# STRENGTH TRAINING 220

#### Model No. HRSY23080 Serial No.

The serial number is found in the location shown below. Write the serial number in the space above.



### **QUESTIONS?**

As a manufacturer, we are committed to providing complete customer satisfaction. If you have questions, or if there are missing or damaged parts, we will guarantee complete satisfaction through direct assistance from our factory.

TO AVOID UNNECESSARY DELAYS, PLEASE CALL DIRECT TO OUR TOLL-FREE CUSTOMER HOT LINE. The trained technicians on our customer hot line will provide immediate assistance, free of charge to you.

#### CUSTOMER HOT LINE: **1-800-999-3756** Mon.–Fri., 6 a.m.–6 p.m. MST

### CAUTION

Read all precautions and instructions in this manual before using this equipment. Save this manual for future reference. USER'S MANUAL



PATENT PENDING

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Note: A PART LIST/EXPLODED DRAWING and a PART IDENTIFICATION CHART are attached to the center of this manual. Remove the PART LIST/EXPLODED DRAWING and the PART IDENTIFICATION CHART before beginning assembly.

### **Important Precautions**

**WARNING:** To reduce the risk of serious injury, read the following important precautions before using the home gym system.

- 1. It is the responsibility of the owner to ensure that all users of the home gym system are adequately informed of all precautions.
- 2. Read all instructions in this manual and in the accompanying literature before using the home gym system.
- 3. If you feel pain or dizziness at any time while exercising, stop immediately and begin cooling down.
- 4. Use the home gym system only on a level surface. Cover the floor or carpet beneath the home gym system for protection.
- 5. Inspect and tighten all parts often. Replace any worn parts immediately.
- 6. Make sure the cables remain on the pulleys at all times. If the cables bind while you are exercising, stop immediately and make sure the cables are on all of the pulleys.
- 7. Always stand on a foot plate when performing an exercise that could cause the home gym system to tip.
- 8. Keep hands and feet away from moving parts.

- 9. Keep children under the age of 12 and pets away from the home gym system at all times.
- 10. The home gym system is designed to be used by only one person at a time.
- 11. Always wear athletic shoes for foot protection when exercising.
- 12. Never release the press arms, butterfly arms, leg lever, lat bar or ab strap while weights are raised. The weights will fall with great force.
- 13. <u>Always disconnect the lat bar or ab strap</u> from the home gym system when performing an exercise that does not use these attachments.
- 14. The home gym system is intended for home use only. Do not use the home gym system in a commercial, rental or institutional setting.
- 15. WARNING: Never use the home gym system without having both shrouds attached.
- 16. Always set the butterfly arms in the storage position when you are using the press arms. Likewise, store the press arms when you are using the butterfly arms.

WARNING: Before beginning this or any exercise program, consult your physician. This is especially important for persons over the age of 35 or persons with pre-existing health problems. Read all instructions before using. ICON assumes no responsibility for personal injury or property damage sustained by or through the use of this product.

### **Before You Begin**

Thank you for selecting the innovative and versatile HEALTHRIDER® 230 Home Gym System. The HEALTHRIDER® 230 offers a unique selection of weight stations designed to develop every major muscle group of the body. Whether your goal is to tone your body, build dramatic muscle size and strength or improve your cardiovascular system, the HEALTHRIDER® 230 makes it easy to achieve the results you want.

For your benefit, read this manual carefully before using the HEALTHRIDER<sup>®</sup> 230 Home Gym System. If you have additional questions, please call our Customer Service Department toll-free at 1-800-999-3756, Monday through Friday, 6 a.m. until 6 p.m. Mountain Time (excluding holidays). To help us assist you, please note the product model number and serial number before calling. The model number is HRSY23080. The serial number can be found on a decal attached to the HEALTHRIDER® 230 Home Gym System (see the front cover of this manual).

Please use the drawing below to familiarize yourself with the major parts and how they fit together.



### Assembly

# Note: This introduction will save you more time than it takes to read it!

#### Making Things Easier for Yourself

Everything in this manual is designed to ensure that the assembly of our products can be completed successfully by anyone. However, it is important to recognize that your new equipment is a sophisticated product with many small parts. The assembly process will take time—possibly several hours. Most people find that by setting aside plenty of time, and by deciding to make the task enjoyable, assembly will go smoothly. You may want to complete the process over a couple of evenings.

#### **Giving Yourself a Good Start**

Before you begin the assembly process itself, take the time to complete the steps outlined here.

#### **Clearing the Workspace**

Clear a workspace that is large enough to hold all parts and allow you to walk all the way around the assembled equipment.

#### Unpacking the Box

To make the assembly process as smooth as possible, we have broken it into separate stages. All parts used in each stage are found in individual packages in the shipping box. Place all parts in a cleared area and remove the packing materials. Do not dispose of the packing materials until assembly is completed.

Important: Wait until you begin each assembly stage to open the parts bag labeled for that assembly stage.

#### **Identifying Parts**

To help you identify the small parts used in assembly, we have included a PART IDENTIFICATION CHART located in the center of this manual. Place the chart on the floor or work table and use it to quickly identify different parts as you open the packages for each step.

Note: Some small parts may have been pre-attached for shipping. If a part is not in the parts bag, check to see if it has been pre-attached.

#### **Orienting Parts**

As you assemble this product, be sure that all parts are oriented as shown in the drawings.

#### **Tightening of Parts**

Tighten all parts as you assemble them, unless instructed to do otherwise.

