sessions, the frequency of training can be increased. Well-conditioned athletes may be capable of, and need training frequencies of 4 to 5 days in a row to improve
achieve their desired goals. When consecutive-training-day
usually beneficial to do different exercises for the same muscle groups and use different resistances for the exercises. When training is performed on consecutive days, it often involves the use of a split routine (different body parts exercised each day), or a split program (different exercises for the same body part performed each day). There are

advanced weight training enthusiast. It is also recommended that you work with a qual-

Leaders in the field of strength and conditioning believe that working the larger muscle groups first (chest, back, legs), should take priority over training the smaller muscle groups (biceps, triceps, deltoids, calves). The reason behind this exercise order is that
going to
exercising the smaller
muscle groups first will deplete the body of the energy necessary to stimulate the larger muscle gr
the leg muscles are exercised. "Stacking" exercises is a common practice among body

curls, one arm concentration curls). The exercise order will have a significant impact on the training stimulus stress level in a training session.

Scheduling Training

Finding the time to do it is one of the most difficult aspects of a training program. Once you have established a time to workout you should plan a training routine based on

groups such as the chest, back, and legs should take priority over working the smaller

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TRAINING TIPS

ARE YOU A "BEGINNER"?

A beginner can be classified as someone who has never touched a weight, may have lifted for a while,

If you happen to fall into any of these categories, pay close attention, because the following information

As a beginner, one of the most common mistakes is doing too much. Because beginners often make good gains quickly, many fall into the trap of thinking that more is better. This may be true later in the training equation, but not for the novice. Some of the most common injuries occur as a result

One of the questions most frequently asked is, "How much weight should I use?" Determining the weight for each

exercise will be lifted in sets and repetitions. Repetition is defined as one execution of any exercise. A set is a combination of any number of repetitions of one exercise.

Experimentation at each exercise station is a good technique for determining the starting weight for an individual. Take the

with a weight that can be pressed 30 times with ease will not help you achieve any particular goals. Adding the

a maximum of 8 to 12 repetitions will help you obtain the results you desire.

On the other hand, if you put too much weight on the press bar and press it 4 or 5 times, then common sense will tell you to reduce the weight, wait a few minutes, then try again.

lifting heavier weight. This is a sure-fire, one-way trip down the road to injury. Making muscles work hard, with proper

Now that you understand how to test each station for your starting amount of resistance, you should know which muscles to train first. Training the large muscles groups first, such as your chest, legs, and back, should be done before training your small muscle groups like the arms, shoulders, and calves.

and maintain quicker gains. The large muscles groups will require more stimulation and a higher intensity level than the

intensity and training your chest immediately afterwards will not leave you with enough energy necessary to properly stimulate the muscle fibers in your chest. Moreover, because the triceps are required in chest press movements, your arm muscles will fail much more quickly than your

As a beginner, you will find that your gains will come quickly. The excitement and enthusiasm that comes with these gains

it easy! Remember, just as too little exercise won't stimulate muscle growth...too much exercise won't either. You need to give your body plenty of rest, especially if you're still sore from the last workout. This will keep you fresh and growing stronger.

STILL SORE FROM THE PREVIOUS WORKOUT. Performing some flexibility exercises is a good way to keep

these muscles again until you are feeling recovered.

Speaking of soreness, there is something else that you, as a beginner, should be aware of: If you work out - your muscles will get sore. The majority of muscle soreness comes from

This is the result of intense exercise. Muscle soreness can become a problem when the body is pushed too fast and

tissues have not yet developed the ability necessary to recover from high intensity exercise. A general warm up of stretching and light calisthenics prior to exercise can possibly reduce the amount of post-exercise muscle soreness. A good cool down of stretching and cardio work

Now that we have laid a good foundation of the "do's and don'ts", let's get into something a little more specific. One of the best beginner's programs is the three-days-a-week routine. For example, do a whole-body workout on Monday, Wednesday and Friday. Use the other days for rest and recuperation. As

muscle groups first, then move on to the small muscle groups. Perform one exercise per muscle group that

routine for at least six to eight weeks in order for your body to establish the proper stimulation for growth.

One or two exercises per muscle group may not sound like enough to produce any results, but if you're a beginner - it most definitely will. As you continue to train and your body

you place upon it, you'll be able to add more sets and exercises to your routine.

of a personal trainer. Through the use of a personal trainer you can learn the mechanics and techniques of exercise, how to use proper form to avoid injury and details on proper nutrition. A good trainer will also provide MOTIVATION.

When choosing a personal trainer, here are some tips:

association. This is a good way to ensure that he or she is qualified to give you what you need. Also, take a look

great shape, look for a trainer who is in great shape. They will know what it takes to get results. Here are a few recommended organizations:

- National Strength & Conditioning (719) 632-6722
- American College of Sports Medicine (317) 637-9200

SAMPLE WORKOUT ROUTINE WHEN TRAINING FOR STRENGTH

Exercises	Reps	Sets
Leg Press / Squat	8 to 12	2 or 3
Leg Extension	8 to 12	2 or 3
Leg Curl	8 to 12	2 or 3
Calf Raise	8 to 12	2 or 3
Bench / Chest Press	8 to 12	2 or 3
Incline Press	8 to 12	2 or 3
Incline Pec Fly	8 to 12	2 or 3
Lat Pulldown	8 to 12	2 or 3
Seated Row	8 to 12	2 or 3
Military Press	8 to 12	2 or 3
Upright Row	8 to 12	2 or 3
Bicep Curl	8 to 12	2 or 3
Tricep Pressdown	8 to 12	2 or 3
Tricep Extension	8 to 12	2 or 3
Resistance Ab Crunch	20 to 30	2 or 3
Resistance Oblique Crunch	20 to 30	2 or 3

Rest period between sets should be about 60 to 90 seconds.

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COMMON TRAINING MISTAKES

1. Lack of Adequate Warm-Up and Inadequate Flexibility

A warmed muscle is a more flexible muscle that's better able to lift heavier weights and work in a full range of motion. Those warmed muscles also greatly reduce your chance of training injuries.

2. Improper Form

it also doesn't allow for adequate muscle-fiber stimulation.

3. Too Much Weight

Overloading the muscles is a good way to promote muscular growth, but packing on too much weight can cause a snowball effect of improper form, injuries, and down time from your routine.

Not lifting enough weight will prohibit the stimulation necessary for muscular growth. Keep challenging yourself to lift heavier weights on a progressive basis always maintaining proper form.

If you're still sore from your previous workout, you don't have to go back at it just because it's your scheduled day. Give your body an extra day off to fully recover so when you return you will be able to give 100%.

6. Overtraining

It's not how much time you spend working out, but what you accomplish that really matters. Try to keep your resistance workouts within 45 to 60 minutes per session.

Eating the right combination of foods, along with good supplementation, will greatly promote your success. Make your diet 50 percent carbohydrate, 35 percent protein, 15 percent fat, and take a good multivitamin and protein/carbohydrate

8. Stale Routines

Your body adapts very quickly to the demands placed upon it. That's why you should have a variety of exercises and routines that you can do. To keep your body growing, you've got to keep it off-guard. Changing your exercises and routines is a sure way to do it.

