

## Owner's Manual

**Model No.**  
16807058000  
CRS800S

- Assembly
- Operation
- Adjustments
- Parts
- Warranty

**CAUTION:**  
Read and  
understand this  
manual before  
operating unit

# SPIRIT



**Retain For Future  
Reference**

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***Thank you for purchasing our product, please save these instructions. Please do not perform or attempt any customizing, adjustments, repair or maintenance that is not described in this manual.***

# ***SPIRIT***

**CONGRATULATIONS ON YOUR  
NEW RECUMBENT STEPPER AND  
WELCOME TO THE SPIRIT FAMILY!**

Thank you for your purchase of this quality recumbent stepper from Dyaco Canada Inc. Your new stepper was manufactured by one of the leading fitness manufacturers in the world and is backed by one of the most comprehensive warranties available. Through your dealer, Dyaco Canada Inc. will do all we can to make your ownership experience as pleasant as possible for many years to come. The local dealership where you purchased this stepper is your administrator for all warranty and service needs. Their responsibility is to provide you with the technical knowledge and service personnel to make your experience more informed and any difficulties easier to remedy.

Please take a moment at this time to record the name of the dealer, their telephone number, and the date of purchase below to make any future needed contact easy. We appreciate your support, and we will always remember that you are the reason that we are in business.

Please go to [www.dyaco.ca/warranty.html](http://www.dyaco.ca/warranty.html) and complete the online warranty registration.

Yours in Health,  
Dyaco Canada Inc.

**Name of Dealer** \_\_\_\_\_

**Telephone Number of Dealer** \_\_\_\_\_

**Purchase Date** \_\_\_\_\_

## ***Product Registration***

### **RECORD YOUR SERIAL NUMBER**

Please record the Serial Number of this fitness product in the space provided below.

**Serial Number** \_\_\_\_\_

### **REGISTER YOUR PURCHASE**

Please visit us at [www.dyaco.ca/warranty.html](http://www.dyaco.ca/warranty.html) to register your purchase.

## BEFORE YOU BEGIN

Thank you for choosing the SPIRIT CRS800S Recumbent Stepper. We take great pride in producing this quality product and hope it will provide many hours of quality exercise to make you feel better, look better, and enjoy life to its fullest. It's a proven fact that a regular exercise program can improve your physical and mental health. Too often, our busy lifestyles limit our time and opportunity to exercise. The SPIRIT CRS800S Recumbent Stepper provides a convenient and simple method to begin your assault on getting your body in shape and achieving a happier and healthier lifestyle. Before reading further, please review the drawing below and familiarize yourself with the parts that are labelled.

Read this manual carefully before using the SPIRIT CRS800S Recumbent Stepper. Although Dyaco Canada Inc. constructs its products with the finest materials and uses the highest standards of manufacturing and quality control, there can sometimes be missing parts or incorrectly sized parts. If you have any questions or problems with the parts included with your SPIRIT CRS800S Recumbent Stepper, please do not return the product. Contact us **FIRST!** If a part is missing or defective, call us toll-free at 1-888-707-1880. Our Customer Service Staff are available to assist you from 8:30 A.M. to 5:00 P.M. (Eastern Time) Monday through Friday. Be sure to have the name and model number of the product available when you contact us.



# SAFETY PRECAUTIONS

## IMPORTANT SAFETY INFORMATION THIS UNIT IS INTENDED FOR HOUSEHOLD USE ONLY READ ALL INSTRUCTIONS BEFORE USING THIS STEPPER

**CAUTION:** Before starting any exercise program, it is recommended that you consult your physician.

Thank you for purchasing our product. Even though we go to great efforts to ensure the quality of each product we produce, occasional errors and/or omissions do occur. In any event, should you find this product to have either a defective or a missing part, please contact us for a replacement.

This exercise equipment was designed and built for optimum safety. However, certain precautions apply whenever you operate a piece of exercise equipment. Be sure to read the entire manual before assembly and operation of this machine. Also, please note the following safety precautions:

1. Read the OWNER'S OPERATING MANUAL and all accompanying literature and follow it carefully before using your stepper.
2. It is the responsibility of the owner to ensure that all users of the stepper exerciser are adequately informed of all precautions.
3. If dizziness, nausea, chest pains, or any other abnormal symptoms are experienced while using this equipment, STOP the workout at once. CONSULT A PHYSICIAN IMMEDIATELY.
4. Inspect your exercise equipment prior to exercising to ensure that all nuts and bolts are fully tightened before each use.
5. The stepper must be regularly checked for signs of wear and damage. Any part found defective; the part must be replaced with a new spare part from the manufacturer.
6. Fitness equipment must always be installed on a flat surface, do not place the unit on a loose rug or uneven surface. It is recommended to use an equipment mat to prevent the unit from moving while it is being used, which could possibly scratch or damage the surface of your floor. Keep the stepper exerciser indoors, away from moisture and dust.
7. No changes must be made which might compromise the safety of the equipment.
8. It is recommended to have a minimum of 1' safe clearance around the exercise equipment while in use.
9. Keep children and pets away from this equipment at all times while exercising.
10. Warm-up 5 to 10 minutes before each workout and cool down 5 to 10 minutes afterward. This allows your heart rate to gradually increase and decrease and will help prevent you from straining muscles.
11. Never hold your breath while exercising. Breathing should remain at a normal rate in conjunction with the level of exercise being performed
12. Always wear suitable clothing and footwear while exercising. Do not wear loose-fitting clothing that could become entangled with the moving parts of your stepper.
13. Always hold the handlebars when mounting, dismounting, or using the stepper exerciser.
14. Keep your back straight when using the stepper exerciser; do not arch your back.
15. When you stop exercising, allow the pedals to slowly come to a complete stop. The stepper exerciser does not have a freewheel; the pedals will continue to move until the flywheel stops.
16. Always unplug the power cord immediately after use and before cleaning the stepper exerciser.
17. If decals on the stepper exerciser are missing or illegible, please call our customer service department toll-free at 1-888-707-1880 and order a replacement decal.
18. Care must be taken when lifting or moving the equipment so as not to injure your back. Always use proper lifting techniques
19. User weight should not exceed 450 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. We assume no responsibility for personal injury or property damage sustained by or through the use of this product.

## SAVE THESE INSTRUCTIONS

# IMPORTANT SAFETY INSTRUCTIONS

**WARNING** - Read all instructions before using this equipment.

**DANGER** - To reduce the risk of electric shock: Always unplug this exercise equipment from the electrical outlet immediately after using and before cleaning.

**WARNING** - To reduce the risk of burns, fire, electric shock, or injury to persons, install the Stepper on a flat level surface with access to a 120-volt, 15-amp grounded outlet with only the Stepper plugged into the circuit.

**DO NOT USE AN EXTENSION CORD UNLESS IT IS 14 AWG OR BETTER, WITH ONLY ONE OUTLET ON THE END.** The recumbent stepper should be the only equipment in the circuit in which it is connected. **DO NOT ATTEMPT TO DISABLE THE GROUNDED PLUG BY USING IMPROPER ADAPTERS OR IN ANY WAY MODIFY THE CORD SET.** A serious shock or fire hazard may result along with computer malfunctions. **DO NOT USE AN EXTENSION CORD UNLESS IT IS A 14AWG OR BETTER, WITH ONLY ONE OUTLET ON THE END:**

- Do not operate Stepper on deeply padded, plush or shag carpet. Damage to both carpet and Stepper may result.
- Keep children away from the Stepper. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the Stepper if it has a damaged cord or plug. If the Stepper is not working properly, call your dealer.
- Keep the cord away from heated surfaces.
- Do not operate where aerosol spray products are being used or where oxygen is being administered. Sparks from the motor may ignite a highly gaseous environment.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position, then remove the plug from the outlet.
- Please make sure that the power-supply cord and adapter are placed in a dry area and kept away from heat.
- Do not attempt to use your Stepper for any purpose other than for the purpose it is intended.
- The hand pulse sensors are not medical devices. Their purpose is to provide you with an approximate measurement in relation to your target heart rate. The use of a chest transmitter strap (sold separately) is a much more accurate method of heart rate analysis. Various factors, including the user's movement, may affect the accuracy of heart rate readings. The pulse sensors are intended only as exercise aids in determining heart rate trends in general.
- Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on your Stepper. Quality athletic shoes are recommended to avoid leg fatigue.
- Keep children under the age of 13 away from this machine.
- This exercise equipment is not intended for use by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the exercise equipment by a person responsible for their safety.
- Before beginning this or any exercise program, consult a physician. This is especially important for persons over the age of 35 or persons with pre-existing health conditions.
- Close supervision is necessary when this exercise equipment is used by, on, or near children.

**WARNING:** Injuries to health may result from incorrect or excessive training.  
**SAVE THESE INSTRUCTIONS - THINK SAFETY!**

# IMPORTANT OPERATION INSTRUCTIONS

- **NEVER** operate this Recumbent Stepper without reading and completely understanding the results of any operational change you request from the console.
- Understand that changes in resistance do not occur immediately. Set your desired resistance on the computer console and release the adjustment key. The computer will obey the command gradually.
- Use caution while participating in other activities while pedaling on your stepper, such as watching television, reading, etc. These distractions may result in serious injury.
- Do not use excessive pressure on console control keys. They are precision set to function properly with little finger pressure. Pushing harder is not going to make the unit go faster or slower. If you feel the buttons are not functioning properly with normal pressure, contact your dealer.



DC Power Connector Location

# WARNING DECAL REPLACEMENT

The decal shown below has been placed on the stepper. If the decal is missing or illegible, please call our Customer Service Department toll-free at 1-888-707-1880 to order a replacement decal.

