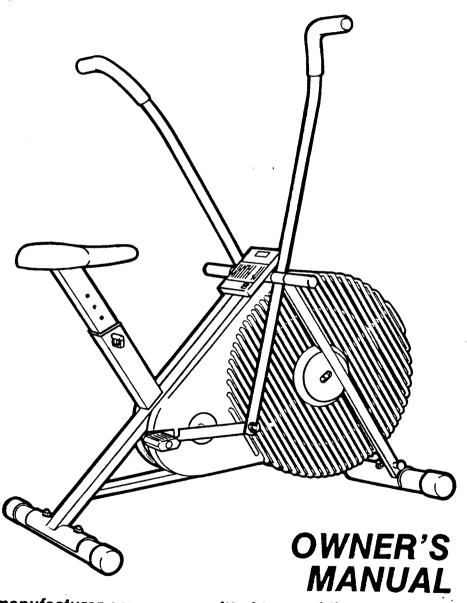
# A Record of the Control of the Contr

# Model No. PF411700 Serial No. Write the serial number in the space above for reference.

Serial Number Decal

# PROGRAMMABLE RESISTANCE FITNESS TRAINER



PATENT PENDING

QUESTIONS?: As a manufacturer, we are committed to providing you complete customer satisfaction. If you have questions, or find damaged or missing parts, we will guarantee you direct assistance from the factory. AVOID THE HASSLE OF TRYING TO CONTACT OR RETURN TO THE STORE WHERE YOU PURCHASED YOUR PRODUCT. Let our trained technicians help you. For immediate assistance, call our "CONSUMER HOT LINE" at no charge to you, 1-800-999-3756, Mon.- Fri., 6 am - 6 pm MST.

CAUTION: Read all safety precautions and instructions in this owner's manual carefully before using this equipment. Save this manual for your future reference.

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# LIMITED WARRANTY

Pro Form Fitness Products, Inc. ("Pro Form") 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. Pro Form's obligation under this Warranty is limited to replacing or repairing, at Pro Form's option, the product at one of its authorized service centers. All products for which warranty claim is made must be received by Pro Form 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 Pro Form. Pre-authorization may be obtained by calling Pro Form's Customer Service Department at 1-800-999-3756. 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 a Pro Form authorized service center or for products used for commercial or rental purposes. No other warranty beyond that specifically set forth above is

PRO FORM 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 ENJOYMENT OR USE, COSTS OF REMOVAL, INSTALLATION OR OTHER CONSEQUENTIAL DAMAGES OF WHATSOEVER NATURE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTIAL OR CONSEQUENTIAL DAMAGES. ACCORDINGLY, THE ABOVE LIMITATION MAY NOT APPLY

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 ALLCW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. ACCORDINGLY, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

PRO FORM Fitness Products, Inc., P.O. Box.4087, Logan, UT 84321

# IMPORTANT SAFETY PRECAUTIONS

WARNING: To reduce the risk of burns, fire, electric shock or injury to persons, read the following important safety precautions and information before operating the exercise bike.

- Plug the power cord directly into any standard outlet. Position the cord on the floor away from walkways. Keep the cord away from heated surfaces. Do not use an extension cord.
- 2. Never operate the exercise bike if the power cord or plug are damaged, or if the bike is not functioning properly. (Refer to the BEFORE YOU BEGIN section in this case.)
- 3. Position the exercise bike on a level surface. Do not use the bike near water or outdoors.
- 4. Wear appropriate workout clothing when exercising. Do not wear flowing clothing that could become caught in the bike. Always wear running or aerobic shoes.
- 5. Keep small children away from the bike during use.
- 6. Use this exercise bike only as described in this manual. Servicing other than the procedures described in this manual should be performed by an authorized service representative only.

WARNING: Before beginning this or 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. Pro Form assumes no responsibility for personal injury or property damage sustained by or through the use of this Pro Form product.