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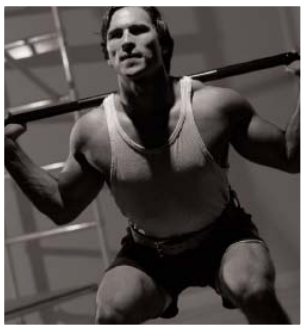
SETTING UP YOUR PERSONAL PROGRAM

It is important to first establish specific and realistic goals. You should determine your long term goal and then set a series of short term goals that will help you attain your long term goal. The most common goals are:

Muscular Endruance & Definition



Increase Strength

Increase Power & Muscle Mass

If your personal goals involve losing a considerable amount of body fat you will **need to focus more on aerobic exercise** and weight training for muscular endurance and definition. If your **goals involve a large increase in muscle** size you will need to **focus on power and muscle mass weight** training. Depending on your goals, you will have different nutritional **requirements.**

Once you have determined your personal goals, you will need to set up a schedule that helps you attain them. Set up a schedule that includes the number of workouts

workout program. Don't forget to factor in the warm up and cool down periods. You may have to modify your current lifestyle to accommodate your new schedule. It's very important to include the following basic components to achieve successful results:

Stretching

Aerobic Exercise

Weight Training

Nutrition

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DETERMINE YOUR TRAINING METHOD

There are three basic types of weight

1. **Training for muscular endurance and definition**
2. **Training for strength**
3. **Training for power and muscle mass**

You should select a training method that reflects both your present fitness level and your long term goals. You

professional guidance. You can always move from one training method to another as you progress.

If you are beginner, you should start slowly and carefully, gradually increasing the frequency and intensity of your training. Always play it safe – be realistic about your goals and your schedule.

follow.

Which is the right training method for you? First, take a look at your present physique and determine your objectives. Do you want a trim, toned, well-defined body? Are you involved in a sport where speed, strength and power are most important? Maybe you

V-shape torso so you look great on the beach. Once you make a decision on what the final results should be, you can set up your personal program using the proper training method to achieve your goals.

Which training method is right for you?

FOR MUSCULAR ENDURANCE & DEFINITION

This training method incorporates achieving and maintaining a high cardiovascular (heart) rate and helps burn away excess fatty tissue. It also adds muscle definition and muscular endurance to your entire body. Exercises are most commonly performed for 15 to 20 repetitions and 3 to 4 sets using a light to moderate weight. The rest period between sets should be about 30 seconds. These short rest intervals will help maintain an elevated heart rate and prevent the muscles from cooling down.

FOR STRENGTH

This type of training is the most popular of the three and is designed specifically for increasing strength throughout the muscle and the muscle-tendon junction. This type of training is especially important for athletes. Normally, exercises are performed using moderate to heavy weight for 8 to 12 repetitions and 2 to 3 sets. The rest period between sets should be from 60 to 90 seconds. This allows a degree of muscle recovery before you hit them again.

FOR POWER AND MUSCLE MASS

This is the method most often used by bodybuilders and is recommended only for the intermediate and advanced lifter. The weights used are heavy — this shocks the muscles and stimulates a more rapid increase in muscle size. Usually exercises are performed for 2 to 6 repetitions and 3 to 4 sets using very heavy weight. The rest period between sets should be from 3 to 4 minutes. The prolonged rest periods allow ample time for recovery between sets.

DESIGNING YOUR PERSONAL ROUTINE

FIRST:

You need to decide which of the above training methods is best suited to

SECOND:

Study the exercise poster that came with your Body-Solid machine and select one or two exercises per body part (body parts are listed to the left of the exercise pictures). Be sure to __ body parts. If you leave out certain body parts your exercise routine and your body will not be balanced. If you are trying to increase muscle mass or

exercises to the area you are particularly concerned about.

THIRD:

Coordinate your body part exercise program and your personal schedule. If you select one exercise per body part you can normally do your entire routine in the same workout. If you choose to do more than 12 exercises you may decide to divide your workout routine into upper and lower body exercises. You can split your schedule to work upper body

particular muscle group 48 hours before working it again.

FOURTH:

Order the exercises in your routine so you are working the large muscle groups first and the small muscle groups last.

FIFTH:

Keep a record! Write down the exercises, number of sets, number of reps and the amount of resistance (weight).

BEGINNER'S SAMPLE WORKOUT ROUTINE
WHEN TRAINING FOR DEFINITION

Exercise	Reps	Sets
Bench / Chest Press	15 to 20	3 or 4
Lat Pulldown	15 to 20	3 or 4
Shoulder Press	15 to 20	3 or 4
Tricep Pressdown	15 to 20	3 or 4
Bicep Curl	15 to 20	3 or 4
Leg Press/Squat	15 to 20	3 or 4
Leg Extension	15 to 20	3 or 4
Leg Curl	15 to 20	3 or 4
Calf Raise	15 to 20	3 or 4
Ab Crunch	20 to 30	3 or 4

Rest period between sets should be about 30 seconds.

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EXERCISE

Listed below are Body-Solid's picks of the best exercises you can do for each body part. These exercises can be done using free weights, machines and multi-station gyms. Learn to do each exercise in proper form. You can accessories to slightly change the emphasis of a particular exercise. Note: Many movements, especially multijoint exercises, work more than one muscle group. For example, your front deltoids and triceps are stimulated during bench / chest pressing movements.

CHEST

This powerful muscle group is the cornerstone of a well-developed upper body. To most thoroughly work your pecs, include both pressing and fly movements and vary the angle of the bench from decline to flat to incline.

BENCH / CHEST PRESS
INCLINE PRESS
DECLINE PRESS
PEC FLY
INCLINE FLY

CABLE CROSSOVER
DIPS

SHOULDERS

The shoulder joint, which has the greatest range of motion of all joints in the body, is best worked by training all three deltoid heads.

movement followed by a raise for each of the three heads.

SHOULDER PRESS
BEHIND THE NECK PRESS
FRONT DELTOID RAISE
LATERAL (SIDE) DELTOID RAISE
BENT-OVER LATERAL DELTOID RAISE
REVERSE PEC-FLY

A powerful upper back is marked by both middle-back thickness and width (the sought-after V-taper). This is best achieved by combining various rows with pull-downs and pull-ups. Remember to vary your grip to slightly

PULL UP
UPRIGHT ROW
LAT PULLDOWN
SEATED ROW
BENT OVER ROW
HIGH ROW
REVERSE GRIP PULLDOWN

TRAPS

back, well-developed traps help prevent neck injury. Shrug movements should be done with heavy weights in a straight up-and-down motion.

STRAIGHT BAR SHRUG
DUMBBELL SHRUG

UPRIGHT ROW

LOWER BACK

Important not only for spinal protection but also because it's the seat of power for many exercises. If you spend a great deal of time crunching for abs, you need to balance your training for complete development and muscular balance.

UPRIGHT ROW
LAT PULLDOWN
SEATED ROW
BENT OVER ROW
HIGH ROW
REVERSE GRIP PULLDOWN

TRICEPS

This three-headed muscle on the back

the elbow. Like the biceps, the triceps cross the elbow and shoulder joints. Because of this, you can and should work the triceps through a variety of angles to ensure complete development.

LYING TRICEPS EXTENSION
CABLE TRICEPS EXTENSION
CABLE TRICEPS PRESSDOWN

REVERSE-GRIP PRESSDOWN
TRICEPS PRESS
DIPS

BICEPS / FOREARMS

A two-headed muscle, the biceps' primary focus is to flex your elbow and supinate your wrist. The ability to build your biceps peak is largely genetic,

short head will help.

BICEPS
STANDING BICEP CURL
SEATED BICEP CURL
INCLINE CURL
PREACHER CURL
CONCENTRATION CURL
ONE-ARM CABLE CURL

WRIST CURL
REVERSE WRIST CURL

ABDOMINALS

The rectus abdominus has upper and lower regions, but you can't isolate one area over the other. Still, include both upper and lower ab movement to more strongly emphasize those areas, and

obliques for complete development.

UPPER AB REGION
CABLE AB CRUNCH
DECLINE BENCH CRUNCH
LOWER AB REGION
REVERSE CRUNCH
HANGING KNEE RAISE
HIP THRUST

CABLE SIDE BEND
OBLIQUE CRUNCH

THIGHS / GLUTES

The main muscles of the thighs are the quadriceps which are composed of four muscles. You have several others near the hip joint, including the body's largest muscle group, the gluteal. Multijoint

both the hip and knee joints) are your best choice to work these muscles.

