

O W N E R 'S M A N U A L

### 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.

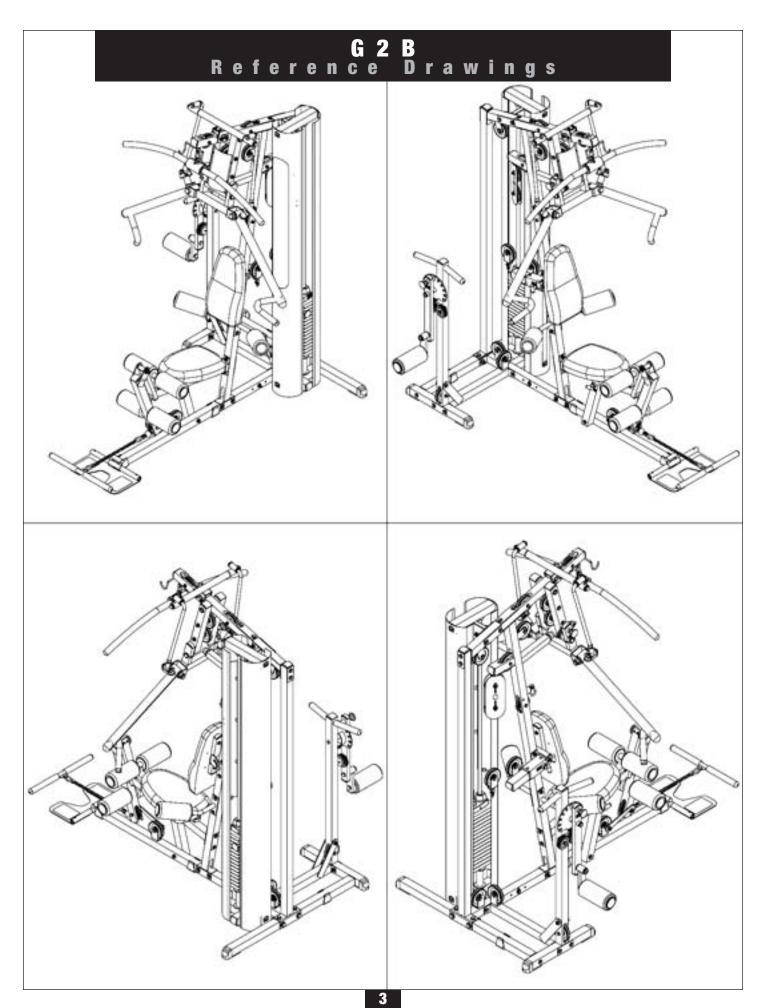


### Also includes:

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



**Total Body Workout DVD** 



### 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 G2B. 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 G2B on a solid, level surface. Locate the unit a few feet from the walls or furniture to provide easy access.

The G2B 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 G2B.

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

### **Obtaining Service**

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

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

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

Or write to: Body-Solid, Inc.

Service Department 1900 S. Des Plaines Ave. Forest Park, IL 60130 USA

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

### Before You Begin

Thank you for purchasing the G2B. This gym is part of the Body-Solid line of quality strength training machines, which let you target specific muscle groups to achieve better muscle tone and overall body conditioning. To maximize your use of the equipment please study this Owner's Manual thoroughly.

### **Unpacking the Equipment**

The G2B is carefully tested and inspected before shipment. Body-Solid ships the unit in several pieces that require assembly. Ask for assistance during the assembly process.

Carefully unpack the boxes and lay the pieces on the floor near the area where you plan to use the equipment.

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

If any items are missing, contact the dealer from whom you purchased the unit or call 1-800-556-3113 for the dealer nearest you.

### Dimensions

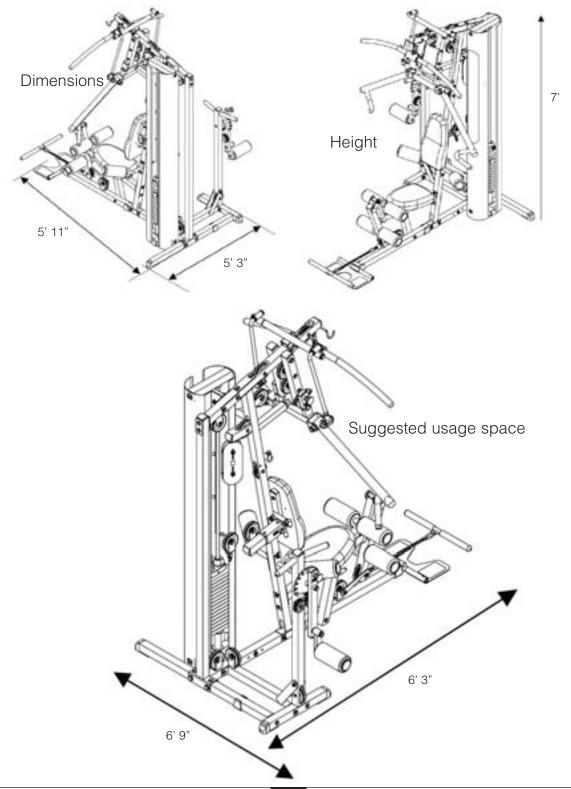
The room layout diagram below will help you decide the best placement for your G2B.

The dimensions of the G2B are: width 5'3" X length 5'11".

The ceiling height requirement for the G2B is 7'.

The usage space is: width 6'9" X length 6'3" (The usage space is the overall space needed for operation.)

The usage space needed for the G2B could be more, depending on the user, allow enough room for the Low Row Station.



### 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 the 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 suitable, 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 <u>do not allow the machine to</u> be used until all parts are tightened or worn or defective parts are repaired or replaced.

### Preparations

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

You must review and follow the instructions in this Owner's Manual. If you do not assemble and use the G2B according to these guidelines, you could void the Body-Solid warranty.

#### **Required Tools**

the G2B include:	the Requ
4mm Allen Key	
5mm Allen Key	
6mm Allen Key	
8mm Allen Key	The C
9/16" Open-End Wrench	asser
11/16" Open-End Wrench	this g
13/16" Open-End Wrench	NOTE
3/4" Open-End Wrench	and a
9/16" Box Wrench	
11/16" Box Wrench	
13/16" Box Wrench	
3/4" Box Wrench	

The tools that you must obtain before assembling

CAUTION: Obtain assistance! Do not attempt to assemble the G2B by yourself. Review the Installation Requirements before proceeding with the following steps.

The G2B unit comes in seven boxes. Be careful to assemble components in the sequence presented in this guide.

NOTE: With so many assembled parts, proper alignment and adjustment is critical. While tightening the nuts and bolts, be sure to leave room for adjustments.

### **Installation Requirements**

Follow these installation requirements when assembling the G2B:

Set up the G2B on a solid, flat surface. A smooth, flat surface under the machine helps keep it level. A level machine has fewer malfunctions.

Provide ample space around the machine. Open space around the machine allows for easier access.

Insert all bolts in the same direction. For aesthetic purposes, insert all bolts in the same direction unless specified (in text or illustrations) to do otherwise.

Leave room for adjustments. Tighten fasteners such as bolts, nuts, and screws so the unit is stable, but leave room for adjustments. Do not fully tighten fasteners until instructed in the assembly steps to do so.

Fill out and mail warranty card.

### Assembly Instructions

Assembly of the G2B 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**

following diagram:

Read all "Notes" on each page before beginning each step.

While you may be able to assemble the G2B using the illustrations only, important safety notes and other tips are included in the text.

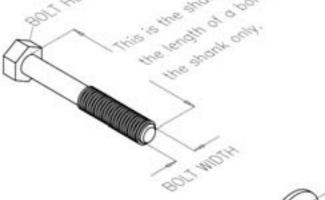
Some pieces may have extra holes that you will not use. Use only those holes indicated in the instructions and illustrations.

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

### **IMPORTANT!**

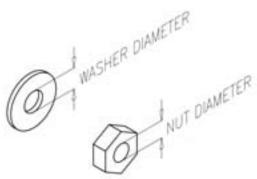
Before you begin you should fold-out pages 82, 83 and 84.

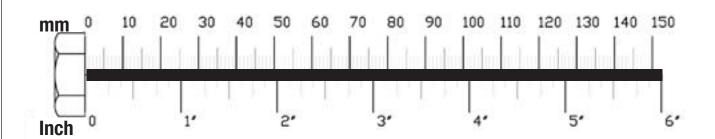
This is a quick reference guide that shows all hardware parts (in actual size) along with the corresponding key numbers on the assembly instructions.



### 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.







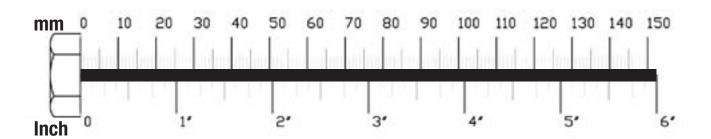
#### NOTE:

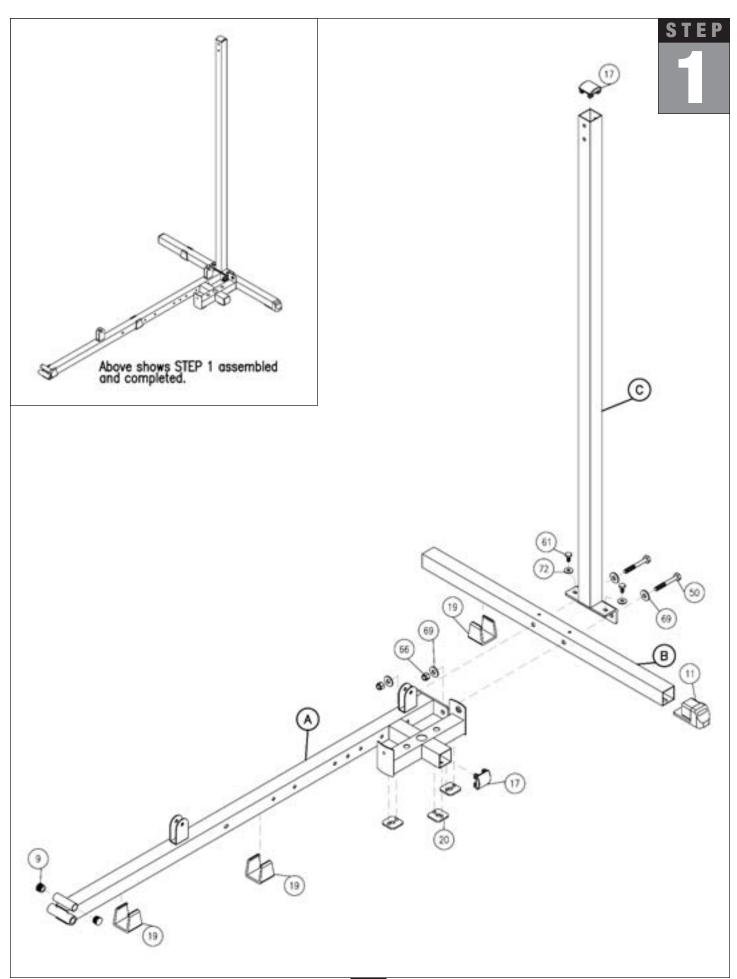
Finger tighten all hardware in this step. Do Not wrench tighten until the end of step 4.

- A. Attach three Weight Stack Shims (20) to the bottom of Main Base Frame (A). Insert one Foot Cap (11) into the end of Rear Base Frame (B). Insert one Convex End Cap (17) to Main Base Frame (A) as shown. Attach two Frame Levelers (19) to Main Base Frame (A).
   Attach one Frame Leveler (19) to Rear Base Frame (B).
- B. Attach Main Base Frame (A) to Rear Base Frame (B) and Rear Vertical Frame (C) using:

Two 50 (1/2" x 3 1/2" hex head bolt) Four 69 (1/2" washer) Two 66 (1/2" nylon lock nut) Two 61 (5/16" x 3/4" allen bolt) Two 72 (5/16" washer)

C. Insert one Convex End Cap (17) to the top of Rear Vertical Frame (C) as shown. Insert two Round End Caps (9) to the openings in Main Base Frame (A) as shown.





### 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 the end of step 4.

A. Attach Angled Vertical Frame (D) to Main Base Frame (A) using:

Two 55 (3/8" x 3" hex head bolt) Four 70 (3/8" washer) Two 67 (3/8" nylon lock nut)

B. Attach Top Main Frame (E) and Flat Plate (F) to Rear Vertical Frame (C) using:

Two 54 (3/8" x 2 3/4" hex head bolt)\*
Two 70 (3/8" washer)

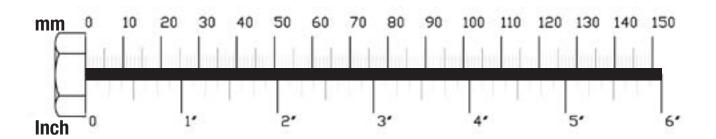
\*NOTE

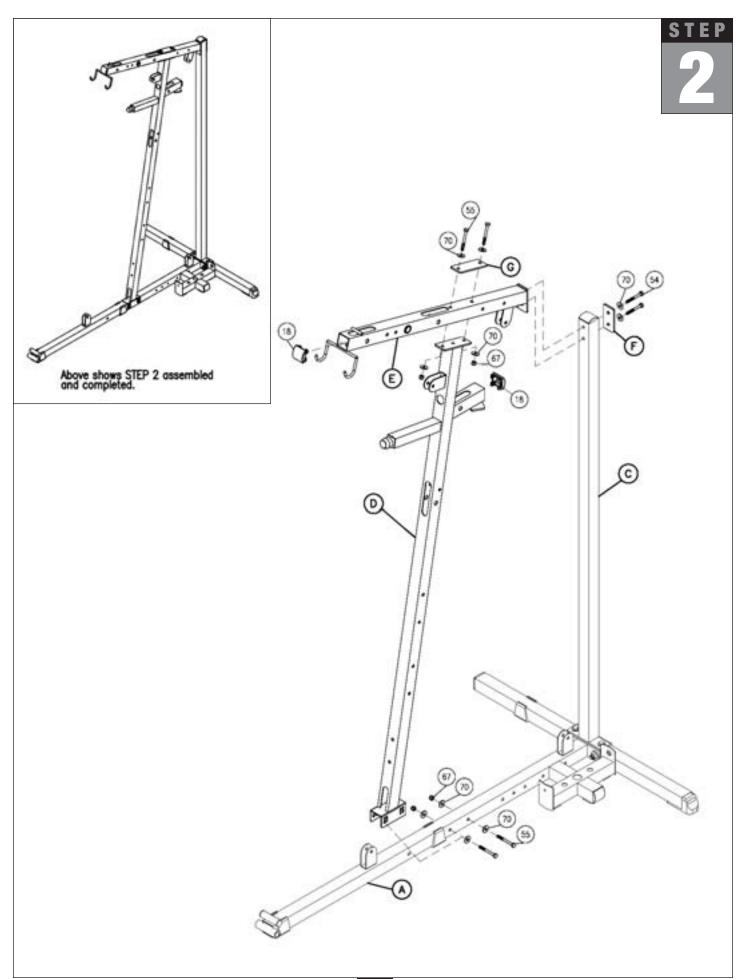
These two bolts (54) go into internal threads inside Top Main Frame (E).

C. Attach Top Main Frame (E) and Flat Plate (G) to Angled Vertical Frame (D) using:

Two 55 (3/8" x 3" hex head bolt) Four 70 (3/8" washer) Two 67 (3/8" nylon lock nut)

Insert Convex End Cap (18) to the front of Top Main Frame (E).
 Insert Convex End Cap (18) to the small arm sticking out of Angled Vertical Frame (D) as shown.





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

#### NOTE:

Finger tighten all hardware in this step, except where noted\* in part A. <u>Do Not</u> wrench tighten any other hardware until the end of step 4.

A. Attach Multi Hip Base (N) to Main Base Frame (A) using:

Two 54 (3/8" x 2 3/4" hex head bolt)\*

Four 70 (3/8" washer)

Two 67 (3/8" nylon lock nut)

\*You must wrench tighten these two bolts (54) now.

B. Attach Multi Hip Vertical Frame (P) and Flat Plate (J) to Multi Hip Base (N) using:

Two 55 (3/8" x 3" hex head bolt)

Four 70 (3/8" washer)

Two 67 (3/8" nylon lock nut)

C. For more stability secure Multi Hip Vertical Frame (P) to Multi Hip Base (N) connection as shown with:

One 55 (3/8" x 3" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

D. Attach Multi Hip Vertical Frame (P) and Rear Base Frame (B) using:

One 54 (3/8" x 2 3/4" hex head bolt)\*

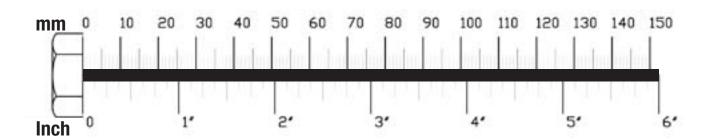
One 70 (3/8" washer)

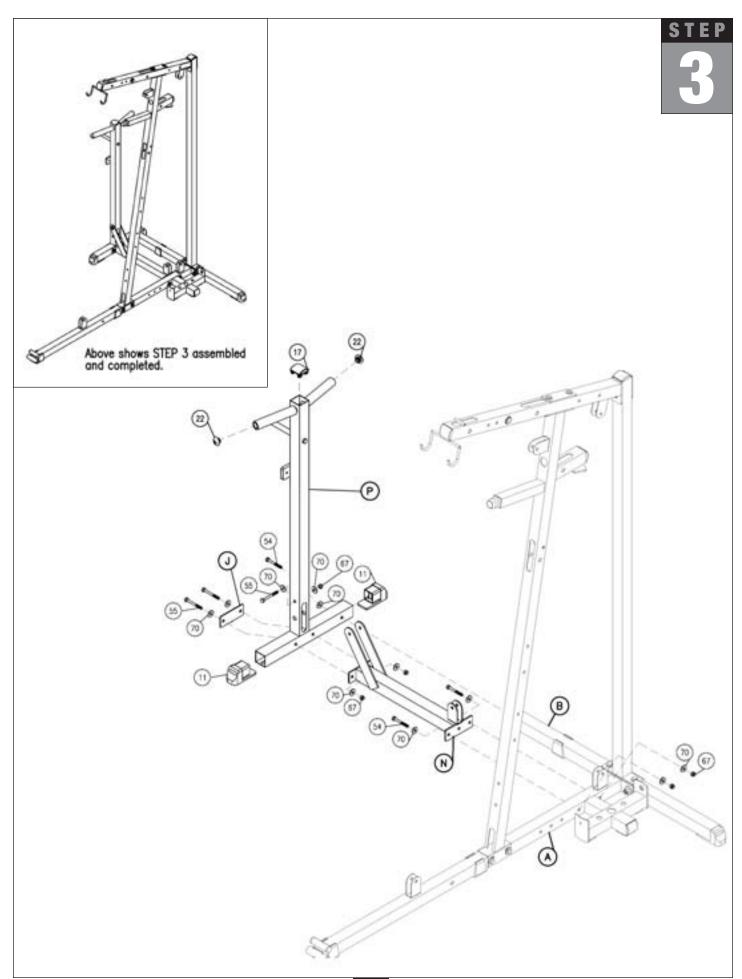
\*NOTE

This bolt (54) goes into internal threads inside Rear Base Frame (B).

