NOTE: Please read all instructions carefully before using this product

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Model MD-3400

Retain This Manual for Reference

07-30-09

OWNER'S MANUAL

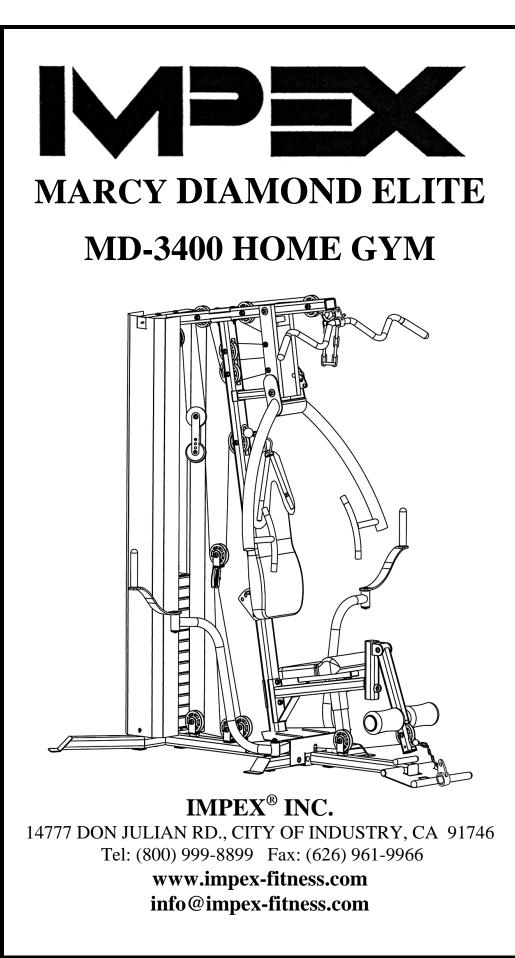


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BEFORE YOU BEGIN

Thank you for selecting the MARCY DIAMOND Home Gym MD-3400 by IMPEX[®] INC. For your safety and benefit, read this manual carefully before using the machine. As a manufacturer, we are committed to provide you complete customer satisfaction. If you have any questions, or find there are missing or damaged parts or you require assistance assembling this product, we guarantee you complete satisfaction through direct assistance. To avoid unnecessary delays, *please call our TOLL-FREE customer service number*. Our Customer Service Agents will provide immediate assistance to you.

Toll-Free Customer Service Number 1-800-999-8899 Mon. - Fri. 9 a.m. - 5 p.m. PST www.impex-fitness.com info@impex-fitness.com

IMPORTANT SAFETY NOTICE

PRECAUTIONS

This exercise machine is built for optimum safety. However, certain precautions apply whenever you operate a piece of exercise equipment. Be sure to read the entire manual before you assemble or operate your machine. In particular, note the following safety precautions:

- 1. Keep children and pets away from the machine at all times. DO NOT leave children unattended in the same room with the machine.
- 2. Only one person at a time should use the machine.
- If the user experiences dizziness, nausea, chest pain, or any other abnormal symptoms, STOP the workout at once. CONSULT A PHYSICIAN IMMEDIATELY.
- 4. Position the machine on a clear, leveled surface. DO NOT use the machine near water or outdoors.
- 5. Keep hands away from all moving parts.
- 6. Always wear appropriate workout clothing when exercising. DO NOT wear robes or other clothing that could become caught in the machine. Running or aerobic shoes are also required when using the machine.
- 7. Use the machine only for its intended use as described in this manual. DO NOT use attachments not recommended by the manufacturer.
- 8. Do not place any sharp object around the machine.
- 9. Disabled person should not use the machine without a qualified person or physician in attendance.
- 10. Before using the machine to exercise, always do stretching exercises to properly warm up.
- 11. Never operate the machine if the machine is not functioning properly.
- 12. A spotter is recommended during exercise.
- 13. Do not intend to insert weight selector pin while the weight stack or top plate is in elevated position.
- 14. Be certain the weight Selector Pin is completely inserted.
- 15. Never use dumbbells or other means to increase the weight resistance. Use only weight plates provided by manufacturer.
- 16. This machine is designed and intended for home and consumer use only, not for commercial use.

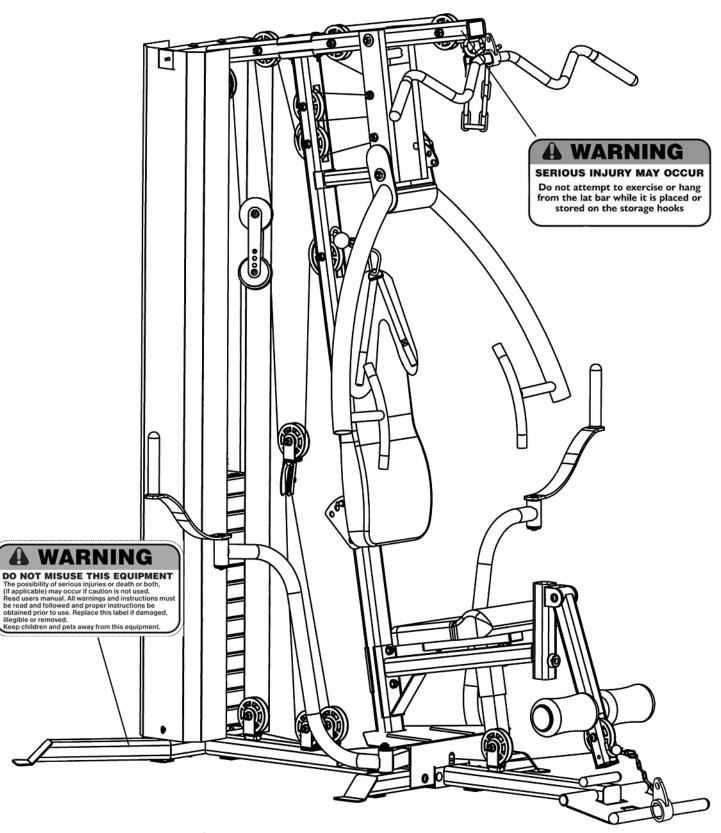
CARE AND MAINTENANCE

- 1. Lubricate moving parts with WD-40 or light oil periodically.
- 2. Inspect and tighten all parts before using the machine.
- 3. The machine can be cleaned using a damp cloth and mild non-abrasive detergent. DO NOT use solvents.
- 4. Maximum user's weight: 300 lbs.

WARNING: BEFORE BEGINNING ANY EXERCISE PROGRAM, CONSULT YOUR PHYSICIAN. THIS IS ESPECIALLY IMPORTANT FOR INDIVIDUALS OVER THE AGE OF 35 OR PERSONS WITH PRE-EXISTING HEALTH PROBLEMS. READ ALL INSTRUCTIONS BEFORE USING ANY FITNESS EQUIPMENT. IMPEX INC. ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE SUSTAINED BY OR THROUGH THE USE OF THIS PRODUCT.

SAVE THESE INSTRUCTIONS.