**⚠ WARNING / AVERTISSEMENT**

Model/Modèle#: [REDACTED]  
Serial/Numéro de série: [REDACTED]

**For consumer use only.  
Max user weight limit**  
[REDACTED] (Max: 150 lbs)

CAUTION: SMALL CHILDREN AND PERSONS PHYSICALLY HANDICAPPED SHOULD NOT USE ANY EXERCISE EQUIPMENT WITHOUT A QUALIFIED PERSON IN ATTENDANCE.  
WARNING: KEEP CHILDREN AWAY FROM THE [REDACTED].  
KEEP BODY AND CLOTHING FREE AND CLEAR OF ALL MOVING PARTS. THE POSSIBILITY OF SERIOUS INJURIES OR DEATH IF CAUTION IS NOT USED.  
READ ALL WARNINGS AND INSTRUCTIONS PRIOR TO USE. REPLACE LABEL IF DAMAGED, ILLEGIBLE OR REMOVED.

**Usage à des fins  
personnelles seulement  
poids maximum de l'utilisateur**  
[REDACTED] (Max: 70 kg)

ATTENTION: LES ENFANTS ET LES PERSONNES AYANT UN HANDICAP PHYSIQUE NE DOIVENT UTILISER AUCUN APPAREIL D'EXERCICE SANS LA SURVEILLANCE D'UNE PERSONNE QUALIFIÉE.  
AVERTISSEMENT: GARDER LES ENFANTS À L'ÉCART DU [REDACTED]. GARDER LE CORPS ET LES VÊTEMENTS ÉLOIGNÉS DE TOUTE PIÈCE MOBILE. LE DÉFAUT DE VIGILANCE DANS L'UTILISATION DE CET APPAREIL POURRAIT ENTRAÎNER DE GRAVES BLESSURES ET MÊME LA MORT.  
LIRE TOUTS LES AVERTISSEMENTS ET TOUTES LES DIRECTIVES AVANT UTILISATION.  
REMPLENER TOUTE ÉTIQUETTE ENDOMMAGÉE, ILLISIBLE OU MANQUANTE.

**Dyaco Canada Inc.  
5955 Don Murie St  
Niagara Falls, Ontario  
L2G 0A9**

**Customer Service  
Service à la clientèle  
1-888-707-1880**

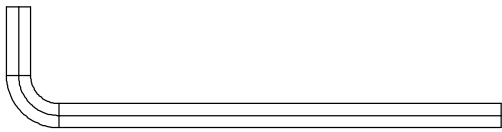


# ASSEMBLY INSTRUCTIONS

## UNPACKING

1. Carefully remove all parts from the carton and inspect for any damage or missing parts. If parts are damaged or missing, contact your dealer immediately.
2. Locate the hardware package. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) are the item number from the assembly drawing for reference.

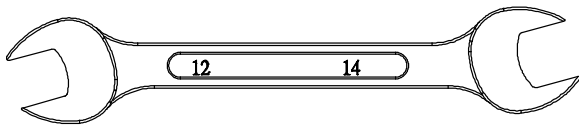
## ASSEMBLY TOOLS



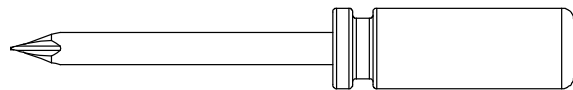
#219. M8\_L Allen Wrench (1 pc)



#217. 5mm\_L Allen Wrench (1 pc)



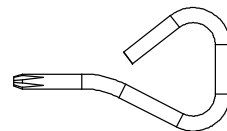
#220. 12/14m/m\_Wrench (1 pc)



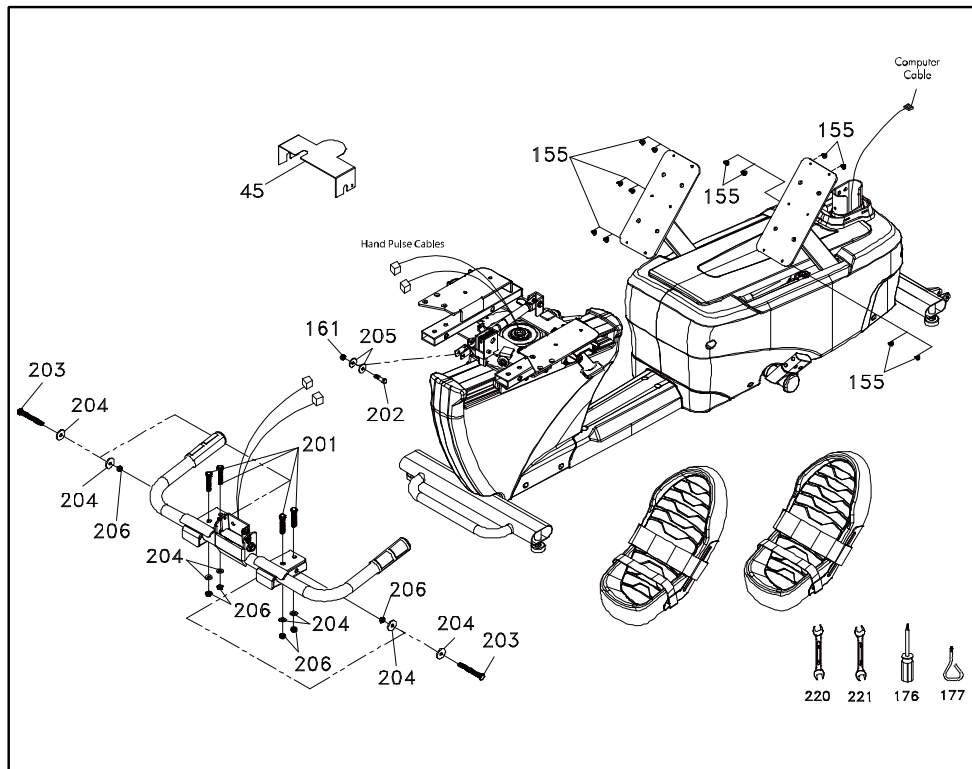
#222. Phillips Head Screw Driver (1 pc)



#221. 13/14m/m\_Wrench (1 pc)



#223. Short Phillips Head Screw Driver (1 pc)



## STEP 1

1. Secure the Pedals to the pedal plates with 6 Phillips Head Screws (No.155) each.
2. Use a Hex Head Bolt (No.202), 2 Flat Washers (No.205), and a Nyloc Nut (No.161) to secure the locking gas piston on the seat bottom.
3. Install Seat Cover (No.45).
4. 2 Hex Head Bolts (No.203) with 2 Flat Washers (No.204) and 2 Nyloc Nuts (No.206) to secure the handgrip.
5. Use 4 Hex Head Bolts (No.201), 4 Flat Washers (No.204) and 4 Nyloc Nuts (No.206) to secure Handlebar to the Seat Assembly.
6. Connect the Hand Pulse Cables; arrange cables taking care, so they are not crushed during seat rotation and adjustment.

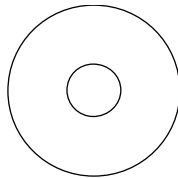
## HARDWARE



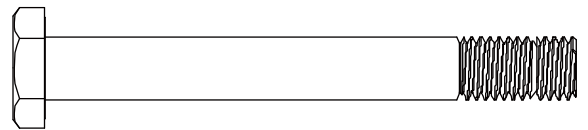
**#155.** M5 x 12mm  
Phillips Head Screw  
(12 pcs)



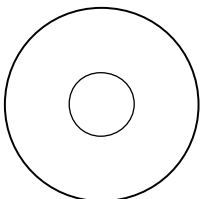
**#161.** 5/16" x 6T  
Nyloc Nut (1 pc)



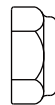
**#205.** 8.5x 26x 2T  
Flat Washer (2 pcs)



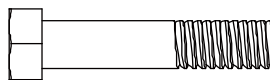
**#203.** 3/8" x 3-1/4"  
Hex Head Bolt (2 pcs)



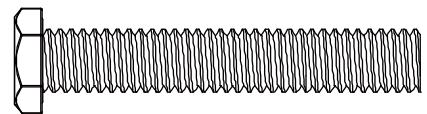
**#204.** 3/8" x 30 x 3T  
Flat Washer (8 pcs)



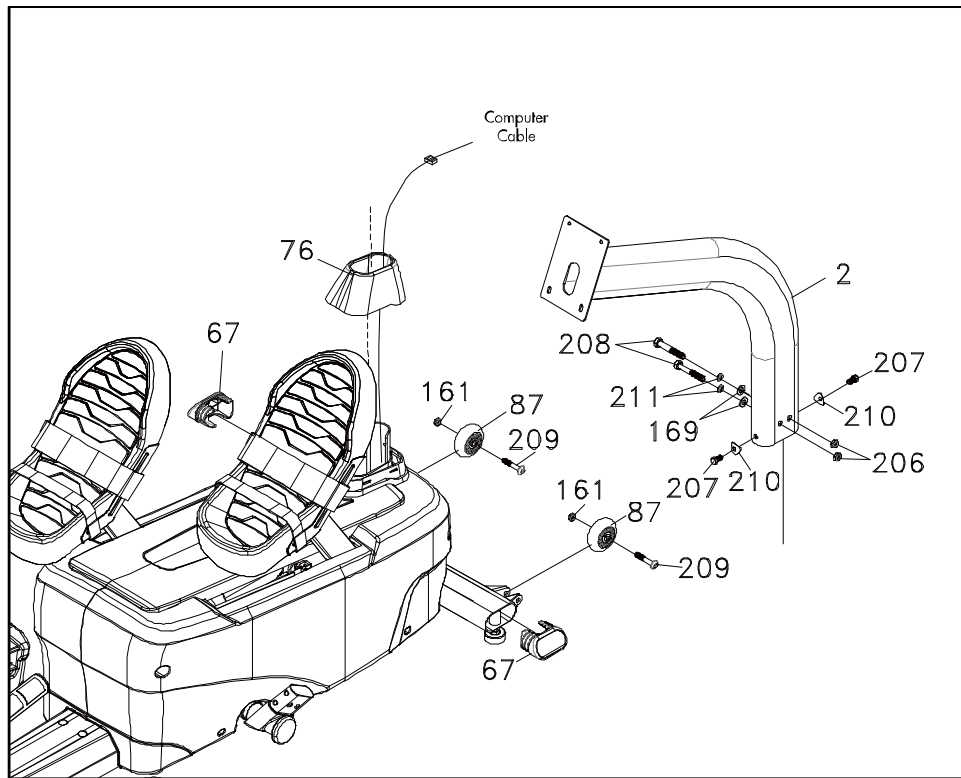
**#206.** 3/8" x 7T  
Nyloc Nut (6 pcs)



**#202.** 5/16" x 1-1/4"  
Hex Head Bolt (1 pc)



**#201.** 3/8" x 2"  
Hex Head Bolt (4 pcs)



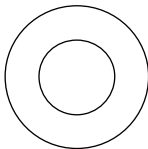
## STEP 2

1. Install Transportation Wheels (No.87) with Button Head Bolts (No.209) and Nyloc Nuts (No.161).
2. Place the Console Mast (No.2) through the Console Mast Cover (No.76) with the correct orientation. Snake the Computer Cable through the bottom end of the console mast and out through the top.
3. Insert the mast on the Main Frame and use Hex Head Bolts (No.208) with Split Washers (No.211), Flat Washers (No.169) and Nyloc Nuts (No.206) to secure on the side. Then use Hex Head Bolts (No.207) and Curved Washers (No.210) to secure at the front and back of the tube.