E. Insert two Foot Caps (11) into the ends of Multi Hip Vertical Frame (P). Attach End Cap (17) to the top of Multi Hip Vertical Frame (P).

Attach Round End Cap (22) to the end of the handles on Multi Hip Vertical Frame (P) as shown.





## 4

### 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 any other hardware until the end of step.

- A. Place two Weight Stack Risers (86) and two Rubber Donuts (24) onto Main Base Frame (A) as shown. Slide two Guide Rods (Q) through the Rubber Donuts (24), through the two Weight Stack Risers (86), and into the Main Base Frame (A).
- B. Slide Weight Stack Plates (87) onto Guide Rods (Q). Make sure the opening in each Weight Stack Plate (87), for the Weight Stack Pin (42), is facing <u>outward</u>.
- C. Connect Top Plate (29) to the Selector Rod (33) using:

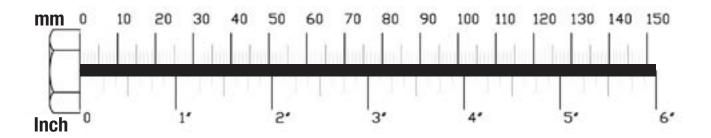
One 52 (3/8" X 2" socket head bolt)
One 71 (3/8" spring lock washer)

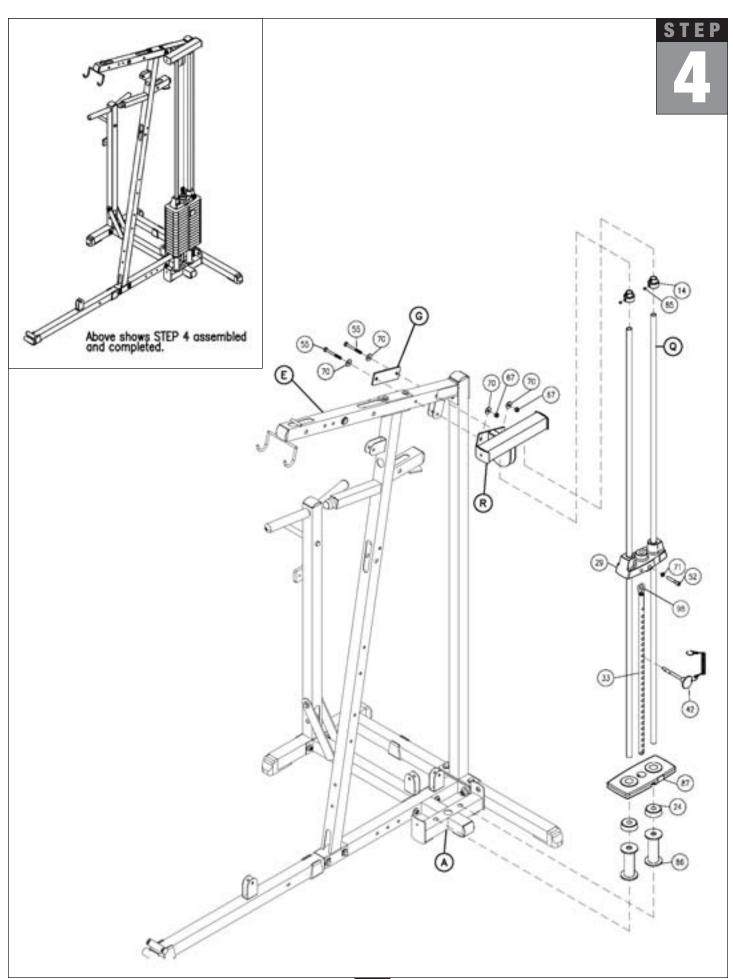
Slide Top Plate (29) and Selector Rod (33) onto Guide Rods (Q).

- D. Slide two Shaft Collars (14) onto the two Guide Rods (Q) as shown.
- E. Insert Guide Rods (Q) into Top Weight Stack Frame (R), and attach Top Weight Stack Frame (R) and Flat Plate (G) to Top Main Frame (E) using:

Two 55 (3/8" x 3" hex head bolt) Four 70 (3/8" washer) Two 67 (3/8" nylon lock nut)

- F. Slide Shaft Collars (14) up into the Top Weight Stack Frame (R) and turn the Shaft Collar, so the Shaft Collars (14) lock onto the Top Weight Stack Frame (R), Now tighten each Allen Screw (85) in Shaft Collars (14).
- G. At this point you can now wrench tighten all bolts and nuts on the main frame unit.





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

A. Slide two Nylon Bushings (13) into Back Pad Holder (S). Attach Back Pad Holder (S) to Angled Vertical Frame (D) using:

Two 54 (3/8" x 2 3/4" hex head bolt) Four 70 (3/8" washer) Two 67 (3/8" nylon lock nut)

- B. Attach End Cap (17) to the end of Back Pad Adjuster (T).
   Slide Back Pad Adjuster (T) into Back Pad Holder (S). Use the T-Shaped Pop Pin (106) and
   One 91 (5/16" x 3/4" socket head allen bolt)
   to hold in place.
- Insert two End Caps (16) to the top and bottom of Back Pad Frame (U).
   Attach Back Pad Frame (U) to Back Pad Adjuster (T) using the Pop Pin (90) and:
   One 92 (3/8" x 5/8" allen bolt)
   One 93 (3/8" washer)
- D. Attach Leg Hold Downs (V) and (W) to the Angled Vertical Frame (D) as shown using:

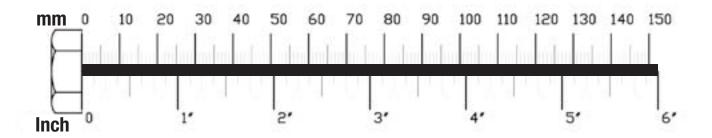
Two 55 (3/8" x 3" hex head bolt) Four 70 (3/8" washer) Two 67 (3/8" nylon lock nut)

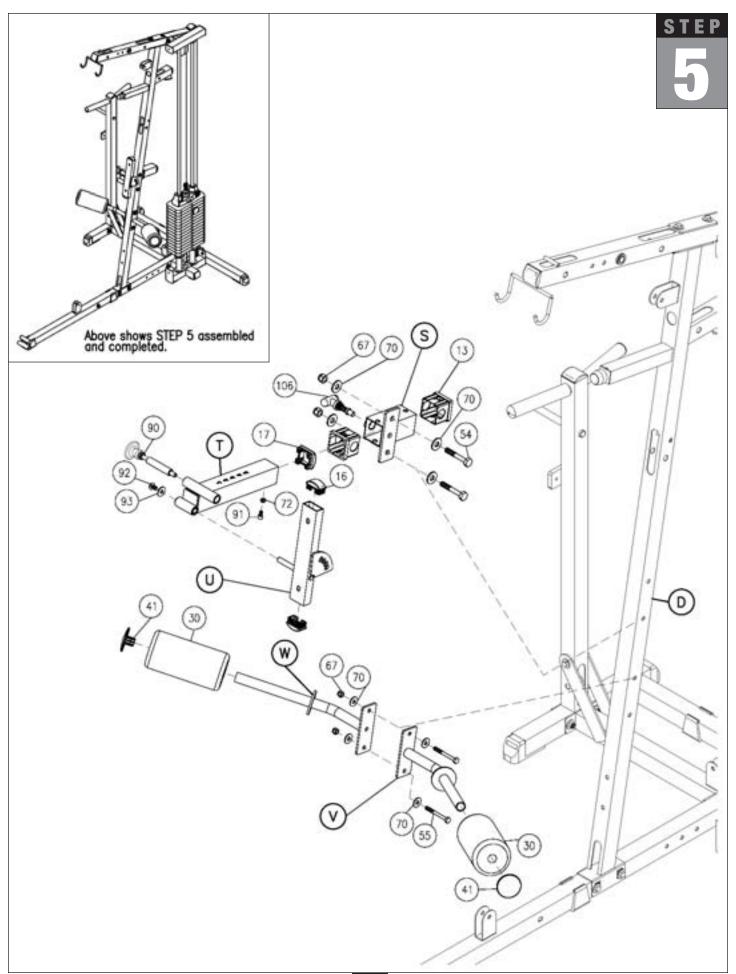
The Leg Hold Downs are marked with an L and R to indicate left and right, They should angle forward and upward.

E. Slide two Rollers (30) onto Right and Left Leg Hold Downs (V) and (W) and hold in place with two Roller End Caps (41).

#### Note:

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





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

A. Attach Press Arm Support (X) to the Top Main Frame (E) using Shaft (88) and tighten two Allen Screws (85).

Attach two Convex End Caps (17) to the top of Press Arm Support (X) as shown.

- B. Attach Press Arm Pivot (Y) to Press Arm Support (X) using Shaft (89) and tighten Two Allen Screws (85).
- C. Attach Bi-Angular Bars (Z) to Top Main Frame (E) using:

Two 55 (3/8" x 3" hex head bolt)

Four 70 (3/8" washer)

Two 67 (3/8" nylon lock nut)

Two 60 (5/16" x 1/2" hex head bolt)

Two 74 (5/16" washer)

D. Attach Left Seated Press Arm (AA) to the Press Arm Pivot (Y) using Shaft (94) and:

One 95 (1/2" x 3/4" hex head bolt)

One 69 (1/2" washer)

Tighten two Allen Screws (85).

Attach Round End Cap (15) to the bottom of Left Seated Press Arm (AA).

E. Connect Left Seated Press Arm (AA) to the Bi-Angular Bars (Z) using Shaft (96) and:

Two 92 (3/8" x 5/8" hex head bolt)

Two 93 (3/8" washer)

F. Attach Right Seated Press Arm (AB) to the Press Arm Pivot (Y) using Shaft (94) and:

One 95 (1/2" x 3/4" hex head bolt)

One 69 (1/2" washer)

Tighten two Allen Screws (85).

Attach Round End Cap (15) to the bottom of Right Seated Press Arm (AB).

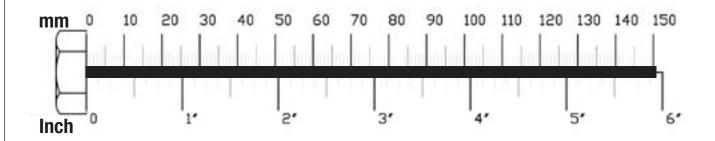
G. Connect Right Seated Press Arm (AB) to the Bi-Angular Bars (Z) using Shaft (96) and:

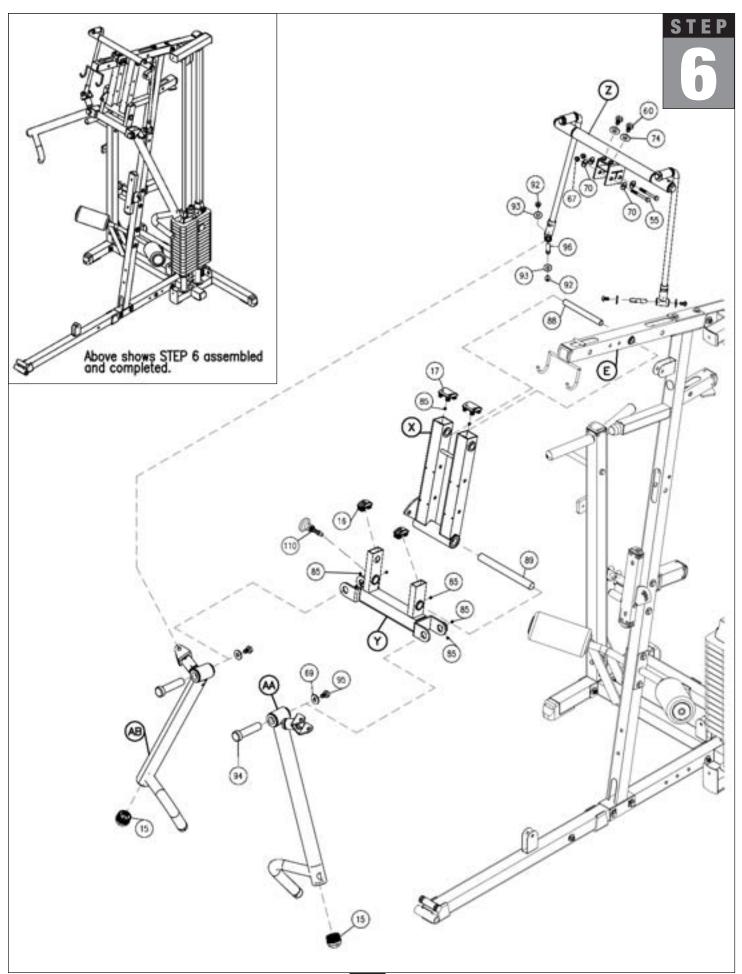
Two 92 (3/8" x 5/8" hex head bolt)

Two 93 (3/8" washer)

### Note:

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





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

- A. Slide Bronze Washer (3) onto Multi Hip Vertical Frame (P). Slide Multi Hip Adjuster (AC) onto Multi Hip Vertical Frame (P).
- B. Slide Multi Hip Arm (AD) onto Multi Hip Vertical Frame (P) attach using Pop Pin (111) and:

One 92 (3/8" x 5/8" allen bolt) One 93 (3/8" washer)

Attach two End Caps (16) to the top and bottom of Multi Hip Arm (AD) as shown.

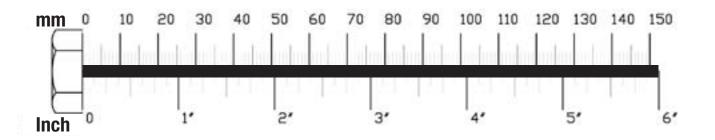
C. Slide Bronze Washer (4) onto Multi Hip Arm (AD).Slide Multi Hip Pad Holder (AE) onto the Multi Hip Arm (AD) and hold in place using:

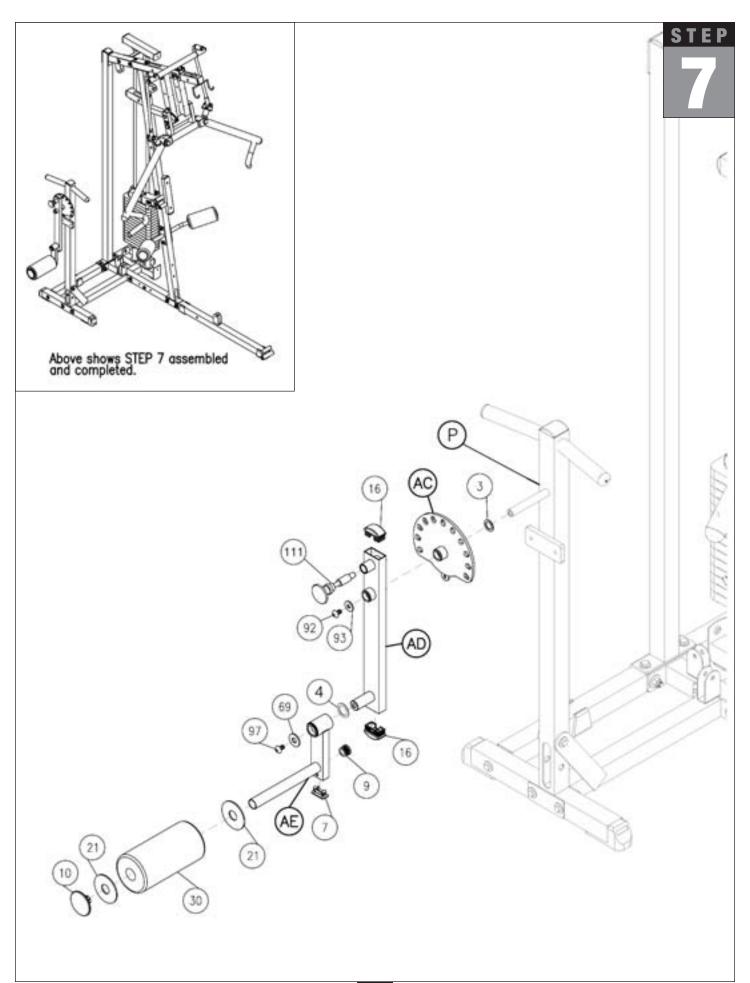
One 97 (1/2" x 3/4" allen bolt) One 69 (1/2" washer)

- D. Attach Round End Cap (9) into Multi Hip Pad Holder (AE).Attach End Cap (7) to the bottom of Multi Hip Pad Holder (AE).
- E. Slide 3" Nylon Washer (21) and Roller (30) onto Multi Hip Pad Holder (AE) as shown. Slide 3" Nylon Washer (21) onto Multi Hip Pad Holder (AE) and hold in place with Roller End Cap (10).

### Note:

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





A. Attach Leg Extension Frame (H) and Flat Plate (J) to Angled Vertical Frame (D) using:

Two 55 (3/8" x 3" hex head bolt)

Four 70 (3/8" washer)

Two 67 (3/8" nylon lock nut)

Leg Extension Frame (H) is pre-assembled with Seat Pad Frame (K).

B. Attach Leg Extension Frame (H) to Main Base Frame (A) using:

One 56 (3/8" x 4 1/2" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

C. Insert End Cap (16) to Leg Extension Frame (H).

Insert Flat End Cap (8) to Seat Pad Frame (K).

Insert End Cap (16) to the back of Seat Pad Frame (K) as shown.