BACK SQUAT
FRONT SQUAT
LEG PRESS
LUNGE
REVERSE LUNGE
STEP-UP

(does not work glutes)

HAMSTRINGS

On the back of the thighs, the hamstrings balance the quads and allow for a wide range of movement. Good exercise choices include those that work the hamstrings and both the hip and knee joints.

STIFF-LEGGED DEADLIFT
GOOD MORNING
LYING LEG CURL
SEATED LEG CURL
ONE-LEGGED STANDING LEG CURL

CALVES

Calves consist of two major muscles, the gastrocnemius and soleus. The

flexed, as in the seated calf raise.

STANDING CALF RAISE
SEATED CALF RAISE
DONKEY CALF RAISE
LEG PRESS CALF RAISE
HACK SQUAT CALF RAISE

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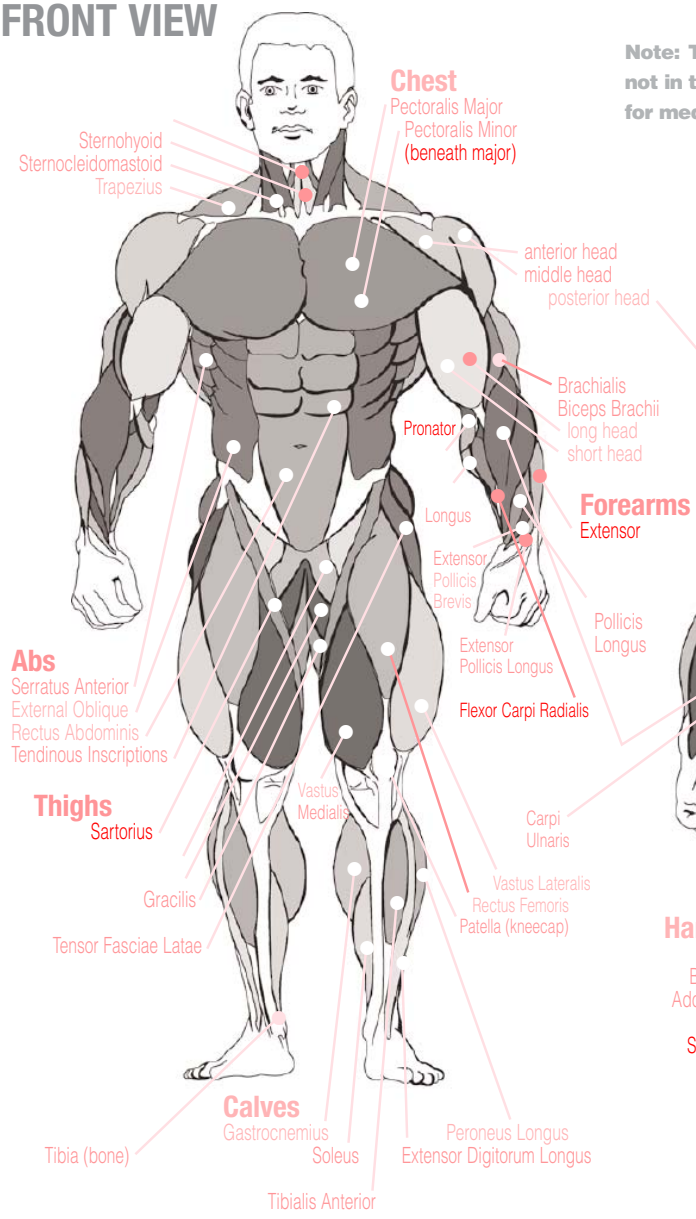
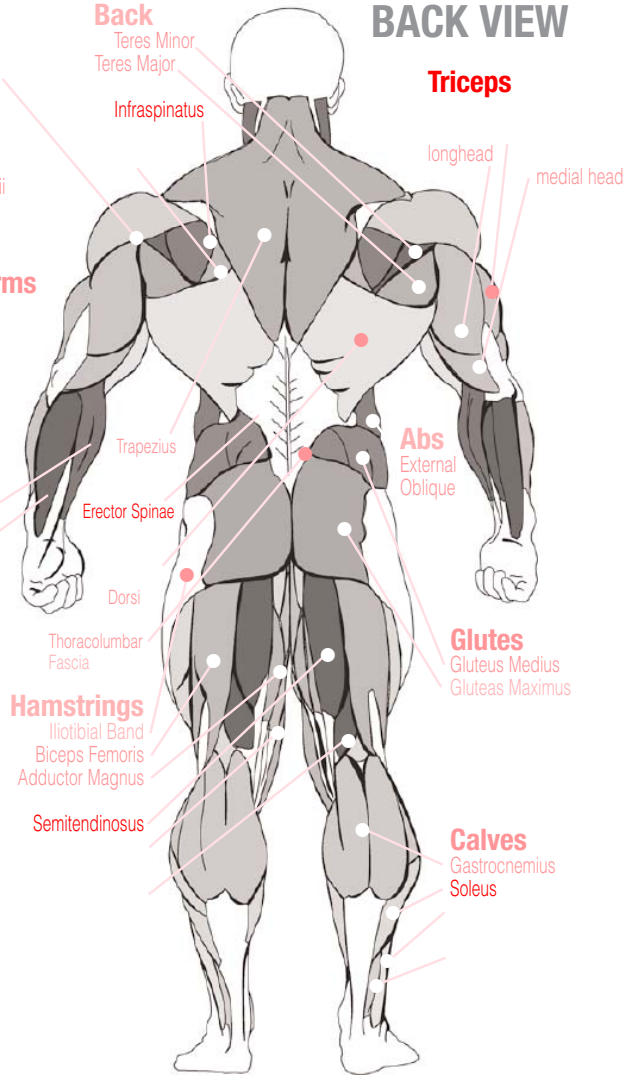
ANATOMY CHART

FRONT VIEW

Note: These illustrations depicting exaggerated musculature are not in the textbook anatomical position. As such, they are inexact for medical purposes but are useful for a general understanding.



BACK VIEW



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FITNESS GOALS*

SHORT-TERM GOALS

Date Accomplished _____

Goal _____

Reward** _____

Date Accomplished _____

Reward** _____

Date Set _____ Date Accomplished _____

Goal _____

Reward** _____

LONG-TERM GOALS

Goal _____

Reward! _____

* Make several copies of this page to keep track of your goals and accomplishments.
You can print more copies of this page by going to http://www.bodysolid.com/support/docs.html
** Don't forget to reward yourself for a job well-done!

Body-Solid WEIGHT TRAINING EXERCISE LOG

S = Sets
R = Repetitions per set
W = Weight used

Keep track of your changes and improvements. It's a great motivational tool!*

Date

Exercise	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
BENCH / CHEST PRESS																		
LAT PULLDOWN																		
SHOULDER PRESS																		
TRICEP PRESSDOWN																		
BICEP CURL																		
LEG PRESS / SQUAT																		
LEG EXTENSION																		
LEG CURL																		
CALF RAISE																		
AB CRUNCH																		
TOTALS																		

* Make several copies of this page to keep track of your progress.
You can print more copies of this page by going to http://www.bodysolid.com/support/docs.html

SAMPLE WORKOUT ROUTINE WHEN TRAINING FOR STRENGTH

Keep track of your changes and improvements. It's a great motivational tool!*

S = Sets
R = Repetitions per set
W = Weight used

Date																	
Exercise	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
LEG PRESS / SQUAT																	
LEG EXTENSION																	
LEG CURL																	
CALF RAISE																	
BENCH / CHEST PRESS																	
INCLINE PRESS																	
INCLINE PEC FLY																	
LAT PULLDOWN																	
SEATED ROW																	
MILITARY PRESS																	
UPRIGHT ROW																	
BICEP CURL																	
TRICEP PRESSDOWN																	
TRICEP EXTENSION																	
RESISTANCE AB CRUNCH																	
RESISTANCE OBLIQUE CRUNCH																	
TOTALS																	