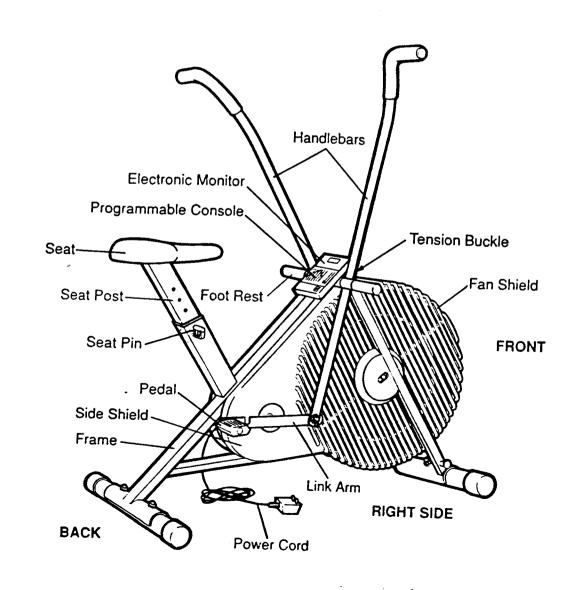
# SAVE THESE INSTRUCTIONS

### **BEFORE YOU BEGIN**

Thank you for selecting the Pro Form AIR CYCLE Programmable Resistance Fitness Trainer. The Proform AIR CYCLE blends advanced engineering and ergonomic styling to offer you an effective and enjoyable cardiovascular workout in the convenience and privacy of your home. The heart of the AIR CYCLE is a unique programmable console, designed to control pedaling resistance automatically according to custom workout programs you create.

For your safety and benefit, read this manual carefully before using this equipment. If you have additional questions, please call our Customer Service Department toll-free at 1-800-999-3756, during our business hours: Monday - Friday, 6 a.m. - 6 p.m. Mountain Time. In all communications regarding this product, please refer to the product model number and serial number. The model number is printed on the front cover of this manual. The serial number is recorded on a decal affixed to the product (see the drawing on the front cover).

Before reading the following sections of this manual, please review the drawing below and familiarize yourself with the parts labeled.

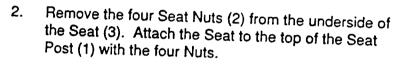


### **ASSEMBLY**

Place all parts in a cleared area and remove the packing materials. Do not dispose of the packing materials until the bike is fully assembled and all parts are accounted for. Read the instructions below carefully before beginning.

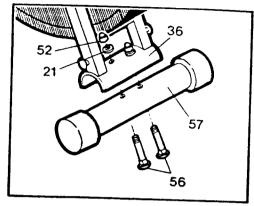
Attach a Stabilizer (57) to the front of the Frame (36) with two Carriage Bolts (56), Washers (21) and Acorn Nuts (52). (The Stabilizer must be turned so that the square holes in the Stabilizer are downward.)

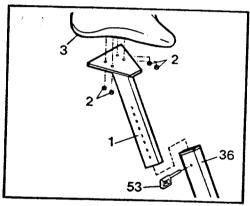
Attach the other Stabilizer to the back of the Frame in the same manner (not shown).

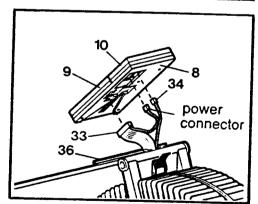


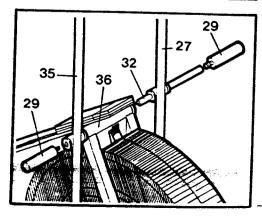
Insert the Seat Post into the Frame (36), adjust the Seat to the desired height, and insert the Seat Pin (53) through the Frame and Seat Post.

- 3. Plug the Sensor Wire (34) into the jack labeled "SPEED" on the Electronic Monitor. Plug the power connector into the jack labeled "POWER" on the Electronic Monitor (10). Plug the Wire Harness (33) into the back of the Programmable Console (9). Slide the Console Plate (8) onto the mounting bracket on the Frame (36).
- 4. Slide the Pivot Shaft (32) into the Frame (36). Slide the Left Handlebar (27) onto the left end of the Shaft. Slide the Right Handlebar (35) onto the right end of the Shaft. Attach the Handlebars by tightening the Foot Rests (29) into the ends of the Pivot Shaft. Note: Due to the action of the Handlebars, the Foot Rests should be tightened periodically.