D. Attach Leg Extension Arm (L) to Leg Extension Frame (H) using Shaft (80) and the pre-installed hardware:

Two 81 (5/16" x 5/8" allen screw)

Two 82 (5/16" washer)

Tighten Allen Screws (85).

Insert End Cap (17) into the top of Leg Extension Arm (L) as shown.

E. Slide Roller Bar (AF) into the front of Seat Pad Frame (K).

Slide two Nylon Washer (21) onto the Roller Bar (AF).

Slide two Rollers (30) onto the Roller Bar (AF) and hold in place with Roller End Cap (10).

F. Slide Roller Bar (AF) into the opening in Leg Extension Arm (L).

Slide two Rollers (30) onto the Roller Bar (AF) and hold in place with Roller End Cap (10).

G. Attach Seat Pad (BA) to Seat Pad Frame (K) using:

Two 59 (5/16" x 1 3/4" hex head bolt)\*

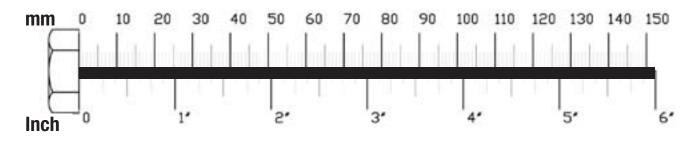
Two 72 (5/16" spring lock washer)

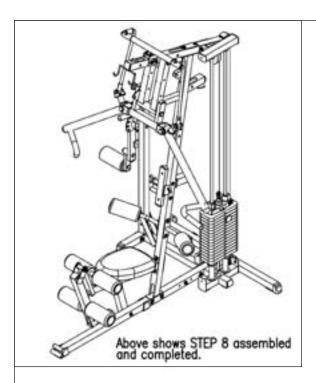
Two 73 (5/16" washer)

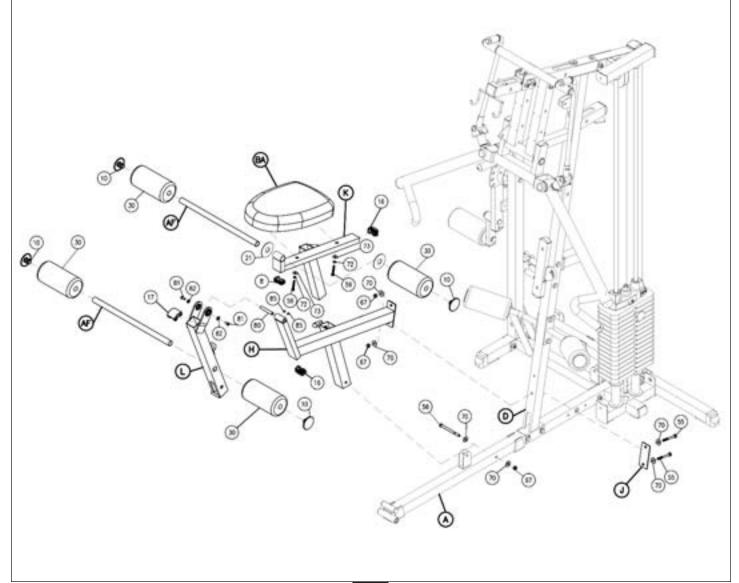
\*Do NOT over-tighten pad bolts (59). Tighten these bolts untill spring lock washer is flat. Over - tightening these bolts will cause T - nuts in pads to strip out.

#### Note:

You should now <u>wrench tighten</u> all bolts and nuts in this step. Do NOT re-tighten any of the pad bolts or pulley bolts.







A. Attach Back Pad (BB) to Back Pad Frame (U) using:

Two 59 (5/16" x 1 3/4" hex head bolt)\*

Two 72 (5/16" spring lock washer)

Two 73 (5/16" washer)

\*Do NOT over-tighten pad bolts (59). Tighten these bolts until spring lock washer is flat. Over - tightening these bolts will cause T - nuts in pads to strip out.

B. Attach Foot Brace (M) to the front of Main Base Frame (A) using Shaft (84) and the pre-installed hardware:

Two 85 (5/16" x 5/16" allen screw)

C. Insert two Pulleys (34) into the Press Arm Support (X) as shown using:

Two 57 (3/8" x 7 1/4" hex head bolt)

Four 1 (spacer sleeve)

Four 70 (3/8" washer)

Two 67 (3/8" nylon lock nut)

D. Attach one Pulley (34) onto the flanges near the rear of Main Base Frame (A) as shown using:

One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

E. Attach one Pulley (34) and Leg Extension Hook (104) onto the flanges near the front on Main Base Frame (A) as shown using:

One 54 (3/8" x 2 3/4" hex head bolt)

Three 70 (3/8" washer)

One 103 (1/4" spacer)

One 105 (1/2" spacer)

One 67 (3/8" nylon lock nut)

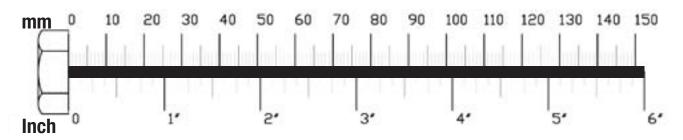
F. Attach two 3" Pulley (36) onto Multi Hip Vertical Frame (P) using:

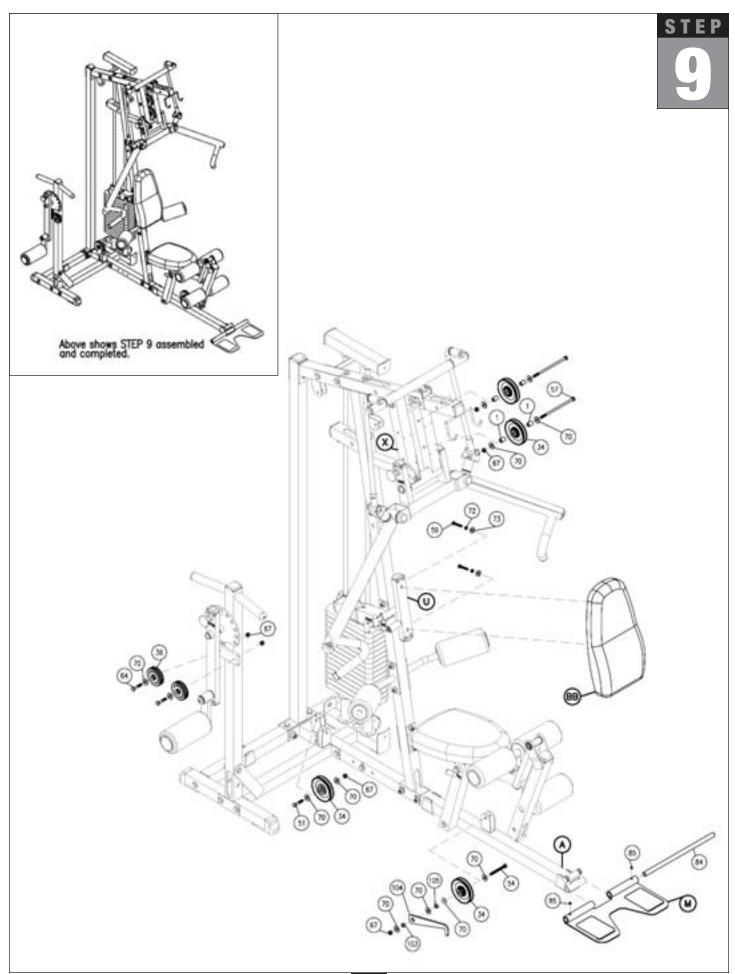
Two 64 (3/8" x 2" hex head bolt)

Two 70 (3/8" washer)

Two 67 (3/8" nylon lock nut)

#### NOTE:







### **High Pulley Cable (37)**



Note:

All Pulleys in this step are 4 1/4" diameter, except where noted in step 10B\*. Leave all pulley bolts hand tight until step 15 is completed.

- A. See Diagram 1. Begin at the high pulley station. Route the High Pulley Cable (37) <u>up</u> through the first opening where pulley (A1) will be installed, and out through the top. Route Cable (37) through the opening under the Bi-Angular Bars (Z) and then <u>down</u> through the second opening where pulley (A2) will be installed. Pull the entire length of cable through.
- B. See Diagram 2. Insert one Pulley (A1)\*, into the first opening in Top Main Frame (E) under Cable (37) and attach using:

One 53 (3/8" x 2 1/2" hex head bolt)

Two 5 (pulley spacer)

One 67 (3/8" nylon lock nut)

\*For Pulley (A1) use 3 1/2" diameter Pulley (KEY #35 on page 77).

C. See Diagram 2. Insert one Pulley (A2), into the second opening in Top Main Frame (E) under Cable (37) and attach using:

One 53 (3/8" x 2 1/2" hex head bolt)

Two 5 (pulley spacer)

One 67 (3/8" nylon lock nut)

D. See Diagram 1. Route Cable (37) <u>over</u> and around pre-installed Pulley (A3). Route Cable (37) around Pulley (A4) and install Pulley (A4) onto the Angled Vertical Frame (D) as shown in Diagram 2:

One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

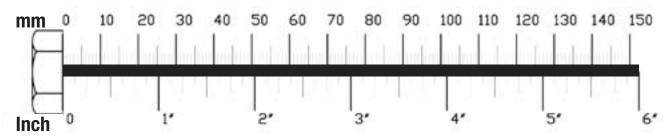
E. See Diagram 1. Route Cable (37) <u>over</u> and around pre-installed Pulley (A5). Route Cable (37) around Pulley (A6) and install Pulley (A6) into the Angled Vertical Frame (D) as shown in Diagram 2:

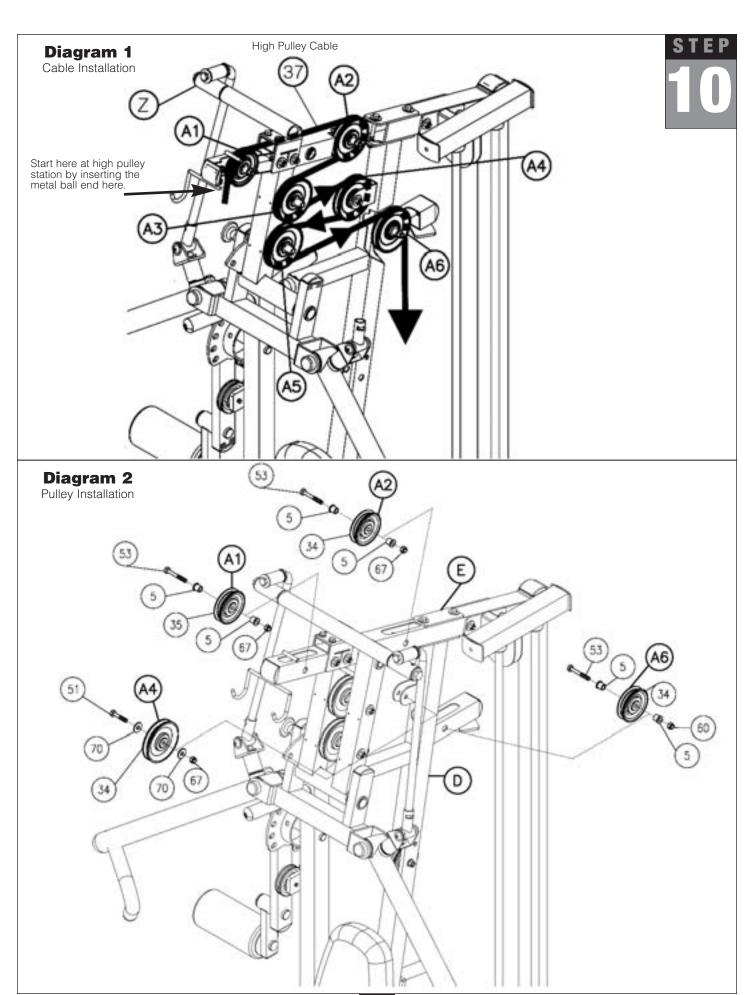
One 53 (3/8" x 2 1/2" hex head bolt)

Two 5 (pulley spacer)

One 60 (3/8" nylon lock nut)

### **NOTE:**







### **High Pulley Cable (37)**



#### Note:

All Pulleys in this step are 4 1/4" diameter.

Leave all pulley bolts hand tight until step 15 is completed.

A. See Diagram 1. Route High Pulley Cable (37) through the top of Double Pulley Holder (CA) and install Pulley (A7) into the top of Double Pulley Holder (CA) as shown in Diagram 2 using:

One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

Attach Rubber Pad (14) to the top of Double Pulley Holder (CA) as shown.

B. See Diagram 1. Route Cable (37) up and into the pulley holder on the Top Weight Stack Frame (R). Installed Pulley (A8) under Cable (37) as shown in Diagram 2 using:

One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

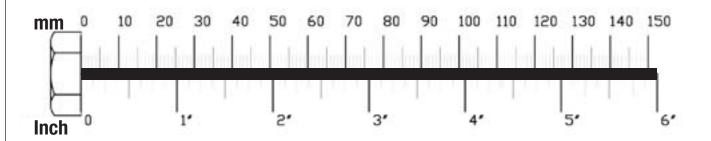
Route Cable (37) down towards the weight stack.

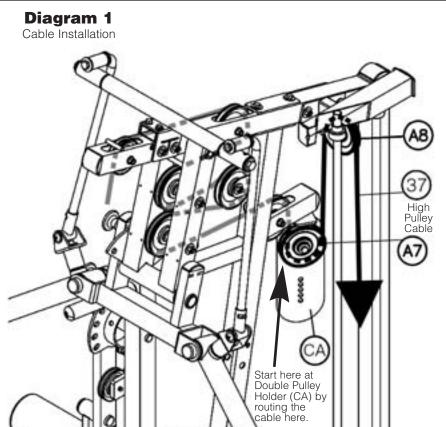
C. See Diagram 1A. First remove Allen Head Bolt (65). The Metal Ball End of Cable (37) should be hanging just above the Weight Stack. slide Metal Ball End of Cable (37) through the Selector Rod Top Bolt (98). Attach Cable End Shaft (99) and securely tighten Allen Screw (100). Pull Cable (37) tight, so Cable End Shaft (99) fits securely inside Selector Rod Top Bolt (98). Install Allen Head Bolt (65) in Selector Rod Top Bolt (98) and hold in place with Nylon Lock Nut (67).

#### Note:

Make sure the Selector Rod Top Bolt (98) is threaded inside Selector Rod (33) <u>at least one half inch.</u> Make sure Spring Lock Washer (101) is in place and wrench tighten Jam Nut (102).

#### NOTE:

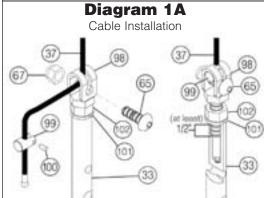




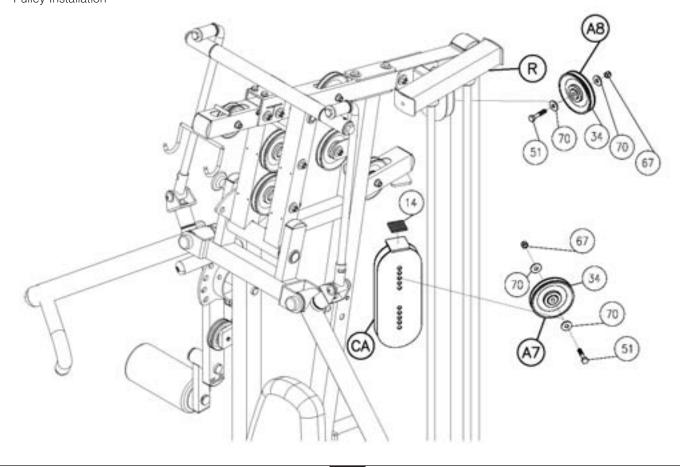


### A WARNING

Selector Rod Top Bolt (98) must be threaded a minumum of 1/2" into the Selector Rod (33), and Jam Nut (102) tightened securely against spring lock washer (101) to ensure proper connection. Check the Jam Nut (102) once a week to make sure it is tight.



### **Diagram 2**Pulley Installation



### **Low Pulley Cable (38)**



#### Note:

All Pulleys in this step are 4 1/4" diameter, except where noted in step 12B\*. Leave all pulley bolts hand tight until step 15 is completed.