* Make several copies of this page to keep track of your progress.
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INTERMEDIATE AND ADVANCED LIFTERS... Design your personal strength training program. Keep track of your changes and improvements. It's a great motivational tool!*

S = Sets

W = Weight used

WEIGHT TRAINING EXERCISE LOG

Body-Solid

Date																		
Exercise	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
TOTALS																		

You can print more copies of this page by going to http://www.bodysolid.com/support/docs.html

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STRETCHING & FLEXIBILITY

and needs to be addressed

prevention and a faster rate of recovery from exercise. Stretching should be performed in both the warm up and cool down phases of a training session. A good general guideline is that each workout session should be preceded by 5 to 15 minutes of general warm up, followed by 8 to 12 minutes of stretching, and concluded with 4 to 5

A regular stretching program will loosen muscle tissue, allowing an increased range

of all injuries from muscle strain occur at the muscle-tendon junction. Repeated injury at this junction can lead to a build-up of scar tissue, which impedes range of motion and adds stress to the joints.

etches

with smooth, slow, controlled motion. Hold the stretch for at least 10 seconds when you feel you have reached your muscle's maximum distance. Do not use fast,

the risk of injury.

The most common and most popular type of stretching is the technique. This form of stretching involves voluntary, complete relaxation of the muscles while they are elongated. A static stretch is a constant, steady stretch in which the end position is held for 10 to 30 seconds. This technique is popular

the least risk of injury.

Ballistic stretching involves a bouncing or bobbing movement during the stretch.

because of the increased amount of delayed muscle soreness and the possibility of injury during the stretching exercise. Ballistic stretching is not recommended.

A dynamic stretch involves flexibility during sport specific movements. **Dynamic** is similar to ballistic stretching in that it utilizes movement, but dynamic stretching includes movements that may be specific to a sport or movement pattern. Dynamic stretching is most common among track and field athletes, but is

stretching would be a track sprinter performing high knees with an emphasis on knee height and arm action, not on horizontal speed.

The following pages show illustrations with descriptions of static stretching for warm up and post-exercise cool down. Remember... stretch your large muscle groups first and do all stretches in a smooth, slow, controlled manner.

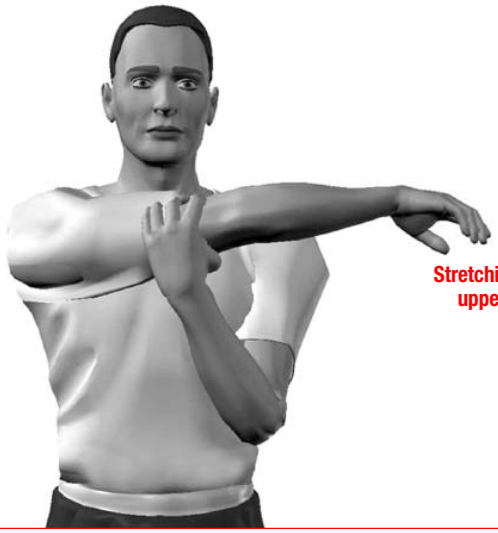
UPPER BACK

Cross Arm in Front of Chest

MUSCLE(S) AFFECTED: *latissimus dorsi and teres major*

1. Stand or sit with the right arm slightly flexed (15° to 30°) and adducted across the chest.
2. Grasp the upper arm just above the elbow, placing the left hand on the posterior side of the upper arm.

hand.
4. Hold for 10 seconds.
5. Repeat with the left arm.



Stretching the upper back

UPPER BACK

MUSCLE(S) AFFECTED: *latissimus dorsi and wrist flexors*

1. Stand with arms in front of torso, fingers interlocked with palms facing each other.
2. Slowly straighten the arms above the head with palms up.

4. While continuing to reach upward, slowly reach slightly backward.
5. Hold for 10 seconds.

Stretching the shoulders, chest and upper back

LOWER BACK

Spinal Twist (Pretzel)

MUSCLE(S) AFFECTED: *internal oblique, external oblique and spinal erectors*

1. Sitting with legs straight and upper body nearly vertical, place right foot on left side of left knee.
2. Place back of left elbow on right side of right knee, which is now bent.
3. Place right palm on floor 12 to 16 inches behind hips.
4. Push right knee to the left with left elbow while turning shoulders and head to the right as far as possible. Try to look behind the back.
5. Hold for 10 seconds.
6. Repeat with left leg.

Stretching the low back and sides

LOWER BACK

MUSCLE(S) AFFECTED: *spinal erectors*

1. Sitting, knees flexed 30 to 50 degrees, let the legs totally relax.
2. Point the knees outward; the lateral side of the knees may or may not touch the floor.
3. Lean forward from waist and reach forward with extended arms.
4. Bending and relaxing legs decreases hamstring involvement and

Stretching the low back from seated position

HIPS

Forward Lunge (Fencer)

MUSCLE(S) AFFECTED: *iliopsoas, rectus femoris*

1. Standing, take a long step forward (as with the lunge) with the right leg and flex the right knee until it is directly over the right foot.
2. Keep right foot flat on floor.
3. Keep back leg straight.
4. Keep back foot pointed in same direction as front foot; it is not
5. Keep torso upright and rest hands on hips or front leg.
6. Slowly lower hips forward and downward.
7. Hold for 10 to 15 seconds.
8. Repeat with the left leg.

Stretching the hip flexors

HIPS

MUSCLE(S) AFFECTED: *hip extensors (gluteus maximus and hamstrings)*

1. Lie on back with legs straight.
2. Flex right leg and lift knee toward chest.
3. Place both hands below knee and continue to
4. Hold for 10 to 15 seconds.

Stretching

and hamstrings

STRETCHING WARM-UP/COOL-DOWN

SHOULDER

MUSCLE(S) AFFECTED: *deltoids and pectoralis major*

1. Sitting with legs straight and arms extended, place palms on floor about 12 inches behind hips.
3. Slide hands backward and lean backward.
4. Hold for 10 seconds.

Stretching shoulder joints—sitting

CHEST

Straight Arms Behind Back

MUSCLE(S) AFFECTED: *deltoids and pectoralis major*

1. Standing, place both arms behind back.
2. Interlock fingers with palms facing each other.
3. Straighten arms fully.
4. Slowly raise the straight arms.
5. Hold for 10 to 15 seconds.
6. Keep head upright and neck relaxed.

Stretching the chest

POSTERIOR OF UPPER ARM

Behind-Neck Stretch (Chicken Wing)

MUSCLE(S) AFFECTED: *triceps and latissimus dorsi*

2. Reach the right hand down toward the left scapula.
3. Grasp right elbow with left hand.
4. Pull elbow behind head with left hand.
5. Hold for 10 seconds.
6. Repeat with left arm.

the triceps

NECK

Look Right and Left

MUSCLE(S) AFFECTED: *sternocleidomastoid*

1. Stand or sit with head and neck upright.
2. Turn head to the right using a submaximal concentric contraction. Hold for 10 seconds.
3. Turn head to the left using a submaximal concentric contraction. Hold for 10 seconds.

Rotational flexion of the neck

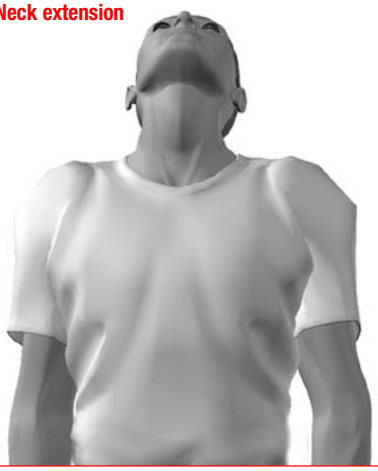
NECK

Flexion and Extension

MUSCLE(S) AFFECTED: *sternocleidomastoid, suboccipitals and splenii*

1. Standing or sitting with head and neck upright, flex neck anteriorly
2. If the chin touches the chest, try to touch lower on the chest with the chin.
3. Extend neck posteriorly (backward) by trying to touch the head to the trapezius; hold for 10 seconds.