## HARDWARE



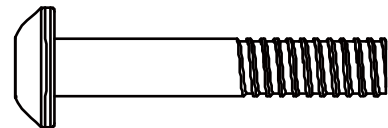
**#161.** 5/16" x 6T  
Nyloc Nut (2 pcs)



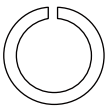
**#169.** 3/8" x 19 x 1.5T  
Flat Washer (2 pcs)



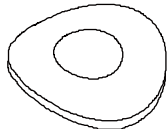
**#206.** 3/8" x 7T  
Nyloc Nut (2 pcs)



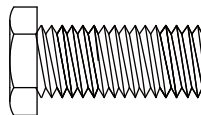
**#209.** 5/16" x 1-3/4" Button  
Head Socket Bolt (2 pcs)



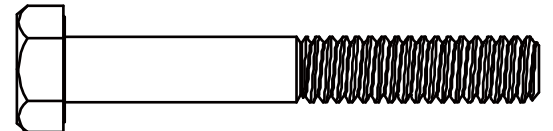
**#211.** 10 x 2T  
Split Washer  
(2 pcs)



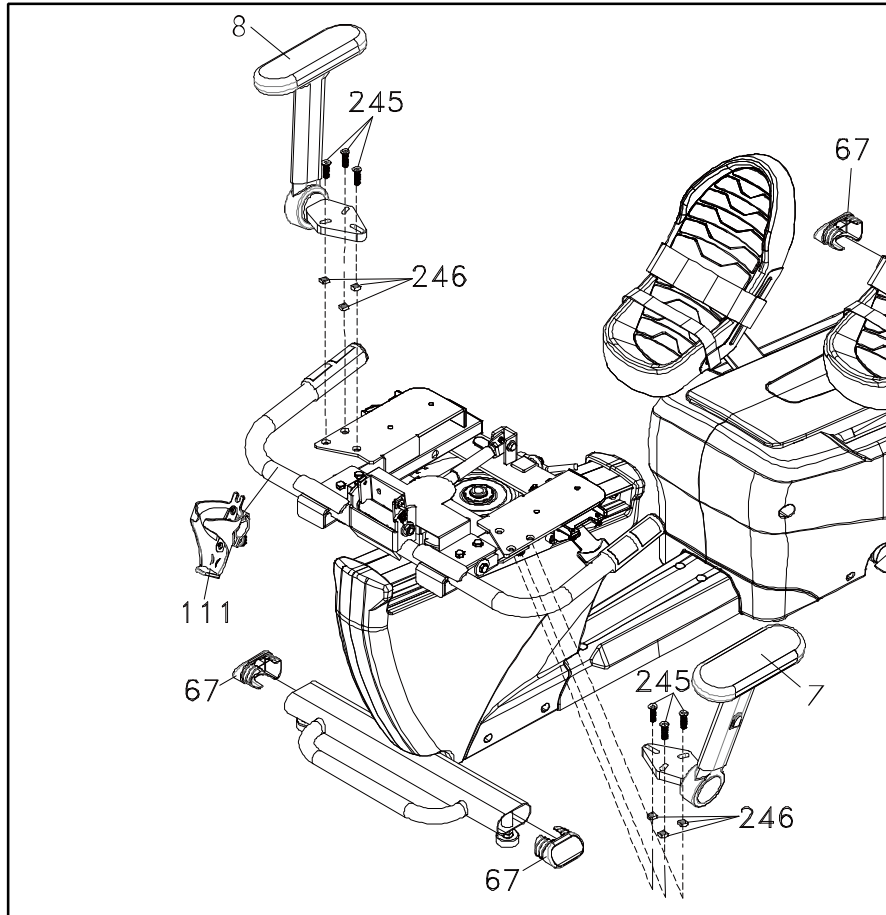
**#210.** Ø8 x 23 x 1.5T  
Curved Washer (2 pcs)



**#207.** M8 x 16mm  
Hex Head Bolt (2 pcs)



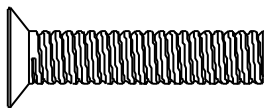
**#208.** 3/8" x 2-1/2  
Hex Head Bolt (2 pcs)



## STEP 2 - Continued

1. Plug in the End Caps (No.67) on Oval Stabilizer Tubes. NOTE: Do not pinch wires
2. Secure the Handle Sliders (No.7&8) using 3 Flat Head Socket Screws (No.245) and 3 Square Nuts (No.246) on each side.
3. Clamp the Water Bottle Cage (No.111) to either Handlebar.

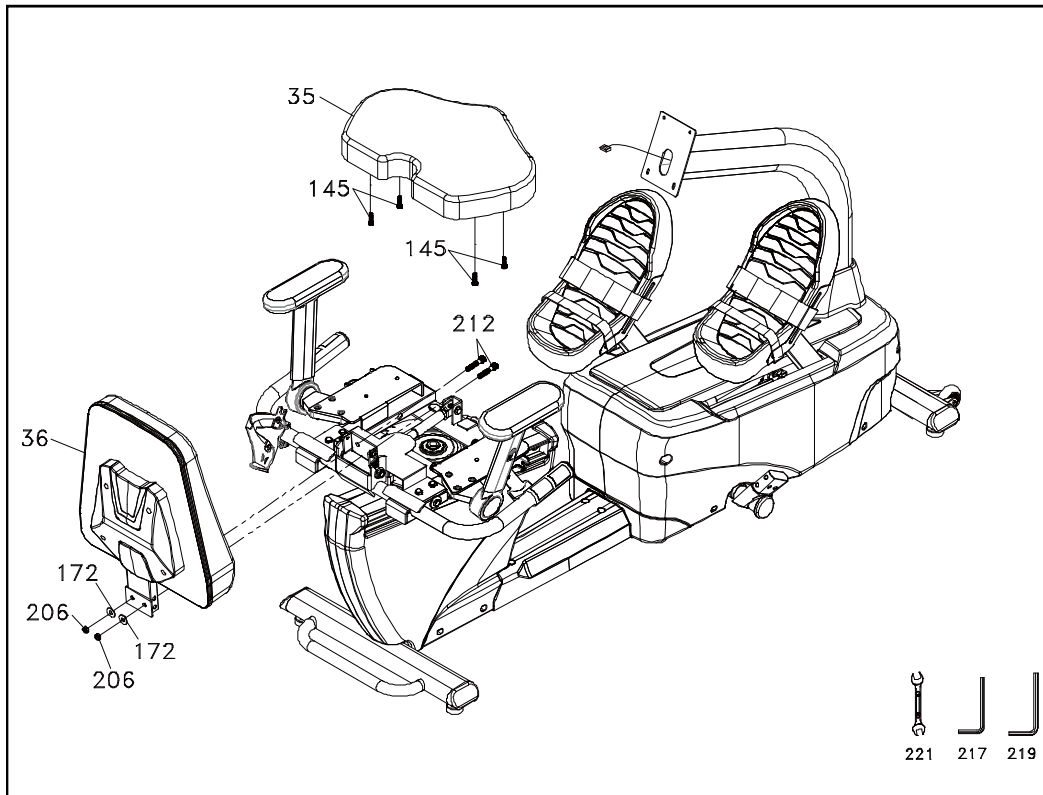
## HARDWARE



**#245.** M8 x P1.25 x 30mm  
Flat Head Socket Screw (6 pcs)



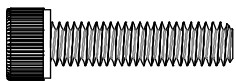
**#246.** M8 x 1.25 x 6.5T  
Square Nut (6 pcs)



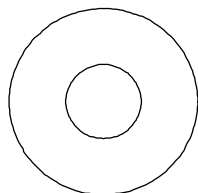
### STEP 3

1. Insert the Seat Back (No.36) in the Seat Carriage and secure with Socket Head Cap Bolts (No.212), Flat Washers (No.172) and Nyloc Nuts (No.206).
2. Put the Seat Cushion (No.35) on the Seat Carriage and secure it with Socket Head Cap Bolts (No.145).