- A. See Diagram 1. Insert either end of the Ab Crunch Cable (38) into the opening in Angled Vertical Frame (D), above Back Pad (BB), and pull entire length through.
- B. Install \*3 1/2" Diameter Pulley (B1), <u>under Cable (38)</u> and into Angled Vertical Frame (D) as shown in Diagram 2 using:

One 53 (3/8" x 2 1/2" hex head bolt)

Two 5 (pulley spacer)

One 67 (3/8" nylon lock nut)

C. See Diagram 1. Route Cable (38) through the first Pulley Holder (CB). Hold cable in place by installing Pulley (B2) as shown in Diagram 2 using:

One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

D. See Diagram 1. Route Cable (38) up through the bottom of Double Pulley Holder (CA). Hold cable in place by installing Pulley (B3) as shown in Diagram 2 using:

One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

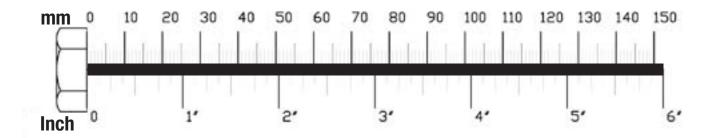
E. See Diagram 1. Route Cable (38) through the other Pulley Holder (CB). Hold Cable (38) in place by installing Pulley (B4) as shown in Diagram 2 using:

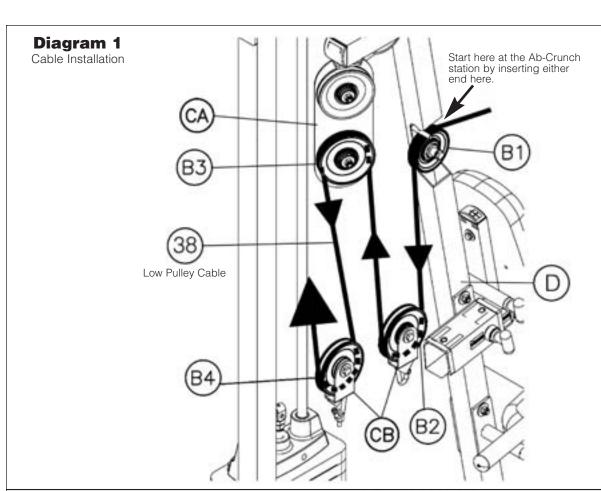
One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

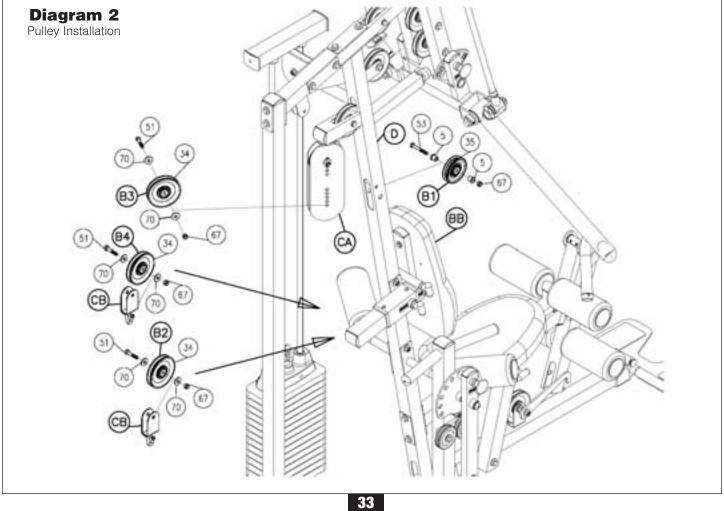
One 67 (3/8" nylon lock nut)

### NOTE:





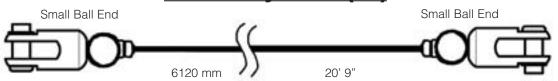




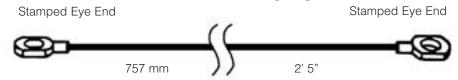
# 13

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

### **Low Pulley Cable (38)**



### **Short Cable (39)**



A. See Diagram 1. Route Leg Extension Cable (38) <u>up</u> to the Top Main Frame (E). Install Pulley (B5) <u>under Cable (38)</u> and into the pulley flange on Top Main Frame (E) as shown in Diagram 2 using:

One 51 (3/8" x 1 3/4" hex head bolt)

Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

- B. See Diagram 1. Route Cable (38) down and <u>under pre-installed Pulley</u> (B6). Route Cable (38) through the opening in Angled Vertical Frame (D). Route Cable (38) <u>under pre-installed Pulley</u> (B7).
- C. Route Cable (38) through the bottom of the Leg Extension Arm (L) and hold Cable (38) in place by installing Pulley (B8) as shown in Diagram 2 using:

One 53 (3/8" x 2 1/2" hex head bolt)

Two 5 (pulley spacer)

One 67 (3/8" nylon lock nut)

D. See Short Cable Diagram. Attach Short Cable (39) to Main Base Frame (A) using:

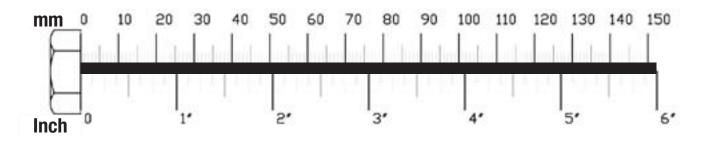
One 55 (3/8" x 3" hex head bolt)

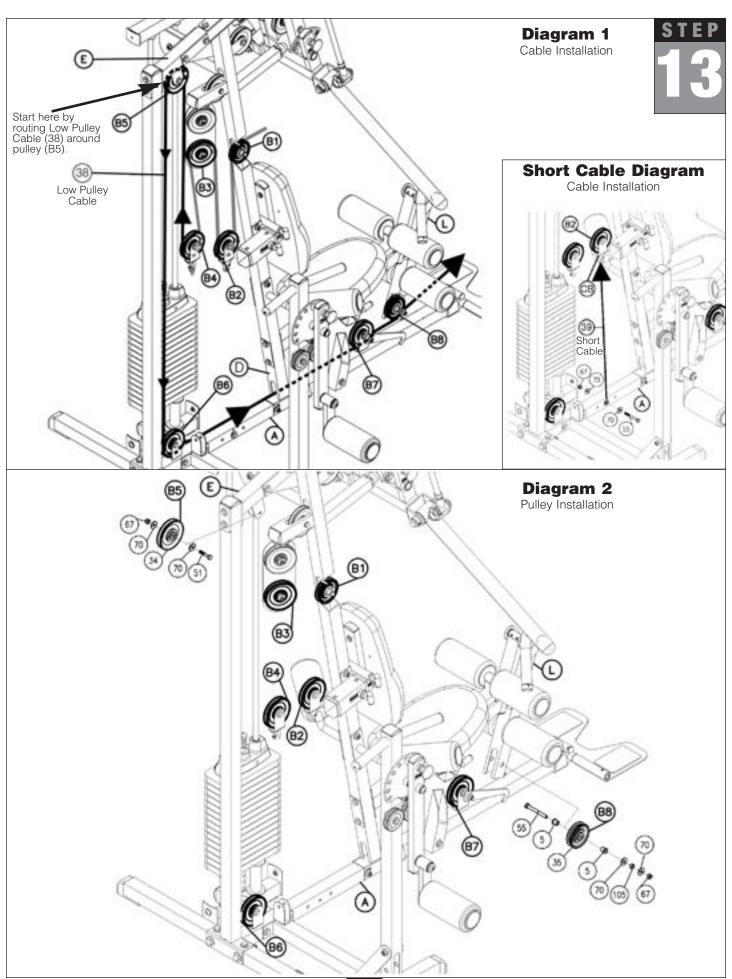
Two 70 (3/8" washer)

One 67 (3/8" nylon lock nut)

E. Route Cable (39) <u>up</u> to the front Pulley Holder (CB), the Pulley Holder (CB) that holds pulley (B2). Attach the Flat Eye End of Cable (39) to the hook on the bottom of this Pulley Holder (CB) as shown in Short Cable Diagram.

### NOTE:







### **Multi Hip Cable (40)**



A. See Diagram 1A. Attach Multi Hip Cable (40) to the Multi Hip Adjuster (AC) as shown using:

One 58 (5/16" x 1 1/2" hex head bolt)
One 63 (7/16"L spacer sleeve)
Two 2 (1/4"L spacer sleeve)
One 68 (5/16" nylon lock nut)

- B. Remove one of the pre-installed 3" Pulleys (36), either Pulley (C1) or Pulley (C2). Route Cable (40) between the two 3" Pulleys (36), and reinstall 3" Pulley (36).
- See Diagram 1. Route Cable (40) <u>down</u> along the Multi Hip Vertical Frame (P), and through the opening in the Multi Hip Vertical Frame (P).
   Install Pulley (C3) into the opening in Multi Hip Vertical Frame (P) over Cable (40) as shown in Diagram 2 using:

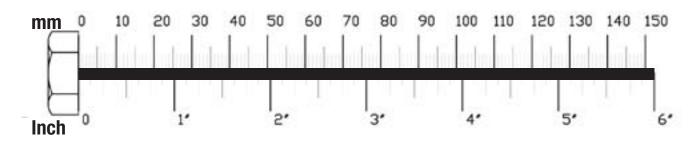
One 53 (3/8" x 2 1/2" hex head bolt) Two 5 (pulley spacer) One 67 (3/8" nylon lock nut)

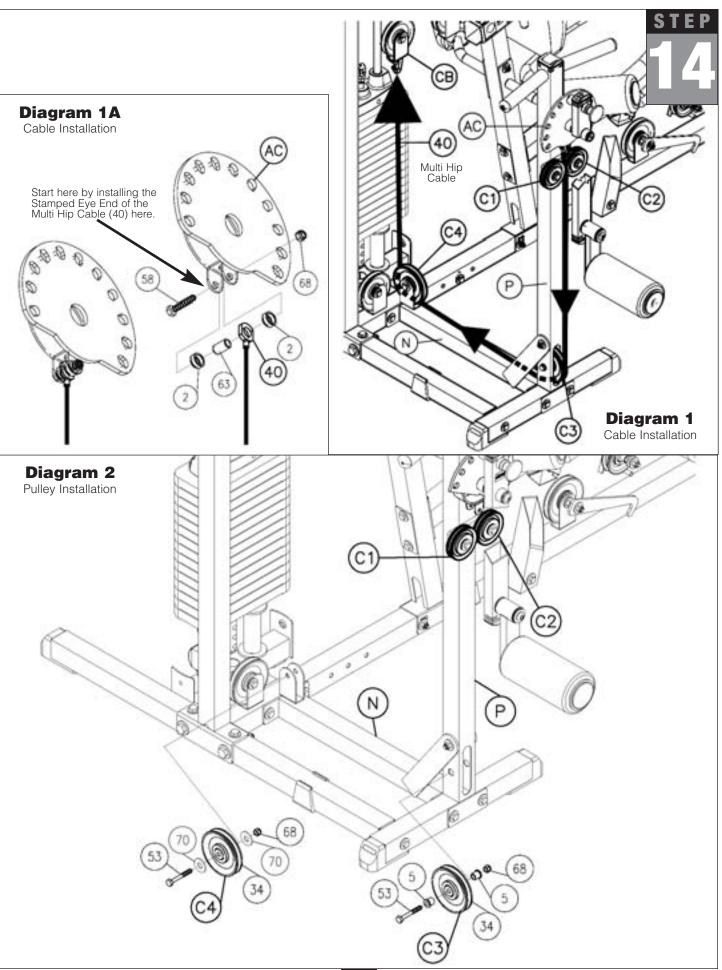
D. See Diagram 1. Route Cable (40) around Pulley (C4) and install Pulley (C4) to the pulley flanges on Multi Hip Base (N) as shown in Diagram 2 using:

One 51 (3/8" x 1 3/4" hex head bolt) Two 70 (3/8" washer) One 67 (3/8" nylon lock nut)

E. See Diagram 1. Route Cable (40) <u>up</u> to Pulley Holder (CB) and attach to the open hook on the bottom of Pulley Holder (CB).

#### **NOTE:**





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

## NOW IS THE TIME TO MAKE ALL NECESSARY CABLE ADJUSTMENTS

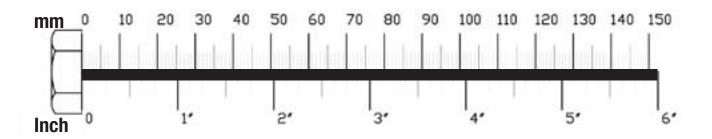
After cable installation is complete you must check all cables for proper tension. Obvious signs that cable tension problems exist include:  Top Plate (29) does not rest directly on the top weight stack plate.  The holes in the Selector Rod (19) does not line up with the holes in the Weight Stack Plates.  Cable(s) are sloppy and there is no resistance from the weight stack for the first few inches of the exercise.
There are FIVE areas for cable adjustment on the G2B:  A. Selector Rod Top Bolt (103).  B. Two Rubber Stops (113).  C. Two Adjustments in Double Pulley Holder (CA).
SEE NOTE 1 ON PAGE 39.
If there is too much tension, and the Top Plate (29) is not resting directly on the top weight stack plate: 1st Turn and tighten the Rubber Stop (113). 2nd Move pulley (A7) up to a higher hole in Double Pulley Holder (CA). 3rd Move pulley (B3) down to a lower hole in Double Pulley Holder (CA).
If there is to much play or excessive slack:  1st Turn and loosen the Rubber Stop (113).  2nd Move Pulley (A7) down to a lower hole in Double Pulley Holder (CA).  3rd Move Pulley (B3) up to a higher hole in Double Pulley Holder (CA).  4th Screw the Selector Rod Top Bolt (103) farther into the Selector Rod (19) of the Weight Stack

#### NOTE

Cables should be inspected daily and adjusted periodically to ensure safe and smooth operation.

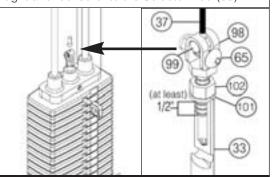
#### NOTE:

After cable adjustment is complete, go back and tighten all bolts. Make sure to tighten the two bolts in Double Pulley Holder (CA).



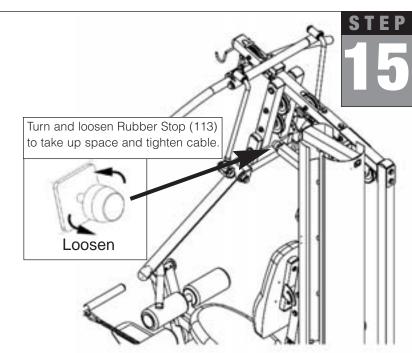


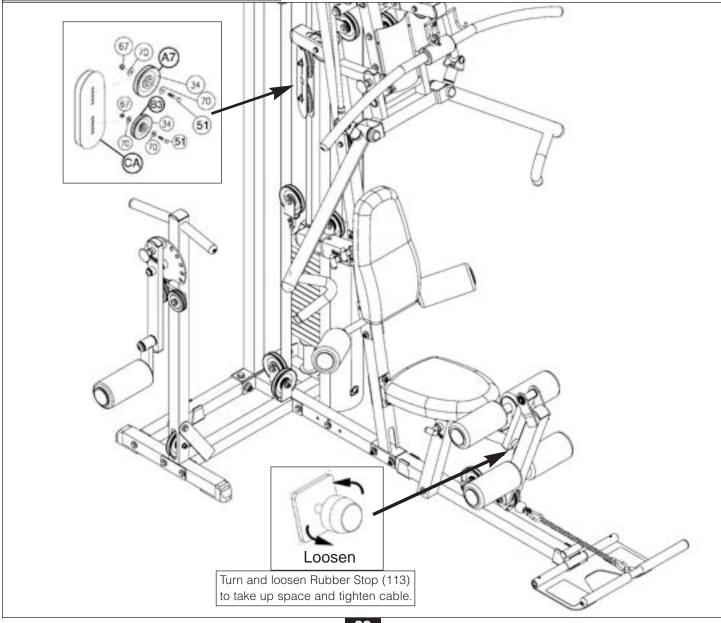
Check Jam Nut (102) weekly to be sure it is tight and locked onto the Selector Rod (33).



#### A WARNING A

Selector Rod Top Bolt (98) **must** be threaded a minimum of 1/2" into the Selector Rod (33), and Jam Nut (102) tightened securely against spring lock washer (101) to ensure proper connection.





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

#### **SEE NOTE 1 ON PAGE 41:**

A. Apply weight stack numbers to weight stack Top Plate (29) and each Weight Stack Plate (87) as shown.

#### **SEE NOTE 2 ON PAGE 41:**

B. Front Shroud (DA) is pre-assembled with Shroud Insert (DB).
 Attach Front Shroud (DA) to the side of the weight stack as shown.
 Bolt onto Main Base Frame (A) at the bottom and Top Weight Stack Frame (R) using:
 Two 108 (3/8" x 5/8" round allen head)

Two 108 (3/8" x 5/8" round allen head Two 70 (3/8" washer)

C. Attach Back Shroud (DC), to the back side of the weight stack, onto the Main Base Frame (A) at the bottom and to the Top Weight Stack Frame (R) as shown using:

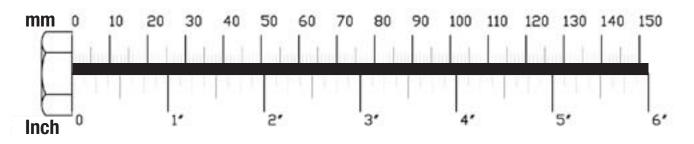
Two 108 (3/8" x 5/8" round allen head) Two 70 (3/8" washer)

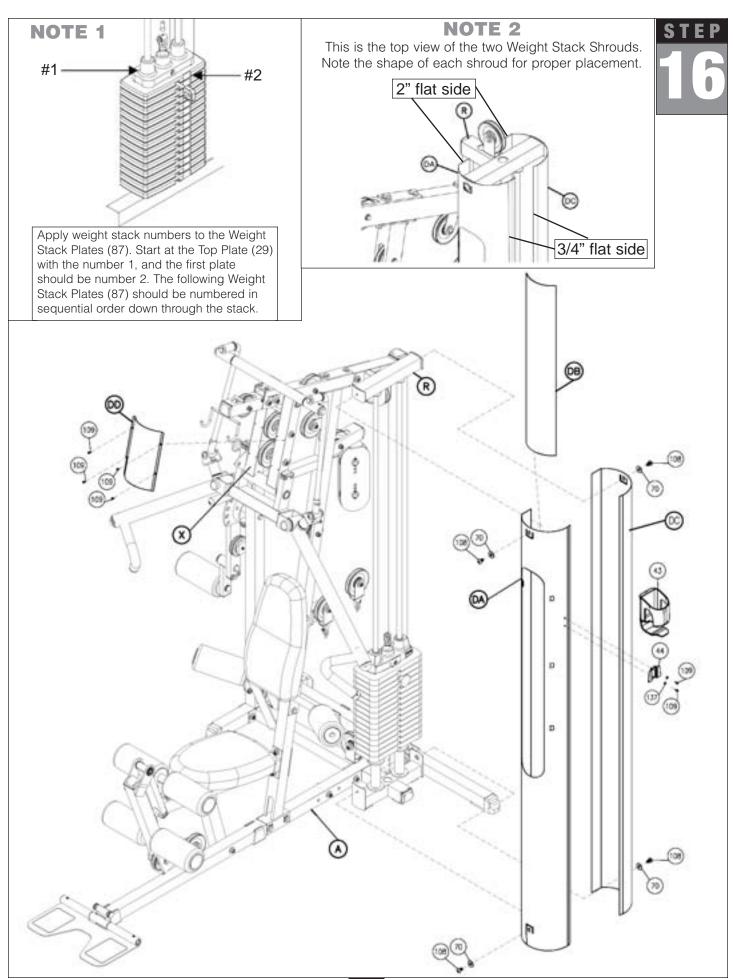
D. Attach Press Arm Shroud (DD) to the Press Arm Support (X) using: Four 109 (1/8" x 3/8" screw)

E. Connect the Water Bottle Bracket (44) to the Weight Stack Shroud (DA) using:

Two 137 (1/8" washer) Two 109 (1/8" x 3/8" screw)

F. Slide the Water Bottle Holder (43) onto the Water Bottle Bracket (44) as shown.





#### Adjustments

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

Note: If any bolts seem to loosen periodically, use Loctite 242 for a long-term cure.