Neck extension



Neck flexion

Straight Arms Behind Back

MUSCLE(S) AFFECTED: *deltoids and pectoralis major*

1. Standing, place both arms behind back.
2. Interlock fingers with palms facing each other.
3. Straighten arms fully.
5. Hold for 10 to 15 seconds.
6. Keep head upright and neck relaxed.

Stretching shoulder joints—standing

SIDES

Side Bend with Straight Arms

MUSCLE(S) AFFECTED: *external oblique, latissimus dorsi and serratus anterior*

2. Interlace the fingers with palms facing each other.
3. Reach upward with straight arms.
4. Keeping arms straight, lean from waist to left side. Do not bend knees.
5. After moving as far as possible, hold for 10 seconds.
6. Repeat to the left side.

Stretching
the sides, upper
back and shoulders

SIDES

Side Bend with Bent Arm

MUSCLE(S) AFFECTED: *external oblique, latissimus dorsi, serratus anterior and triceps*

1. Stand with feet 14 to 16 inches apart.
2. Flex right arm and raise elbow above head.
3. Reach the right hand down toward the left shoulder.
5. Pull the elbow behind head.
6. Keeping arm bent, lean from waist to left side.
7. Do not bend knees.
8. After moving as far as possible, hold for 10 to 15 seconds.
9. Repeat with the left arm.

the sides, triceps
and upper back

ANTERIOR OF THIGH AND HIP FLEXOR

quadriceps
on side

Side Quadriceps Stretch

MUSCLE(S) AFFECTED: *quadriceps and iliopsoas*

1. Lie on left side with both legs straight.
2. Place left forearm flat on floor and upper arm perpendicular to floor.
3. Place left forearm at 45° angle with torso.
4. Flex right leg with heel of right foot moving toward buttocks.
5. Grasp front of ankle with right hand and pull toward buttocks.
6. Move knee backward and slightly upward. The stretch occurs not so much from the excessive flexion of the knee but from moving the knee
7. Hold for 10 to 15 seconds.
8. Repeat with the left leg.

ANTERIOR OF THIGH AND HIP FLEXOR

Kneeling Quadriceps Stretch

MUSCLE(S) AFFECTED: *quadriceps*

1. Kneel with the balls of the feet on the ground.
2. Keep hips straight (upper leg and torso should be in a straight line).
3. Place palms of hands on buttocks and push slightly forward.
4. With a straight body, lean slightly backward until developmental stretch is felt in quadriceps.

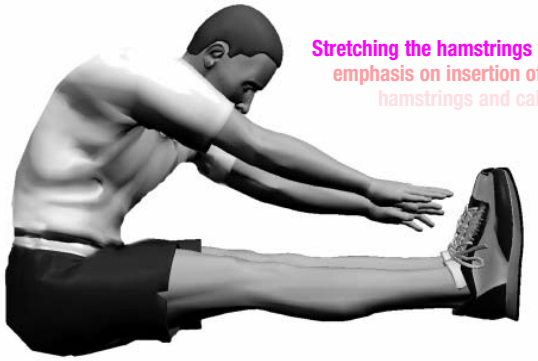
Stretching the quadriceps

POSTERIOR OF THIGH

Sitting Toe Touch

MUSCLE(S) AFFECTED: *hamstrings, spinal erectors and gastrocnemius*

1. Sit with the upper body nearly vertical and legs straight.
2. Lean forward from waist and grasp toes with each hand, slightly (If you are very stiff, try to grasp the ankles.) Hold for 10 seconds.
3. Release toes and relax foot.
4. Grasp ankles and continue to pull chest towards legs. Hold for 10 seconds.
5. Still grasping the ankles, point away from body and continue to pull chest towards legs. Hold for 10 seconds.



Stretching the hamstrings with emphasis on insertion of the hamstrings and calves.

Stretching the hamstrings with emphasis on the middle portion.

Stretching the hamstrings with emphasis on the upper portion.

POSTERIOR OF THIGH

Semistraddle (Figure Four)

MUSCLE(S) AFFECTED: *gastrocnemius, hamstrings and spinal erectors*

1. Sit with the upper body nearly vertical and legs straight.
2. left leg should be resting on the floor.
3. Lean forward from the waist and grasp toes with right hand and slightly pull toes toward the upper body as the chest is also pulled toward right leg. Hold for 10 seconds.
4. Release toes and relax foot.
5. Grasp ankle and continue to pull chest toward right leg. Hold for 10 seconds.
6. Point toes away from body and continue to pull chest toward right
7. Repeat with the left leg.

emphasis on insertion of the hamstrings and calves

Stretching the hamstrings with emphasis on the middle portion

Stretching the hamstrings with emphasis on the upper portion

Remember... do all stretches in a smooth, slow, controlled manner.

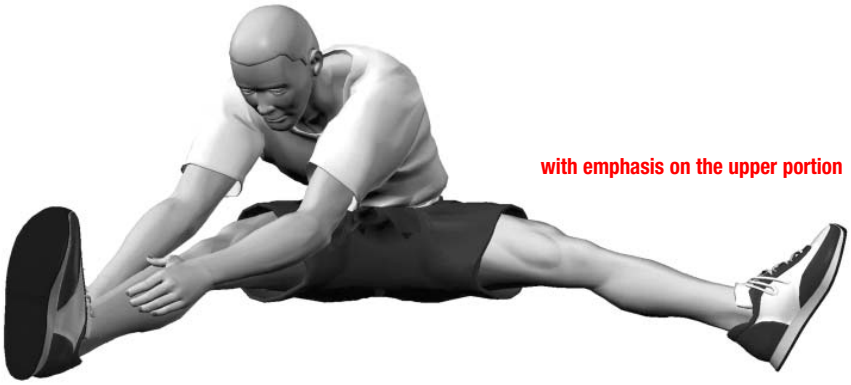
GROIN

MUSCLE(S) AFFECTED: *gastrocnemius, hamstrings, spinal erectors, adductors and sartorius*

1. Sit with the upper body nearly vertical and legs straight, and spread legs as far as possible.
2. With right hand, grasp toes of right foot and pull on toes slightly,
3. Release toes and relax foot.
4. Grasp ankle and continue to pull chest toward right leg. Hold for
leg. Hold for 10 seconds.
6. Repeat process with the left leg.
7. Repeat process by grasping right toes with right hand and left toes with left hand. Move the torso forward and toward the ground.

with emphasis on insertion of the hamstrings and calves

Stretching the hamstrings and groin with emphasis on the middle portion



with emphasis on the upper portion

Stretching the groin, low back and hamstrings

GROIN

Butterfly

MUSCLE(S) AFFECTED: *adductors and sartorius*

both knees as the soles of the feet come together.
2. Pull feet toward body.
3. Place hands on feet and elbows on legs.
4. Pull torso slightly forward as elbows push legs down.
5. Hold for 10 to 15 seconds.

Stretching the groin

POSTERIOR OF LOWER LEG

Bent-Over Toe Raise

MUSCLE(S) AFFECTED: *gastrocnemius and soleus*

1. Stand with heel of right foot 6 to 8 inches in front of left foot.
2. Flex right foot toward shin (dorsi-flexion) with heel in contact with floor.
3. Lean forward and try to touch right leg with chest while both legs are straight.
4. Continue to lean downward with upper body as the foot is dorsi-flexed near maximal toward the shin.