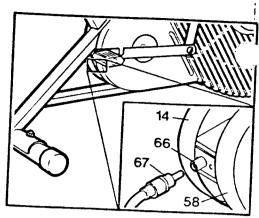






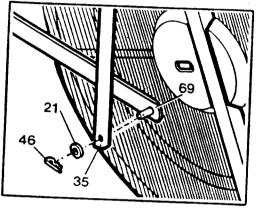


5. Plug the Power Cord (67) into the Power Plug (66) at the rear of the Side Shields(14,58).



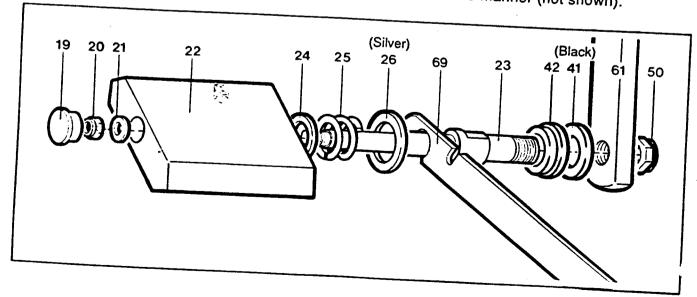
6. Insert the pin on the Right Link Arm (69) through the hole in the lower end of the Right Handlebar (35) and a Washer (21). (When the pin points outward as shown, the large opening in the other end of the Link Arm will be toward the floor.) Insert a Cotter Pin (46) through the pin.

Attach the Left Link Arm to the Left Handlebar in the same manner (not shown).



7. Slide a Link Arm Bushing (42) and a Link Arm Washer (41) onto the end of a Pedal Shaft (25) Shaft firmly. Tighten a Shaft Nut (50) onto the end of the Pedal Shaft. Fit the end of the Right Link Arm (69) over the Pedal Shaft and slide it onto the Link Arm Bushing. Slide a Pedal end of the Pedal Spring (25), Spring Washer (24) and Pedal (22) onto the Pedal Shaft. (The a Washer (21) and Pedal Nut (20). Press a Pedal Cap (19) into the end of the Pedal.

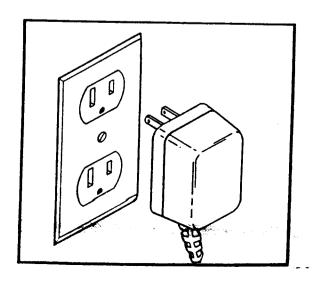
Attach the other Pedal to the left arm of the Crank in the same manner (not shown).

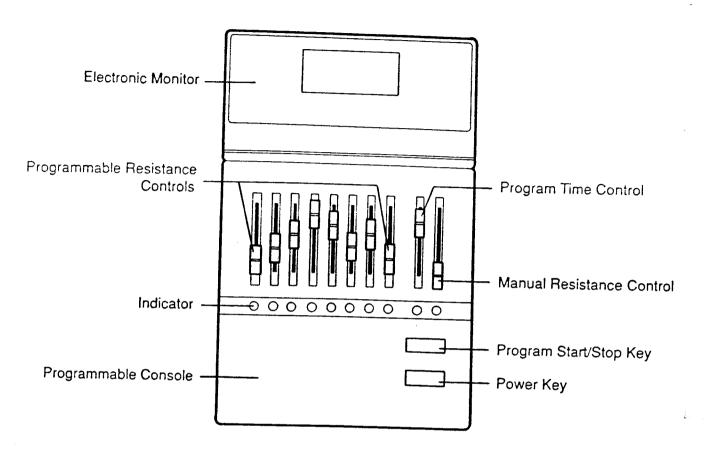


8. The Resistance Strap around the Fan has been tightened for shipping purposes (not shown). It may be necessary to loosen the Strap before using the exercise bike. See MAINTENANCE AND TROUBLE-SHOOTING on page 10 of this manual for Strap adjustment instructions.

# OPERATION AND ADJUSTMENT

Plug the transformer into a 120 volt outlet.





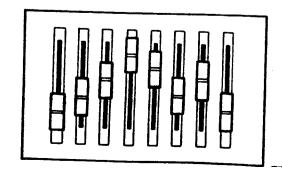
### MANUAL RESISTANCE MODE OPERATION

- 1. Before turning the power on, move the manual resistance control to the lowest position.
- 2. Turn the power on by pressing the power key.
- As you pedal the bike, move the manual resistance control slowly up or down until the desired resistance level is reached.