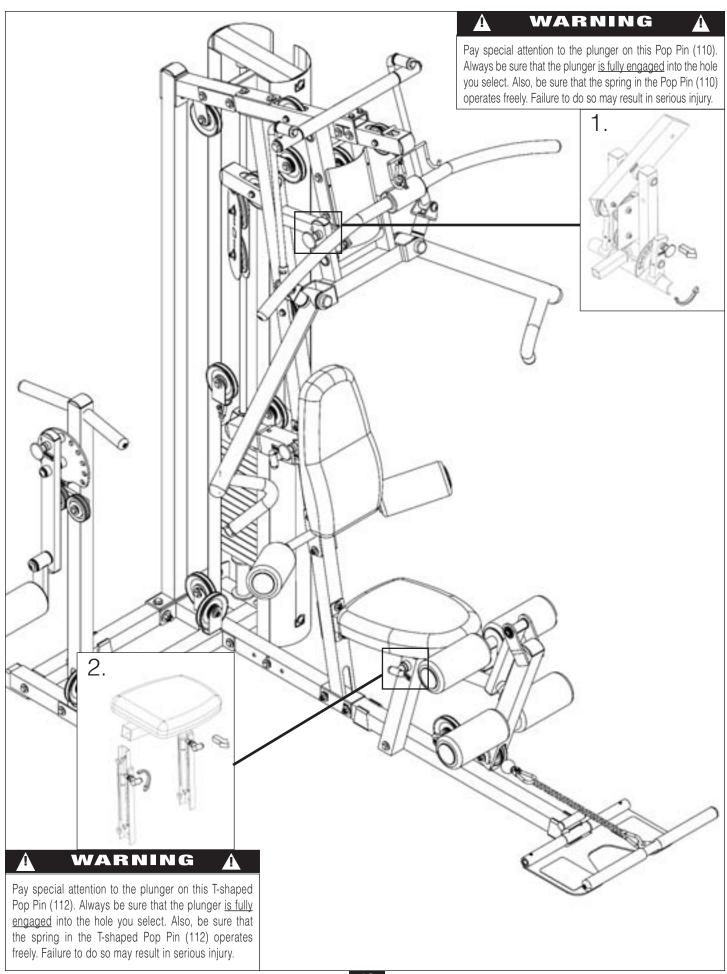
This gym is capable of a variety of different exercises, as well as, smooth and user-friendly adjustment features. The following pages of adjustments will help you to familiarize yourself with your new gym. We hope you are completely satisfied with this product and wish you many years of enjoyment.

#### 1. SEATED PRESS ARMS (AA) and (AB) ADJUSTMENT

- A. Grasp the Seated Press Arm (AA) with your left hand.
- B. Pull the Flat Head Pop Pin (110) with your right hand to release the Press Arm Pivot (Y).
- C. Adjust the Seated Press Arms to the desired position (depending on the exercise you are performing).
- D. Release the Flat Head Pop Pin (110), and make sure it is <u>fully engaged</u> into the selector hole.

#### 2. SEAT PAD (BA) ADJUSTMENT

- A. Grasp the Seat Pad (BA).
- B. Turn the T-Shaped Pop Pin (112) counter clockwise to unlock it, and then pull the Pop Pin to release the Seat Pad (BA).
- C. Adjust the Seat Pad (BA) to the desired position.
- D. Release the T-Shaped Pop Pin (112) and make sure it is <u>fully engaged</u> into the selector hole of the Seat Pad Frame (K). Turn T-Shaped Pop Pin (112) clockwise to lock it in place.



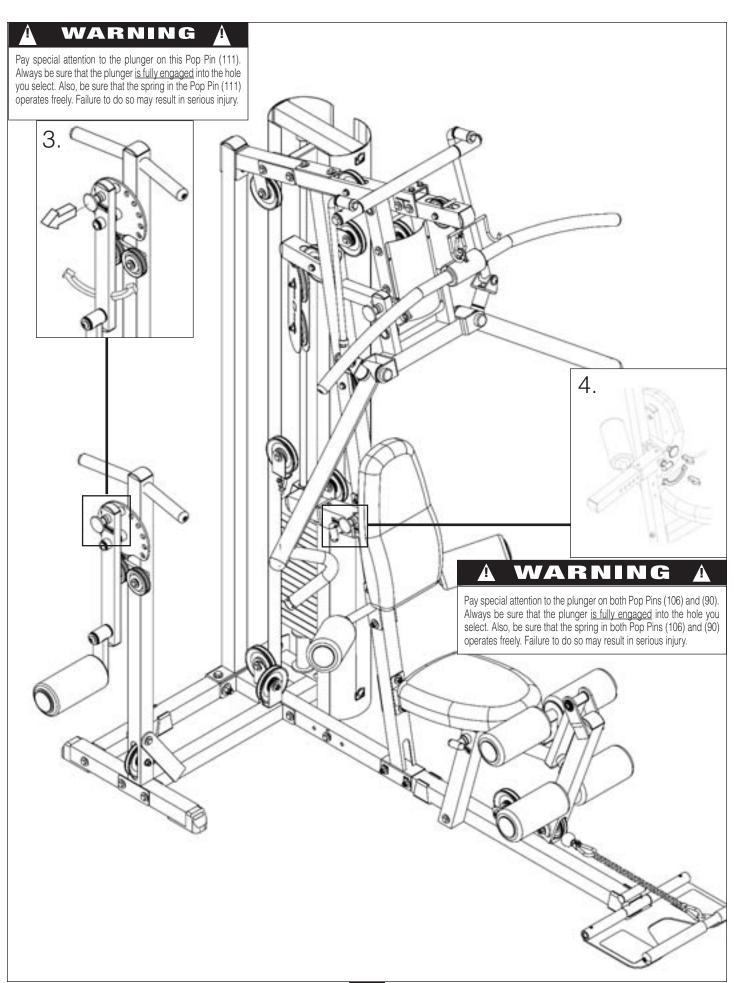
#### Adjustments

#### 3. MULTI HIP (AD) ADJUSTMENT

- A. Grasp the Multi Hip Arm (AD).
- B. Pull the Pop Pin (111) in the Multi Hip Arm (AD) to release.
- C. Adjust the Multi Hip Arm (AD) to the desired position.(depending on the exercise you are performing).
- D. Release the Pop Pin (111) and make sure it is <u>fully engaged</u> into the selector hole.

#### 4. BACK PAD (BB) ADJUSTMENT

- A. Grasp the Back Pad (BB).
- B. Turn the T-Shaped Pop Pin (106) on the Back Pad Holder (S) counter clockwise to unlock it, and then pull the T-Shaped Pop Pin (106) to release Back Pad Adjuster (T).
- C. Adjust the Back Pad (BB) to the desired position.
- D. Release the T-Shaped Pop Pin (106) and make sure it is <u>fully</u> engaged into the selector hole of the Back Pad Adjuster (T). Turn T-Shaped Pop Pin (106) clockwise to lock it in place.
- E. For certain exercises you may wish to change the angle of the Back Pad. Pull the Pop Pin (90) on the Back Pad Adjuster (T), this will allow you to change to the desired angle.



### Warning, Safety & Maintenance

Be sure that all users carefully read and understand all warning, safety and maintenance labels on the machine before each use. Failure to do so may 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.

	THERE IS A RISK ASSUMED BY INDIVIDUALS WHO USE THIS TYPE OF EQUIPMENT. TO MINIMIZE RISK, YOU MUST FOLLOW THESE RULES:
	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 TOLLOW THEST RULES MAY RESULT IN STRICTS IN JURY.]
2. 3.	Keep clear of the cables and all moving parts when the machine is in use.  Always make sure all Snap Links are closed when doing any cable/pulley/strap exercises.  Exercise with care. Perform your exercises at a smooth moderate pace; never perform
5.	jerky or uncoordinated movements that may cause injury. It is recommended that you should workout with a training partner. 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. WARNING: Consult your physician before starting your exercise program. For your own
٥.	safety, do not begin any exercise program without proper instruction, part 8-6-03 WC-54

**#DWRULE-4** Warning Label for Rules

dintegrity meanwests. I K rquipment L t. Replace	MAINTENANCE SCHEDULE Check the function and integrity of the following components. As noted, Inspect equipment before each workout. Replace all demaged, broken or worn components immediately.
d cooting V	Cables: Check tension, end fittings, and coating
	Check that locking nut at weight stack is light
Y	Upholstery: Wipe down and dry Clean and condition
Y	Frame: Wipe down and dry Polish / Wax
Y	Chrome: Wipe down and dry Polish / Lubricete
	Nuts / Bolts / Fasteners : Tighten and / or adjust as needed
e end dean	Guide Rods: Lubricate and clean
e and dean	Linear Rods : Lubricate and dean
e and dean V e and dean V and clean V	Seat Sleeves: Lubricate and clean
Pins/	Adjustments / Locking Pins / Tightening Knobs
✓	Weight Stack Pins
ibels 🗸	Warning Instruction Labels
٧	Springs/Pop Pins
V	Anti Skid Surfaces
✓	Hand Grips/Rollers
-556-3113	For Body-Solid Customer 5 Call 1-800-556-3 PMSSTKF0803

#DWSM-5
Warning Label for Maintenance



## **Warning**

#### **Safety and Maintenance of Cables**

Although Body-Solid provides the highest quality of materials and workmanship in its products, the fact remains that component parts eventually wear out over time and with use. This is particularly true with reference to pliable moving parts such as cables. In spite of any expressed and/or implied warranties, intervening factors such as improper use, unusually heavy use, improper installation, improper alignment, poor maintenance, etc. serve to drastically reduce the usable life and safety of cables.

Be advised that dangerous conditions can arise even during warranty periods and that any expressed and/or implied warranties **Do Not Negate** the owner's responsibility to thoroughly, carefully and daily inspect all cables on this machine.

Serious injury can occur if you are struck by falling weights or moving parts. The risk that you assume by using this type of equipment can be reduced by following a few simple steps:

Cable inspection should be performed daily. Inspect all cables, the nylon coating on all cables and the area near the fittings at each end of each cable. Replace any damaged or worn cables immediately. Do not allow the machine to be used until damaged or worn cables are replaced.

**Important:** Cables are wear items. It is your responsibility to prevent unexpected breakage. The actual wire strands, the fittings and the nylon coating itself must all be scrutinized. Using or allowing a machine to be used with a suspect cable can result in serious injury.

The nylon coating on a cable is essential for cable life and safety. Visually inspect all cables and pulleys. Look at the cables as they travel around the cams and pulleys. A cable that is wearing may exhibit a "ballooned" or broken coating in the area that passes over the pulley. Damage to the coating is an early warning signal. A cable should be replaced if the nylon coating is missing, is damaged in anyway, has pulled or shrunk from the fittings at the end of the cables, or if it is discolored. Discoloration of the cable coating is an early indication of internal problems such as wear or fraying.

Annual cable replacement (semiannual in multi-user settings) is strongly recommended as an additional precaution. The rate at which cables wear depends on many factors including: number of users, number of repetitions, weight setting, misuse, abuse, etc. Because of this, periodic cable replacement is not a sufficient safeguard against unexpected breakage.

Nothing short of a thorough, careful, daily inspection constitutes an adequate safety program.

#### Safety and Maintenance of Cables IMPORTANT: Cables are wear items. It is your responsibility to prevent unexpected breakage. Cable inspection should be performed daily. Inspect all cables, the nylon coating on all cables, and the area near the fitting at each end of each cable. Replace any damaged or worn cable immediately. Do not allow the machine to be used until damaged or worn cables are replaced. Using or allowing a machine to be used with a suspect cable can result in serious injury. See Owner's Manual for more information. Call 1-800-556-3113

#### Warning, Safety & 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 G2B. 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 maintaning 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 use 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. See pages 38-39.
- Check that the jam nut on the selector rod top bolt 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 immediatly.

#### **ANTI-SKID SURFACES:**

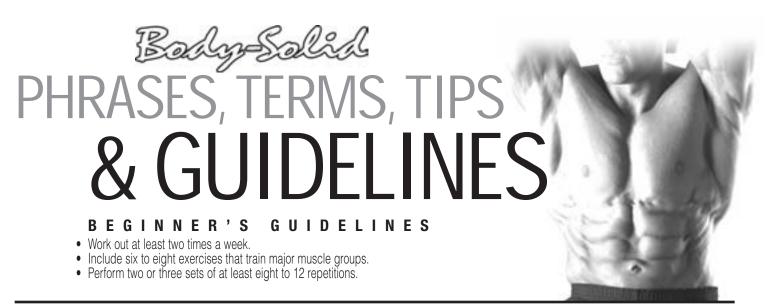
• Replace if they appear worn or become slippery.

#### **WARNING INSTRUCTION LABELS:**

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



	0								
MAINTENANCE SCHEDULE	DAILY	WEEKLY	L <i>P</i>	ATES	ST [	DAT	ΈE	INTI	RY
CABLES: CHECK TENSION, END FITTINGS, AND	<u> </u>								
COATING.  CHECK THAT JAM NUTON THE SELECTOR ROD TOP BOLT IS TIGHT.	•	<b>~</b>							
UPHOLSTERY: WIPE DOWN AND DRY	$\checkmark$								
CLEAN AND CONDITION.		<b>~</b>							
FRAME: WIPE DOWN AND DRY	<b>~</b>								
POLISH/WAX		<b>✓</b>							
CHROME: WIPE DOWN AND DRY	<b>V</b>								
POLISH/LUBRICATE		<b>~</b>							
NUTS/BOLTS/FASTENERS: TIGHTEN AND/OR ADJUST AS NEEDED									
		<b>✓</b>							
GUIDE RODS: LUBRICATE AND CLEAN		_							
		<b>Y</b>							
LINEAR RODS: LUBRICATE AND CLEAN									
SEAT SLEEVES:									
LUBRICATE AND CLEAN									
ADJUSTMENTS / LOCKING PINS / TIGHTENING KNOBS									
WEIGHT STACK PINS									
WARNING INSTRUCTION LABELS		•							
		<b>✓</b>							
SPRINGS / POP PINS	<b>V</b>								
ANTI-SKID SURFACES		•							
HAND GRIPS / ROLLERS		<b>~</b>							
FOR BODY-SOLID CUSTOMER SI 1-800-556-31		*Make several cop You can http://	print mo	re copie	s of this	s page l		to:	ance.



#### **AEROBIC**

Exercise that primarily uses oxygen to burn fuel at low to moderate levels of intensity. Running and jogging are examples of aerobic exercise.

#### **ANAEROBIC**

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

A stretching technique that involves a bouncing or bobbing movement during the stretch. The final position is not held. This is <u>not</u> 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 complications. The rule of thumb is to exhale on exertion and inhale on the return part of the exercise.

#### **CARDIOVASCULAR**

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

#### **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 or reach new goals.

#### **CHANGE ROUTINE**

Beginner's please note: If you want to make changes in the exercise routine that you do, wait until about the six to eight week point. Advanced lifters may want to change routines to avoid plateus in gaining size or strength.

#### **CIRCUIT TRAINING**

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

#### **CONCENTRIC MUSCLE ACTION**

The muscle shortens while contracting against resistance.

#### **ECCENTRIC MUSCLE ACTION**

The muscle lengthens while contracting against resistance.

#### **EXERCISE FREQUENCY**

Exercise each muscle group 2-3 times per week. Allow a minimum of 48 hours rest for each 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 you exercise your small muscle groups (ie. bicep curls, tricep pressdowns, lateral raises).

#### **EXERCISE PROGRAM DURATION**

A weight training routine should take anywhere from 45 minutes to one hour to complete. Add another 20 to 60 minutes when you include stretching, warm-up, aerobics and cool-down.

#### **GIVE YOUR MUSCLES A REST**

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 training.

#### INTENSITY

The degree to which the body is worked during exercise.

#### **ISOKINETIC EXERCISE**

Resistance is given at a fixed velocity of movement with accommodating intensity. A machine 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 heavier than you can handle, but cannot move.

#### ISOTONIC EXERCISE

Shortens and lengthens the muscle through a complete range of motion. This defines weight training with full range of motion.

#### **MUSCLE FATIGUE**

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**

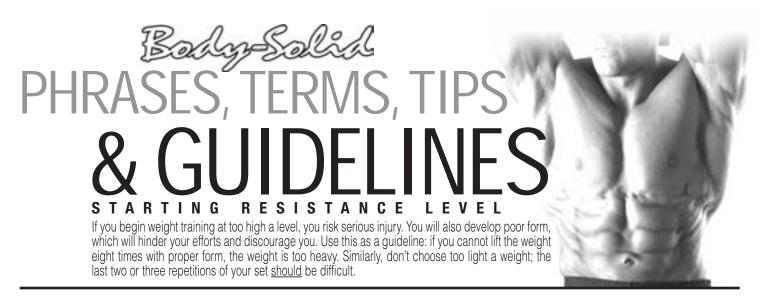
The maximum force that can be applied by a muscle during a single maximum contraction.

#### **OSTEOPOROSIS**

A decrease in bone density.

#### **PLYOMETRIC EXERCISE**

A technique that includes specific exercises which encompass a rapid stretch of a muscle 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 extremeity.



#### **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. Power during a repetition can be increased by lifting the same weight the same vertical distance 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.

#### **PROPER FORM**

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 lock your knees. 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 easily if necessary.

#### 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 lowering of the resistance.

#### 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 working them again. For power and muscle size development allow a 3 to 4 minute rest 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.

#### SE<sub>1</sub>

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. <u>Do not</u> 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

If you feel pain during a specific exercise stop immediately. Any continuation may aggravate an existing injury. Re-evaluate your routine to make sure that you are doing a proper warm up. 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 warm up routine. Try to do a total body warm up before you start training. A good example of a total body warm up is using a stationary bike, treadmill, elliptical, rowing or skiing machine. 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.

## Body-Solid NUTRION



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 underconsumption, overconsumption, 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 that the body requires for the maintenance of health, 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 consumed come from carbohydrates (American Diabetes 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 cannot be 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, Diabetes & Exercise, 1990). Excellent sources of 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, energy production, and formation of component parts 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 to increased cardiovascular disease. 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 to substitute margarine for butter.

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 proteins, and it is estimated that tens of thousands of 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 such as beans, starchy vegetables, nuts, and grains do 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 training intensely will have an increase in their protein 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.