6. Repeat with the left leg.

Stretching calves without a step

POSTERIOR OF LOWER LEG

Step Stretch

MUSCLE(S) AFFECTED: *gastrocnemius and soleus; also, achilles tendon*

1. Have ready a step or board 3 to 4 inches high.
3. With straight legs, lower heels as far as possible.
4. Hold for 10 to 15 seconds.
5. To stretch achilles tendon, raise heels slightly. Slightly flex the achilles tendon.
6. Hold for 10 to 15 seconds.
7. For a more intense and individualized stretch, perform this stretch with one leg at a time.

standing on a step

Preparing to stretch the achilles tendon by

Stretching the

lowering the heel

Mainframe Parts List

PART#	QTY	DESCRIPTION
A	1	MAIN BASE FRAME
B	1	MAIN BASE FRAME
C	1	PRESS ARM PIVOT
D	1	REAR UPRIGHT FRAME
E	1	MAIN TOP FRAME
F	1	MAIN FRONT FRAME
G	2	WEIGHT STACK RISERS
H	1	FUNCTIONAL TRAINING ARM (left side)
J	1	FUNCTIONAL TRAINING ARM (right side)
K	1	FUNCTIONAL TRAINING ARM (right side)
L	1	FUNCTIONAL TRAINING ARM (left side)
M	1	END PULLEY HOLDER (left side)
N	1	END PULLEY HOLDER (right side)
P	1	LEG HOLD DOWN FRAME
Q	1	PULLEY HOLDER WITH STOP
R	1	PIVOTING BACK REST FRAME
S	2	ARMREST
T	1	FOAM ROLLER SHAFT 1”OD X19.7”L
U	1	LEG EXTENSION ARM
V	1	PIVOTING ROLLER FRAME
W	2	HOLDER FOR DOUBLE CROSSED PULLEYS
X	2	PULLEY HOLDER WITH STOP
Y	2	CHROME GUIDE ROD
Z	1	ADJUSTABLE SEAT FRAME
AA	1	LAT BAR
AB	1	LOW ROW BAR
AC	1	FRONT SHROUD
AD	1	BACK SHROUD
AE	4	SHROUD

Part numbers are required when ordering parts.

Hardware List

PART#	QTY	DESCRIPTION
1	1	SHAFT 12X122L
2	2	T-SHAPED POP PIN
3	1	FLAT HEAD POP PIN 65
4	2	FLAT HEAD POP PIN 38
5	4	BEARING 20ID X42 OD
6	2	BEARING 12ID X32 OD
7	2	BEARING 30ID X38 OD
8	2	OILITE BUSHING 1/2”ID X21 OD
9	2	OILITE BUSHING 2”ID X34 OD
10	4	OILITE BUSHING 2”ID X37 OD
11	4	PULLEY SPACER 16X20L
12	1	HYDRAULIC SEAT ADJUSTER
13	4	PULLEY SPACER 35X19L
14	2	FOAM GRIP 24 OD X220L
15	2	FOAM GRIP 24 OD X340L
16	3	RUBBER STOP 58.5(3/8”bolt)
17	1	RUBBER PAD 45X45
18	2	PLATE 50X195L
19	6	PLATE 110X3T
20	1	L-PLATE 25X97
21	1	TOP PLATE 10 lbs
22	6	FOAM ROLLER 4”X8”
23	6	ROLLER END CAP
24	4	PULLEY SPACER 16X16.5
25	6	SNAP LINK
26	1	FLAT END CAP 50X50
27	2	FLAT END CAP 50X100
29	2	ROUND END CAP 5/8”
30	2	NYLON BUSHING 60X50
31	2	SHAFT COLLAR
32	1	NYLON BUSHING 60X45
33	2	ROUND END CAP 60
34	1	FLAT END CAP 30X60
35	2	FLAT END CAP 25.4X50.8
36	6	CONVEX END CAP 40X80
37	2	CONVEX END CAP 50X100
38	4	FOOT CAP 50X100
39	1	NAMEPLATE SEAT
40	10	NYLON WASHER 3”
42	4	ROUND END CAP 1”
43	2	RUBBER DONUT 60
44	20	WEIGHT PLATES
45	1	NAMEPLATE
46	2	ARTICULATING FUNCTIONAL TRAINING HARNESS
48	26	PULLEY 110
49	5	PULLEY 109
50	2	PULLEY 90
56	1	WEIGHT STACK PIN 10X128
57	1	WEIGHT STACK LANYARD
58	1	CABLE END SHAFT

Part numbers are required when ordering parts.

Hardware List (continued)

PART#	QTY	DESCRIPTION
59	2	HYDRAULIC SEAT ADJUSTER 35
60	1	HEX HEAD BOLT M10 X 140L PARTIAL THREAD
61	2	HEX HEAD BOLT M10 X 85L PARTIAL THREAD
62	13	HEX HEAD BOLT M10 X 75L PARTIAL THREAD
63	1	HEX HEAD BOLT M10 X 60L PARTIAL THREAD
64	1	HEX HEAD BOLT M10 X 55L PARTIAL THREAD
66	22	HEX HEAD BOLT M10 X 45L PARTIAL THREAD
67	1	HEX HEAD BOLT M10 X 25L PARTIAL THREAD
68	7	ALLEN HEAD BOLT M10X15 FULL THREAD
69	2	ALLEN HEAD BOLT M10X20 FULL THREAD
70	1	SOCKET HEAD BOLT 3/8"X2" PARTIAL THREAD
71	3	ALLEN HEAD BOLT 3/8"X75 FULL THREAD
72	2	ALLEN HEAD BOLT M8X50 FULL THREAD
73	2	ALLEN HEAD BOLT M8X45 FULL THREAD
74	2	ALLEN HEAD BOLT M8X15 FULL THREAD
75	1	SOCKET HEAD BOLT M8X10 PARTIAL THREAD
76	4	ALLEN SCREW M8X8L FULL THREAD
77	8	ALLEN SCREW M5X5L FULL THREAD
78	2	CROSSHEAD SCREW M4X6 FULL THREAD
79	83	WASHER M10
80	9	WASHER M10X19
81	6	WASHER M8
82	4	SPRING LOCK WASHER M8
83	6	WASHER 3/8"
84	38	NYLON LOCK NUT M10
86	3	NYLON LOCK NUT 3/8"
87	20	STEEL BALL(3)
88	1	SELECTOR ROD (20 selector holes)
89	2	TAPERED CROSSHEAD SCREW M5X10 FULL THREAD
90	3	JAM NUT 3/8"
91	1	STEEL CHAIN 3/16"
92	2	SPRING LOCK WASHER M4
93	4	ALLEN HEAD BOLT M10X10 FULL THREAD
94	2	FOAM GRIP 24 OD X195L
95	2	JAM NUT 3/8"
96	1	UTILITY STRAP
99	1	FOAM ROLLER
100	1	CHROME PLATE (right side)
101	1	CHROME PLATE (left side)
102	1	SELECTOR ROD TOP BOLT 1/2"X2" FULL THREAD
103	1	JAM NUT 1/2"
104	1	SPRING LOCK WASHER 1/2"
105	1	HEX HEAD BOLT M10X20L PARTIAL THREAD
106	1	CABLE END SHAFT
107	1	ALLEN SCREW 3/16"X5/16"
108	1	SPRING LOCK WASHER 3/8"
109	1	COMMUNICATION LABEL
115	1	MESH SHROUD
116	1	MESH SHROUD
117	2	FOAM GRIP Ø27 OD X275L

Part numbers are required when ordering parts.