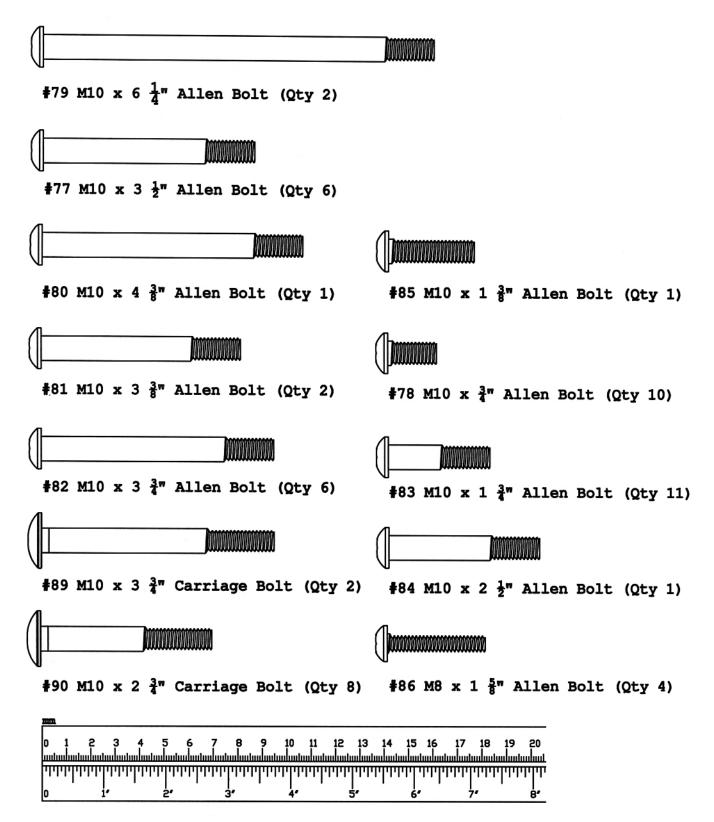
WARNING LABEL PLACEMENT



The warning labels shown here have been placed on the Rear Stabilizer and Upper Frame. If the labels are missing or illegible, please call customer service at 1-800-888-8899 for replacements. Apply the labels in the location shown.

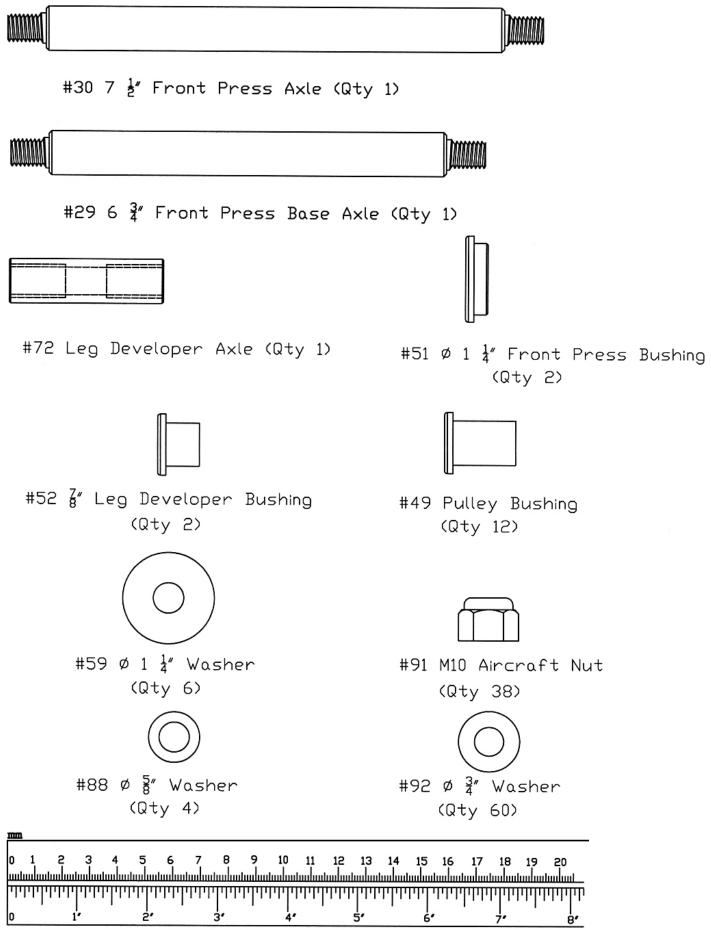
HARDWARE PACK

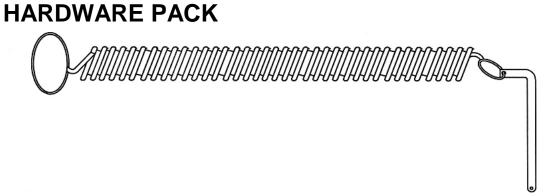
NOTE: The following parts are not drawn to scale. Please use your own ruler to measure the size.



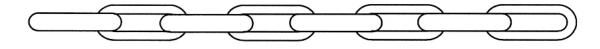
HARDWARE PACK

NOTE: The following parts are not drawn to scale. Please use your own ruler to measure the size.

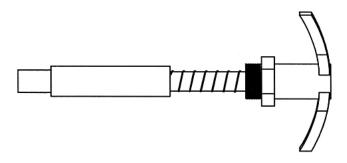




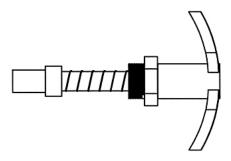
#42 Weight Plate Selector Pin(Qty 1)



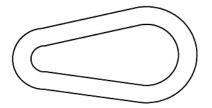
#36 Chain(Qty 2)



#38 Long T-shaped Lock Pin (Qty 1)



#39 T-shaped Lock Pin (Qty 1)



#37 Hook (Qty 5)

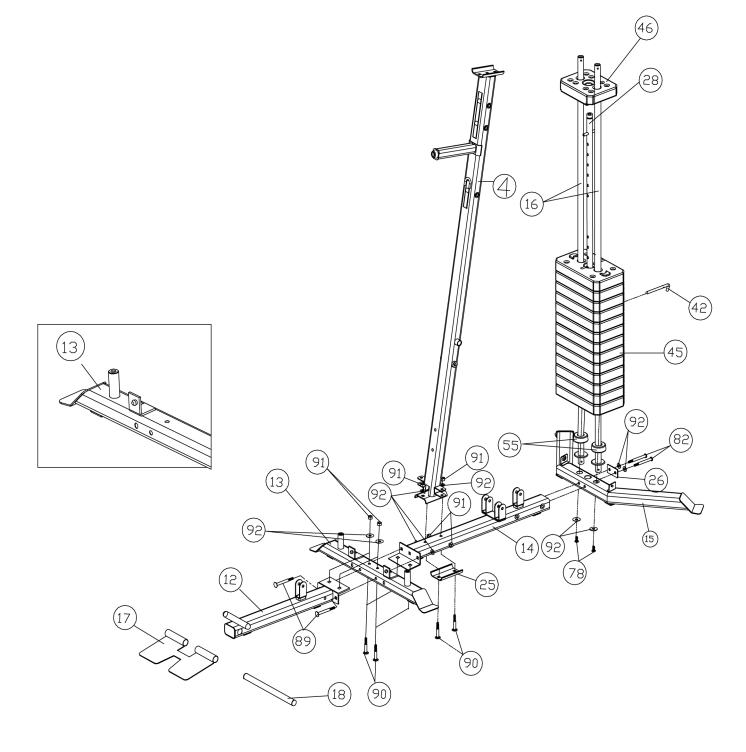
ASSEMBLY INSTRUCTION

Tools Required for Assembling the Machine: Two Adjustable Wrenches and Allen Wrenches

NOTE: It is strongly recommended that this machine be assembled by two or more people to avoid possible injury.