Minerals are inorganic molecules that serve a variety of 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, selenium, and 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 a decrease in strength of the remaining bone. This 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 underconsumed 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 oxygen in the blood, and is also common in those 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 limiting consumption of processed foods and decreasing 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 throughout the body.

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

- 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.
- 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.

## Body-Solid

# EXERCISE PRESCRIPTION



#### Seto

Sets are defined as a combination of any number of reps of one exercise. The number of sets used in a workout is directly related to training results. Typically, two to three sets are used by intermediate and advanced lifters to achieve optimum gains in strength. Experts agree that multiple-set systems work best for the development of strength and 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 resistance training program. One-set programs might also be used for simple maintenance once you are in shape. It is important to note that low-volume set programs will increase strength in untrained individuals, but more complex physiological adaptations, such as gains in muscle mass, tone, size, and performance usually requires 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 level of strength training, endurance, and muscular development.

#### **Resistance Used**

The amount of resistance used for a specific exercise is probably the most important variable in resistance training. When designing a resistance training program, a weight 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, if you can easily lift the weight 12 times, the weight is too light. In either case, the weight needs to be changed. As the strength level of the lifter changes over time, the resistance is adjusted so a true RM target or target zone resistance is used.

#### **Rest Periods Between Sets and Exercises**

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 fat and increase muscular endurance. Short rest periods are a characteristic of circuit weight training, and the resistances used are typically lighter. This type of workout is best for trimming body fat and toning muscle. Exercises with heavier resistance and fewer sets usually have a longer resting period between sets. The results of using this method are normally increased muscular strength and mass. If the desired outcome is to gain overall muscle mass, your exercise prescription should lean toward a higher weight resistance doing 2 to 6 repetitions per set, with a rest period of 3 to 4 minutes between each set.

#### **Rest Periods Between Workouts**

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 training is not excessive, only moderate amounts of delayed muscular soreness should be experienced one day after the session. As the lifter advances and his or her body is 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 significantly and achieve their desired goals. When consecutive-training-day sequences are used, it is 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 many books available at the library or your local book store for the intermediate and advanced weight training enthusiast. It is also recommended that you work with a qualified personal trainer to achieve your ultimate goals.

#### **Order of Exercise**

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 the exercises performed in the beginning of the workout are the ones that are going to require the greatest amount of muscle mass to perform. Hence, exercising the smaller muscle groups first will deplete the body of the energy necessary to stimulate the larger muscle groups. Arm-to-leg ordering allows for some recovery of the arm muscles while the leg muscles are exercised. "Stacking" exercises is a common practice among body builders as a way to attempt to bring about muscle hypertrophy. Stacking is loading up different exercises on the same muscle group (ie. standing bicep curls, preacher 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 what muscles to involve on which day. As previously discussed, the larger muscle groups such as the chest, back, and legs should take priority over working the smaller muscle groups. Give your muscles at least 48 hours (but no more than 72 hours) of rest in between sessions.

## Body-Solid

# 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.

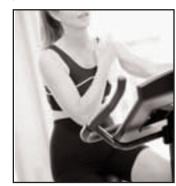
Once you have determined your personal goals, you will need to set up a schedule that helps you attain them. Set up a schedule that includes the number of workouts per week, the type of workout activity, the time of day for each workout, and the actual workout program. Don't forget to factor in the warm 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



**Weight Training** 



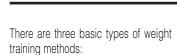
**Aerobic Exercise** 



Nutrition

## Body-Solid DETERMINE YOUR





- 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 should begin carefully and with proper 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. Realistic goals are safer and easier to 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 want bulging muscles and a terrific 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 accomplish your personal goals.

#### 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 include exercises for all 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 increase strength to a muscle group it is alright to add extra 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 one day and lower body the next day. Remember to rest each 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	<u>Sets</u>
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.

# EXERCISETIPS Listed below are Body-Solid's picks of the best exercises you can do for each body part. These exercises can be

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 make substitutions in your training and try variations of each using different Body-Solid grips, cable attachments and 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
DECLINE 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. Include a pressing 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

#### **UPPER BACK**

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 change the stimulus.

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

#### **TRAPS**

A signature muscle of a strong upper 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 BEHIND THE BACK 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**

**PULL UP** 

This three-headed muscle on the back of your arm is involved in extension of 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
CLOSE-GRIP BENCH PRESS
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, but exercises that maximally stress the short head will help.

#### **BICEPS**

STANDING BICEP CURL
SEATED BICEP CURL
INCLINE CURL
PREACHER CURL
CONCENTRATION CURL
ONE-ARM CABLE CURL
FOREARMS
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 do twisting movements to work the obliques for complete development.

UPPER AB REGION

CABLE AB CRUNCH

DECLINE BENCH CRUNCH

LOWER AB REGION

REVERSE CRUNCH

HANGING KNEE RAISE

HIP THRUST

OBLIQUES

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 gluteals. Multijoint movements (in which action occurs at 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
LEG EXTENSION (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.

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

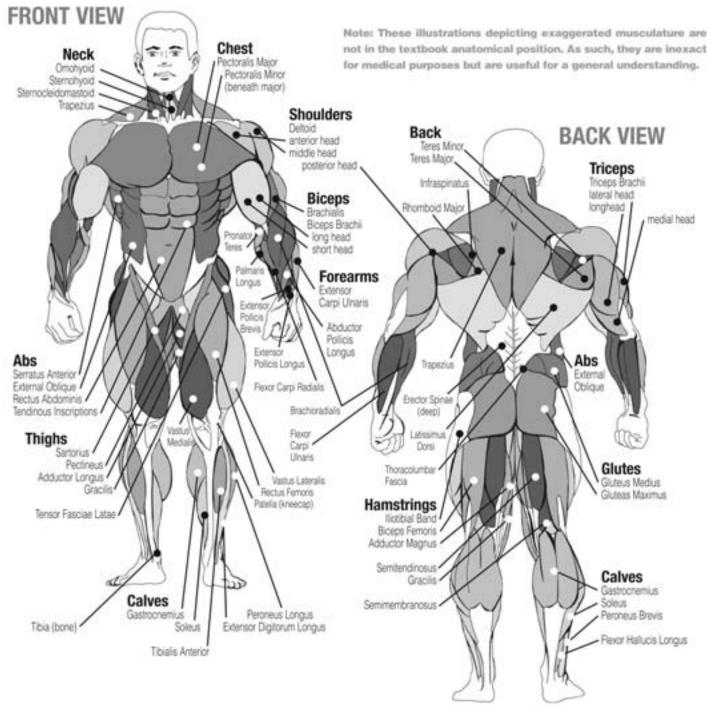
#### **CALVES**

Calves consist of two major muscles, the gastrocnemius and soleus. The latter is best worked when the knee is flexed, as in the seated calf raise.

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

## ANATOMY CHART





### **SHORT-TERM GOALS**

Date Set	Date Accomplished	
Goal		
Reward**		
Date Set	Date Accomplished	
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Reward**		
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LONG-TERM GOA	LS	
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-		
Reward!		

\*\* Don't forget to reward yourself for a job well-done!

<sup>\*</sup> 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

## WEIGHT TRAINING EXERCISE LOG

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<b>BEGINNER'S SAMPLE WORKOUT ROUTINE</b> Keep track of your changes and improvements. It's a great motivational tool!*	Date	Exercise	BENCH / CHEST PRESS	LAT PULLDOWN	SHOULDER PRESS	TRICEP PRESSDOWN	BICEP CURL	LEG PRESS / SQUAT	LEG EXTENSION	LEG CURL	CALF RAISE	AB CRUNCH							TOTALS

## WEIGHT TRAINING EXERCISE LOG

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<b>SAMPLE WORKOUT I</b> Keep track of your cha	Date	Exercise	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. You can print more copies of this page by going to http://www.bodysolid.com/support/docs.html

## Body-Solid $\geq$ S = Sets R = Repetitions per set W = Weight used $\square$

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Exercise Date

**INTERMEDIATE AND ADVANCED LIFTERS...** Design your personal strength training program. Keep track of your changes and improvements. It's a great motivational tool!\*

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# STRETCHING & FLEXIBILITY



Flexibility is an important component of physical fitness and needs to be addressed in a resistance training program. The two main purposes for stretching are injury 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 minutes of post-exercise stretching.

A regular stretching program will loosen muscle tissue, allowing an increased range of motion. This helps prevent microtears at the muscle-tendon junction. Almost 90% 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.

Begin by stretching the major muscle groups first. Move in and out of your stretches 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, hurried or reckless motions when stretching. Fast and bouncy motions will increase the risk of injury.

The most common and most popular type of stretching is the **static stretching** 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 because it is easy to learn, effective, and accompanied by minimal soreness with the least risk of injury.

**Ballistic stretching** involves a bouncing or bobbing movement during the stretch. The final position in the movement is not held. Ballistic stretching is unpopular because of the increased amount of delayed muscle soreness and the possibility of injury during the stretching exercise. Ballistic stretching is <u>not</u> recommended.

A dynamic stretch involves flexibility during sport specific movements. **Dynamic stretching** 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 also used in other sports, such as basketball and volleyball. An example of dynamic 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.

# STRETCHING WARM-UP/COOL-DOWN

### **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.
- Pull the right arm across the chest (toward the left) with the left hand.
- 4. Hold for 10 seconds.
- 5. Repeat with the left arm.



Stretching the upper back

### **UPPER BACK**

#### **Arms Straight Up Above Head (Pillar)**

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.
- 3. Continue to reach upward with hands and arms.
- 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.
- 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.
- 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.

## **LOWER BACK**

#### **Semi-Leg Straddle**

MUSCLE(S) AFFECTED: spinal erectors

- 1. Sitting, knees flexed 30 to 50 degrees, let the legs totally relax.
- Point the knees outward; the lateral side of the knees may or may not touch the floor.
- Lean forward from waist and reach forward with extended arms. Hold position for 10 to 15 seconds.
- Bending and relaxing legs decreases hamstring involvement and increases lower back stretch.





Stretching the low back from seated position

Stretching

# STRETCHING WARM-UP/COOL-DOWN

## **SIDES**

#### **Side Bend with Straight Arms**

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

- 1. Stand with feet 14 to 16 inches apart.
- 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.

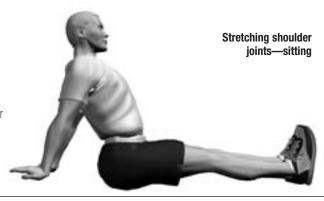


### **SHOULDER**

#### **Seated Lean-Back**

MUSCLE(S) AFFECTED: deltoids and pectoralis major

- 1. Sitting with legs straight and arms extended, place palms on floor about 12 inches behind hips.
- 2. Point fingers away (backward) from body.
- 3. Slide hands backward and lean backward.
- 4. Hold for 10 seconds.



### **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.



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

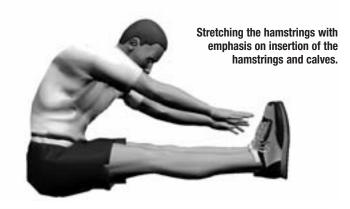
## Body-Solid STRETCHING WARM-UP/COOL-DOWN

## **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 pull toes towards the upper body, and pull chest towards leg. (If you are very stiff, try to grasp the ankles.) Hold for 10 seconds.
- 3. Release toes and relax foot.
- Grasp ankles and continue to pull chest towards legs. Hold for 10 seconds.
- Still grasping the ankles, point away from body and continue to pull chest towards legs. Hold for 10 seconds.







## **GROIN**

#### **Butterfly**

MUSCLE(S) AFFECTED: adductors and sartorius

- Sitting with the upper body nearly vertical and legs straight, flex 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

# STRETCHING WARM-UP/COOL-DOWN

### **GROIN**

#### Straddle (Spread Eagle)

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.
- With right hand, grasp toes of right foot and pull on toes slightly, while pulling chest toward right leg. Hold for 10 seconds.
- 3. Release toes and relax foot.
- Grasp ankle and continue to pull chest toward right leg. Hold for 10 seconds.
- 5. Point toes away from body and continue to pull chest toward right 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.





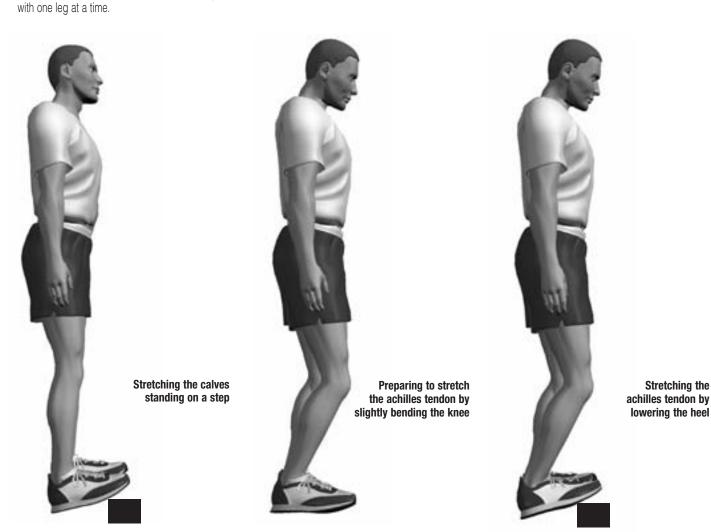


## **POSTERIOR OF LOWER LEG**

#### **Step Stretch**

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

- 1. Have ready a step or board 3 to 4 inches high.
- 2. Place balls of both feet on the step or board, 1 inch from its edge.
- 3. With straight legs, lower heels as far as posible.
- 4. Hold for 10 to 15 seconds.
- 5. To stretch achilles tendon, raise heels slightly. Slightly flex the knees and then lower the heels. This stretch will be felt in 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.



achilles tendon by



## Boly-Solid WORKOUT



#### CHEST

## Vertical Grip Chest Press

(Pectorals)

- 1. Insert pin into weight stack at desired resistance level.
- Adjust seat pad height so that when seated the vertical press handles bisect the chest (pectoral) muscles.
- 3. Seat yourself comfortably on the seat pad with your back straight.
- 4. Grasp vertical bench handles with your arms bent and palms facing in.
- 5. Keeping your elbows out and below your shoulders, extend your arms forward at a smooth, moderate pace through out the exercise movement.
- 6. Pause for a moment, then slowly return to the starting position, repeat.
- 7. Exhale on exertion, inhale on return motion.



(Pectorals)

- 1. Insert pin into weight stack at desired resistance level.
- Adjust seat pad height so that when seated the horizontal press handles bisect the chest (pectoral) muscles.
- 3. Seat yourself comfortably on the seat pad with your back straight.
- 4. Grasp horizontal bench handles with your arms bent and palms facing downward.
- Keeping your elbows out and below your shoulders, extend your arms forward at a smooth, moderate pace throughout the exercise movement.
- 6. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.



#### **Incline Press**

(Upper Pectorals)

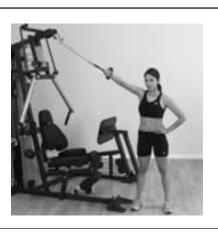
- 1. Insert pin into weight stack at desired resistance level.
- 2. Set press arms and back pad to the Incline Press position.
- 3. Adjust seat pad height so that when seated the horizontal press handles bisect the upper chest (pectoral) muscles.
- 4. Sit comfortably on the seat pad with your back flat against the back pad.
- 5. Grasp horizontal bench handles with your arms bent and palms facing downward.
- 6. Keeping your elbows out and below your shoulders, extend your arms forward at a smooth, moderate pace throughout the exercise movement.
- Pause for a moment, then slowly return to the starting position. Repeat movement.
- 8. Exhale on exertion, inhale on return motion.



#### **High Cable Crossover**

 $(Upper\ Pectorals)$ 

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Stirrup Handle (optional) to high pulley cable.
- 3. Stand sideways in front of the machine. Grasp Handle with hand nearest machine, feet shoulder width apart, stand erect. Bend slightly at the waist and maintain this torso angle throughout the exercise movement.
- 4. Keeping your palm facing downward and arm slightly bent, pull Handle downward and across your body in a semicircular arc until hand is approximately 6 inches in front of hip.
- 5. Pause for a moment, then slowly return the Handle back along the same arc, to the starting position. Repeat movement.
- 6. Exhale on exertion, inhale on return motion.
- 7. Turn around and repeat with opposite arm.





## Body-Solid WORKOUT



#### BACK

#### Lat Pulldown

(Latissimus Dorsi)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Lat Bar to high pulley cable.
- 3. Adjust seat pad so your knees fit comfortably under leg hold-down foam rollers. Sit on seat pad facing into machine.
- 4. Grasp Lat Bar 3 to 6 inches wider than your shoulders, on each side.
- 5. Keeping your elbows back during movement, slowly pull the Bar down until it lightly touches the upper part of your chest.
- 6. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.



#### **Seated Row**

(Latissimus Dorsi)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Low Row Bar to low pulley cable.
- 3. Sit on the floor with your knees slightly bent and your feet placed firmly against the foot brace.
- 4. Grasp the Bar in both hands. Straighten your arms and lean towards the pulley to completely stretch your Lats.
- 5. Simultaneously pull the Bar toward you and sit erect, being sure to keep your elbows close to your sides. Continue to pull the Bar until it touches your midsection.
- 6. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.



#### **Shrugs**

(Trapezius)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Low Row Bar to low pulley cable.
- 3. Stand, facing the machine with your feet set shoulder width apart.
- Grasp the Bar and stand erect with your arms extended straight down and the Bar resting across your thighs. Allow the weight to pull your shoulders forward and Downward.
- Use Trapezius strength to "shrug" your shoulders upward and back as far as possible.
- 6. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.





# Body-Solid WORKOUT

#### ARMS

### **Seated Tricep Extension**

(Triceps)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Tricep Strap to middle pulley cable.
- 3. Sit on seat pad, facing away from the machine. Grasp the Tricep Strap.
- 4. Bend at the waist so that your torso is at an approximate 45° angle. Start with your hands behind your head and with your elbows pointing forward.
- Use Triceps strength to move the Tricep Strap forward and upward in an arcing motion until your arms are fully extended.
- 6. Pause for a moment, then slowly return the strap back along the same arc, to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.