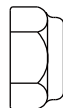
### HARDWARE



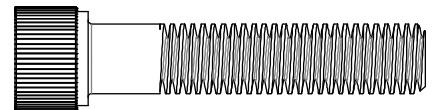
**#145.** M6x 25mm  
Socket Head Cap Bolt  
(4 pcs)



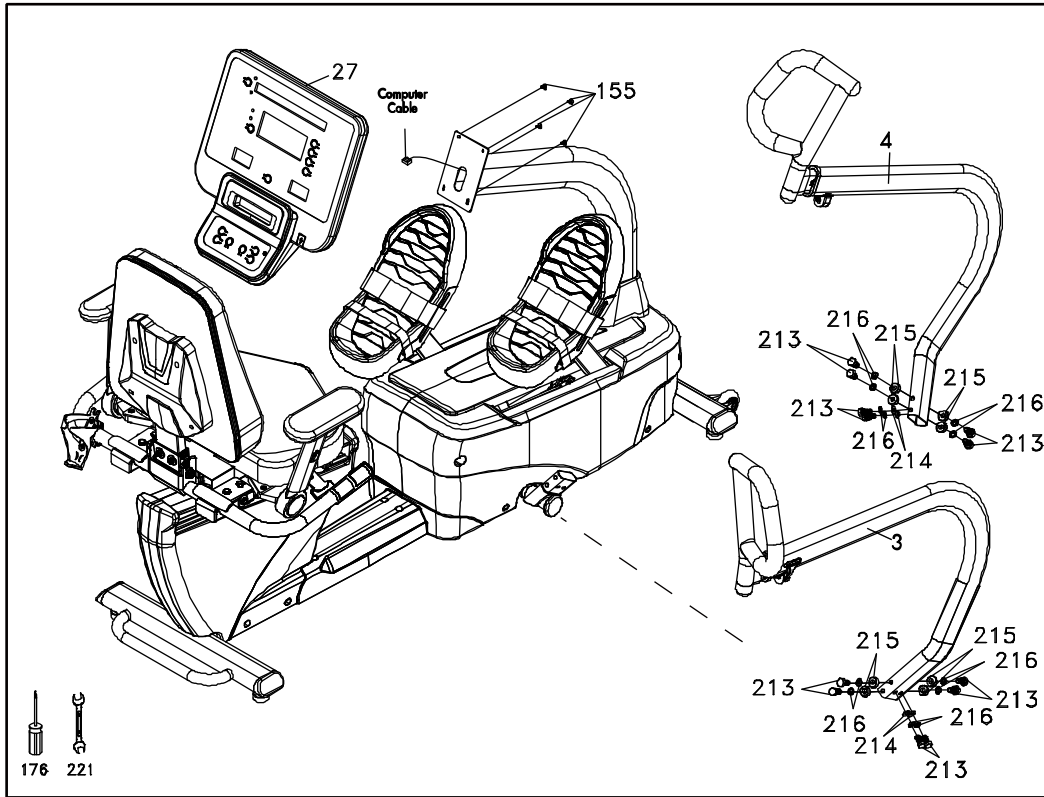
**#172.** 3/8"x 25x 2T  
Flat Washer (2 pcs)



**#206.** 3/8" x 7T  
Nyloc Nut (2 pcs)



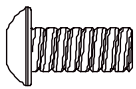
**#212.** 3/8"x 1-3/4"  
Socket Head Cap Bolt  
(2 pcs)



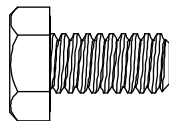
## STEP 4

1. Connect the computer cables from the mast to the Console (No.27) and use Phillips Head Screws (No.155) to secure it.
2. To install Left and Right Swing Arms (No. 4 & 3) onto the Main Frame, use Button Head Bolts (No.213), Flat Washers (No.214), Split Washers (No.216) and Curved Washers (No.215).

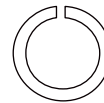
## HARDWARE



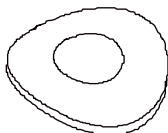
**#155.** M5 x 12mm  
Phillips Head Screw (4 pcs)



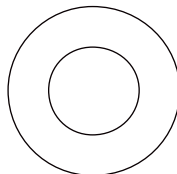
**#213.** 3/8" x 3/4"  
Hex Head Bolt (12 pcs)



**#214.** 3/8" x Ø19 x 1.5T  
Flat Washer (4 pcs)



**#215.** 10 x 21.3 x 7.8T  
Curved Washer (8pcs)

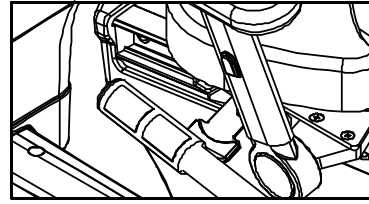


**#216.** 10 x 2T\_  
Split Washer (12 pcs)

# RECUMBENT STEPPER SETUP

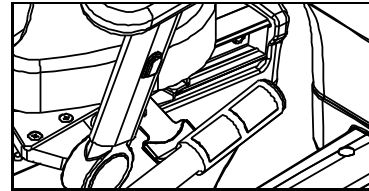
## SEAT ROTATION

Lift the left lever and hold it while rotating the seat to the desired position. Release lever.



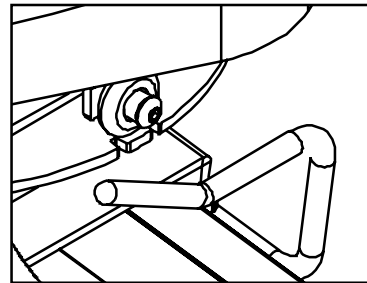
## SEAT RECLINE

Lift right lever and hold while adjusting seat position to the desired position. Release lever.



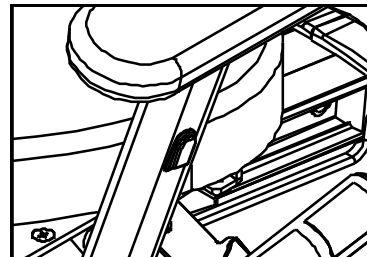
## SEAT FOR/AFT ADJUSTMENT

Lift the lever and hold while adjusting the seat position to the desired distance from the console. Release lever.



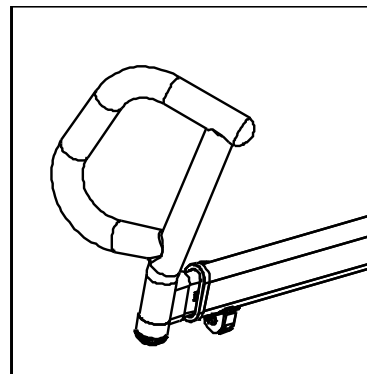
## ARMREST ADJUSTMENT

Push the button and hold while adjusting the position of the Armrests to the desired angle.

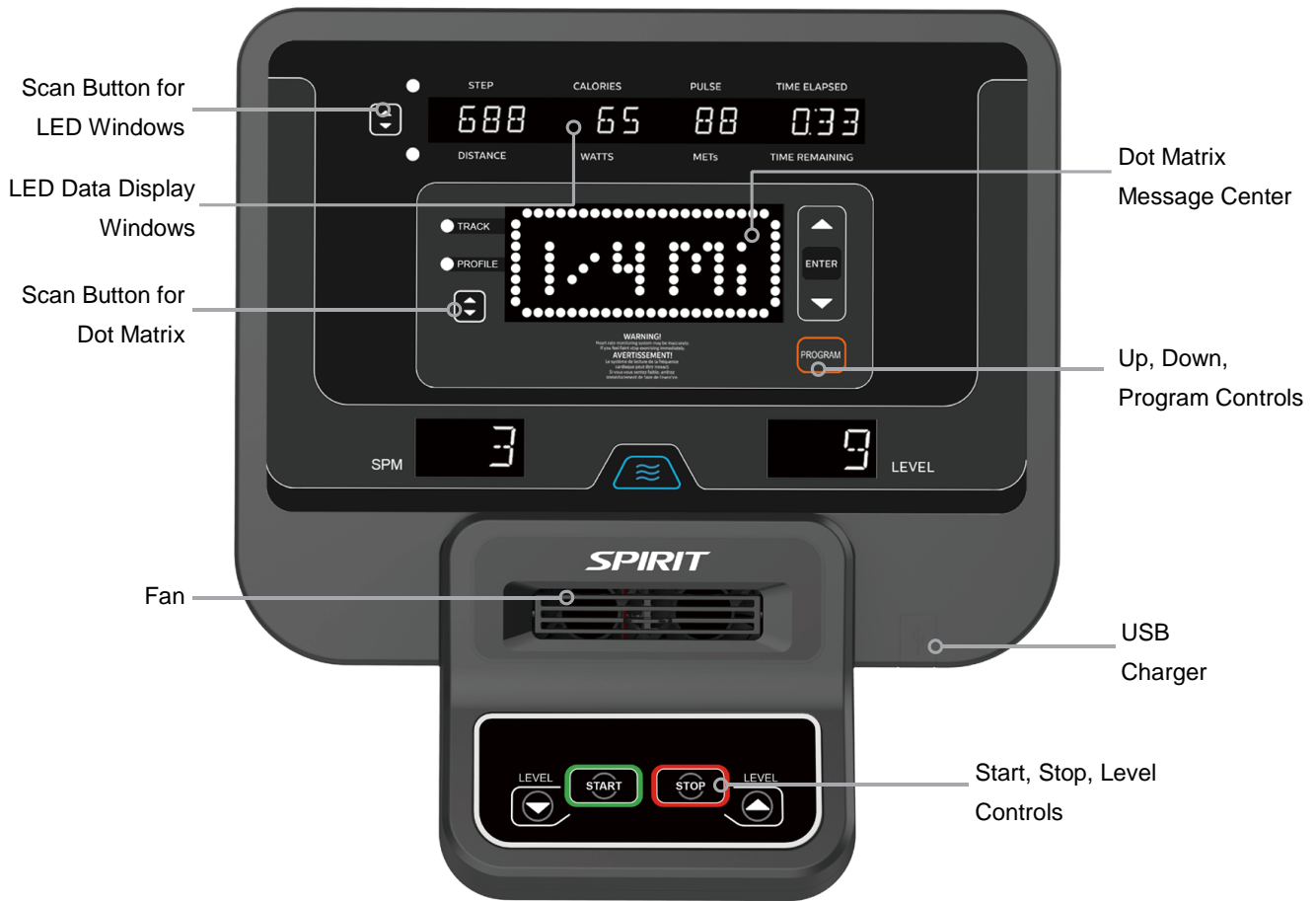


## HANDHOLD ADJUSTMENT

Open lever. Adjust handhold to desired distance from seat. Close lever securely.



# OPERATION OF YOUR CONSOLE



## POWER

When the DC Power cord is connected to the equipment, the console will automatically power up. When initially powered on, the console will perform an internal self-test. During this time all the lights will turn on. When the lights go off, the Dot Matrix Message Center will show the software version (i.e., VER 1.0). The LED Data Display Window shows the total hours of use and total steps. The odometer will remain displayed for only a few seconds then the console will go to the start-up display. The Dot Matrix Message Center will be scrolling through the different profiles of the programs and will be scrolling the start-up message. You may now begin to use the console.