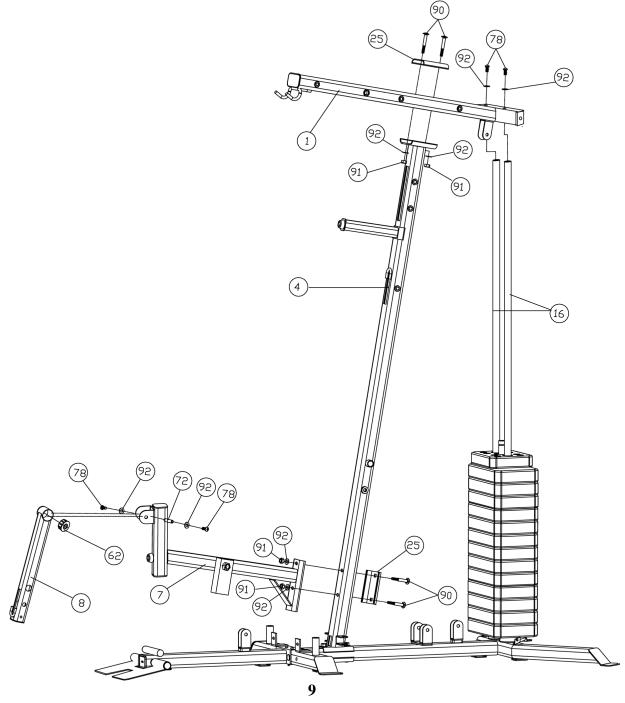
STEP 1 (See Diagram 1)

- A.) Insert two Guide Rods (#16) into the holes on the Rear Stabilizer (#15). Secure each Guide Rod with one M10 x ¾" Allen Bolt (#78) and Ø ¾" Washer (#92) from the bottom. Attach two Rubber Bumpers (#55) onto top of the two Guide Rods and slide down to the stopper on the Guide Rods.
- B.) Attach the Vertical Frame (#4) onto the Rear Base Frame (#14). Secure it with two M10 x 2 ³⁄₄" Carriage Bolts (#90), one 4 ³⁄₄" x 2 ³⁄₄" Bracket (#25), two Ø ³⁄₄" Washers (#92), and two M10 Aircraft Nuts (#91). DO NOT tighten the Nuts and Bolts yet.
- C.) Attach the Butterfly Base (#13) to the Rear Base Frame (#14). Attach the Front Base Frame (#12) to the Butterfly Base (#13). Align the holes and secure them together with two M10 x 2 ³/₄" Carriage Bolts (#90) from the bottom, two M10 x 3 ³/₄" Carriage Bolts (#90) from the bottom, two M10 x 3 ³/₄" Carriage Bolts (#89) from the side of Butterfly Base, four Ø ³/₄" Washers (#92), and four M10 Aircraft Nuts (#91).
- D.) Attach the Rear Base Frame (#14) to the Rear Stabilizer (#15). Secure them together with two M10 x 3 ³/₄" Allen Bolts (#82), two Ø ³/₄" Washers (#92), and one 1 5/8" x 1 ¹/₂" Bracket (#26).
- E.) Attach the Foot Plate (#17) to the Front Base Frame (#12). Align the holes and insert the 13" Foot Plate Axle (#18) through the holes.
- F.) Slide 13 Weight Plates (#45) onto the Guide Rods. Make sure the deep groves on all Plates face down and toward the back. Insert the Selector Rod (#28) through the center hole on the Weight Plates. Slide the Weight Selector Stem (#46) onto the Guide Rods.
- G.)Use the Weight Plate Selector Pin (#42) to select desired number of Weight Plates to exercise. NOTE: Each Plate weights approximately 15lbs. Please refer to the Weight Resistance Chart on page 26.



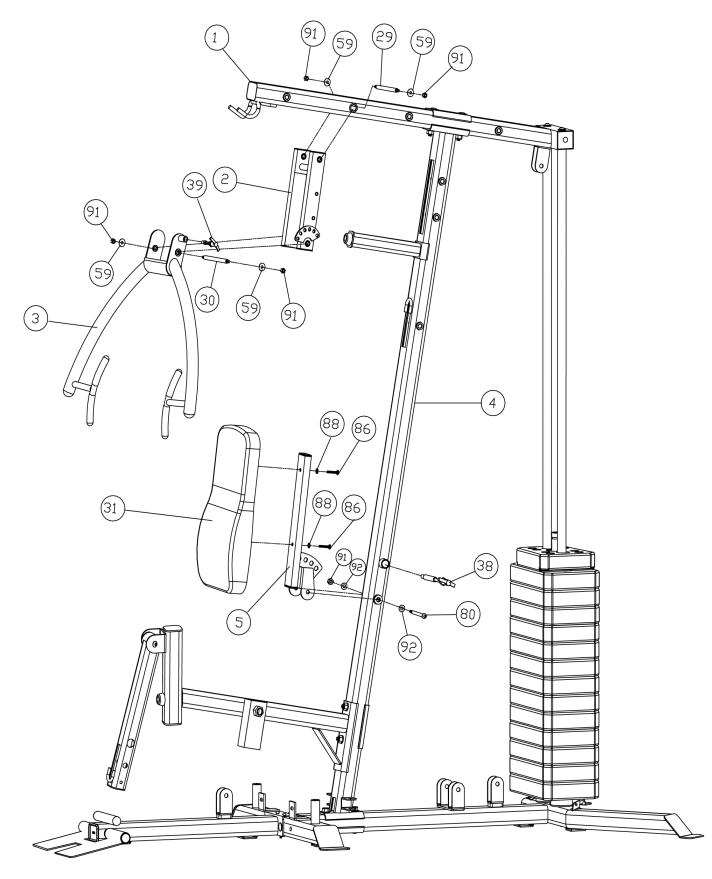
STEP 2 (See Diagram 2)

- A.) Attach the Upper Frame (#1) onto the two Guide Rods (#16). Secure it with two M10 x ¾" Allen Bolts (#78) and Ø ¾" Washers (#92). DO NOT tighten the Bolts yet.
- B.) Place the Upper Frame (#1) onto the Vertical Frame (#4). Secure it with two M10 x 2 ³⁄₄" Carriage Bolts (#90), one 4 ³⁄₄" x 2 ³⁄₄" Bracket (#25), two Ø ³⁄₄" Washers (#92), and two M10 Aircraft Nuts (#91).
- C.) Securely tighten all Nuts and Bolts previously installed.
- D.) Attach the Seat Support Frame (#7) to the Vertical Frame (#4). Secure it with two M10 x 2 ³⁄₄" Carriage Bolts (#90), one 4 ³⁄₄" x 2 ³⁄₄" Bracket (#25), two Ø ³⁄₄" Washers (#92), and two M10 Aircraft Nuts (#91).
- E.) Attach the Leg Developer (#8) to the bracket on the Seat Support Frame. Secure it with one Leg Developer Axle (#72), two M10 x ¾" Allen Bolts (#78), and two Ø ¾" Washers (#92). Do not over tighten the Bolts. Make sure the Leg Developer is able to swivel.