## PROGRAMMABLE RESISTANCE MODE OPERATION

The programmable resistance mode allows you to create custom workout programs. Simply set the length of time that you plan to exercise, and program eight resistance settings. With the touch of a key, the equalizer computer takes over, controlling pedaling resistance automatically as you exercise.

- 1. Set the program time control for the length of time that you plan to exercise, from 5 to 40 minutes.
- 2. Set the eight programmable resistance controls to the desired resistance levels. The controls can be set in an infinite variety of ways. A sample program is shown at right. This program begins with low resistance to give you a good warm-up. Then the resistance increases gradually to simulate a challenging climb. Next, a decrease in resistance provides a period of rest before a final climb, and the program ends with a low resistance setting to allow you to cool down.



3. Press the program start/stop key and begin pedaling. The indicator below the first programmable resistance control will light and the pedaling resistance will automatically adjust to the setting of the first control. After one-eighth of the total time has elapsed, the indicator below the second programmable resistance control will light and the pedaling resistance will adjust to the setting of the second control. (The console will sequentially activate all eight programmable resistance controls regardless of the length of time set.) When the total time has elapsed, the bike will return to the manual mode and the indicator below the manual resistance control will light.

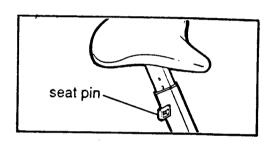
Note: The programmable resistance controls can be changed while the program is running if desired. To return the bike to the manual mode before the program has ended, simply press the program start/stop key.

## **ELECTRONIC MONITOR OPERATION**

See the Electronic Monitor Operation Guide accompanying this manual.

### SEAT ADJUSTMENT

Proper seat height is important for efficient exercise. As you pedal the bike, there should be a slight bend in your knees when the pedals are at the lowest position. To adjust the seat height: stand beside the bike, hold onto the seat and withdraw the seat pin. Raise or lower the seat, and reinsert the seat pin. CAUTION: Failure to fully insert the seat pin could result in injury.

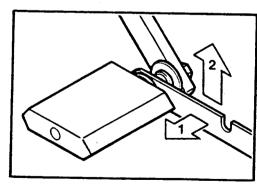


#### HANDLEBAR OPERATION

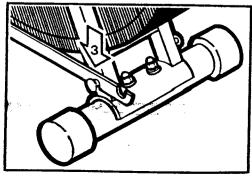
The handlebars are designed to be used either in a stationary position, for pedaling exercise only, or in a dual-action position, adding upper-body exercise to your workout.

#### STATIONARY MODE

To convert the handlebars to the stationary mode, first press the link arms outward against the pedal washers (1), and lift the link arms off the pedals (2).



Rotate the link arms up and forward, and clip the ends of the link arms onto the locking pegs on the bike frame (3). In the stationary mode, the muscles of the legs are emphasized.

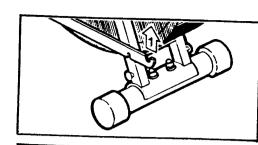


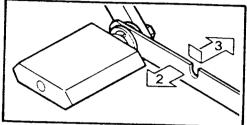
#### **DUAL-ACTION MODE**

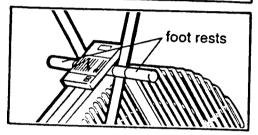
To convert the handlebars to the dual-action mode, first remove the link arms from the locking pegs on the frame (1). Rotate the link arms up and back until they reach the pedals.

Press the ends of the link arms outward against the pedal washers (2), and slide the link arms onto the link arm bushings (3). (The link arms fit tightly onto the link arm bushings. It may be necessary to move the link arms up and down slightly until they slide onto the link arm bushings.) In the dual-action mode, both the arms and legs can be exercised by pushing and pulling the handlebars as you pedal.

To isolate the muscles of the upper-body, you can rest your feet on the foot rests and exercise using only your arms. Note: Due to the action of the handlebars, the foot rests should be tightened periodically.