#### Lining Up the Tools

Assembly requires the following tools (not included):

- Two (2) adjustable wrenches
- One (1) standard screwdriver



One (1) phillips screwdriver

• One (1) rubber mallet

- Lubricant, such as grease or petroleum jelly, and soapy water
- Tape, such as clear tape or masking tape

Assembly will be more convenient if you have a socket set, a set of open-end or closed-end wrenches or a set of ratchet wrenches. **Some assembly steps require two people.** 

### The Four Stages of the Assembly Process

#### Frame Assembly

You will begin by assembling the base and the upright frames that serve as the skeleton of the equipment. The seat and all moving parts will later be attached to the frame.

#### **Arm Assembly**

Completes the press and butterfly arms that you operate while you are exercising.

#### **Cable Assembly**

Completes the cables and pulleys that connect the moving arms with each other and with the weights. This ties the different parts together and makes the equipment function as a unit.

#### Seat Assembly

Completes the seat and backrest that support your body while you are exercising.

### **Frame Assembly**

1. Before beginning, make sure that you have read and understood the information on page 4.

Locate and open the parts bag labeled "FRAME ASSEMBLY."

Insert four 3/8" x 2 3/4" Carriage Bolts (45) up through the indicated holes in the Stabilizer (4). Insert a 3/8" x 3 1/2" Carriage Bolt (62) up through the hole in the sidearm on the Stabilizer. **Note: If the Bolts tend to fall out, secure them by putting a small piece of tape over the head of each Bolt.** Place the Stabilizer flat on the floor.

 Place the bracket on the lower end of the Support Upright (3) over the indicated 3/8" x 2 3/4" Carriage Bolts (45) in the Stabilizer (4). Hand tighten two 3/8" Nylon Locknuts (50) onto the Bolts. Do not tighten the Nylon Locknuts yet.

CAUTION: Until step 3 has been performed, the unit can easily tip over. Have one person hold the Support Upright in position or lean it against a wall.

Insert two 3/8" x 3" Bolts (53) with two 3/8" Flat Washers (55) through the indicated holes in the Stabilizer (4) and the bracket on the Support Upright (3).

3. Press a 2" Square Inner Cap (28) into the end of the Weight Base (5).

Press a 2" Square Inner Cap (28) into the end of the riser on the Weight Base (5).

Press a 2" Square Cover Cap (33) onto the sidearm on the Weight Base (5).

Insert two 3/8" x 2 3/4" Carriage Bolts (45) up through the indicated holes in the Weight Base (5) and secure the bolt heads with pieces of tape to prevent them from falling out.

Insert a  $3/8^{\circ} \times 3 1/2^{\circ}$  Carriage Bolt (62) up through the hole in the sidearm on the Weight Base (5) and secure the bolt head with tape.

Place the Weight Base (5) on the floor with the holes in the mounting bracket over the 3/8" x 3" Bolts (53) going through the Stabilizer (4) and the bracket on the Support Upright (3). Hand tighten two 3/8" Nylon Locknuts (50) onto the Bolts. **Do not tighten the Nylon Locknuts yet.** 



 Place the bracket on the lower end of the Main Upright (1) over the indicated 3/8" x 2 3/4" Carriage Bolts (45) in the Stabilizer (4). Hand tighten two 3/8" Nylon Locknuts (50) onto the Bolts. Do not tighten the Nylon Locknuts yet.

Insert two 3/8" x 3" Bolts (53) with two 3/8" Flat Washers (55) through the indicated holes in the Stabilizer (4) and the bracket on the Main Upright (1).

5. Press a 2" Square Inner Cap (28) into the end of the Seat Base (6).

Insert two 3/8" x 2 3/4" Carriage Bolts (45) up through the indicated holes in the Seat Base (6) and secure the bolt heads with pieces of tape to prevent them from falling out.

Insert a 3/8" x 3 1/2" Bolt (56) up through the welded tube on the Seat Base (6) and secure the bolt head with tape.

Place the Seat Base (6) on the floor with the holes in the mounting bracket over the 3/8" x 3" Bolts (53) going through the Stabilizer (4) and the bracket on the Main Upright (1). Hand tighten two 3/8" Nylon Locknuts (50) onto the Bolts. **Do not tighten the Nylon Locknuts yet.** 

 Place the Seat Frame (7) onto the 3/8" x 2 3/4" Carriage Bolts (45) in the Seat Base (6). Hand tighten two 3/8" Nylon Locknuts (50) onto the Bolts. Do not tighten the Nylon Locknuts yet.

Locate two 3/8" x 3" Bolts (53) and slide a 3/8" Flat Washer (55) onto each Bolt. Insert the 3/8" x 3" Bolts through the indicated holes in the Main Upright (1) and the bracket on the Seat Frame (7). Hand tighten two 3/8" Nylon Locknuts (50) onto the Bolts. **Do not tighten the Nylon Locknuts yet.** 







- Locate two 3/8" x 4 3/4" Bolts (46) and slide a 3/8" Flat Washer (55) onto each of them. Insert the Bolts through the indicated holes in the Top Frame (9) and then through the holes in the Main Upright (1). Slide a 3/8" Flat Washer onto each Bolt and secure it with a 3/8" Nylon Locknut (50). Do not tighten the Nylon Locknut yet.
- Slide a 3/8" Flat Washer (55) onto a 3/8" x 4 3/4" Bolt (46) and push the Bolt through the Top Frame (9). Push the Bolt into the hole in the Support Upright (3) until the tip of the Bolt is visible inside the Upright. Slide the 1/2" x 1 13/16" Bushing (84) down into the Upright and push the Bolt all the way through the Bushing and the Upright. Note: Make sure you don't drop the Bushing into the Upright!