Pads List

PART#	QTY	DESCRIPTION
97	1	SEAT PAD
98	1	BACK PAD

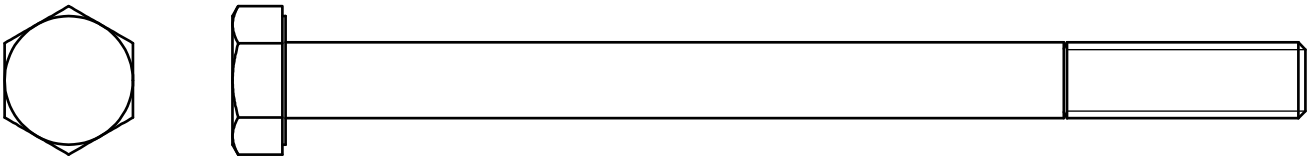
Cable List

PART#	QTY	DESCRIPTION
51	1	SHORT CABLE 3265mm
52	1	CABLE 2890mm
53	1	LEFT ATTACHMENT CABLE 1395mm
54	1	CABLE 4395 mm
55	2	FUNCTIONAL TRAINNG ARM CABLE 4445 mm

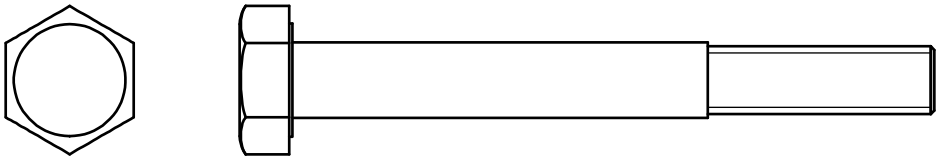
Part numbers are required when ordering parts.

Hardware

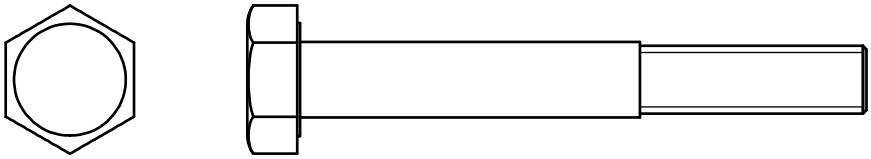
(Actual Size Shown)



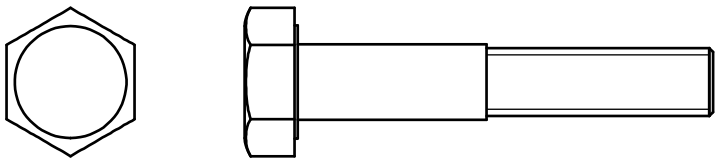
PART # 60 HEX HEAD BOLT M10X140L PARTIAL THREAD QTY.1



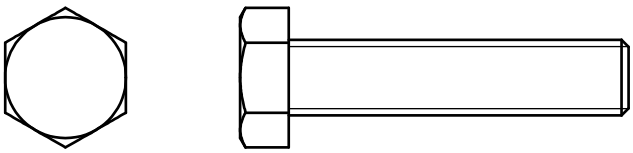
PART # 61 HEX HEAD BOLT M10X85L PARTIAL THREAD QTY.4



PART# 62 HEX HEAD BOLT M10X75L PARTIAL THREAD QTY.10



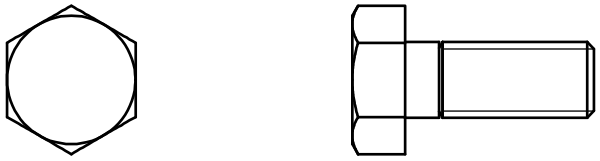
PART # 64 HEX HEAD BOLT M10X55L PARTIAL THREAD QTY.1



PART# 66 HEX HEAD BOLT M10X45L PARTIAL THREAD QTY.20

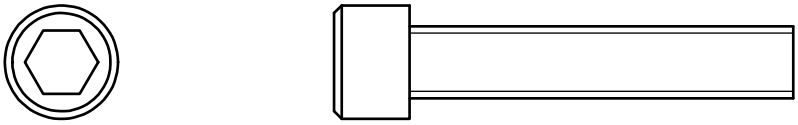
Hardware

(Actual Size Shown)

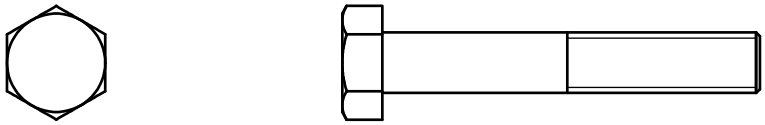


PART# 67 HEX HEAD BOLT M10X25L PARTIAL THREAD QTY.1

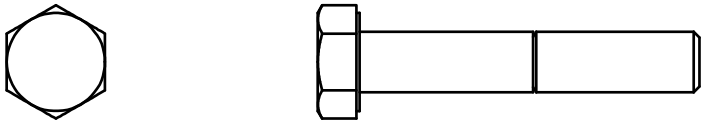
PART# 68 ALLEN HEAD BOLT M10X15L FULL THREAD QTY.2



PART # 70 FLAT ALLEN HEAD 3/8"X2" FULL THREAD QTY.1



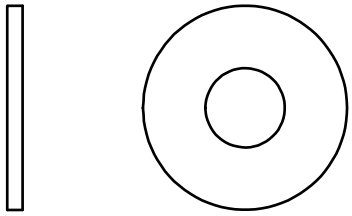
PART # 72 HEX HEAD BOLT M8X50L PARTIAL THREAD QTY.2



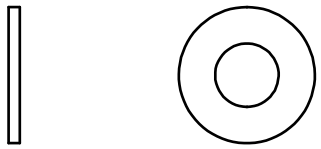
PART # 73 HEX HEAD BOLT M8X45L PARTIAL THREAD QTY.2

Hardware

(Actual Size Shown)

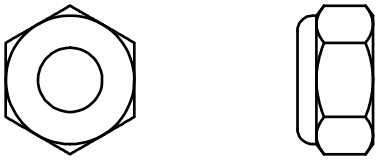


PART # 79 WASHER
M10XØ27 QTY.71



PART # 81 WASHER M8
QTY.4

PART # 82 SPRING LOCK
WASHER M8 QTY.4



PART # 84 NYLON LOCK NUT
M10 QTY.32

Fusion 400

Exploded View

With Steel Shroud

△ KEY

Match the letters inside each triangle

- A connects to A
- B connects to B
- C connects to C
- D connects to D
- E connects to E
- F connects to F
- G connects to G
- H connects to H
- K connects to K
- L connects to L