## C-SAFE FEATURE

Your console is equipped with a C-SAFE feature. The Power (POWER) port can be used for powering a remote-controlled audio-visual system by connecting a cable from the remote to the Power port at the back of the console. The Communication port (COMM) can be used to interact with fitness software applications.



# CONSOLE OPERATION

## QUICK START

This is the quickest way to start a workout. After the console powers up, you just press the Start key to begin. This will initiate the Quick Start mode. In Quick Start, the Time will count up from zero, all workout data will start to accrue, and the workload may be adjusted manually by pressing the Level Up and Down buttons. The Dot Matrix Message Center will show just the bottom row lit. As you increase the workload, more rows will light, indicating a harder workout. The Recumbent Stepper will get harder to pedal as the rows increase. The Dot Matrix Message Center has 24 columns of lights, and each column represents 1 minute. At the end of the 24th column (or 24 minutes of work), the display will wrap around and start at the first column again. There are 20 levels of resistance available for plenty of variety. The first 5 levels are very easy workloads, and the changes between levels are set to a good progression for de-conditioned users. Levels 6-10 are more challenging, but the increases in resistance from one level to the next remain small. Levels 11-15 start getting tough as the levels jump more dramatically. Levels 16-20 are extremely difficult and are good for short interval peaks and elite athletic training.

## BASIC INFORMATION

The Dot Matrix Message Center, or Profile Window, will display the workout Profile. The LED Data Display Windows display pertinent exercise data. There is a Strides Per Minute window for pedal speed and a Level window indicating machine resistance. The LED Data Display Window will initially be displaying Steps, Calories, Pulse and Time Elapsed information. When the Up/Down Scan key is pressed, the next set of information will appear; Distance, Watts, METs and Time Remaining. Pressing the Up/Down Scan button, the Scan mode is activated, and the LED Data Display Window will show each set of data for four seconds, then switch to the next set of data in a continuous loop. Pressing the Up/Down Scan button again will bring you back to the beginning. The Stop key button actually has several functions. Pressing the Stop key once during a program will pause the program for 5 minutes. If you need to get a drink, answer the phone, or do any of the many things that could interrupt your workout, this is a great feature. To resume your workout during Pause, just press the Start key. If the Stop key is pressed twice during a workout, the program will end, and the console will return to the start-up screen. If the Stop key button is held down for 3 seconds, the console will perform a complete Reset. During data entry for a program, the Stop key performs a Previous Screen function. This allows you to go back one step in the programming each time you press the Stop button. The Program Key is used to preview each program. When you first turn the console on, you may press the program key to preview what the program profile looks like. If you decide that you want to try a program, press the Enter key to select the program and enter into the data set-up mode.

## 1/4 MILE / 0.4 KM TRACK

The 1/4-mile track (0.4 km) will be displayed around the dot matrix window. The flashing dot indicates your progress. In the center of the track, there is a lap counter for reference.

## **HEART RATE WINDOW**

The Pulse (Heart Rate) window will display your current heart rate in beats per minute during the workout. You must use both left and right stainless steel sensors to pick up your pulse. Pulse values are displayed anytime the computer is receiving a Grip Pulse signal. You may use the Grip Pulse feature while in Heart Rate Control. The Recumbent Stepper will also pick up wireless heart rate transmitters that are Polar compatible, including coded transmissions.

## **TO TURN RECUMBENT STEPPER OFF**

This function is called sleep mode. The display will automatically turn off (go to sleep) after 30 minutes of inactivity. In sleep mode, the Recumbent Stepper will power down most everything except for a minimum of circuitry for detecting button presses and the safety button, so it will start up again if these are activated. The default setting for sleep mode is OFF; follow the instructions on page 35 to turn it on.

## **PROGRAMMABLE FEATURES**

Each of the programs can be customized with your personal information and changed to suit your needs. Some of the information asked for is necessary to ensure the readouts are correct. You will be asked for your Age and Weight. Your Age is also necessary during the Heart Rate control program to ensure the correct settings are in the program for your Age. Otherwise, the work settings could be too high or low for you; entering your Weight aids in calculating a correct Calorie reading. Although we cannot provide an exact calorie count, we do want to be as close as possible.

*CALORIE NOTE: Calorie readings on every piece of exercise equipment, whether it is in a gym or at home, are not accurate and tend to vary widely. They are meant only as a guide to monitor your progress from workout to workout. The only way to measure your calorie burn accurately is in a clinical setting connected to a host of machines. This is because every person is different and burns calories at a different rate. Some good news is that you will continue to burn calories at an accelerated rate for at least an hour after you have finished exercising!*

## **ENTERING A PROGRAM & CHANGING SETTINGS**

When you enter a program, you have the option of entering your own personal settings. If you want to work out without entering new settings, then just press the Start key. This will bypass the programming of data and take you directly to the start of your workout. If you want to change the personal settings, then just follow the instructions in the Dot Matrix Message Center. If you start a program without changing the settings, the default or pre-saved settings will be used.

# MANUAL

The Manual program works, as the name implies, manually. This means that you control the workload yourself and not the computer. To start the Manual program, follow the instructions below:

1. Using the Program button, choose Manual, then press the Enter key.
2. The Dot Matrix Message Center will ask you to enter your Age. You may enter your Age, using the Up and Down keys, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your Weight. You may adjust the Weight number using the Up and Down keys; then press Enter to continue.
4. The next setting is Time. You may adjust the Time and press Enter to continue.
5. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key.  
*NOTE: At any time during the editing of data, you can press the Stop key to go back one level or screen.*
6. The program automatically starts you at level one. This is the easiest level, and it is a good idea to stay at level one for a while to warm up. If you want to increase the workload at any time, press the Level Up key; the Level Down key will decrease the workload.
7. When the program ends, you may press Start to begin the same program again or Stop to exit the the program, or you can save the program you just completed as a custom program by pressing the Program button and selecting Custom, then following the instructions in the Dot Matrix Message Center.

## PROGRAMMING PRESET PROGRAMS

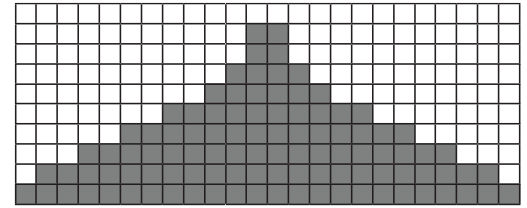
1. Using the Program button, select your desired program, then press the Enter button.
2. The Dot Matrix Message Center will ask you to enter your Age. You may adjust the age setting using the Level Up/Down buttons, then press the Enter button to accept the new number and proceed on to the next screen.
3. You are now asked to enter your Weight. You may adjust the weight value using the Level Up/Down buttons; then press Enter to continue.
4. Next is Time. You may adjust the Time and press Enter to continue.
5. Now you are asked to adjust the Max Resistance Level. This is the peak exertion level you will experience during the program. Adjust the level and then press Enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start button. You can also go back and modify your settings by pressing the Enter button.
7. If you want to increase or decrease the resistance at any time during the program, press the Level Up/Down buttons on the console or above the heart rate sensor grips of the stationary handlebars. This will change the resistance settings of the entire profile, although the profile picture on the screen will not change. The reason for this is so that you can see the entire profile at all times. If the profile picture is changed, it also would be distorted and not a true representation of the actual profile. When you make a change to the resistance, the Dot Matrix Message Center will show the current column and program maximum levels of work.
8. During the program, you will be able to scroll through the data in the LED Data Display Window by pressing the Scan button.
9. When the program ends, the LED Data Display Window will show a summary of your workout. The summary will be displayed for a short time; then, the console will return to the start-up display.

## PRESET PROGRAMS

The Recumbent stepper has seven different programs that have been designed for a variety of workouts. These five programs have factory preset work level profiles for achieving different goals.

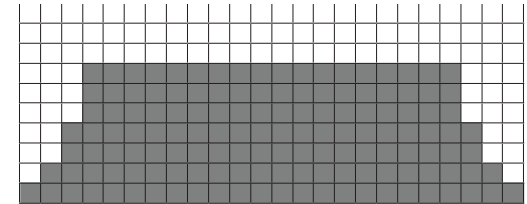
### HILL

This program follows a triangle or pyramid type of gradual progression from approximately 10% of maximum effort (the level that you chose before starting this program) up to a maximum effort that lasts for 10% of the total workout time, then a gradual regression of resistance back to approximately 10% of maximum effort.



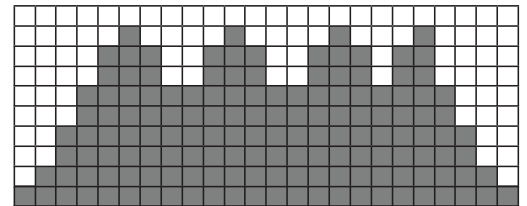
### FATBURN

This program follows a quick progression up to the maximum resistance level (default or user input level) that is sustained for 2/3 of the workout. This program will challenge your ability to sustain your energy output for an extended period of time.



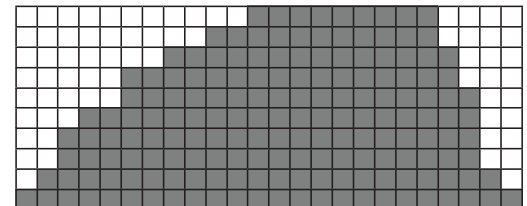
### Cardio

This program presents a quick progression up to near maximum resistance level (default or user input level). It has slight fluctuations up and down to allow your heart rate to elevate and then recover repeatedly before beginning a quick cool down. This will build up your heart muscle and increase blood flow and lung capacity.



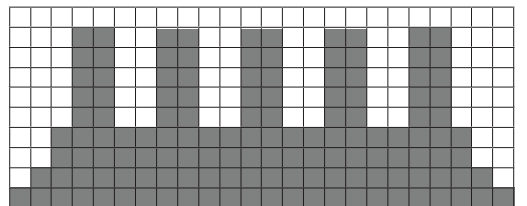
### Strength

This program has a gradual progression of resistance up to 100% of maximum effort that is sustained for 25% of workout duration. This will help build strength and muscular endurance in the lower body and glutes. A brief cool-down follows.