#### **Tricep Pressdown**

(Triceps)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Tricep Strap to high pulley cable.
- 3. Stand erect with your feet shoulder width. Grasp the Tricep Strap with your hands set 3 to 5 inches apart.
- 4. Pull the Strap down and lock your upper arms against the sides of your torso where they must remain throughout the exercise. Lean slightly forward at the waist.
- Moveing only your forearms, use Triceps strength to press the Strap down in a semicircular arc to a position below your waist.
- Pause for a moment, then slowly return along the same arc, to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.



#### **Standing Cable Curl**

(Biceps)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Low Row Bar to low pulley cable.
- 3. Take an underhand grasp on the Bar. Stand erect with your feet set at shoulder width, approximately 1 to 2 feet away from pulley. Your arms should be down at your sides with the Bar resting on your thighs.
- 4. Keeping your upper arms locked against the sides of your torso, use Bicep strength to curl the Bar upward and forward in a semicircular arc to a position beneath your chin.
- 5. Pause for a moment, then slowly return the bar back along the same arc, to the starting position. Repeat movement.
- 6. Exhale on exertion, inhale on return motion.



#### **Concentration Curl**

(Biceps)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Stirrup Handle (optional) to low pulley cable.
- Take an underhand grasp on the Stirrup Handle with your right hand. Stand approximately 1 to 2 feet back from the pulley with your feet at shoulder width. Bend slightly at the waist. Keep your right upper arm locked against the side of your torso.
- 4. Use Bicep strength to curl the Handle forward and upward in a semicircular arc to a position under your chin.
- 5. Pause for a moment, then slowly return the Handle back along the same arc, to the starting position. Repeat movement.
- 6. Exhale on exertion, inhale on return motion.
- 7. Change hands and repeat with opposite arm.





## Body-Solid WORKOUT



#### SHOULDERS

#### **Deltoid Raise**

(Deltoids)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Stirrup Handle (optional) to low pulley cable.
- 3. Take an overhand grasp of the Stirrup Handle with your right hand and your palm facing down.
- 4. Facing away from the machine, stand 1 to 2 feet away from pulley.
- 5. Using shoulder muscle strength, slowly raise the Stirrup Handle upward and forward in a semicircular arc until it is in a position slightly above your shoulder level.
- 6. Pause for a moment, then slowly return the Handle along the same arc, back to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.
- 8. Change hands and repeat with opposite arm.



- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach the Low Row Bar to low pulley cable.
- 3. Take an overhand grasp of the Bar with your hands approximately 6 inches apart.
- 4. Facing the machine, stand 1 to 2 feet away from the pulley with your feet set shoulder width apart. Allow the weight to extend your arms downward with the bar resting across your thighs.
- 5. Keeping your elbows above your hands at all times, slowly pull the bar upward until the backs of your hands lightly touch your chin.
- 6. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.



#### **Shoulder Press**

(Deltoids)

- 1. Insert pin into weight stack at desired resistance level.
- Set Press Arms to the Shoulder Press position and set back pad to the Shoulder Press position.
- 3. Adjust seat pad height so that when seated the horizontal press handles bisect the shoulder (deltoid) muscles.
- 4. Sit comfortably on the seat pad with your back flat against the back pad.
- 5. Grasp horizontal bench handles with your arms bent and palms facing downward.
- 6. Keeping your elbows out, extend your arms forward at a smooth, moderate pace throughout the exercise movement.
- 7. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 8. Exhale on exertion, inhale on return motion.





## Standing Leg Curl

- 1. Insert pin into weight stack at desired resistance level.
- 2. Stand facing machine and hook your right heel under the bottom roller pad with right knee positioned slightly below the top roller pad. Grasp bench handles or back pad for stability.
- 3. Use Hamstring strength to pull and curl your right foot upward, bending your knee as much as possible.
- 4. Pause for a moment, then slowly return along the same arc, to the starting position. Repeat movement.
- 5. Exhale on exertion, inhale on return motion.
- 6. Change sides and repeat with opposite leg.



## Leg Extension (Quadriceps)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Adjust seat pad height so that when seated the front of your ankles fit under the bottom foam rollers.
- 3. Sit comfortably on seat pad. Place knees over the top roller pads and hook your feet under the bottom roller pads.
- 4. Using Quadricep strength, extend your feet out and upward until your legs are fully extended.
- 5. Pause for a moment, then slowly return your feet back along the same arc, to the starting position, Repeat movement.
- 6. Exhale on exertion, inhale on return motion.



#### RESS LEG OPTIONAL

#### **Leg Press**

(Quadriceps, Hamstrings, and Gluteus Maximus)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Sit comfortably on seat pad with your back flat against the back pad and your feet securely against the press plate.
- 3. Adjust back pad so your knees are at a 90° angle.
- 4. Grasp the handles at your sides for balance and stability.
- 5. Using leg muscles, slowly press the foot plate until your legs are extended. Do not lock-out your knees.
- 6. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 7. Exhale on exertion, inhale on return motion.



#### **Calf Press**

(Gastrocnemius)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Adjust back pad to desired position.
- 3. Sit comfortably on seat pad with your back flat against the back pad and the balls of your feet on the bottom portion of the press plate.
- 4. Grasp the handles at your sides for balance and stability.
- 5. Extend your legs and hold them in this position throughout the exercise. Do not lock-out your knees.
- 6. Flex your toes forward as far as you comfortably can, hold that position for a moment and return to the furthest back position you comfortably can.
- 7. Exhale on exertion, inhale on return motion.





# Boly-Solid WORKOUT



### MULTI-HIP

# Leg Adduction

(Inner Thigh)

- 1. Insert pin into weight stack at desired resistance level.
- Adjust the Multihip roller so you will be able to feel resistance throughout the full range of motion.
- 3. Grasp the handles for stability. Keep our left leg straight, extend your right leg so the roller is pushing against the inside of your leg.
- 4. Using inner thigh strength, slowly push your right leg across your body as far as comfortably possible.
- Pause for a moment, then slowly return along the same arc, to the starting position.Repeat movement.
- 6. Exhale on exertion, inhale on return motion.
- 7. Readjust roller and repeat with your left leg.



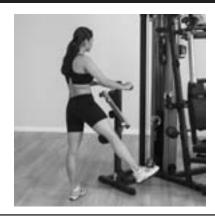
(Outer Thigh)

- 1. Insert pin into weight stack at desired resistance level.
- Adjust the Multihip roller so you will be able to feel resistance throughout the full range of motion.
- 3. Grasp the handles for stability. Keep our left leg straight, extend your right leg so the roller is pushing against the outside of your leg.
- 4. Using outer thigh strength, slowly pull your right leg away from your body as far as comfortably possible.
- 5. Pause for a moment, then slowly return along the same arc, to the starting position. Repeat movement.
- 6. Exhale on exertion, inhale on return motion.
- 7. Readjust roller and repeat with your left leg.

### **Glute Kickback**

(Gluteus Maximus)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Ankle Strap to your left ankle and low pulley cable. Stand 1 to 2 feet away from the pulley facing into the machine.
- 3. Keeping your legs straight and your body balanced, allow the weight to pull your left leg toward the machine. Hold the frame of the gym for balance and support.
- 4. Keeping both legs straight and using Gluteal strength, slowly pull your left leg backward and behind your body as far as comfortably possible.
- 5. Pause for a moment, then slowly return along the same arc, to the starting position. Repeat movement.
- 6. Exhale on exertion, inhale on return motion.
- 7. Repeat with your right leg.









## **Ab Crunch**

(Abdominals)

- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Tricep Strap to the middle pulley cable.
- 3. Sit comfortably on seat pad with your back resting against back pad. Grasp the Tricep Strap and place it over your shoulders, keeping your hands planted firmly on your upper chest throughout the entire exercise movement.
- 4. Using Abdominal muscle strength, slowly bend forward at the waist as far as possible.
- 5. Pause for a moment, then slowly return back to the starting position. Repeat movement.
- 6. Exhale on exertion, inhale on return motion.



## **Oblique Crunch**

(Obliques & Abdominals)

- 1. Insert pin into weight stack at desired resistance level and adjust Press Arm to Storage position.
- 2. Attach Tricep / Ab Strap to mid pulley cable and adjust back pad to Chest Press position.
- 3. Sit on seat pad with your back resting against back pad. Grasp the strap and place it securely over your shoulders, keeping your hands planted firmly on your upper chest throughout the exercise movement.
- 4. While holding the strap firmly over your shoulders, simultaneously bend forward and rotate your upper body slowly to the left as far as comfortably possible while keeping vour leas and hips stationary.
- 5. Pause for a moment, then slowly return to the starting position.
- 6. Alternate the movements from the left to the right and then repeat the movements.
- 7. Exhale on exertion, inhale on return motion.



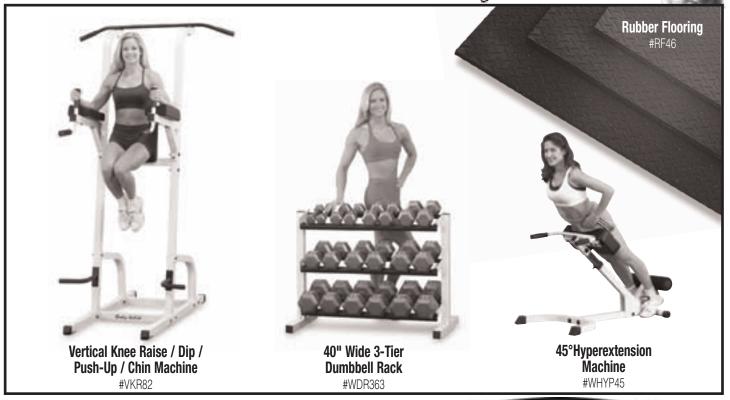
# Oblique Bend (Obliques & Abdominals)

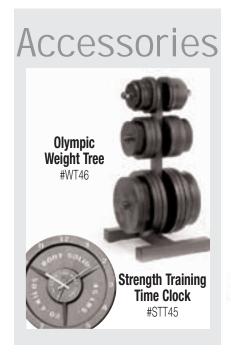
- 1. Insert pin into weight stack at desired resistance level.
- 2. Attach Stirrup Handle (optional) to low pulley cable.
- 3. Take an overhand grasp of the Handle with your right hand and stand 1 to 2 feet away from the pulley with your right side facing the machine.
- 4. Keeping your arm, legs and hips straight, bend your torso away from the machine.
- 5. Pause for a moment, then slowly return to the starting position. Repeat movement.
- 6. Exhale on exertion, inhale on return motion.
- 7. Turn around and repeat with opposite hand.



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# Signs Of Overtraining

In the quest for better health and fitness, it is sometimes difficult to quell one's enthusiasm and take a break from exercise. But if exercise is leaving you more exhausted than energized, you could be suffering from an acute case of overtraining. Individuals who excessively exercise are risking more than poor performance; they're risking their health. If you recognize the following symptoms in yourself or a friend, it is essential that you seek professional help.

# Here are signs of overtraining:

### DECREASED PERFORMANCE.

Slower reaction times, reduced speeds and lowered endurance levels are all common signs of overtraining.

# AGITATION, MOODINESS, IRRITABILITY OR LACK OF CONCENTRATION.

Too much exercise and too little rest can wreak havoc on the hormones, cause mood swings and create an inability to concentrate.

### **EXCESSIVE FATIGUE AND MALAISE.**

A body that never has a chance to fully recover from a previous workout will continue to feel more and more fatigued. some people describe this feeling as "heavy leas."

# INCREASED PERCEIVED EFFORT DURING NORMAL WORKOUTS.

Overtraining takes a toll on the body, and workouts that were once a breeze can begin to feel like a grind.

# CHRONIC OR NAGGING MUSCLE ACHES OR JOINT PAIN.

Overused muscles and joints can cause constant aches, which may go unnoticed until the body is given proper rest.

# MORE FREQUENT ILLNESSES AND UPPER-RESPIRATORY INFECTIONS.

Too much exercise taxes all of the body's systems and makes it more difficult to ward off infections.

### INSOMNIA OR RESTLESS SLEEP.

During sleep the body has time to rest and repair itself. An overtrained body, however, is sometimes unable to slow down and completely relax, making it difficult to recover between workouts.

### LOSS OF APPETITE.

Overtraining can cause an increase in hormones such as epinephrine and norepinephrine that tend to inhibit appetite. The physical exhaustion and anxiety that often comes with overtraining can also have the same effect.

# CHRONICALLY ELEVATED HEART RATE AT REST AND DURING EXERCISE.

A clear sign of an overworked heart muscle is a chronically elevated heart rate. Also, people who overtrain will often find that it takes longer for their heart rate to return to normal after a workout.

# MENSTRUAL CYCLE DISTURBANCES IN WOMEN.

Exercising excessively and not consuming enough calories may disrupt a women's menstrual cycle. While some may experience irregular periods, others will stop menstruating altogether.

# High Pulley 100% Seated Press 100% Ab Crunch 150% Leg Curl / Leg Extension

		75%	95%	100%	150%
Top Plate	1	7.5 lbs.	9.5 lbs.	10 lbs.	15 lbs.
	2	15	19	20	30
	3	22.5	28.5	30	45
	4	30	38	40	60
	5	37.5	47.5	50	75
S	6	45	57	60	90
۴	7	52.5	66.5	70	105
<u>a</u>	8	60	76	80	120
<u> </u>	9	67.5	85.5	90	135
Weight Plates	10	75	95	100	150
<u></u>	11	82.5	104.5	110	165
Š	12	90	114	120	180
-	13	97.5	123.5	130	195
-	14	105	133	140	210
	15	112.5	142.5	150	225
	16	120	152	160	240

This chart shows the actual weight you are lifting.

To use this chart; count the number of plates you have pinned, and move across to the correct weight ratio (depending on the exercise you are performing).

# G 2 B Mainframe Parts List

KEY#	QTY	PART#	DESCRIPTION
Α	1	JG2BMBF-A	MAIN BASE FRAME
В	1	JG2BRBF-B	REAR BASE FRAME
С	1	JG2BRVF-C	REAR VERTICAL FRAME
D	1	JG2BAVF-D	ANGLED VERTICAL FRAME
Е	1	JG2BTF-E	TOP MAIN FRAME
F	1	JG2BFP-F	FLAT PLATE 3 3/4"L
G	2	JG2BFP-G	FLAT PLATE 5 1/2"L
Н	1	JG2BLEF-H	LEG EXTENSION FRAME
J	2	JG2BFP-J	FLAT PLATE 4 3/4"L
K	1	JG2BSPF-K	SEAT PAD FRAME
L	1	JG2BLEA-L	LEG EXTENSION ARM
M	1	JG2BFB-M	FOOT BRACE
Ν	1	JG2BMHB-N	MULTI HIP BASE
Р	1	JG2BMHVF-P	MULTI HIP VERTICAL FRAME
Q	2	JG2BCGR-Q	CHROME GUIDE ROD
R	1	JG2BTWSF-R	TOP WEIGHT STACK FRAME
S	1	JG2BBPH-S	BACK PAD HOLDER
Τ	1	JG2BBPA-T	BACK PAD ADJUSTER
U	1	JG2BBPF-U	BACK PAD FRAME
V	1	JG2BLHD-V	LEG HOLD DOWN (left side)
W	1	JG2BLHD-W	LEG HOLD DOWN (right side)
Χ	1	JG2BPAS-X	PRESS ARM SUPPORT
Υ	1	JG2BPAP-Y	PRESS ARM PIVOT
Z	1	JG2BBAB-Z	BI ANGULAR BAR
Z1	1	JG2BBAS-Z1	BI ANGULAR SHAFT
Z2	1	JG2BBAF-Z2	BI ANGULAR FRAME
Z3	1	JG2BBARA-Z3	BI ANGULAR RIGHT ARM
Z4	1	JG2BBALA-Z4	BI ANGULAR LEFT ARM
Z5	1	JG2BBARJ-Z5	BI ANGULAR RIGHT JUNCTION
Z6	1	JG2BBALJ-Z6	BI ANGULAR LEFT JUNCTION
<b>Z</b> 7	1	JG2BBARP-Z7	BI ANGULAR RIGHT PIVOT
Z8	1	JG2BBALP-Z8	BI ANGULAR LEFT PIVOT
AA	1	JG2BSPA-AA	SEATED PRESS ARM (left side)
A1	1	JG2BLPAP-A1	LEFT PRESS ARM PIVOT
AB	1	JG2BSPA-AB	SEATED PRESS ARM (right side)
A2	1	JG2BRPAP-A2	RIGHT PRESS ARM PIVOT
AC	1	JG2BMHA-AC	MULTI HIP ADJUSTER
AD	1	JG2BMHA-AD	MULTI HIP ARM
AE	1	JG2BMHPH-AE	MULTI HIP PAD HOLDER
AF	2	JG2BRB-AF	ROLLER BAR

# Pads List

KEY#	QTY	PART#	DESCRIPTION
ВА	1	JG2BSP-BA	SEAT PAD
BB	1	JG2BBP-BB	BACK PAD

# G2B Hardware List

KEY#	QTY	PART#	DESCRIPTION
1	4	JSS.62x.87	SPACER SLEEVE 5/8" X 7/8"
2	2	JSS.75X.37	SPACER SLEEVE 3/4" X 3/8"
3	1	JOW.75X1.25	OILITE WASHER 3/4"ID X 1 1/4"OD
4	1	JOW1X1.25	OILITE WASHER 1"ID X 1 1/2"OD
5	12	JPS.37x.62	PULLEY SPACER 3/8" X 5/8"L
6	5	JSNAP3	SNAP LINK
7	1	JFEC.75X1.5	FLAT END CAP 3/4" X 1 1/2"
8	1	JFEC1X2	FLAT END CAP 1" X 2"
9	3	JEC1	END CAP 1"
10	5	JREC	ROLLER END CAP
11	3	JFC2X2	FOOT CAP 2" X 2"
12	1	JSC10	STEEL CHAIN 10"
13	2	JNB2X2	NYLON BUSHING 2" X 2"
14	2	JSC	SHAFT COLLAR
15	2	JREC2	ROUND END CAP 2"
16	8	JCEC1X2	CONVEX END CAP 1" X 2"
17	5	JCEC2X2X1.8	CONVEX END CAP 2" X 2"(1.8T)
18	4	JCEC2X2X2.5	CONVEX END CAP 2" X 2"(2.5T)
19	3	JFL22	FRAME LEVELER 2" X 2"
20	3	JWSS22	WEIGHT STACK SHIM 2" X 2"
21	4	JNW3	NYLON WASHER 3"
22	6	JREC1	ROUND END CAP 1"
23	1	JRP1.5X1.5	RUBBER PAD 1.5" X 1.5"
24	2	JRD2.5	RUBBER DONUGHT 2.5"
25	4	JGT4X5.5	GRIP TAPE 4" X 5.5"
29	1	JTP10	TOP PLATE 10lbs.
30	7	JFR4X8	FOAM ROLLER 4" X 8"
32	1	JSC17	STEEL CHAIN 17"
33	1	JSR20	SELECTOR ROD (20 selector holes)
34	15	JP4.25	PULLEY 4 1/4" DIA.
35	3	JP3.5	PULLEY 3 1/2" DIA.
36	2	JP3	PULLEY 3" DIA.
42	1	JPIN4.25	WEIGHT STACK PIN 4.25"L
43	1	JWBH	WATER BOTTLE HOLDER
44	1	JWBB	WATER BOTTLE BRACKET
45	1	JWB	WATER BOTTLE
46	1	JWSL	WEIGHT STACK LANYARD