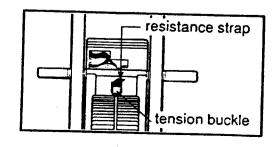


# MAINTENANCE AND TROUBLE-SHOOTING

This exercise bike is designed to be virtually maintenance-free. The foot rests and other parts should be tightened periodically. Apply a few drops of light, multi-purpose oil to the chain every three months through the opening in the left side shield. Place the bike in a cool, dry location, out of direct sunlight. During periods of nonuse, the bike should be covered.

If the electronic monitor appears to malfunction, the speed and power wires to the monitor should be checked. Slide the console plate off of the bike frame, and make sure that both wires are plugged fully into the back of the monitor. Replace the console plate on the bike frame.

If the range of pedaling resistance is too high or too low, it can be adjusted using the tension buckle located on the front of the bike frame above the fan guard. To raise the range of resistance, open the tension buckle, pull the resistance strap slightly tighter, and close the buckle. To lower the range of resistance, open the buckle, loosen the strap slightly, and close the buckle.



# TIGHTENING THE CHAIN

This exercise bike utilizes a high-precision chain which must be kept properly adjusted. If the chain is too loose, the fan may be damaged. If the chain is too tight, the bearings may be damaged. Check the chain periodically in the following manner.

- 1. Remove the right pedal assembly and the right side shield (see the exploded drawing).
- 2. Check the tightness of the chain. There should be almost no up and down movement in the chain.
- 3. If the chain is properly adjusted, reattach the right side shield and pedal assembly. If the chain requires adjustment, remove the fan shield from the front of the bike.
- 4. Locate the fan adjustment nut. If the chain is loose, turn the nut clockwise until the correct tension is reached. If the chain is too tight, turn the nut counterclockwise. Be sure the fan is aligned with the frame, and reattach the fan shield. Reattach the side shield and pedal assembly.

Always check the chain if it slips or causes excessive noise while pedaling. A few drops of light, multipurpose oil should be applied to the chain every three months.

# CONDITIONING GUIDELINES

The following guidelines will help you to plan and regulate your personal fitness program. Remember that adequate rest and good nutrition are also essential to the success of any fitness program. Before beginning this or any exercise program, consult your physician.

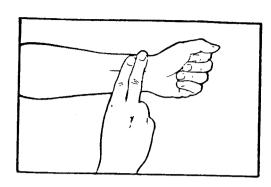
## **EXERCISE INTENSITY**

To maximize the benefits from exercising, your level of exertion must exceed mild demands while falling short of causing breathlessness and fatigue. The proper level of exertion can be determined using the heart rate as a guide. For effective aerobic exercise, the heart rate must be maintained at a level between 70% and 85% of your maximum heart rate. This is your "Training Zone." You can determine your Training Zone by consulting the table below. Training Zones are listed for both conditioned and unconditioned persons according to age. Use the column that is appropriate for you.

AGE	UNCONDITIONED TRAINING ZONE (BEATS/MIN)	CONDITIONED TRAINING ZONE (BEATS/MIN)	AGE	UNCONDITIONED TRAINING ZONE (BEATS/MIN)	CONDITIONED TRAINING ZONE (BEATS/MIN)
20	138-167	133-162	55	107.455	
25	136-166	132-160		127-155	122-149
30	135-164		60	126-153	121-147
35	1	130-158	65	125-151	119-145
	134-162	129-156	70	123-150	
40	132-161	127-155			118-144
45	131-159		75	122-147	117-142
		125-153	80	120-146	115-140
50	129-156	124-150	85	118-144	114-139

During the first few weeks of your exercise program, you should keep your heart rate near the low end of your Training Zone. Over the course of a few months, gradually increase your heart rate until it reaches the high end of your Training Zone. As your condition improves, a greater workload will be required in order to raise your heart rate to your Training Zone.

The easiest way to measure your heart rate is to stop exercising and place two fingers on your wrist where you feel a pulse. Carefully take a six-second heart beat count. (A six-second count is used because your heart rate will drop rapidly after you stop exercising.) Add a 0 to the result to find your heart rate. Compare your heart rate to your Training Zone. If your heart rate is too low, increase your level of exertion. If your heart rate is too high, decrease your level of exertion.



#### **WORKOUT PATTERN**

Each workout should consist of the following 5 basic parts: 1. At rest, 2. Warming up, 3. Training Zone exercise, 4. Cooling down, 5. At rest.