STEP 3 (See Diagram 3)

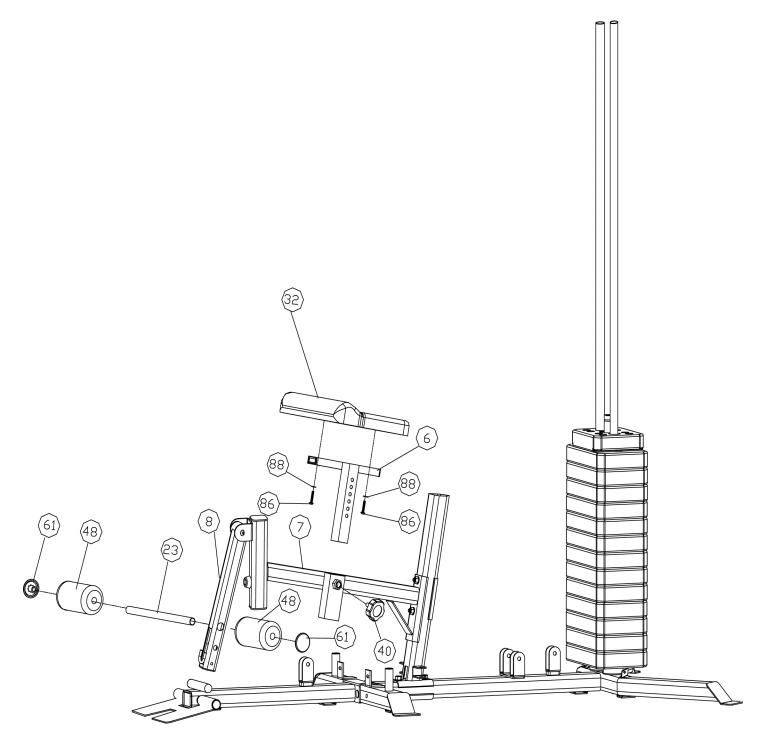
- A.) Attach the Front Press Base (#2) to the Upper Frame (#1). Secure it with one 6 ³/₄" Front Press Base Axle (#29), two Ø 1 ¹/₄" Washers (#59), and two M10 Aircraft Nuts (#91).
- B.) Attach the Front Press (#3) to the Front Press Base (#2). Secure it with one 7 ½" Front Press Axle (#30), two Ø1 ¼" Washers (#59), and two M10 Aircraft Nuts (#91).
- C.) Thread the T-shaped Lock Pin (#39) into the hole on the Front Press to obtain the desired Front Press position.
- D.) Attach the Backrest Board (#31) to the Backrest Support Frame (#5). Secure it with two M8 x 1 5/8" Allen Bolts (#86) and Ø 5/8" Washers (#88).
- E.) Attach the Backrest Support Frame to the Vertical Frame (#4). Secure it with one M10 x 4 3/8" Allen Bolt (#80), two Ø ¾" Washers (#92), and one M10 Aircraft Nut (#91).
- F.) Thread the Long T-shaped Lock Pin (#38) into the hole on the side of the Vertical Frame to obtain the desired Backrest position.



STEP 4 (See Diagram 4)

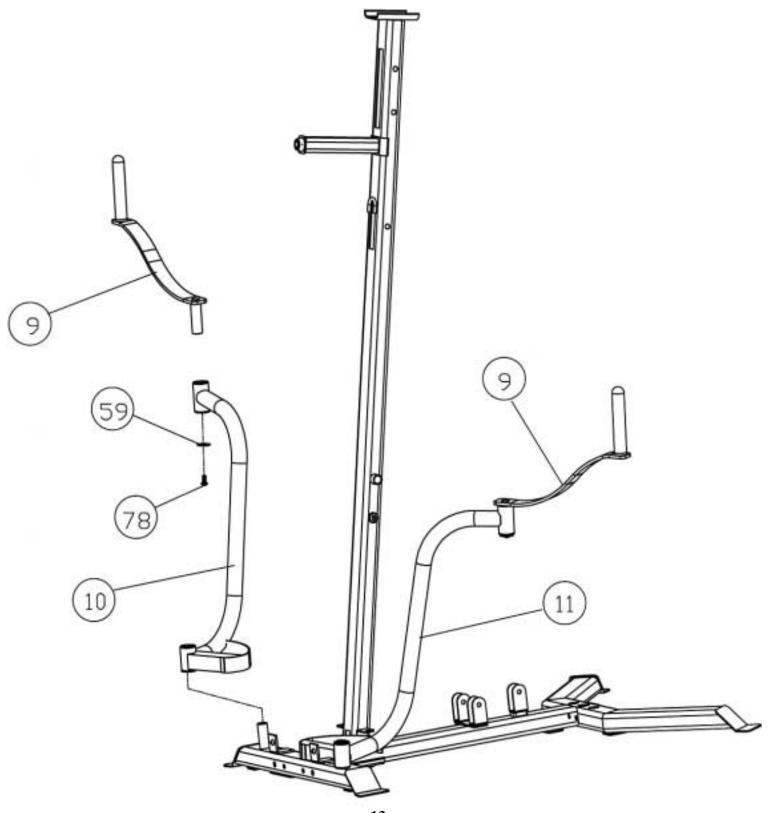
- A.) Attach the Seat (#32) to the Seat Post (#6). Secure it with two M8 x 1 5/8" Allen Bolts (#86) and Ø 5/8" Washers (#88).
- B.) Insert the Seat Post into the opening on the Seat Support Frame (#7). Thread the Lock Knob (#40) into the hole on the Seat Support Frame to lock the Seat at selected height.
- C.) Insert the Foam Tube (#23) halfway through the hole on the Leg Developer (#8). Push two Foam Rolls (#48) onto the Foam Tube from both ends. Plug two Foam Roll End Caps (#61) into the Ends.



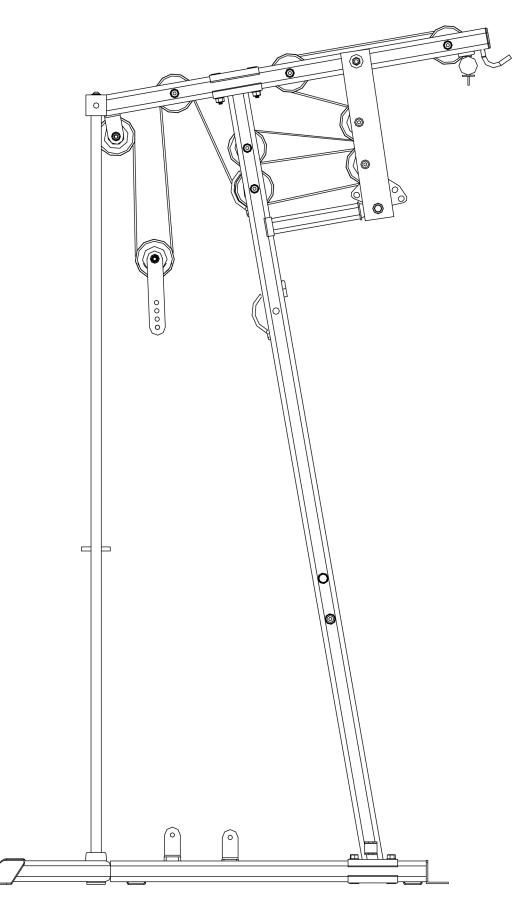


STEP 5 (See Diagram 5)

- A.) Slide the Right Butterfly (#10) onto the right axle on the Butterfly Base (#13).
- B.) Insert the Butterfly Handle (#9) into the pivot on the Right Butterfly. Secure it with one M10 x ¾" Allen Bolt (#78) and Ø 1 ¼" Washer (#59) from the bottom.
- C.) Repeat Procedures A and B above to install the other side. Do not over tighten the Bolts. Make sure the Handles are able to swivel.