Slide a 3/8" Flat Washer (55) onto the Bolt and secure it with a 3/8" Nylon Locknut (50). **Do not tighten the Nylon Locknut yet.** 

Slide a 3/8" Flat Washer (55) onto a 3/8" x 2 3/4" Bolt (47) and insert the Bolt through the hole in the Support Upright (3) and the bracket on the Top Frame (9). Hand tighten a 3/8" Nylon Locknut (50) onto the Bolt. **Do not tighten the Nylon Locknut yet.** 

 Place the bracket on the lower end of the Weight Upright (2) over the indicated 3/8" x 2 3/4" Carriage Bolts (45) in the Weight Base (5). Hand tighten two 3/8" Nylon Locknuts (50) onto the Bolts. Do not tighten the Nylon Locknuts yet.

Locate two 3/8" x 1 3/4" Bolts (57) and slide a 3/8" Flat Washer (55) onto each of them. Insert the Bolts through the indicated holes in the Weight Upright (2) and then through the bracket on the Support Upright (3). Secure the Bolts with two 3/8" Nylon Locknuts (50).

Go back and fully tighten all Nylon Locknuts used in steps 2 through 9.



 Attach two Bumpers (40) to the Weight Base (5) with two #8 x 1" Screws (78). Insert the two Weight Guides (15) through the indicated holes in the Weight Base (5).

See the inset drawing. Press two Weight Inserts (77) into the indicated holes in each Weight (21). Make sure the large pin groove is pointed downward, as shown. Slide all of the included Weights (21) onto the two Weight Guides (15). Make sure the Weights are oriented correctly. The adjustment holes must be turned towards the center of the unit, as shown.

For packaging purposes, the Top Weight (16) is mounted in the upper threaded hole in the Weight Tube (17). Unless you have bought the Weight Expansion Set with five extra weight plates along with your system, the Top Weight must be moved. Use the Allen Wrench (100) to loosen the Button Head Screw (52) and slide the Top Weight down to the lower of the two **threaded** holes in the Weight Tube, as shown. Lubricate the insides of the holes in the Top Weight (16). Press the Weight Tube Bumper (18) into the indicated end of the Weight Tube (17). Slide the Weight Tube (17) with the Top Weight (16) onto the Weight Guides (15). Attach the Allen Wrench Holder (79) to the indicated location on the Seat Frame (7)

Locate the decal sheet with the stickers showing the numbers 1 through 15. Place a sticker on each Weight (21) and the Top Weight (16) right next to the adjustment holes (see the inset drawing). The Top Weight must have the number 1 on it.

- 11. Slide a 3/8" Flat Washer (55) and a 5/8" x 1/2" Bushing (85) onto a 3/8" x 2 3/4" Bolt (47). Line up the hole in the indicated Weight Guide (15) with the hole in the Weight Base (5). Slide the 3/8" x 2 3/4" Bolt through the Weight Guide and the Weight Base. Slide a 5/8" x 1/2" Bushing (85) onto the Bolt. Secure the Bolt with a 3/8" Flat Washer (55) and a 3/8" Nylon Locknut (50).
- 12. Attach the upper ends of the Weight Guides (15) to the welded bracket underneath the Weight Upright (2) with two 3/8" x 1 3/4" Bolts (57) and two 3/8" Nylon Locknuts (50). **Tighten, but do not overtighten, the Nylon Locknuts.**



### **Arm Assembly**

#### 13. Press Arm Assembly—Locate and open the parts bag labeled "ARM ASSEMBLY."

Press a 2" Square Inner Cap (28) into the open end of each press arm on the Press Frame (8). Press a 1" Round Inner Cap (58) into each of the indicated holes on the press arms. Locate the Press Adjustment Frame (14).

14. Tap two 1" Retainer Rings (32) and a 1" Round Cover Cap (81) onto one end of the Press Frame Tube (34). Lubricate the Press Frame Tube in its entire length. Note: Use the Cover Cap to tap on the Retainer Rings. Make sure the teeth on the Retainer Rings bend towards the Cover Cap (see inset drawing).

Have one person lift up the Press Frame (8) while a second person slides the indicated end of the Press Frame Tube (34) through the bracket on the Top Frame (9) and the pre-assembled Large Bushings (44) in the Press Frame. Hold up the Press Adjustment Frame (14) and slide the Press Frame Tube through it and the bracket on the Top Frame. Secure the Press Frame Tube with two 1" Retainer Rings (32) and a 1" Round Cover Cap (81).

- 15. Butterfly Arm Assembly. Identify the Left Adjustment Disc (26) and Right Adjustment Disc (27) by looking at the three adjustment holes and orienting the Discs as shown in the drawing. Make sure a Butterfly Bushing (88) has been pre-assembled on each side of the Adjustment Discs. Lubricate the indicated rod on the crossbar attached to the Main Upright (1). Slide the Right Adjustment Disc (27) onto the rod. Secure the Adjustment Disc with a 3/4" Retainer Ring (31) and a 3/4" Dome Cap (82). Assemble the Left Adjustment Disc (26) in the same manner. Make sure the teeth on the Retainer Ring bend towards the Dome Cap as shown above.
- 16. Press two 2" Square Inner Caps (28) into the open ends of each Butterfly Arm (10). Wet the end of each Arm with soapy water. Slide a Butterfly Foam Pad (29) onto the indicated end of each Arm. Make sure a Butterfly Bushing (88) has been pre-assembled on each side of the Butterfly Arms.