Warming up is an important part of every workout. Warming up prepares the body for more strenuous exercise by increasing circulation, delivering more oxygen to the muscles, and raising the body temperature. This can be done by stretching for 5-10 minutes prior to exercising.

After warming up, begin exercising at a low intensity level for a few minutes. Then increase the intensity to raise your heart rate to your Training Zone for a period of 20-30 minutes.

Cooling down after vigorous exercise is important in aiding circulation and preventing soreness. 5-10 minutes of stretching or light exercise will allow the body to cool down.

### **EXERCISE FREQUENCY**

To maintain or improve your condition, you must work out 2-3 times per week following the pattern described above. A day of rest between workouts is recommended. After several months of exercise, the number of workouts can be increased to 4-5 per week. The key to a successful program is REGULAR exercise.

### SUGGESTED STRETCHES

The following stretches provide a good warm-up, or cooldown. Move slowly as you stretch - never bounce.

### HAMSTRING STRETCH

Sit with one leg extended. Bring the sole of the opposite foot toward you, resting it against the extended leg's inner thigh. Stretch toward your toe as far as possible, hold for 15 counts, then relax. Repeat three times for both legs.

12\_\_\_\_ Stretches: Hamstrings, lower back and groin.

### INNER THIGH STRETCH

Sit with the soles of your feet together and knees outward. Pull your feet as close into the groin area as possible. Hold for 15 counts, then relax. Repeat three times.

Stretches: Quadriceps, hip muscles.

### TOE TOUCHES

Standing with your knees bent slightly, slowly bend forward from the hips. Allow your shoulders to relax as you stretch down toward your toes. Go as far as you can and hold for 15 counts, then relax. Repeat three times.

Stretches: Hamstrings, back of knees, back.

### QUADRICEPS STRETCH

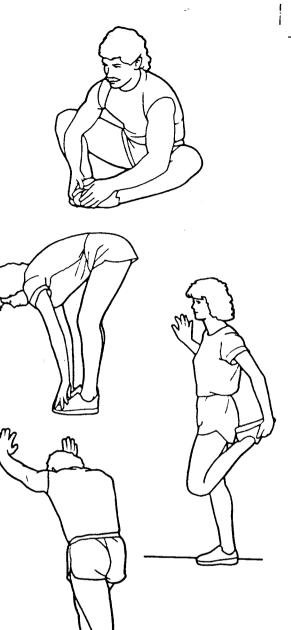
With one hand against a wall for balance, reach behind you and grasp your foot. Bring your heel as close to your buttocks as possible. Hold for 15 counts, then relax. Repeat three times for both legs.

Stretches: Quadriceps, hip muscles.

### CALF/ACHILLES STRETCH

With one leg in front of the other, and arms forward, lean against a wall. Keep your back leg straight and back foot flat on the floor. Bend your front leg and lean forward, moving your hips toward the wall. Hold for 15 counts, then repeat on the other side. To cause further stretching of the achilles tendons, bend back leg as well.

Stretches: Calves, achilles tendons, and ankles.