### Interval

This program takes you through high levels of intensity, followed by recovery periods of low intensity. This program utilizes and develops your "Fast Twitch" muscle fibres which are used when performing tasks that are intense and short in duration. These deplete your oxygen level and spike your heart rate, followed by periods of recovery and heart rate drop to replenish oxygen. Your cardiovascular system gets programmed to use oxygen more efficiently.



## CUSTOM USER-DEFINED PROGRAMS

There are two customizable User programs that allow you to build and save your own workout. The two programs, Custom 1 and Custom 2, operate exactly the same way, so there is no reason to describe them separately. You can build your own custom program you complete as a custom program. Both programs allow you to personalize it by adding your name further.

1. Using the Program button, choose the Custom programs, then press Enter. The Dot Matrix Message Center will show a welcome message. If you had previously saved a program, the message will contain your name. Then press the Enter button to begin programming.
2. If you have already saved a program to either CUS1 or CUS2, it will be displayed, and you are ready to begin. If not, you will have the option of inputting a username. In the LED Data Display Window, the letter "A" will be blinking. Use the Up/Down Level buttons to select the appropriate first letter of your name (pressing the UP button will switch to the letter "B"; pressing the Down button will switch to the letter "Z"). Press Enter when the desired letter is displayed. Repeat this process until all of the characters of your name have been programmed (maximum 7 characters). When finished, press Stop.
3. If there is a program already stored in Custom, you will have an option to run the program as it is or delete the program and build a new one. At the welcome message screen, when pressing Start or Enter, you will ask: Run Program? Use the Up/Down arrows to select Yes or No. If you select No, you will then be asked if you want to delete the currently saved program. It is necessary to delete the current program if you want to build a new one.
4. The Dot Matrix Message Center will ask you to enter your Age. You may enter your age using the Level Up/ Down buttons, then press the Enter button to accept the new value and proceed on to the next screen.
5. You are now asked to enter your Weight. You may adjust the weight value using the Up/Down buttons or the numeric button pad, then press Enter to continue.
6. Next is Time. You may adjust the time and press Enter to continue.
7. Now, you are asked to adjust the Max Resistance Level of the program, press Enter when resistance has been selected.
8. Now, the first column will be blinking, and you are asked to adjust the resistance level for the first segment (SEGMENT > 1) of the workout by using the Level Up button. When you finish adjusting the first segment, or if you don't want to change, then press Enter to continue to the next segment.
9. The next segment will show the same workload resistance level as the previously adjusted segment. Repeat the same process as the last segment, then press Enter. Continue this process until all twenty segments have been set.
10. The Dot Matrix Message Center will then tell you to press Enter to save the program. After saving the program, the Dot Matrix Message Center says "Program Saved," then will give you the option to start or modify the program. Pressing Stop will exit to the start-up screen.

# HEART RATE PROGRAMS

The old motto, "no pain, no gain", is a myth that has been overpowered by the benefits of exercising comfortably. A great deal of this success has been promoted by the use of heart rate monitors. With the proper use of a heart rate monitor, many people find that their choice of exercise intensity is either too high or too low and exercise is much more enjoyable by maintaining their heart rate in the desired benefit range.

To determine the benefit range in which you wish to train, you must first determine your Maximum Heart Rate. This can be accomplished by using the following formula: 220 minus your age. This will give you the Maximum heart rate (MHR) for someone of your age. To determine the effective heart rate range for specific goals you simply calculate a percentage your MHR. Your Heart rate training zone is 50% to 90% of your maximum heart rate. 65% of your MHR is the zone that burns fat while 85% is for strengthening the cardio vascular system. This 65% to 85% is the zone to stay in for maximum benefit.

For someone who is 40 years old their target heart rate zone is calculated:

$$220 - 40 = 180 \text{ (maximum heart rate)}$$
$$180 \times .65 = 117 \text{ beats per minute (65\% of maximum)}$$
$$180 \times .85 = 153 \text{ beats per minute (85\% of maximum)}$$

So for a 40 year old the training zone would be 117 to 153 beats per minute.

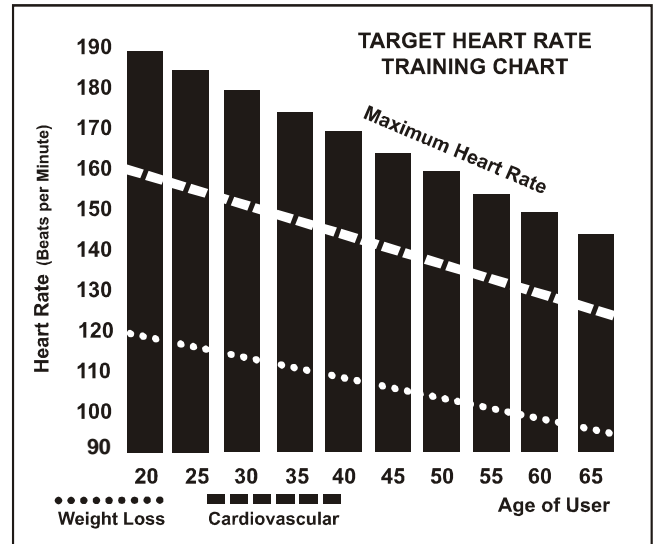
If you enter your age during programming the console will perform this calculation automatically. Entering your age is used for the Heart Rate control programs. After calculating your Maximum Heart Rate you can decide upon which goal you would like to pursue.

The two most popular reasons for, or goals, of exercise are cardiovascular fitness (training for the heart and lungs) and weight control. The black columns on the chart above represent the Maximum Heart Rate for a person whose age is listed at the bottom of each column. The training heart rate, for either cardiovascular fitness or weight loss, is represented by two different lines that cut diagonally through the chart. A definition of the lines' goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 85% or 65%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.

With all Heart Rate Control stepper equipment, you may use the heart rate monitor feature without using the Heart Rate Control program. However, when using the heart rate monitor feature in conjunction with the Heart Rate programs, the machine will automatically adjust speed or incline to maintain the desired heart rate.

## CAUTION!

The target value used in HR programs is a suggestion only for normal, healthy individuals. Do not exceed your limits! You may not be able to obtain your chosen target. If in question, enter a higher age value that will set a lower target goal.



# HEART RATE PROGRAM OPERATION

To start the HR program, follow the instructions below.

1. Using the Program button, choose the HR program (65% or 80%), then press the Enter key.
2. The Dot Matrix Message Center will ask you to enter your Age. You may enter your Age, using the Up/Down keys, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your Weight. You may adjust the Weight number using the Up/Down keys, then press Enter to continue.
4. Next is Time. You may adjust the Time and press Enter to continue.
5. Now you are asked to adjust your Target Heart Rate. This is the heart rate level you will try to maintain during the program. Adjust the value and then press Enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. Note: At any time during the editing of data, you can press the Stop key to go back one level or screen.
7. If you want to increase or decrease the resistance at any time during the program, press the Level Up/Down key. This will allow you to change your target heart rate at any time during the program.
8. The program will automatically increase or decrease the amount of resistance, depending on whether your heart rate is above or below your target.

If you enter your age during programming, the console will perform this calculation automatically. Entering your age is used for the Heart Rate programs. After calculating your MHR, you can decide upon which goal you would like to pursue.

The two most popular reasons for, or goals, of exercise, are cardiovascular fitness (training for the heart and lungs) and weight control. The black columns on the chart represent the MHR for a person whose age is listed at the bottom of each column. The training heart rate, for either cardiovascular fitness or weight loss, is represented by two different lines that cut diagonally through the chart. A definition of the lines' goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 85% or 60%, respectively, of your MHR on a schedule approved by your physician. Consult your physician before participating in any exercise program.

With all Spirit Fitness machines, you may use the heart rate monitor feature without using the Heart Rate program. However, when using the heart rate monitor feature in conjunction with the Heart Rate programs, the machine will automatically adjust speed or incline to maintain the desired heart rate.

# RATE OF PERCEIVED EXERTION

Heart rate is important but listening to your body also has a lot of advantages. There are more variables involved in how hard you should work out than just heart rate. Your stress level, physical health, emotional health, temperature, humidity, the time of day, the last time you ate and what you ate all contribute to the intensity at which you should workout. If you listen to your body, it will tell you all of these things.

The rate of perceived exertion (RPE), also known as the Borg scale, was developed by Swedish physiologist G.A.V. Borg. This scale rates exercise intensity from 6 to 20 depending upon how you feel or the perception of your effort.

The scale is as follows:

## Rating Perception of Effort

- 6 Minimal
- 7 Very, very light
- 8 Very, very light +
- 9 Very light
- 10 Very light +
- 11 Fairly light
- 12 Comfortable
- 13 Somewhat hard
- 14 Somewhat hard +
- 15 Hard
- 16 Hard +
- 17 Very hard
- 18 Very hard +
- 19 Very, very hard
- 20 Maximal

You can get an approximate heart rate level for each rating by simply adding a zero to each rating. For example, a rating of 12 will result in an approximate heart rate of 120 beats per minute. Your RPE will vary depending on the factors discussed earlier. That is the major benefit of this type of training. If your body is strong and rested, you will feel strong, and your pace will feel easier. When your body is in this condition, you are able to train harder, and the RPE will support this. If you are feeling tired and sluggish, it is because your body needs a break. In this condition, your pace will feel harder. Again, this will show up in your RPE, and you will train at the proper level for that day.