Lubricate the indicated rod on the crossbar attached to the Main Upright (1). Orient one Butterfly Arm (10) as shown and slide it onto the rod. Secure the Butterfly Arm with a 3/4" Retainer Ring (31) and a 3/4" Dome Cap (82). **Make sure the teeth on the Retainer Ring bend towards the Dome Cap as shown above.** Assemble the other Butterfly Arm (10) on the opposite side of the crossbar. Follow the procedure described above, but orient the Butterfly Arm as shown.



17. Leg Lever Assembly. Attach a Bumper (40) to the Seat Frame (7) with a #8 x 1" Screw (78).

Press a 2" Square Inner Cap (28) into the indicated end of the Leg Lever (41).

Lubricate a 3/8" x 3" Bolt (53). Attach the Leg Lever (41) to the Seat Frame (7) with the 3/8" x 3" Bolt and a 3/8" Nylon Jamnut (63).



### **Cable Assembly**

 Locate and open the parts bag labeled "Cable Assembly and Pulleys." For Cable identification and routing during steps 18–39, refer to the Cable Diagram and Cable ID Chart on page 19.

Identify the Low Cable (72). It is approximately 176" long and it has a ball on one end and a bolt on the other.

Route the end of the Low Cable (72) with the ball through the bracket on the Weight Base (5) as shown. Attach the 3 1/2" Pulley (24) to the bracket with a 3/8" x 2" Bolt (54) and a 3/8" Nylon Locknut (50).



19. Wrap the Low Cable (72) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the welded tube on the Weight Upright (2) with a 3/8" x 3 3/4" Bolt (59) and a 3/8" Nylon Locknut (50). **Make sure the Cable Trap is oriented as shown.** 



20. Wrap the Low Cable (72) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the bracket on the Press Adjustment Frame (14) with a 3/8" x 3" Bolt (53), a 3/8" Flat Washer (55), a 5/8" x 1 1/4" Bushing (91) and a 3/8" Nylon Jamnut (63). **Make sure the Cable Trap is oriented as shown.** 

21. Route the Low Cable (72) through the indicated slot in the Support Upright (3) from above.

Locate the Small Pulley Frame (22) and remove both of the pre-assembled 3 1/2" Pulleys (24).

Wrap the Low Cable (72) around a 3 1/2" Pulley (24) in the direction shown. Attach the 3 1/2" Pulley (24) to the top half of the Small Pulley Frame (22) with a 3/8" x 2" Bolt (54) and a 3/8" Nylon Locknut (50). Note: The Pulley Frame must be oriented as shown.

Route the Low Cable (72) through the indicated slot in the Support Upright (3) from below.

22. Feed the bolt at the end of the Low Cable (72) through the indicated slot in the Weight Upright (2) from below.

Attach a 3 1/2" Pulley (24) inside the slot in the Weight Upright (2). To do this, slide a 3/8" Flat Washer (55) and a 5/8" x 1/2" Bushing (85) onto a 3/8" x 2 3/4" Bolt (47). Insert the Pulley into the slot in the Upright and hold it in position while pushing the Bolt through the hole in the Upright and the Pulley. Slide a 5/8" x 1/2" Bushing (85) and a 3/8" Flat Washer (55) onto the Bolt and secure it with a 3/8" Nylon Locknut (50). Make sure the Low Cable (72) is wrapped around the Pulley in the direction shown, and that it is between the welded rod inside the Upright and the Pulley.

23. Feed the end of the Low Cable (72) through the indicated slot in the Weight Upright (2) from above.

Wrap the Low Cable (72) around a 3 1/2" Pulley (24). Attach the 3 1/2" Pulley inside the slot in the Weight Upright (2) with a 3/8" x 2 3/4" Bolt (47), two 3/8" Flat Washers (55), two 5/8" x 1/2" Bushings (85) and a 3/8" Nylon Locknut (50). Make sure the Low Cable is wrapped around the Pulley in the direction shown, and that it is between the welded rod inside the Upright and the Pulley.



24. Thread the bolt at the end of the Low Cable (72) a couple of turns into the Weight Tube (17).

25. Identify the High Cable (73). It is approximately 340" long and it has a ball on one end and a loop on the other.

Route the end of the High Cable (73) with the loop through the slot in the Main Upright (1).

Wrap the end of the High Cable (73) with the ball around a 3 1/2" Pulley (24) as shown.

Attach the 3 1/2" Pulley (24) inside the slot in the Main Upright (1) with a 3/8" x 3 3/4" Bolt (59), two 3/8" Flat Washers (55), two 5/8" x 1" Bushings (86) and a 3/8" Nylon Locknut (50).

26. Route the end of the High Cable (73) with the loop through the bracket on the Main Upright (1) from above. Route the High Cable over a 3 1/2" Pulley (24) in the direction shown.

Slide the 3 1/2" Pulley (24) into the bracket on the Main Upright (1). Slide a 3/8" x 3" Bolt (53) through the bracket and the Pulley, but do not mount a Locknut yet.

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27. Locate the Adjustable Pulley Frame (23) and remove the 3 1/2" Pulleys (24) and Cable Traps (25).

Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown. Attach the 3 1/2" Pulley and a Cable Trap (25) to the top half of the Adjustable Pulley Frame (23) with a 3/8" x 2" Bolt (54) and a 3/8" Nylon Locknut (50). **Note: The Pulley must be attached to the upper of the three adjustment holes. Make sure the Cable Trap is oriented as shown.** 

Route the end of the High Cable (73) with the loop through the bracket on the Main Upright (1) from below.



28. Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown and route it back down through the bracket on the Main Upright (1).

Attach the 3 1/2" Pulley (24) inside the bracket on the Main Upright (1) with the 3/8" x 3" Bolt (53) that was inserted in step 26. Secure the Bolt with a 3/8" Nylon Locknut (50). Make sure the Pulley you are attaching in this step is on the correct side of the Pulley attached in step 26 (see the inset drawing).

29. Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) to the bracket on the Stabilizer (4) with a 3/8" x 2" Bolt (54) and a 3/8" Nylon Locknut (50).



Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the sidearm on the Stabilizer (4) with the 3/8" x 3 1/2" Carriage Bolt (62, inserted earlier) and a 3/8" Nylon Jamnut (63). Make sure the Cable Trap is oriented as shown.



31. Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the riser on the Weight Base (5) by sliding a 3/8" x 4 3/4" Bolt (46) through the Pulley, Cable Trap and riser. Do not use a 3/8" Nylon Locknut unless the Bolt slides out during the following step.

32. Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) to the lower half of the Small Pulley Frame (22) with a 3/8" x 2" Bolt (54) and a 3/8" Nylon Locknut (50).

33. Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the riser on the Weight Base (5) by sliding the Cable Trap and Pulley onto the 3/8" x 4 3/4" Bolt (46) attached in step 31. Thread a 3/8" Nylon Locknut (50) onto the Bolt and tighten it. **Make sure the Cable Traps for both of the Pulleys attached to the riser are oriented as shown in this step and in step 31.** 

Note: For the sake of clarity, drawing 33A shows some parts removed.

34. Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the sidearm on the Weight Base (5) by sliding the Pulley and Cable Trap onto the 3/8" x 3 1/2" Carriage Bolt (62) inserted earlier. Tighten a 3/8" Nylon Jamnut (63) onto the Bolt. **Make sure the Cable Trap is oriented as shown.** 





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35. Wrap the High Cable (73) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the welded tube on the Seat Base (6) by sliding the Pulley and Cable Trap onto the 3/8" x 3 1/2" Bolt (56) inserted earlier. Thread a 3/8" Nylon Locknut (50) onto the Bolt and tighten it. **Make sure the Cable Trap is oriented as shown.** 

Note: For the sake of clarity, drawing 35A shows some parts removed.



36. Route the High Cable (73) through the slot in the leg of the Seat Frame (7).

Attach the closed loop at the end of the High Cable (73) to the Leg Lever (41) with a 3/8" x 2 3/4" Bolt (47), two 3/8" Flat Washers (55) and a 3/8" Nylon Locknut (50). **Note: Do not overtighten the Nylon Locknut.** 



#### 37. Identify the Butterfly Cable (92). It is approximately 61" long and it has a loop on both ends.

Attach one end of the Butterfly Cable (92) to the Left Adjustment Disc (26) with a 5/16" x 1" Bolt (87), a 3/8" Flat Washer (55), a 1/2" x 3/8" Bushing (83) and a 5/16" Nylon Locknut (64). Note: The loop on the Cable must wrap around the 1/2" x 3/8" Bushing. For the sake of clarity, some parts have been removed and the Adjustment Disc is shown exploded.



38. Wrap the Butterfly Cable (92) around a 3 1/2" Pulley (24) in the direction shown.

Attach the 3 1/2" Pulley (24) and a Cable Trap (25) to the lower half of the Adjustable Pulley Frame (23) with a 3/8" x 2" Bolt (54) and a 3/8" Nylon Locknut (50). The Pulley must be attached to the middle of the three adjustment holes.

Note: For the sake of clarity, some parts have been removed from the drawing.

 Attach the free end of the Butterfly Cable (92) to the Right Adjustment Disc (27) with a 5/16" x 1" Bolt (87), a 3/8" Flat Washer (55), a 1/2" x 3/8" Bushing (83) and a 5/16" Nylon Locknut (64).

Note: The loop on the Cable must wrap around the 1/2" x 3/8" Bushing.





40. Important: Follow all three Cables from end to end and make sure they rest in the grooves of all Pulleys and that both the Cables and the Pulleys move smoothly. Attach the bolt at the end of the Low Cable (72), the 1/2" Plain Nut (68), the 1 1/2" Flat Washer (48) and the Adjustment Tube (89) to the Weight Tube (17) in the order shown. Note: The bolt at the end of the Low Cable is one of the means for tightening the Cables (72, 73 and 92). Thread the bolt into the Weight Tube until all Cables are tight and rest firmly in the grooves of all Pulleys. Then tighten the 1/2" Plain Nut (68) onto the 1 1/2" Washer (48).

Insert the Weight Pin (19) into one of the holes between the Weights (21).

### **Seat Assembly**

41. Locate and open the parts bag labeled "Seat Assembly."

Press a 1 1/4" Square Inner Cap (98) into the indicated end of the Backrest Center Tube (38). Attach the Backrest Center Tube to the bracket on the Seat Frame (7) with a 3/8" x 2 3/4" Bolt (47) and a 3/8" Nylon Locknut (50). Slide the Backrest Adjustment Tube (39) onto the Backrest Center Tube (38). If necessary, pull out the Short Adjustment Knob (51).

42. Press a 1" x 1 1/2" Inner Cap (96) into each end of both Backrest Frames (37).

Identify the Right Backrest Frame (101) and the Left Backrest Frame (37) by looking at the welded bushings. Orient the Backrest Frames so the welded bushings are facing the Seat Frame (7) and are on the lower edge of the Backrest Frames. Attach the Backrest Frames (37, 101) to the indicated hole in the Seat Frame (7) with a  $3/8" \ge 6 1/2"$  Bolt (65) and a 3/8" Nylon Locknut (50).

Attach the Backrest Frames (37) to the indicated hole in the Backrest Adjustment Tube (39) with a 3/8" x 6 1/2" Bolt (65) and a 3/8" Nylon Locknut (50).