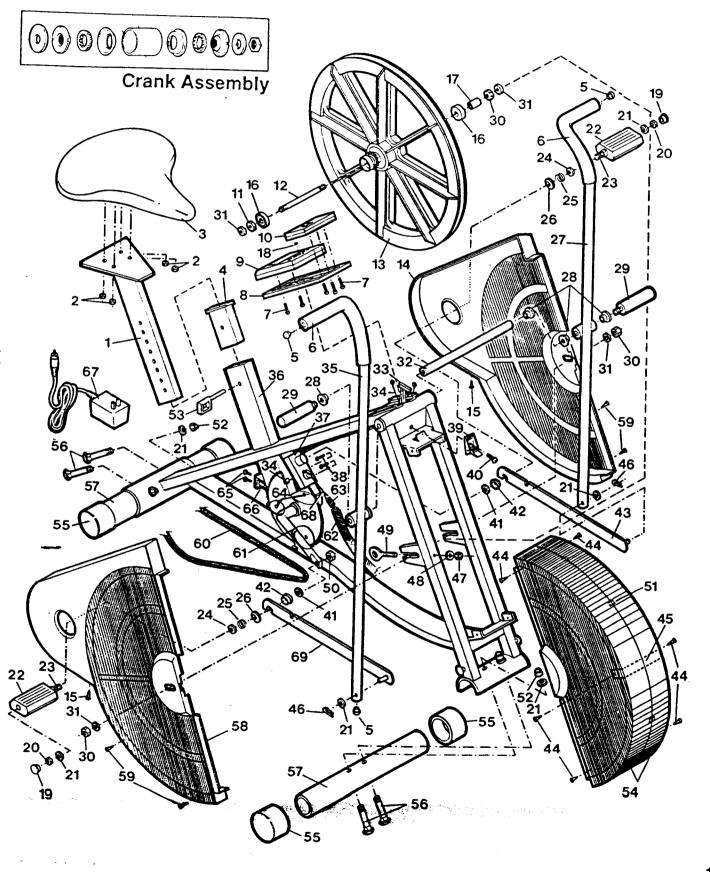
Key No.	Qty.	Description	Key No.	Qty.	Description
1	1	Seat Post	38	2	Tension Motor Screw
2	4	Seat Nut	39	1	Tension Buckle
3	1	Seat	40	1	Tension Buckle Screw
4	1	Seat Post Sleeve	41	2	Link Arm Washer
5	4	Handlebar Endcap	42	2	Link Arm Bushing
6	2	Foam Grip	43	1	Left Link Arm
7	5	Plate Screw	44	6	Fan Shield Screw
8	1	Console Plate	45	1	Fan Shield Bracket
9	1	Programmable Console	46	2	Cotter Pin
10	1	Electronic Monitor	47	1	Adjustment Nut
11	1	Thin Axle Nut	48	1	Adjustment Washer
12	1	Axle Shaft	49	1	Adjustment Bolt
13	1	Fan w/Sprocket	50	2	Shaft Nut
14	1	Left Side Shield	51	4	Fan Shield Clip
15	2	Side Shield Screw	52	4	Acorn Nut
16	2	Bearing	53	1	Seat Pin
17	1	Axle Spacer	54	2	Fan Shield
18 19	10	Console Knob	55	4	Stabilizer Cap
20	2	Pedal Cap	56	4	Carriage Bolt
21	8	Pedal Nut	57	2	Stabilizer
	· 2	Washer	58	1	Right Side Shield
23	2	Pedal Chaff	59	4	Self-Tapping Screw
24	2	Pedal Shaft	60	1	Chain
25	2	Shaft Washer	61	1	Crank/Sprocket Assembly
26	2	Pedal Spring Pedal Washer	62	1	Resistance Strap
27	1	Left Handlebar	63	1	Spring Assembly
28	6	Pivot Bushing	64	3	Sensor Magnet
29	2	Foot Rest	65	2	Power Plug Screw
30	3	Axle Nut	66	1	Power Plug
31	4	Axle Washer	67	1	Power Cord
32	1	Pivot Shaft	68	1	Tension Rope
33	1	Mira Harras	69 	1	Right Link Arm
34	1	Sensor Wire/Reed Switch	#	1	Owner's Manual
35	1	Right Handlebar	#	1	Monitor Operation Guide
36	1	Frame			
37	1	Tension Motor Assembly			

Note: "#" indicates a non-illustrated part. Specifications are subject to change without notice. See the back cover for information on ordering replacement parts.

# **EXPLODED DRAWING - MODEL NO. PF411700**

Rev 10/90

Specifications are subject to change without notice.



# **ORDERING REPLACEMENT PARTS**

Replacement parts can be ordered by calling our Customer Service Department toll-free at 1-800-999-3756, during our business hours: Monday - Friday, 6 a.m. - 6 p.m., Mountain Time. When ordering parts, please be prepared to give the following information:

- 1. The MODEL NUMBER of the product (PF411700).
- 2. The NAME of the product (Pro Form AIR CYCLE Programmable Resistance Fitness Trainer).
- 3. The SERIAL NUMBER of the product (see the front cover of this manual).
- 4. The KEY NUMBER of the part from page 14 of this manual.
- 5. The DESCRIPTION of the part from page 14 of this manual.

If possible, place the exercise bike near your telephone for easy reference when calling.