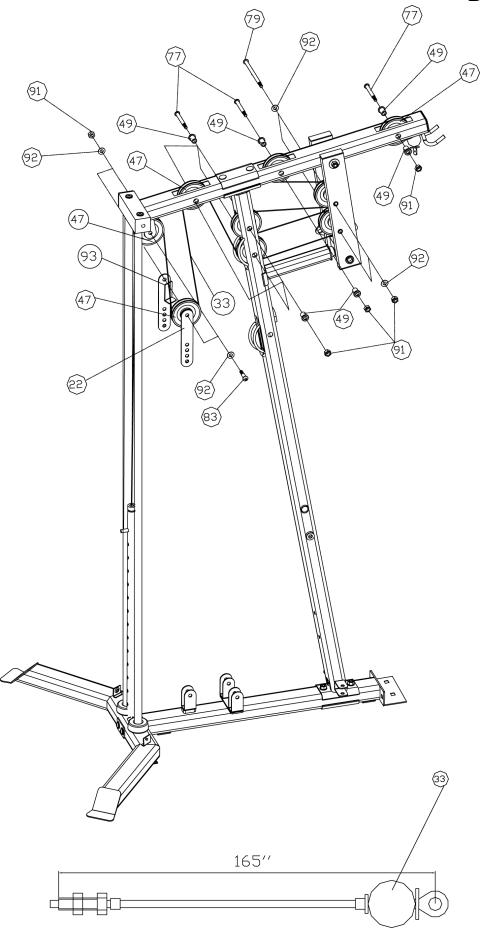


CABLE LOOP DIAGRAM

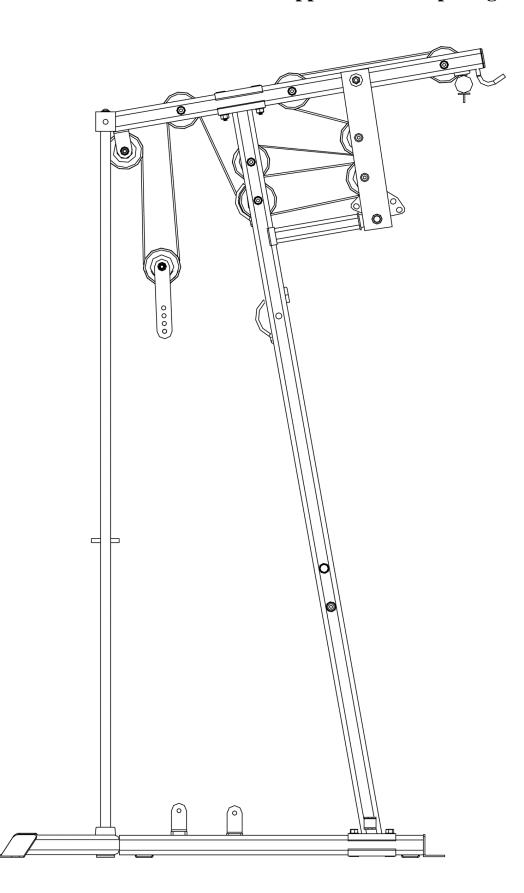


STEP 6 (See Diagram 6 & Upper Cable Loop Diagram)

- A.) Attach the 165" Upper Cable (#33) to the opening on the front of Upper Frame (#1). Make sure the ball stopper is underneath the Frame. Attach a Pulley (#47) to the Cable.
- B.) Secure the Pulley to the opening with one M10 x 3 ½" Allen Bolt (#77), two Pulley Bushings (#49), and one M10 Aircraft Nut (#91).
- C.) Draw the Cable over the Pulley along the Upper Frame towards the back of the machine to the opening in the middle of Upper Frame. Repeat Procedure B above to install a Pulley.
- D.) Draw the Cable around the Pulley then back to the upper opening on the Front Press Base (#2). Attach a Pulley to the opening. Secure it with one M10 x 6 ¼" Allen Bolt (#79), two Ø ¾" Washers (#92), and one M10 Aircraft Nut (#91).
- E.) Draw the Cable around the Pulley then towards the upper opening on the Vertical Frame (#4). Repeat Procedure B above to install a Pulley.
- F.) Draw the Cable around the Pulley and back to the lower opening on the Front Press Base. Repeat Procedure D above to install a Pulley.
- G.) Draw the Cable around the Pulley then to the lower opening on the Vertical Frame. Repeat Procedure B above to install a Pulley.
- H.) Draw the Cable underneath the Pulley then pull upward to the other opening on the back of the Upper Frame. Repeat Procedure B above to install a Pulley.
- I.) Draw the Cable around the Pulley then downward. Attach a Pulley and a L-shape Cable Retainer (#93) to the top hole on the two Double Floating Pulley Brackets (#22). Secure the Pulley and the L-shape Cable Retainer together to the brackets with one M10 x1³/₄" Allen Bolt (#83), two Ø ³/₄" Washers (#92), and one M10 Aircraft Nut (#91). Let the Bracket hanging for now.
- J.) Draw the Cable around the Pulley then upward to the open bracket between the two Guide Rods. Repeat Procedure J above to install a Pulley.
- K.) Draw the Cable around the Pulley then downward to the Selector Rod (#28). Securely thread the Head Bolt at end of the Cable into the Selector Rod.