# USING HEART RATE TRANSMITTER (Optional)

How to wear your wireless chest strap transmitter:

1. Attach the transmitter to the elastic strap using the locking parts.
2. Adjust the strap as tightly as possible as long as the strap is not too tight to remain comfortable.
3. Position the transmitter centred in the middle of your body facing away from your chest (some people must position the transmitter slightly left of center). Attach the final end of the elastic strap by inserting the round end and, using the locking parts, secure the transmitter and strap around your chest.
4. Position the transmitter immediately below the pectoral muscles.
5. Sweat is the best conductor to measure very minute heartbeat electrical signals. However, plain water can also be used to pre-wet the electrodes (2 black square areas on the reverse side of the belt and either side of the transmitter). It's also recommended that you wear the transmitter strap a few minutes before your workout. Some users, because of body chemistry, have a more difficult time achieving a strong, steady signal at the beginning. After "warming up," this problem lessens. As noted, wearing clothing over the transmitter/strap doesn't affect performance.
6. Your workout must be within range - the distance between transmitter/receiver – to achieve a strong, steady signal. The length of the range may vary somewhat but generally stay close enough to the console to maintain good, strong, reliable readings. Wearing the transmitter immediately against bare skin assures you of proper operation. If you wish, you may wear the transmitter over a shirt. To do so, moisten the areas of the shirt that the electrodes will rest upon.



*Note: The transmitter is automatically activated when it detects activity from the user's heart. Additionally, it automatically deactivates when it does not receive any activity. Although the transmitter is water-resistant, moisture can have the effect of creating false signals, so you should take precautions to completely dry the transmitter after use to prolong battery life (estimated transmitter battery life is 2500 hours). If your chest strap has a replaceable battery, the replacement battery is Panasonic CR2032.*

## ERRATIC OPERATION

Caution! Do not use this stepper for Heart Rate programs unless a steady, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem.

Areas to look for interference which may cause erratic heart rate:

1. Stepper is not properly grounded.
2. Microwave ovens, TV's, small appliances, etc.
3. Fluorescent lights.
4. Some household security systems.
5. Electric fence for a pet.
6. Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down.
7. The antenna that picks up your heart rate is very sensitive. If there is an outside noise source, turning the whole machine 90 degrees may de-tune the interference.
8. Another Individual wearing a transmitter within 3' of your machine's console.

**If you continue to experience problems contact your dealer.**

# GENERAL MAINTENANCE

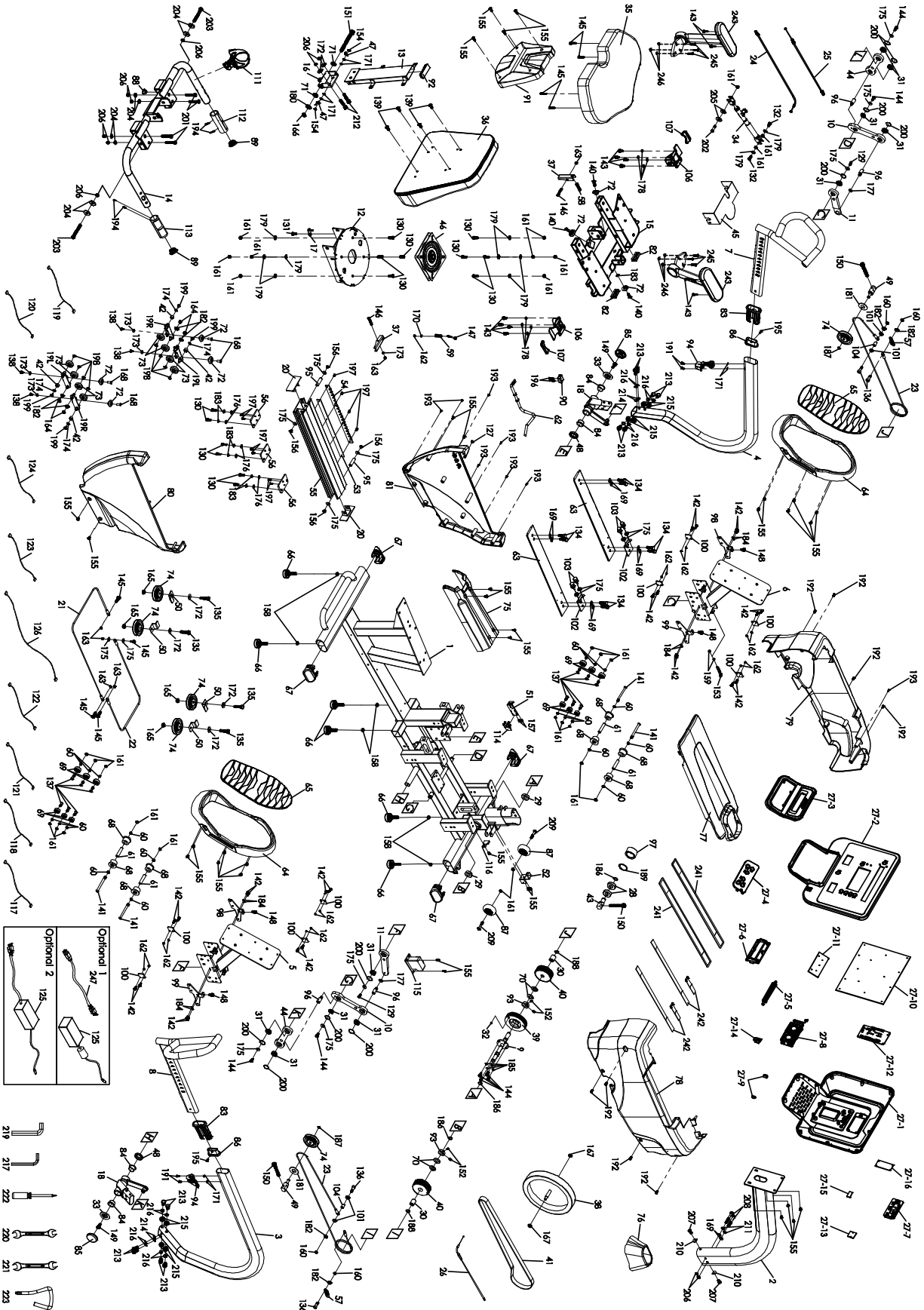
1. Wipe down all areas in the sweat path with a damp cloth after each workout.
2. If a squeak, thump, clicking, or rough feeling develops, the main cause is most likely one of two reasons:
  - a. The hardware was not sufficiently tightened during assembly. All bolts that were installed during assembly need to be tightened as much as possible. It may be necessary to use a larger wrench than the one provided if you cannot tighten the bolts sufficiently. 90% of calls to the service department for noise issues can be traced to loose hardware.
  - b. If squeaks or other noises persist, check that the unit is properly levelled. There are 2 levelling pads on the front, 2 levelling pads in the centre and 2 levelling pads on the back of the unit.

## ENGINEERING MODE

To enter the Maintenance Mode, pedal the Recumbent Stepper and press and hold down the Start, Stop and Enter keys. Keep holding the keys down for about 5 seconds, and the Message Center will display Maintenance Mode. Press the Enter key to access the menu below:

1. Key Test (Will allow you to test all the keys to make sure they are functioning)
2. Display Test (Tests all the display functions)
3. Function
  - Units - Sets the display to read out in Imperial (miles, pounds, feet, etc.) or Metric (kilometres, kilograms, meters, etc.) display measurements
  - Pause mode (have five minutes)
  - Odometer Reset (Resets the odometer)
  - Sleep mode
  - Beep sound(Control Beep)
  - CAB Protocol or CSAFE Protocol
4. Service
  - Motor test
  - Sensor test
  - Csafe test
5. Exit

# EXPLODED VIEW DIAGRAM



# PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	Q'TY
1	CC010069-S13	Main Frame	1
2	CC060175-S13	Console Mast	1
3	A630138-S13	Swing Arm (R)	1
4	A630136-S13	Swing Arm (L)	1
5	CC040056-S13	Pedal Plate (R)	1
6	CC040055-S13	Pedal Plate (L)	1
7	B140026	Handle Slider (L)	1
8	B140027	Handle Slider (R)	1
9	C144004-Z3	Drive Pulley	1
10	B030128-Q2	Lower Linkage A	2
11	B030129-Q2	Lower Linkage B	2
12	CC040069-Z3	Seat Carriage	1
13	CC040038-S13	Seat Back Bracket	1
14	CC030090-S13	Handle Bar	1
15	CC040079-S13	Rotate Seat Assembly	1
16	CC040037-S13	Seat Back Bracket	1
17	CC060071-S13	Cantilever Anchor Assembly	1
18	K131002-Z2	Swing Arm Drive Weldment	2
19L	CC060017-Z3	Seat Wheel Adjustment Plate(L)	2
19R	CC060018-Z3	Seat Wheel Adjustment Plate(R)	2
20	CC060067-S13	Seat Stop Assembly	2
21	K020092	Front Connecting Cable(750L)	1
22	K020091	Rear Connecting Cable(800L)	1
23	K020107	Drive Cable(1820L)	2
24	K020120	Steel Cable	1
25	K020121	Drive Cable(45L)	1
26	K020089	Drive Cable(52L)	1
27	RZSS0040-21	Console Assembly	1
28	K056203	6203_Ball Bearing	2
29	K056003	6003_Ball Bearing	2
30	K050004	One Way Bearing	2
31	K056902A	6902_Ball Bearing	10
32	N041002-Z2	Magnet	1
33	B139102-Z3	Ø9 x Ø49 x 1.5T_Cup Washers	2
34	K070024	Locking Gas Cylinder	1
35	N120024	Seat Cushion	1
36	N120008	Seat Back	1
37	B112200-Z3	Seat Position Latch	2
38	K500063	Fly Wheel	1
39	C120077-Z3	Ø106 x 22L_Drive Wheel	1
40L	RC120056A-Z5	Ø84 x 32L_Cable Drive Pulley (L)	1
40R	RC120056-Z5	Ø84 x 32L_Cable Drive Pulley (R)	1