Attach the Backrest (12) to the Backrest Frames (37) with four 1/4" x 2" Bolts (74) and four 1/4" Flat Washers (71).

Attach the Seat (13) to the brackets on the Seat Frame (7) with four  $1/4 \times 3/4$ " Bolts (49).









44. Press two 3/4" Round Inner Caps (43) into each Pad Tube (42).

Insert one Pad Tube (42) into the Seat Frame (7). Slide a Foam Roller (30) onto each end of the Pad Tube.

Insert the other Pad Tube (42) into the Leg Lever (41). Slide a Foam Roller (30) onto each end of the Pad Tube.

### **Miscellaneous Assembly**

45. Identify the Right Shroud (36) which is the one that does not have a slot in it.

Attach the Right Shroud (36) to the indicated brackets on the Weight Base (5) with two 1/4" x 5/8" Bolts (80). **Do not tighten the Bolts yet.** 

46. Attach the Right Shroud (36) to the indicated bracket on the Weight Upright (2) with a 1/4" x 5/8" Bolt (80).Do not tighten the Bolt yet.







47. Follow the procedure described in steps 45 and 46 to attach the Left Shroud (35) on the opposite side of the weight stack.

Attach both Shrouds (35, 36) to the end of the top bar on the Weight Upright (2) with a 1/4" x 5/8" Bolt (80).

Tie the Shrouds (35, 36) together with four 1/4" x 5/8" Bolts (80).

Go back and fully tighten all of the 1/4" x 5/8" Bolts (80) used to attach both Shrouds (35, 36).



48. The decal shown below has been attached to the home gym system in the location shown. If the decal is missing or illegible, please call our customer hotline at the number on the front cover to order a replacement decal. Apply the new decal in the appropriate location.



49. Make sure that all parts have been properly tightened. The use of the remaining parts will be explained in ADJUSTMENT, beginning on page 20 of this manual.

Before using the home gym system, pull each cable a few times to make sure that the cables move smoothly over the pulleys. If one of the cables does not move smoothly, find and correct the problem. **IMPORTANT:** If the cables are not properly installed, they may be damaged when heavy weight is used. If there is any slack in the cables, you will need to remove the slack by tightening the cables. See TROUBLE-SHOOTING AND MAINTENANCE on page 23.

### Cable Diagram

The Cable Diagrams below show the proper routing of the Butterfly Cable (92), the High Cable (73) and the Low Cable (72). The numbers show the correct route for each Cable. Make sure the Cables are routed correctly, that the Pulleys move smoothly and that the Cable Traps do not touch or bind the Cables. Incorrect cable routing can damage the weight system.



### Adjustment

The instructions below describe how each part of the home gym system can be adjusted. Refer to the exercise guide accompanying this manual to see how the home gym system should be set up for each exercise. **IMPOR-TANT:** When attaching the lat bar or ab strap, make sure that the attachments are in the correct starting position for the exercise to be performed. If there is any slack in the cables or chain as an exercise is performed, the effectiveness of the exercise will be reduced.

### **Changing the Weight Setting**

To change the setting of the weight stack, insert a Weight Pin (19) under the desired Weight (21). Make sure you insert the Weight Pin as far as it will go. The weight setting of the weight stack can be changed from 10 pounds to 150 pounds, in increments of 10 pounds. Note: Due to the cables and pulleys, the amount of resistance at each exercise station may vary from the weight setting. Use the WEIGHT RESISTANCE CHART on page 22 to find the approximate amount of resistance at each weight station.

# Attaching the Lat Bar, Ankle Strap or Ab Strap to the Low Pulley Station

Attach the Lat Bar (61) to the Low Cable (72) with a Cable Clip (69). For some exercises, the Chain (67) should be attached between the Lat Bar and the Low Cable with two Cable Clips. **Adjust the length of the Chain between the Lat Bar and the Low Cable so the Lat Bar is in the correct starting position for the exercise to be performed.** 

The Ankle Strap (99) or Ab Strap (75) can be attached in the same manner.

# Attaching the Lat Bar, Ankle Strap or Ab Strap to the High Pulley Station

Attach the Lat Bar (61) to the High Cable (73) with a Cable Clip (69). For some exercises, the Chain (67) should be attached between the Lat Bar and the High Cable with two Cable Clips. Adjust the length of the Chain between the Lat Bar and the High Cable so the Lat Bar is in the correct starting position for the exercise to be performed.

The Ab Strap (75) or Ankle Strap (99) can be attached in the same manner.







#### **Adjusting the Press Arms**

Pull out on the Press Frame Knob (11) on the Press Frame (8) and pivot the press arms up or down to the desired position. Release the Press Frame Knob and let it snap into one of the adjustment holes in the cam on the Press Arm Adjustment Frame (14).

Note: Make sure the Butterfly Arms are in the storage position, as described on the next page, when you are using the press arms.

#### Adjusting the Position of the Backrest

Pull out the Short Adjustment Knob (51) on the Backrest Adjustment Tube (39) and pivot the Backrest (12) up or down to the desired position. Release the Adjustment Knob and let it snap into one of the adjustment holes in the Backrest Center Tube (38, not visible).

# Coordinating the Positions of the Backrest and Press Frame

For many exercises, the Press Frame (8) and the Backrest (12) must be in the correct positions relative to each other. The Press Frame can be set in 12 different positions, as indicated by the decal on the cam of the Press Arm Adjustment Frame (see drawing A). The Backrest can be set to six different positions, as shown on drawing B. The positions of the Backrest and Press Frame correspond in the following manner:

**1. Decline, Row, Butterfly, Lat**. With the Backrest in this position (1. on drawing B), you can use the Butterfly Arms or the Lat Bar by setting the Press Frame in the Storage Position (see the next page). For row exercises, set the Press Frame in one of the three Row positions.