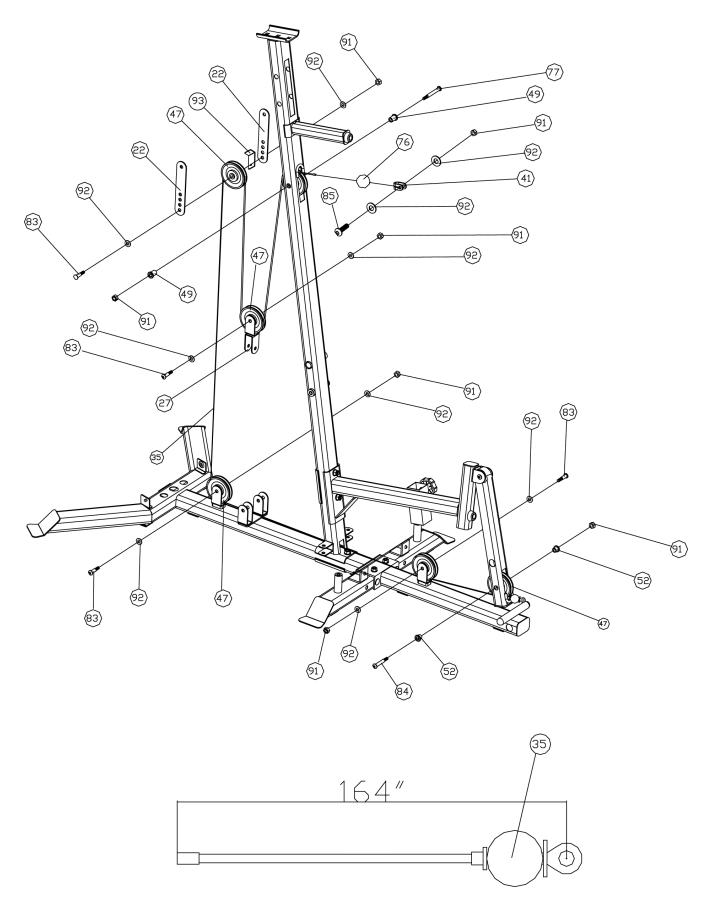


Upper Cable Loop Diagram

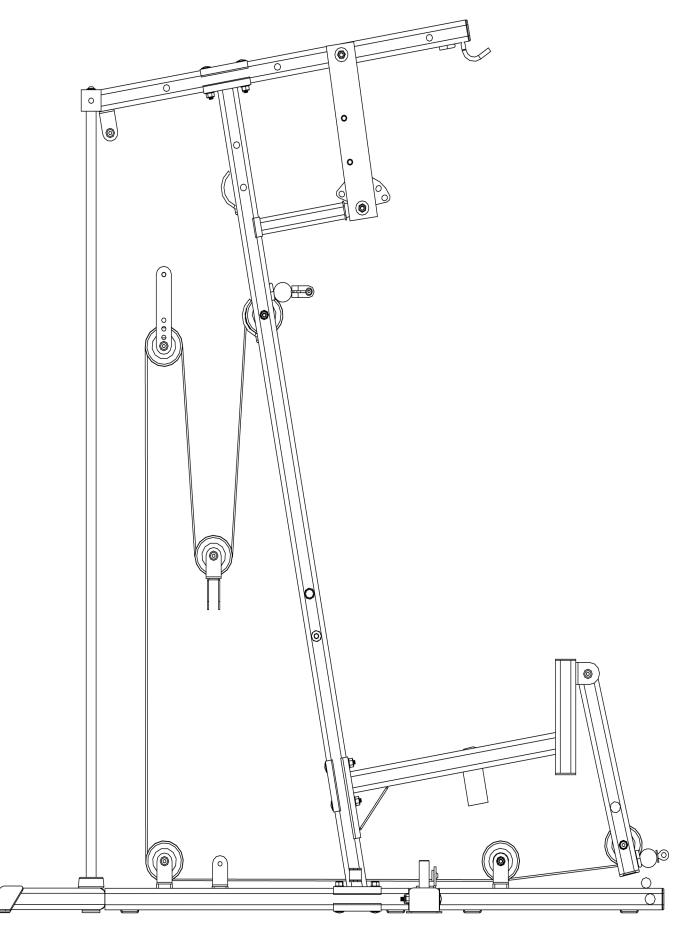


STEP 7 (See Diagram 7 & Lower Cable Loop Diagram)

- A.) Attach the 164" Lower Cable (#35) to the opening on the Leg Developer (#8). Attach a Pulley (#47) to the opening. Secure it with one M10 x 2 ½" Allen Bolt (#84), two Ø 7/8" Leg Developer Pulley Bushings (#52), and one M10 Aircraft Nut (#91).
- B.) Draw the Cable underneath the Pulley to the open bracket on the Front Base Frame (#12). Attach a Pulley to the bracket. Secure it with one M10 x 1 ¾" Allen Bolt (#83), two Ø ¾" Washers (#92), and one M10 Aircraft Nut (#91).
- C.) Draw the Cable underneath the Pulley towards the back of the machine through the bottom opening on the Vertical Frame (#4) to the open bracket on the Rear Base Frame (#14).
- D.) Install a Pulley to the bracket with M10 x 1¾" Allen Bolt (#83), two Ø ¾" Washers (#92), and one M10 Aircraft Nut.
- E.) Draw the Cable underneath the Pulley then pull upward to the Double Floating Pulley Bracket (#22) with previously installed in STEP-6. Repeat Procedure D above to install a Pulley together with a L-shape Cable Retainer (#93). After completing the entire cable system, come back to the Double Floating Pulley Bracket and adjust the height of the lower Pulley to adjust the tension of the Cables. Move up the hole to increase the tension. Move down the hole to decrease the tension.
- F.) Draw the Cable around the Pulley then downward. Attach the Cable to an Angled Double Floating Pulley Bracket (#27). Repeat Procedure D above to install a Pulley. Let the Bracket hanging for now.
- G.) Draw the Cable around the Pulley then upward to the opening on the Vertical Frame (#4). Attach a Pulley to the opening. Secure it with one M10 x 3 ½" Allen Bolt (#77), two Pulley Bushings (#49), and one M10 Aircraft Nut (#91).
- H.) Insert the Cable through a Ball Stopper (#76). Attach the Cable to a U-shape Cable Connector (#41). Attach a Hook (#37) to the Connector. Secure the Connector and Hook with one M10 x 1 3/8" Allen Bolt (#85), two Ø ¾" Washers (#92), and one M10 Aircraft Nut (#91).