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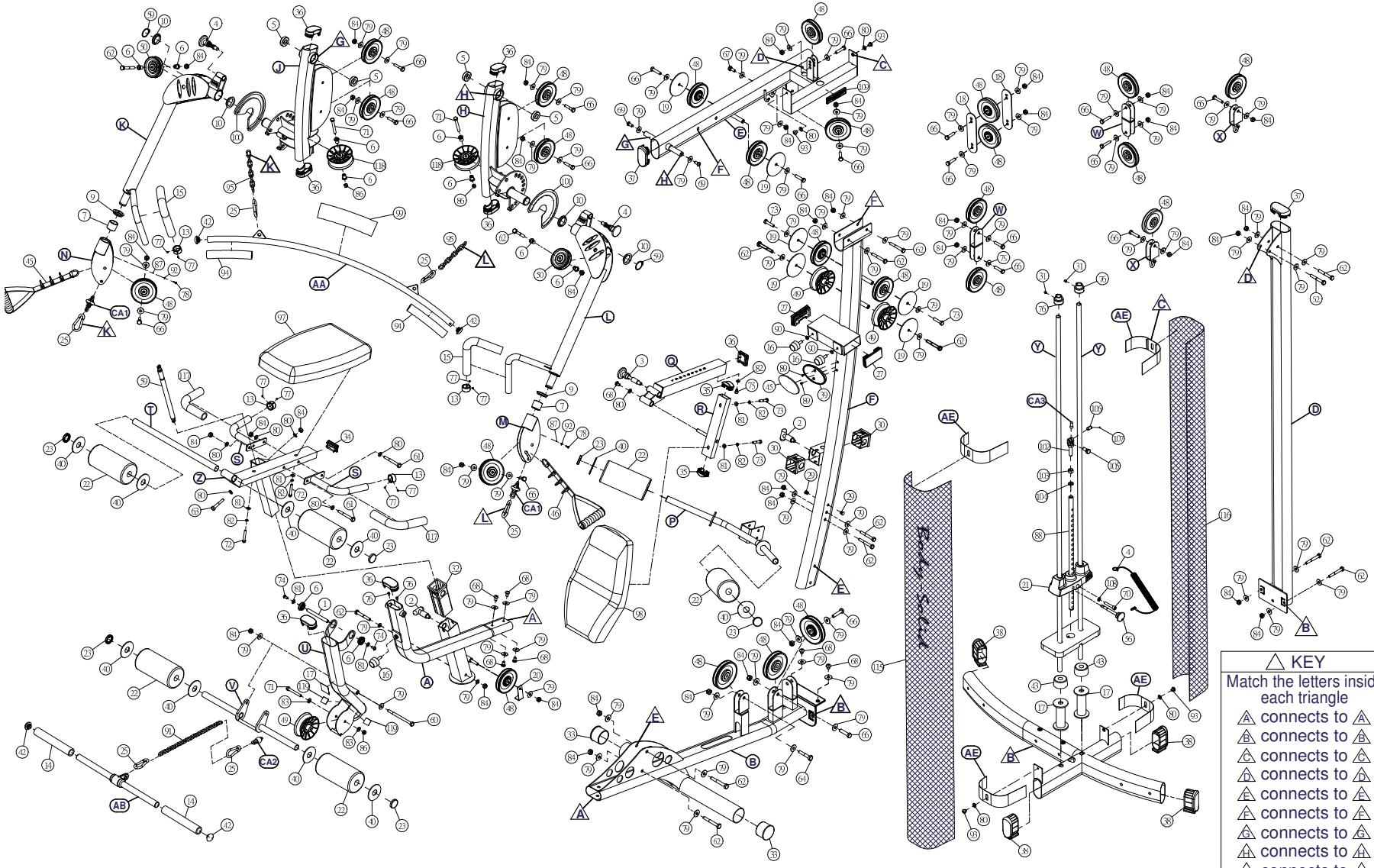
Fusion 400

Exploded View

With Mesh Shroud



△ KEY

Match the letters inside each triangle

- △A connects to △A
- △B connects to △B
- △C connects to △C
- △D connects to △D
- △E connects to △E
- △F connects to △F
- △G connects to △G
- △H connects to △H
- △K connects to △K
- △L connects to △L

BODY-SOLID
LIFETIME WARRANTY

Please consult your physician before using this product.

This Warranty applies only in the United States to products manufactured or distributed by Body-Solid, Inc. (Body-Solid) under the Body-Solid brand name. The warranty period to the original purchaser is lifetime of the original purchaser.

Body-Solid warrants that the Product you have purchased for non-commercial, personal, family, or household use from Body-Solid or from an authorized Body-Solid reseller is free from defects in materials or workmanship under normal use during the warranty period. Your sales receipt, showing the date of purchase of the Product, is your proof of the date of purchase. This warranty extends only to you, the original purchaser. It is not transferable to anyone who subsequently purchases the Product from you. It excludes expendable parts such as paint and finish (ie. scratched or chipped paint; scratched, chipped, peeling or flaking chrome; rust or corrosion). This Warranty becomes VALID ONLY if the Product is assembled / installed according to the instructions / directions included with the Product.

During the warranty period Body-Solid will at no additional charge, repair or replace (at Body-Solid's option) the Product if it becomes defective, malfunctions, or otherwise fails to conform with this Warranty under normal non-commercial, personal, family, or household use. In repairing the product Body-Solid may replace defective parts or, at the option of Body-Solid, serviceable used parts that are equivalent to new parts in performance. All exchanged parts and Products replaced under this warranty will become the property of Body-Solid. Body-Solid reserves the right to change manufacturers of any part to cover any existing warranty.

To obtain warranty service, you must return the Product to Body-Solid in its original container (or equivalent). You must pre-pay any shipping charges, export taxes, customs duties and taxes, or any other charges associated with transportation of the Product. In addition, you are responsible for insuring any Product shipped or returned. You assume the risk of loss during shipment. You must present Body-Solid with proof-of-purchase documents (including the date of purchase). Any evidence of alteration, erasing or forgery of proof -of-purchase documents will be cause to void this Warranty.

This Warranty does not extend to any Product not purchased from Body-Solid or from an authorized Body-Solid reseller. This Warranty does not extend to any Product that has been damaged or rendered defective; (a) as a result of accident, misuse, or abuse; (b) by the use of parts not manufactured or sold by Body-Solid; (c) by modification of the Product; (d) as a result of service by anyone other than Body-Solid, or an authorized Body-Solid warranty service provider. Should any product submitted for Warranty service be found to be ineligible, an estimate of repair cost will be furnished and the repair will be made if requested by you upon Body-Solid's receipt of payment.

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY BODY-SOLID MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. BODY-SOLID EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED IN THIS WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED TO THE TERMS OF THIS WARRANTY. NEITHER BODY-SOLID NOR ANY OF ITS AFFILIATES SHALL BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSION MAY NOT APPLY TO YOU. This Warranty gives you specific legal rights and you may also have other rights that may vary from state to state. This is the only express warranty applicable to Body-Solid branded products. Body-Solid neither assumes nor authorizes anyone to assume for it any other express warranty.

Before returning a product you must call Body-Solid at 1-800-556-3113 to obtain a Return Authorization Number. No returns will be accepted without the Return Authorization Number. Original purchaser must pre-pay all freight charges on warranty claims. Body-Solid will not accept Freight Collect shipments or return shipments on a freight collect basis.

KEEP THIS HALF FOR YOUR RECORDS

LIFETIME WARRANTY
Registration Card

Congratulations! You have just purchased a quality Body-Solid product.You must fill out this Warranty Registration Card completely, sign it and return it to BODY-SOLID within 30 days of purchase for this warranty to be valid.

First Name _____ Initial _____ Last Name _____

Street _____ Apt. No. _____

City _____ State _____ Zip Code _____

Country _____ Phone _____

ITEM NO. _____

ITEM NAME _____

DATE OF PURCHASE _____

1. **Where did you purchase this product from?**

   _____

   _____

2. **Who will use this product?**

   ___ % Male ___ % Female

3. **Age of product user?**

   ☐ Under 24 ☐ 45-54

   ☐ 25-34 ☐ 55-64

   ☐ 35-44 ☐ Over 65

4. **Household Income?**

   ☐ Under $15,000 ☐ $45,000 - $60,000

   ☐ $15,000 - $30,000 ☐ $60,000 - $75,000

   ☐ $30,000 - $45,000 ☐ $75,000 Plus

5. **How did you learn of this product?**

   ☐ TV ☐ Friend

   ☐ Radio ☐ Print ad / Flyer

   ☐ In Store Display ☐ Catalog

   ☐ Salesperson ☐ Other_____

6. **Why did you choose our product?**

   ☐ Quality ☐ Brand Name

   ☐ Features ☐ Price / Value

   ☐ Appearance / Style ☐ Warranty

   ☐ Design / Function ☐ Other_____

CAUTION • PLEASE NOTE • WARNING

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 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.

Please sign:

_____

Signature

Body-Solid

LIFETIME WARRANTY Registration Card

See Details On Back.

You must complete and return Registration Card to Body-Solid within 30 days for this Warranty to be valid.

FROM:

Name: _____

Address: _____ Apt#: _____

City: _____ State: _____ Zip Code: _____

PLACE STAMP HERE

BODY-SOLID, Inc.
1900 Des Plaines Avenue
Forest Park, IL 60130 USA

IMPORTANT!
Lifetime Warranty Registration Card