**2. Decline.** With the Backrest raised to this position, the Press Frame should be in one of the three Decline positions.

**3. Decline/Incline Combo.** With the Backrest in this position, the Press Frame should be in the third Decline position or one of the three Press positions.

**4. Press/Incline.** With the Backrest in this position, the Press Frame should be in the third Press position or one of the three Incline positions.

**5. Incline/Shoulder.** With the Backrest in this position, the Press Frame should be in the third Incline position or one of the three Shoulder positions.

**6. Shoulder.** With the Backrest in this position, the Press Frame should be in one of the three Shoulder positions.



#### Adjusting the Butterfly Arms

Make sure the Backrest (12) is in the horizontal position as described on the previous page. Pull out the Adjustment Knob (66) on one of the Adjustment Discs (26, 27) and pivot the Butterfly Arm (10 or 11) up or down to the desired position. Release the Adjustment Knob and let it snap into one of the adjustment holes in the Disc.

Note: The Adjustment Discs (26, 27) each have three adjustment holes for use during regular exercises. Each Disc also has one hole for use when the Butterfly Arms are stored in a vertical position, pointing towards the floor.



### Weight Resistance Chart

The chart below shows the approximate weight resistance at each exercise station. "Top" refers to the 10 lb. top weight; the other numbers refer to the 10 lb. weight plates. Note: The actual resistance at each station may vary due to differences in individual weight plates as well as friction between the cables, pulleys, and weight guides. This chart shows the resistance for the five extra weight plates included with the Weight Expansion Set (see No. 16-20 below). The set is available as a separate purchase; ask for Model No. HRSA15080.

Weight Plates	Press Arm (Ibs.)	Lower Pulley (Ibs.)	Upper Pulley (Ibs.)	Butterfly (one side) (Ibs.)	Leg Lever (Ibs.)	
Top-1	15	18	16	9	15	
2	24	31	26	15	27	
3	35	40	38	19	37	
4	46	54	49	25	49	
5	56	64	57	28	59	
6	67	76	69	32	71	
7	77	87	80	37	84	
8	87	99	94	43	94	
9	99	110	104	50	107	
10	110	122	116	56	114	
11	119	133	128	63	128	
12	129	145	142	65	139	
13	139	159	151	72	149	
14	150	172	164	80	162	
15	163	183	174	81	173	
*16	169	199	183	87	154	
*17	182	213	196	93	198	
*18	194	223	209	97	206	
*19	202	228	219	102	220	
*20	211	240	229	109	234	

### **Trouble-shooting and Maintenance**

Inspect and tighten all parts each time you use the home gym system. Replace any worn parts immediately. The home gym system can be cleaned using a damp cloth and mild non-abrasive detergent. Do not use solvents.

#### **Tightening the Cables**

Woven cable, the type of cable used on the home gym system, can stretch slightly when it is first used. If there is slack in the Cables before resistance is felt, the Cables should be tightened.

Slack can be removed by moving one or both of the 3 1/2" Pulleys (24) attached to the Adjustable Pulley Frame (23).

To move one Pulley, unscrew the 3/8" Nylon Locknut (50) and the 3/8" x 2" Bolt (54). Remove the Cable Trap (25) and Pulley (24) from the Adjustable Pulley Frame (23). Re-attach the Pulley and Cable Trap to the appropriate adjustment hole in the Pulley Frame.

Note: Begin by moving one Pulley to the second adjustment hole. If the Cables are still too loose, move the same Pulley to the third hole. If additional adjustment is needed, move the second Pulley until the Cables are tight.

The Cables can also be tightened by adjusting the bolt at the end of the Low Cable (72). To do this, the Shrouds (35, 36, not shown) must be removed. Follow assembly steps 45 to 47 in the opposite order to remove the Shrouds.

When the Shrouds have been removed, insert the Weight Pin (19, not shown) between the third and the fourth Weight (21), counting from the top. See "Changing the Weight Setting" on page 20 for instructions on moving the Weight Pin.

Loosen the 1/2" Plain Nut (68) securing the bolt at the end of the Low Cable (72). Tighten the bolt a couple of turns into the Weight Tube (17) until the Cables feel tighter. Tighten the Plain Nut to prevent the bolt from turning.

# Note: If a Cable tends to slip off the Pulleys often, the Cable may have become twisted. Remove the Cable and re-install it.

If the Cables need to be replaced, see ORDERING REPLACEMENT PARTS on the back cover of this manual.







### Part Identification Chart - Model No. HRSY23080



1 1/2" Flat Washer (48)



3/8" Flat Washer (55)





5/16" Nylon Locknut (64)



1/2" Plain Nut (68)



1/4" Nylon Jamnut (94)

#8 x 1" Screw (78)



3/8" Nylon Locknut (50)



3/8" Nylon Jamnut (63)

1/4" x 3/4" Bolt (49)



1/4" x 1 1/2" Bolt (95)

1/4" x 2" Bolt (74)

5/16" x 1" Bolt (87)

3/8" x 1 1/2" Button Head Screw (52)

1/4" x 5/8" Bolt (80)

3/8" x 1 3/4" Bolt (57)	
3/8" x 2" Bolt (54)	(2)
3/8" x 2 3/4" Bolt (47)	3/8" x 6 1/2" Bolt (65)
3/8" x 2 3/4" Carriage Bolt (45)	3/8
3/8" x 3" Bolt (53)	
3/8" x 3 1/2" Bolt (56)	
3/8" x 3 1/2" Carriage Bolt (62)	
3/8" x 3 3/4" Bolt (59)	