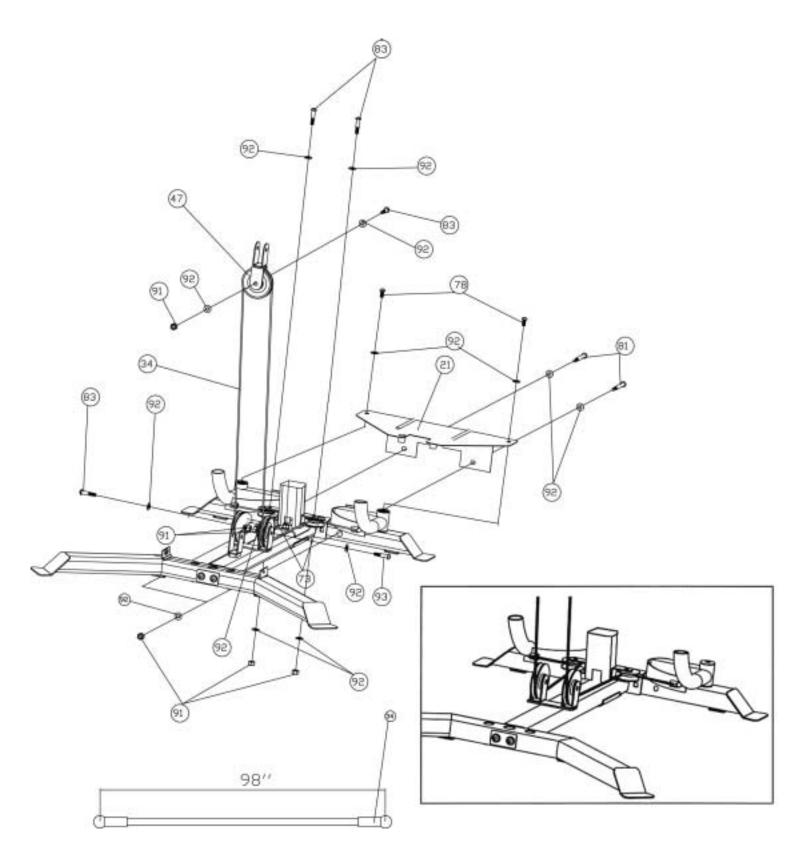


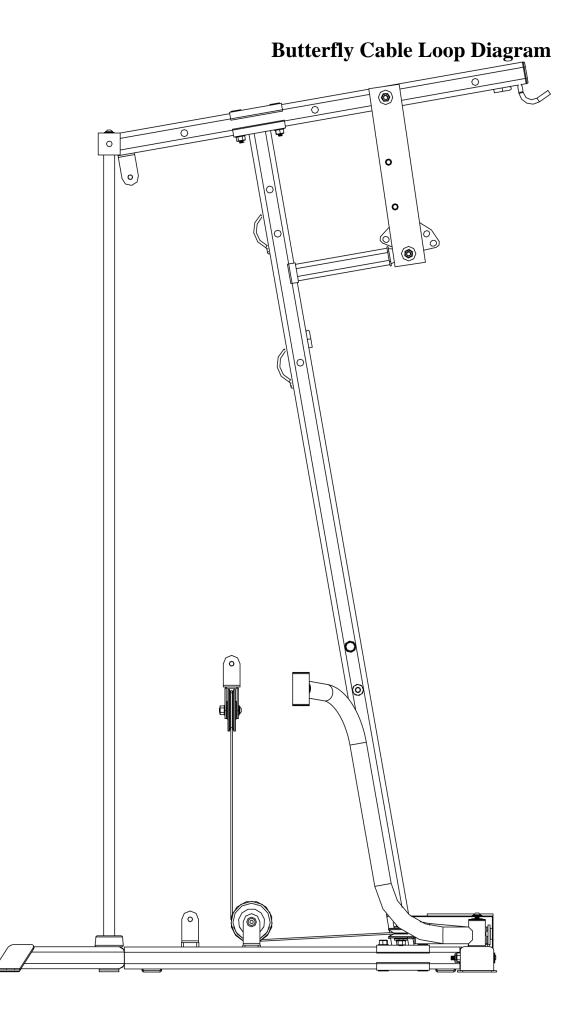
Lower Cable Loop Diagram



STEP 8 (See Diagram 8 & Butterfly Cable Loop Diagram)

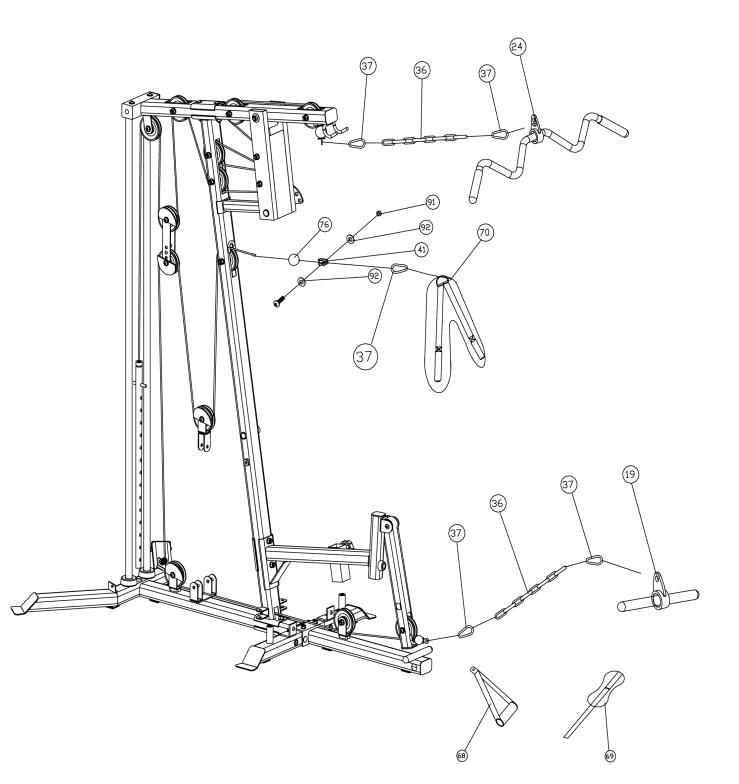
- A.) Clip one end of the 98" Butterfly Cable (#34) to the open slot on the Right Butterfly (#10).
- B.) Draw the Cable to the open bracket on the right side of the Vertical Frame (#4). Attach a Small Pulley (#73) to the bracket
- C.) Secure it with one M10 x 1 ³/₄" Allen Bolt (#83), two Ø ³/₄" Washers (#92), and one M10 Aircraft Nut (#91).
- D.) Draw the Cable around the Small Pulley to the right open bracket on the Rear Base Frame (#14).
- E.) Attach a Pulley to the bracket. Secure it with M10 x 1¾" Allen Bolt (#83), two Ø ¾" Washers (#92), and one M10 Aircraft Nut (#91).
- F.) Draw the Cable underneath the Pulley then upward to the Angled Double Floating Pulley Bracket (#27) previously installed in Step-7. Repeat Procedure E above to install a Pulley.
- G.) Draw the Cable around the Pulley then downward to the left open bracket on the Rear Base Frame. Repeat Procedure E above to install a Pulley.
- H.) Draw the Cable underneath the Pulley to the left open bracket on the Vertical Frame. Install a Small Pulley to the bracket.
- I.) Draw the Cable around the Small Pulley then attach the end the Cable to the open slot on the Left Butterfly.
- J.) Attach the Butterfly Base Cover (#21) to the Butterfly Base (#13) to cover the left and right pivot on the Butterfly Base. Secure the Cover to the Pivots with two M10 x ³/₄" Allen Bolts (#83) and Ø ³/₄" Washers (#92).
- K.) Align the holes and secure the Cover to the Butterfly Base with two M10 x 3 3/8" Allen Bolts (#81), four Ø ¾" Washers (#92), and twoM10 Aircraft Nut (#91).





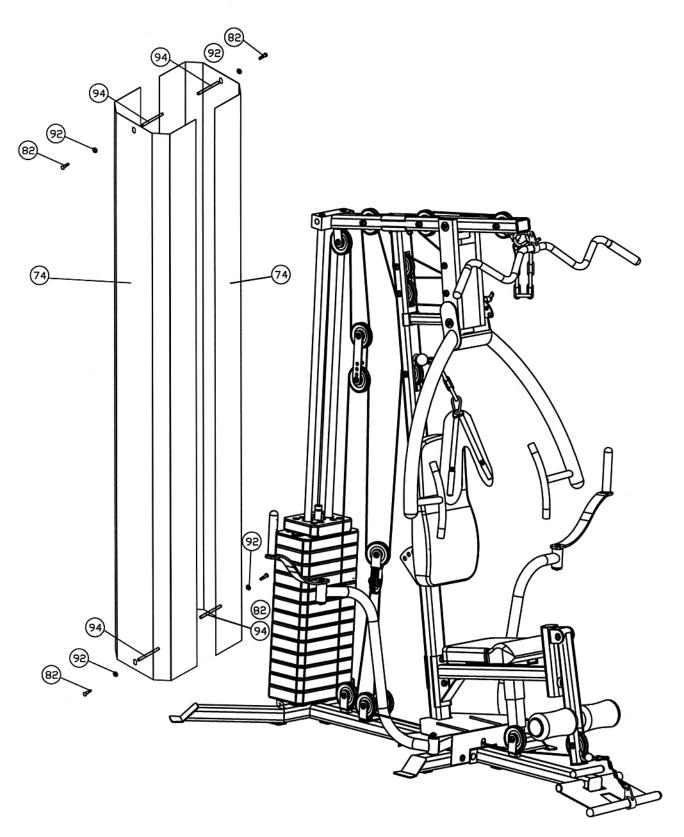
STEP 9 (See Diagram 9)

- A.) Connect the Lat Bar (#24) to the Upper Cable (#33) with two Hooks (#37) and one Chain (#36).
- B.) Connect the Abdominal Strap (#70) to the Lower Cable (#35) with a Hook.
- C.) Connect the Shiver Bar (#19) to the Lower Cable with two Hooks and a Chain. Replace Shiver Bar with Single Handle (#68) or Ankle Strap (#69) for various exercises.