Continued on next page

# G 2 B Hardware (continued)

KEY#	QTY	PART#	DESCRIPTION
50	2	JHEX.5X3.5PT	HEX HEAD BOLT 1/2" X 3 1/2" PARTIAL THREAD
51	10	JHEX.37X1.75PT	
52	1	JSHB.37X2PT	SOCKET HEAD BOLT 3/8" X 2" PARTIAL THREAD
53	6	JHEX.37X2.5PT	HEX HEAD BOLT 3/8" X 2 1/2" PARTIAL THREAD
54	7	JHEX.37X2.75PT	HEX HEAD BOLT 3/8" X 2 3/4" PARTIAL THREAD
55	16	JHEX.37X3PT	HEX HEAD BOLT 3/8" X 3" PARTIAL THREAD
56	1	JHEX.37X4.5PT	HEX HEAD BOLT 3/8" X 4 1/2" PARTIAL THREAD
57	2	JHEX.37X7.25PT	HEX HEAD BOLT 3/8" X 7 1/4" PARTIAL THREAD
58	1	JHEX.31X1.5FT	HEX HEAD BOLT 5/16" X 1 1/2" FULL THREAD
59	4	JHEX.31X1.75FT	HEX HEAD BOLT 5/16" X 1 3/4" FULL THREAD
60	2	JHEX.31X.5FT	HEX HEAD BOLT 5/16" X 1/2" FULL THREAD
61	2	JAHB.31X.75FT	ALLEN HEAD BOLT 5/16" X 3/4" FULL THREAD
63	1	JSS.5X.87	SPACER SLEEVE 1/2" X 7/8"
64	2	JHEX.37X2FT	HEX HEAD BOLT 3/8" X 2" FULL THREAD
65	1	JAHB.37X1.12FT	ALLEN HEAD BOLT 3/8" X 1 1/8" FULL THREAD
66	2	JNLN.5	NYLON LOCK NUT 1/2"
67	40	JNLN.37	NYLON LOCK NUT 3/8"
68	1	JNLN.31	NYLON LOCK NUT 5/16"
69	4	JWFLT.5	WASHER 1/2"
70	71	JWFLT.37	WASHER 3/8"
71	1	JSLW.37	SPRING LOCK WASHER 3/8"
72	4	JSLW.31	SPRING LOCK WASHER 5/16"
73	8	JWFLT.31	WASHER 5/16"
80	1	JS.87X3	SHAFT 7/8" X 3"
81	2	JAB.31X.62FT	· · · · · · · · · · · · · · · · · · ·
83	2	JSB.5X1.25	SEALED BEARING 1/2"ID X 1.25"OD (leg extension) pre-installed
84	1	JS.75X16	SHAFT 3/4" X 16"
85	2	JAS.31X.31FT	ALLEN SCREW 5/16" X 5/16" FULL THREAD
86	2	JWSR	WEIGHT STACK RISERS
87	15	JSP10	WEIGHT PLATES
88	1	JS.75X7	SHAFT 3/4" X 7"
89	1	JS1X9.75	SHAFT 1" X 9 3/4"
90	1	JPP6.75	POP PIN 6 3/4"L
91	1	JSHB.31.75FT	SOCKET HEAD BOLT 5/16" X 3/4" FULL THREAD
92	1	JAB.37X.62FT	ALLEN BOLT 3/8" X 5/8" FULL THREAD
94	1	JS1X4	SHAFT 1" X 4"
95	4	JHEX.5X.75FT	HEX HEAD BOLT 1/2" X 3/4" FULL THREAD
96	2	JS.5X2.25	SHAFT 1/2" X 2 1/4"
97	2	JAB.5X.75FT	ALLEN BOLT 1/2" X 3/4" FULL THREAD SELECTOR ROD TOP BOLT
98	1	JSRTB	
99	1	JCES	CABLE END SHAFT
100	1	JASX31FT	ALLEN SCREW 3/16" X 5/16" FULL THREAD SPRING LOCK WASHER 1/2"
101	1	JSLW.5	
102	1	JJN.5 JS.25	JAM NUT 1/2" SPACER 1/4"
103	1		SPACER 1/4" LEG EXTENSION HOOK
104		JLEH JS.5	SPACER 1/2"
105	1	JO.Ü	OFAUEN 1/2

# G 2 B Hardware (continued)

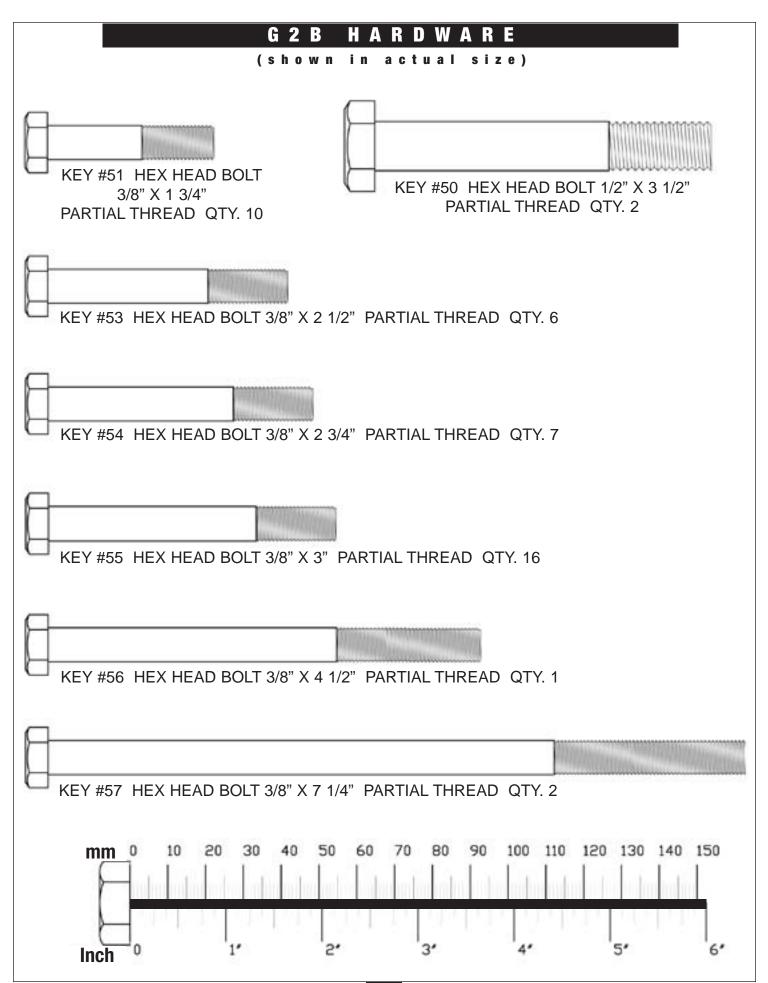
KEY#	QTY	PART#	DESCRIPTION
106	2	JTSPP3	T-SHAPED POP PIN 3" (back pad and seat pad)
108	4	JAB.37X.62FT	ALLEN BOLT 3/8" X 5/8" FULL THREAD
109	2	JS.12X.38FT	SCREW 1/8" X 3/8" FULL THREAD
110	1	JFHPP3.5	FLAT HEAD POP PIN 3 1/2" (seated press)
111	1	JFHPP6.75	FLAT HEAD POP PIN 6 3/4" (multi hip)
113	2	JRS2.5	RUBBER STOP 2 1/2" L (3/8" bolt)
122	2	JACN.19	ACORN CAP NUT 3/16" ID preinstalled
123	2	JJN.37	JAM NUT 3/8"
124	2	JBB.5X.87	OILITE BUSHING 1/2"IDX 7/8"OD (back pad adjuster)
125	4	JBB.75X1	OILITE BUSHING 3/4"ID X 1"OD (multi hip)
126	2	JBB1X1.5	OILITE BUSHING 1"ID X 1.5"OD (multi hip)
127	2	JRR1.25X1.5	RETAINING RING 1 1/4"ID X 1.5"OD
128	2	JCC1X1.37	CHROME COLLAR 1"ID X 1 3/8"OD
129	4	JBB1X1.75	OILITE BUSHING 1"ID X 1 3/4"OD preinstalled (press arm pivot)
130	4	JBB.5X.87	OILITE BUSHING 1/2"ID X 1 7/8"OD preinstalled (press arm pivot)
131	4	JBB.37X.87	OILITE BUSHING 3/8"ID X 7/8"OD preinstalled (left and right pivot)
132	4	JBB.75X1	OILITE BUSHING 3/4"ID X 1"OD preinstalled (left and right junction)
133	2	JWW.75	WAVE WASHER 3/4"ID X 1"OD
134	2	JBB1X1.5	OILITE BUSHING 1"ID X 1 1/2"OD preinstalled (left and right junction)
135	2	JSB1X1.37	STEEL BUSHING 1"ID X 1 3/8" preinstalled (seated press arm support)
137	2	JFLTW.12	WASHER 1/8" (cup holder)

C o	h		6
			5

KEY#	QTY	PART#	DESCRIPTION
37	1	JHPC3916	HIGH PULLEY CABLE 12' 10" (3916mm)
38	1	JLPC9120	LOW PULLEY CABLE 20' 9" (6120mm)
39	1	JSC757	SHORT CABLE 2' 5" (757mm)
40	1	JMHC1790	MULTI HIP CABLE 5' 10" (1790mm)

# Accessories List

KEY#	QTY	PART#	DESCRIPTION
27	1	JACH	AB CRUNCH HARNESS
28	1	JAS	ANKLE STRAP
115	1	JLB	LAT BAR
116	1	JLRB	LOW ROW BAR
117	2	JBP	LAT BAR PAD
118	2	JFG1.5X6.75	FOAM GRIP 1 1/2" OD X 6 3/4" L (multi hip)
119	2	JFG1.5X8.5	FOAM GRIP 1 1/2" OD X 8 1/2" L (low row bar)
120	2	JFG1.5X13	FOAM GRIP 1 1/2" OD X 13" L (seated press)
121	2	JFG1.5X21	FOAM GRIP 1 1/2" OD X 21" L (lat bar)



# G 2 B H A R D W A R E

(shown in actual size)



KEY #52 SOCKET HEAD BOLT 3/8" X 2" FULL THREAD QTY. 1



KEY #58 HEX HEAD BOLT 5/16" X 1 1/2" FULL THREAD QTY. 1



KEY #59 HEX HEAD BOLT 5/16" X 1 3/4" FULL THREAD QTY. 4



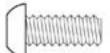
KEY #65 ALLEN HEAD BOLT 5/16" X 1 1/8" FULL THREAD QTY. 1



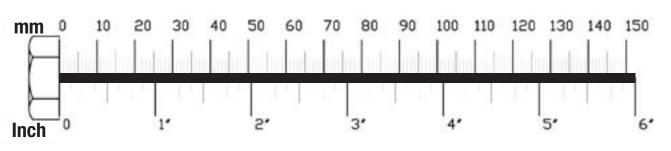
KEY #64 HEX HEAD BOLT 3/8" X 2" FULL THREAD QTY. 2



KEY #60 HEX HEAD BOLT 5/16" X 1/2" FULL THREAD QTY. 2

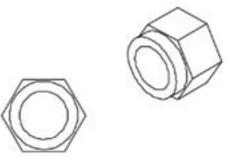


KEY #61 ALLEN HEAD BOLT 5/16" X 1/2" FULL THREAD QTY. 2

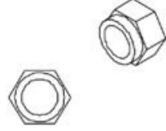


# G 2 B H A R D W A R E

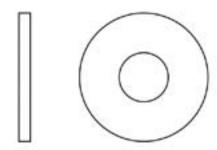
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KEY #66 NYLON LOCK NUT 1/2" QTY. 2



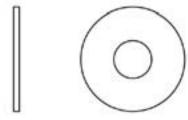
KEY #67 NYLON LOCK NUT 3/8" QTY. 41



KEY #69 FLAT WASHER 1/2" QTY. 4



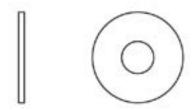
KEY #72 SPRING LOCK WASHER 5/16" QTY. 4



KEY #70 FLAT WASHER 3/8" QTY. 71



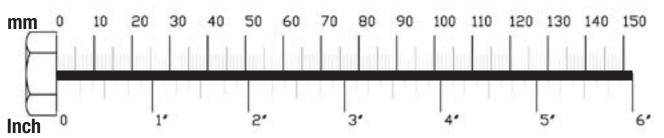
KEY #71 SPRING LOCK WASHER 3/8" QTY. 2

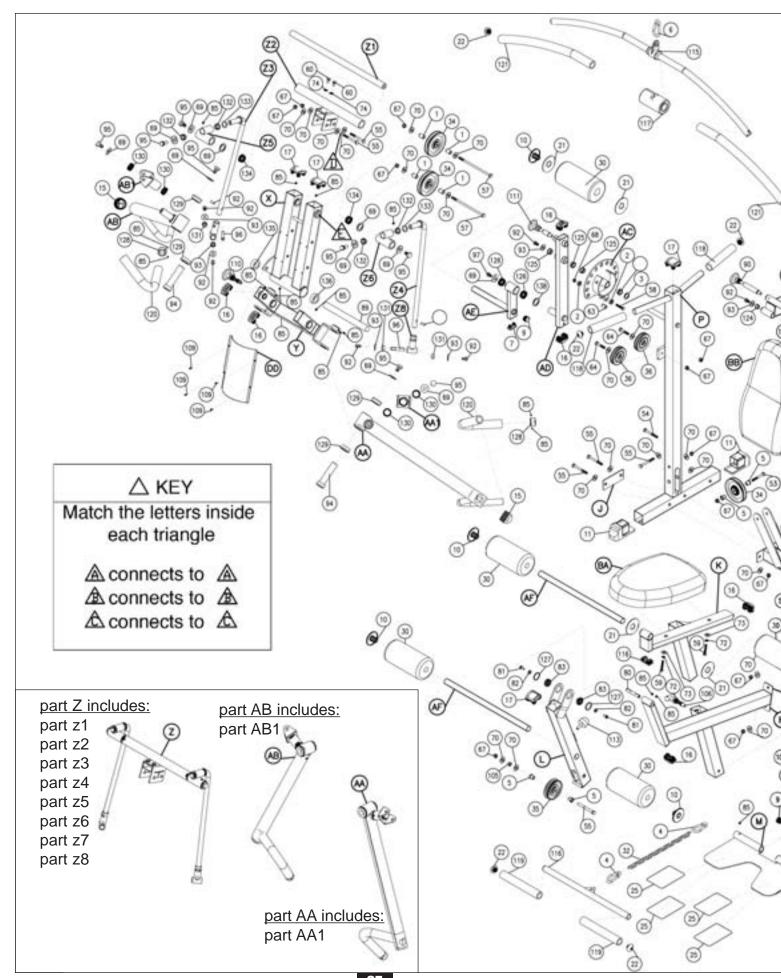


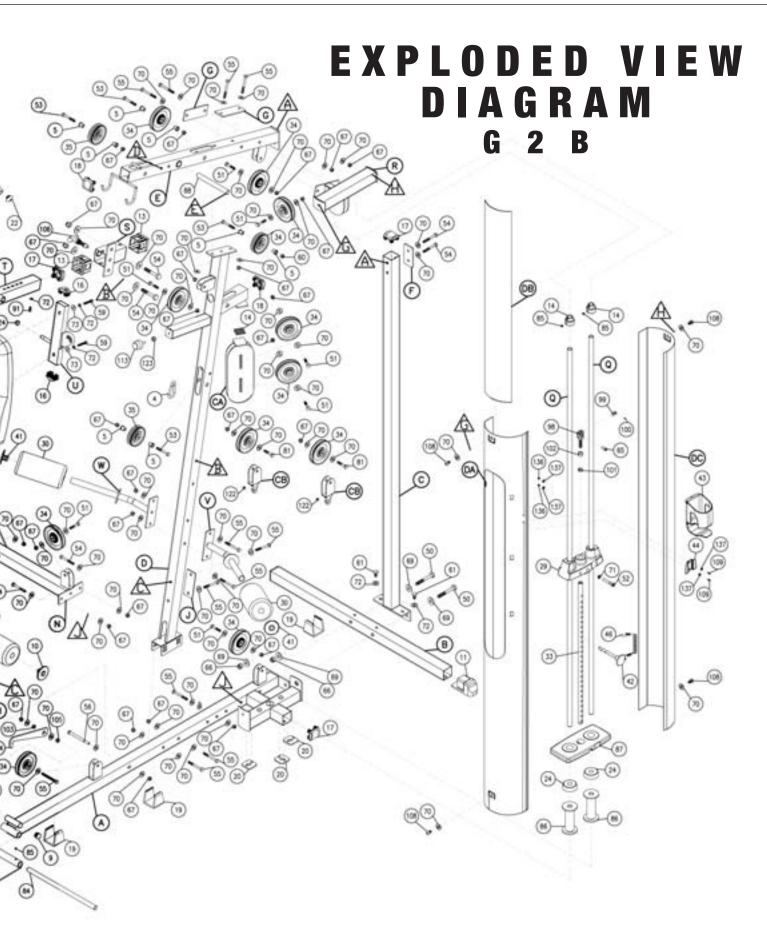
KEY #73 FLAT WASHER 5/16" QTY. 6



KEY #101 SPRING LOCK WASHER 1/2" QTY. 1







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