### Part List - Model No. HRSY23080

Key No.	Qty.	Description	Key No.	Qty.	Description
1	1	Main Upright	53	9	3/8" x 3" Bolt
2	1	Weight Upright	54	6	3/8" x 2" Bolt
3	1	Support Upright	55	28	3/8" Flat Washer
4	1	Stabilizer	56	1	3/8" x 3 1/2" Bolt
5	1	Weight Base	57	4	3/8" x 1 3/4" Bolt
6	1	Seat Base	58	4	1" Round Inner Cap
7	1	Seat Frame	59	2	3/8" x 3 3/4" Bolt
8	1	Press frame	60	1	2" Leg Lever Cap
9	1	Top Frame	61	1	Lat Bar
10	2	Butterfly Arm	62	2	3/8" x 3 1/2" Carriage Bolt
11	1	Press Frame Knob	63	4	3/8" Nylon Jamnut
12	1	Backrest	64	2	5/16" Nylon Locknut
13	1	Seat	65	2	3/8" x 6 1/2" Bolt
14	1	Press Arm Adjustment Frame	66	2	Adjustment Knob
15	2	Weight Guide	67	1	16" Chain
16	1	Top Weight	68	1	1/2" Plain Nut
17	1	Weight Tube	69	2	Cable Clip
18	1	Weight Tube Bumper	70	2	Small Grip
19	1	Weight Pin	71	4	1/4" Flat Washer
20	1	Weight Cover	72	1	Low Cable
21	14	Weight	73	1	High Cable
22	1	Small Pulley Frame	74	4	1/4" x 2" Bolt
23	1	Adjustable Pulley Frame	75	1	Ab Strap
24	18	3 1/2" Pulley	76	1	1/2" x 3/4" Bushing
25	9	Cable Trap	77	28	Weight Insert
26	1	Left Adjustment Disc	78	3	#8 x 1" Screw
27	1	Right Adjustment Disc	79	1	Allen Wrench Holder
28	12	2" Square Inner Cap	80	11	1/4" x 5/8" Bolt
29	2	Butterfly Foam Pad	81	2	1" Round Cover Cap
30	4	Foam Roller	82	4	3/4" Dome Cap
31	4	3/4" Retainer Ring	83	2	1/2" x 3/8" Bushing
32	4	1"Retainer Ring	84	1	1/2" x 1 13/16" Bushing
33	5	2" Square Cover Cap	85	6	5/8" x 1/2" Bushing
34	1	Press Frame Tube	86	2	5/8" x 1" Bushing
35	1	Left Shroud	87	2	5/16" x 1" Bolt
36	1	Right Shroud	88	8	Butterfly Bushing
37	1	Left Backrest Frame	89	1	Adjustment Tube
38	1	Backrest Center Tube	90	2	Leg Lever Bushing
39	1	Backrest Adjustment Tube	91	1	5/8" x 1 1/4" Bushing
40	3	Bumper	92	1	Butterfly Cable
41	1	Leg Lever	93	1	Weight Support Plate
42	2	Pad Tube	94	4	1/4" Nylon Jamnut
43	4	3/4" Round inner Cap	95	4	1/4" x 1 1/2" Bolt
44	4	Large Bushing	96	4	1" x 1 1/2" Inner Cap
45	8	3/8" x 2 3/4" Carriage Bolt	97	2	1 1/2" x 2" Inner Cap
46	4	3/8" x 4 3/4" Bolt	98	1	1 1/4" Inner Cap
47	6	3/8" x 2 3/4" Bolt	99	1	Ankle Strap
48	1	1/2" Flat washer	100	1	Allen Wrench
49	4	1/4" x 3/4" Bolt	101	1	Right Backrest Frame
50	40	3/8" Nylon Locknut	#	1	User's Manual
51	1	Small Adjustment Knob	#	1	Exercise Guide
52	1	3/8" x 1 1/2" Button Head Screw	#	1	Decal Sheet

Note: "#" indicates a non-illustrated part. Specifications are subject to change without notice.

### Exploded Drawing— Model No. HRSY23080

R0199A



### **Ordering Replacement Parts**

To order replacement parts, simply call our Customer Service Department toll-free at 1-800-999-3756, Monday through Friday, 6 a.m. until 6 p.m. Mountain Time (excluding holidays). To help us assist you, please be prepared to give the following information:

- 1. The MODEL NUMBER of the product (HRSY23080).
- 2. The NAME of the product (HEALTHRIDER<sup>®</sup> 230 Home Gym System).
- 3. The SERIAL NUMBER of the product (see the front cover of this manual).
- 4. The KEY NUMBER and DESCRIPTION of the part(s) (see the PART LIST and EXPLODED DRAWING attached at the center of this manual).

### **Limited Warranty**

ICON Health & Fitness, Inc. (ICON), warrants this product to be free from defects in workmanship and material, under normal use and service conditions, for a period of ninety (90) days from the date of purchase. This warranty extends only to the original purchaser. ICON's obligation under this warranty is limited to replacing or repairing, at ICON's option, the product at one of its authorized service centers. All products for which warranty claim is made must be received by ICON at one of its authorized service centers with all freight and other transportation charges prepaid, accompanied by sufficient proof of purchase. All returns must be pre-authorized by ICON. 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 not provided by an ICON authorized service center, products used for commercial or rental purposes, or products used as store display models. No other warranty beyond that specifically set forth above is authorized by ICON.

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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.

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