Step 10 (See Diagram 10)

- A.) Attach the two Weight Stack Covers (#74) with four 3" Sleeve (#94) to the Upper Frame (#1) and Rear Stabilizer (#15).
- B.) Secure them with four M10 x 3¾" Allen Bolts (#82) and four Ø ¾" Washers (#92).



WEIGHT RESISTANCE CHART

	WEIGHT PLATE								
Station	1	2	3	4	5	6	7	8	9
Low Pulley	27	43	59	75	91	107	123	139	155
Lat Pull	35	50	65	80	95	110	125	140	155
Butterfly	15	26	37	48	59	70	81	92	103
Front Press	25	44	63	82	101	120	139	158	177
AB Crunch	27	43	59	75	91	107	123	139	155
Leg Developer	31	48	65	82	99	116	133	150	167

	WEIGHT PLATE								
Station	10	11	12	13					
Low Pulley	171	187	203	219					
Lat Pull	170	185	200	215					
Butterfly	114	125	136	147					
Front Press	196	215	234	253					
AB Crunch	171	187	203	219					
Leg Developer	184	201	218	235					

*Numbers are approximate. Actual weight may vary.

*Value for butterfly is for each arm.

PARTS LIST

P/	ARISLISI				
KE	Y NO. DESCRIPTION	Q'ty			
1	Upper Frame	1	51	Ø 1 ¼" Front Press Bushing	2
2	Front Press Base	1	52	Ø 7/8" Leg Developer Bushing	2
3	Front Press	1	53	Ø 1" Bushing	8
4	Vertical Frame	1	54	Ø 1" Spacer	2
5	Backrest Support Frame	1	55	Rubber Bumper	2
6	Seat Post	1	56	Ø 1 ½" Spacer	2
7	Seat Support Frame	1	57	Ø 1" Rubber Bumper	2
8	Leg Developer	1	58	Ø 1" x 5/8" Rubber Bumper	2
	•				
9	Butterfly Handle	2	59	Ø 1 ¼" Washer	6
10	Right Butterfly	1	60	Ø 1" Cone-shaped End Cap	4
11	Left Butterfly	1	61	Foam Roll End Cap	2
	Front Base Frame	1	62	Leg Developer End Cap	2
13	Butterfly Base	1	63	2" x 1" End Cap	4
14	Rear Base Frame	1	64	Ø 1" End Cap	1
15	Rear Stabilizer	1	65	Handle Sleeve	2
16	Guide Rod	2	66	2" x 2 ¾" Upper Frame End Cap	2
	Foot Plate	1	67	2" x 2" End Cap	3
18	13" Foot Plate Axle	1	68	Single Handle	1
19	Shiver Bar	1	69	Ankle Strap	1
20	Shiver Bar Handle	1	70	Abdominal Strap	1
21	Butterfly Base Cover	1	71	1" x 2 ¾" End Cap	4
22	Double Floating Pulley Bracket	2	72	Leg Developer Axle	1
23	Foam Tube	1	73	Small Pulley	2
24	Lat Bar	1	74	Weight Stack Cover	2
25	4 ¾" x 2 ¾" Bracket	3	75	Ø 2" End Cap	2
26	1 5/8" x 1 ½" Bracket	1	76	Ball Stopper	1
27	Angled Double Floating Pulley Bracket	1	77	M10 x 3 ½" Allen Bolt	6
28	Selector Rod	1	78	M10 x ¾" Allen Bolt	12
29	6 ³ / ₄ " Front Press Base Axle	1	79	M10 x 6 ¼" Allen Bolt	2
	7 ¹ / ₂ " Front Press Axle	1	80	M10 x 4 3/8" Allen Bolt	1
31	Backrest Board	1	81	M10 x 3 3/8" Allen Bolt	2
32	Seat	1	82	M10 x 3 ¾" Allen Bolt	6
33	165" Upper Cable	1	83	M10 x 1 $\frac{3}{4}$ " Allen Bolt	11
34	98" Butterfly Cable	1	84	M10 x 2 $\frac{1}{2}$ " Allen Bolt	1
35	164" Lower Cable	1	85	M10 x 1 $3/8$ " Allen Bolt	1
36	Chain	2	86	M8 x 1 5/8" Allen Bolt	4
	Hook	5	87	M6 x $5/8$ " Screw	2
	Long T-shaped Lock Pin	1	88	Ø 5/8" Washer	4
	T-shaped Lock Pin	1	89	M10 x 3 ¾" Carriage Bolt	2
	Lock Knob	1	90	M10 x 2 ³ / ₄ " Carriage Bolt	8
40	U-shaped Cable Connector	1	90 91	M10 Aircraft Nut	38
	•	1	91	\emptyset ³ / ₄ " Washer	
42 43	Weight Plate Selector Pin		92 93		60 2
	5 3/8" Grip	6 4		L-shape Cable Retainer	2
44 45	6" Grip Weight Dista	4	94	3" sleeve	4
45	Weight Plate	13			
46	Weight Selector Stem	1			
47	Pulley	18			
48	Foam Roll	2			
49	Pulley Bushing	12			
50	Ø 1 ½" Bushing	8			



LIMITED WARRANTY

IMPEX Inc. ("IMPEX[®]") warrants this product to be free from defects in workmanship and material, under normal use and service conditions, for a period of two years on the Frame from the date of purchase. This warranty extends only to the original purchaser. IMPEX's obligation under this Warranty is limited to replacing or repairing, at IMPEX's option.

All returns must be pre-authorized by IMPEX. Pre-authorization may be obtained by calling IMPEX Customer Service Department at 1-800-999-8899. All freights for products return to IMPEX must be prepaid by the customer. This warranty does not extend to any product or damage to a product caused by or attributable to freight damage, abuse, misuse, improper or abnormal usage or repairs. No other warranty beyond that specifically set forth above is authorized by IMPEX.

IMPEX is not responsible or liable for indirect, special or consequential damages arising out of or in connection with the use or performance of the product or other damages with respect to any economic loss, loss of property, loss of revenues or profits, loss of enjoyments or use, costs of removal, installation or other consequential damages or whatsoever natures. Some states do not allow the exclusion or limitation of incidental or consequential damages. Accordingly, the above limitation may not apply to you.

The warranty extended hereunder is in lieu of any and all other warranties and any implied warranties of merchantability or fitness for a particular purpose is limited in its scope and duration to the terms set forth herein. Some states do not allow limitations on how long an implied warranty lasts. Accordingly, the above limitation may not apply to you.

This warranty gives you specific legal right. You may also have other rights which vary from state to state. Register on-line www.impex-fitness.com

IMPEX[®] INC. 14777 Don Julian City of Industry, CA 91746

ORDERING REPLACEMENT PARTS

Replacement parts can be ordered by calling our Customer Service Department toll-free at **1-800-999-8899** during our regular business hours: Monday through Friday, 9 am until 5 pm Pacific standard time. **info@impex-fitness.com**

When ordering replacement parts, always give the following information.

- 1. Model
- 2. Description of Parts
- 3. Part Number
- 4. Date of Purchase