KEY NO.	PART NO.	DESCRIPTION	Q'TY
41	N010014	Belt (8PJ), 1321mm	1
42	C070095-Z4	5/8" x 13.2 x 8L_Sleeve	4
43	C120055-Z3	Adjustable Idler Wheel Axle	1
44	B030087-Q2	Lower Linkage	2
45	B130225-S13	Safety Cover	1
46	N200065	Rotate Disk	1
47	B139602-Z1	Scale Arrowhead	2
48	C080302-Z2	Flywheel Axle Set Collar (R)	2
49	C120121-Z3	Cable Guide Wheel Axle	2
50	B130264-Z3	Shroud Bracket	4
51	B070065-Z3	Sensor Bracket	1
52	B130293-Z3	Shroud Fixing Plate	1
53	B020003-Z3	Seat Track Fixing Plate	1
54	B135300-Z3	Rack, Seat Position	1
55	M020002-Z0	Aluminum Track	1
56	B031800-Z3	Backing Plate	3
57	K010062-Z1	Ø15.5 x 26.5L_Spring	2
58	K010079-Z1	Ø13.5 x 54L_Spring	1
59	K010006-Z1	Ø13.5 x 30L_Spring	1
60	K090006	Metal Sleeve(8.2x12.7x5Lmm)	20
61	C080102-ZL	Metal Sleeve(8.1x12x56.2Lmm)	4
62	C120100-Z1	Ø10 x 386L_Seat Front/Aft Adjustment Lever	1
63	M020017	Aluminum Track	2
64	PP130022A-A1	Pedal	2
65	P120031	Pedal Foam Cushion	2
66	N270027	Rubber Foot	6
67	B030087-Q2	End Cap, Oval Stabilizer Tube	4
68	P040075B-A1	Transportation Wheel, Aluminum Axle	8
69	P050052-AH	Transportation Wheel	12
70	P200011-AH	Ø18 x Ø32 x 1.5T_High-Performance Polymer Washer	4
71	J240014	Podwer metallurgy Sleeve	2
72	P040157	PU Wheel	7
73	P050027-A1	Ø38_Seat Track Wheel	8
74	RP050043-02	Roller	6
75	PP190044-I1	Bottom Step Cover	1
76	P100169-I1	Console Mast Cover	1
77	PP100170-I1	Top Cover	1
78	RP100172-I1-03	Shroud ( R )	1
79	RP100171-I1-03	Shroud ( L )	1
80	RP100125A-I1	Rear Shroud ( R )	1
81	RP100124A-I1	Rear Shroud ( L )	1
82	P040187-A1	Slider Sleeve	2

KEY NO.	PART NO.	DESCRIPTION	Q'TY
83	P040190-A1	Hollow Plug(30x70x98.5L)	2
84	P270061	WFM-2528-16_Plastic Bushing	4
85	P180041-I11	End Cap	2
86	P040166-A1	Slide End Cap Spacer	2
87	P050021-A1	Ø65_Transportation Wheel	2
88	P040042-A1	Ø7_HGP Wire Grommet	1
89	P060253-A1	Button Head Plug	2
90	P270006-A1	Lever Anchor	1
91	P190021-I1	Seat Back Cover	1
92	P040074-A1	Square End Cap	1
93	C080069-Z3	Main Frame Housing	2
94	P290020-AK	Quick Release	2
95	C030026-Z2	Seat Stop Axle	2
96	C040070-Z4	Axle	4
97	C080054-Z3	Ø52 x Ø40 x 28L_Bearing	1
98	B070077-S13	Adjusting Plate (L)	2
99	B070078-S13	Adjusting Plate (R)	2
100	P060654-A1	Plastic flaps	8
101	P060221-A1	Ø25 x Ø10 x 3T_Nylon WasherA	4
102	B060078-S13	Cushion Fixing Plate	2
103	P270062	Rubber Foot	4
104	C120079	Podwer metallurgy Sleeve	2
106	K040003B	Release Lever	2
107	P060682-A7	Nylon Handgrip	2
111	N240007	Drink Bottle Holder	1
112	F090259	750m/m_Hand Pulse W/Cable Assembly( L)	1
113	F090237-01	900m/m_Hand Pulse W/Cable Assembly( R)	1
114	D151001	Optical Sensor Board	1
115	F090301	Gear Motor	1
116	F030437	400m/m_Sensor W/Cable	1
117	E070509	250m/m_Conneting Wire	1
118	F030504	350m/m_Encoder Cable	1
119	E030042	300m/m_Handpulse Wire	1
120	E030070	300m/m_Handpulse Wire(White)	1
121	E060741	100m/m_DC Power Cord	1
122	E020456	1550m/m_Computer Cable	1
123	E030402	550m/m_Handpulse Wire	1
124	E030402-01	550m/m_Handpulse Wire(White)	1
125	RF080075	Power Adapter (110V,220V)	1
126	E030222	2900m/m_Hand Pulse Cable, Lower	1
127	P280004-A1	Block	1
129	J012503-ZG	M6 x 15m/m_Hex Head Bolt	2
130	J010502-Z1	5/16" x UNC18 x 3/4" _Hex Head Bolt	14

KEY NO.	PART NO.	DESCRIPTION	Q'TY
131	J010502-Z9	5/16" x UNC18 x 3/4" _Hex Head Bolt	1
132	J010503-Z1	5/16" x UNC18 x 5/8" _Hex Head Bolt	2
134	J011005-Z1	3/8" x 1-1/4" _Hex Head Bolt	8
135	J013508-Z1	M10 x 40m/m _Hex Head Bolt	4
136	J080075-Y3	M8 x P1.25 _Bolt	4
137	J020504C-Z1	5/16" x UNC18 x 1" _Button Head Socket Bolt	12
138	J022501-Y3	M6 x 10m/m _Button Head Socket Bolt	4
139	J023004-Z1	M8 x 20m/m _Button Head Socket Bolt	4
140	J023005-Z1	M8 x 25m/m _Button Head Socket Bolt	3
141	J020354P-ZL	5/16" x UNC18 x 95m/m _Button Head Socket Bolt	4
142	J032003-Z1	M5 x P0.8 x 15m/m _Socket Head Cap Bolt	24
143	J032502-Z1	M6 x P1.0 x 12m/m _Socket Head Cap Bolt	12
144	J032503-Z1	M6 x P1.0 x 15m/m _Socket Head Cap Bolt	8
145	J032505-Z1	M6 x 25m/m _Socket Head Cap Bolt	8
146	J032513I-ZQ	M6 x 38m/m _Socket Head Cap Bolt	2
147	J032009C-Y3	M5 x P0.8 x 45m/m _Socket Head Cap Bolt	1
148	J033002-Z1	M8 x P1.25 x 12m/m _Socket Head Cap Bolt	4
149	J033004-Z1	M8 x P1.25 x 20m/m _Socket Head Cap Bolt	2
150	J033522-Z4	M10 x P1.5 x 75m/m _Socket Head Cap Bolt	3
151	J035015G-Z1	M12 x P1.75 x 120m/m _Socket Head Cap Bolt	1
152	J080073-X7	M5 x P0.8 x 10m/m _Slotted Set Screw	4
153	J082514-Z1	M6 x 57m/m _Eye Bolt	1
154	J092014-Z1	M5 x 6m/m _Phillips Head Screw	2
155	J092002-Z1	M5 x 12m/m _Phillips Head Screw	33
156	J092501-Z1	M6 x 10m/m _Phillips Head Screw	4
157	J094501-Z1	M4 x P0.7 x 10m/m _Phillips Head Screw	2
158	J129021-Y3	3/8" x 7T _Luck Nut	6
159	J129621-Z1	M6 x P1.0 x 5T _Luck Nut	2
160	J129271-Z1	M8 x 6T _Luck Nut	4
161	J139061-Z1	5/16" x 6T _Nyloc Nut	29
162	J139161-Z1	M5 x 5T _Nyloc Nut	17
163	J139601-Z1	M6 x 6T _Nyloc Nut	6
164	J139261-Y3	M8 x 7T _Nyloc Nut	4
165	J139361-Z1	M10 x 8T _Nyloc Nut	4
166	J139311-Z1	M12 _Nyloc Nut	1
167	J160034-Z1	M10 x P1.5 x 8T _Nut	2
168	J160007-Y3	M6 x 19L _Nut	4
169	J210003-Z1	Ø3/8" x Ø19 x 1.5T _Flat Washer	10
170	J210004-Z1	Ø5 x Ø10 x 1T _Flat Washer	1
171	J210006-Z1	Ø5 x Ø12 x 1T _Flat Washer	8
172	J210008-Z1	Ø3/8" x Ø25 x 2T _Flat Washer	6
173	J210016-Z1	Ø1/4" x 13 x 1T _Flat Washer	5

KEY NO.	PART NO.	DESCRIPTION	Q'TY
174	J210023-Y3	Ø1/4" x Ø16 x 1T_Flat Washer	4
175	J210030-Z1	Ø6 x Ø19 x 3T_Flat Washer	16
176	J210032-Z1	Ø5/16" x 16 x 1.5T_Flat Washer	6
177	J210038-Z1	Ø3/8" x 20 x 3T_Flat Washer	2
178	J210048-Z1	Ø6.6 x Ø12 x 1.5T_Flat Washer	8
179	J210059-Z1	Ø8.5 x Ø18 x 1.5T_Flat Washer	10
180	J210063-Z1	Ø1/2" x Ø26 x 2.0T_Flat Washer	1
181	J210083-Z1	Ø45 x Ø21.8 x 2.5T_Flat Washer	2
182	J230001-Z1	Ø8 x Ø18 x 3T_Knurled Lock Washer	8
183	J260007-Z1	Ø8 x 1.5T_Split Washer	7
184	J260008-Z1	Ø5 x 1.5T_Split Washer	8
185	J260009-Z1	M6 x 1T_Split Washer	4
186	J310002-Z4	Ø17_C Ring	3
187	J310003-Z4	Ø10_C Ring	2
188	J310005-Z4	Ø16_C Ring	2
189	J310008	Ø40_C Ring	1
191	J352014-Z1	M5 x 6m/m_Phillips Head Screw	4
192	J352002-Z1	M5 x P0.8 x 12L_Phillips Head Screw	8
193	J396804-Z1	3.5 x 12m/m_Sheet Metal Screw	8
194	J517007-Z1	3 x 20m/m_Tapping Screw	4
195	J537105-Y3	Ø5 x 16L_Tapping Screw	2
196	J552005-Z1	M5 x 25m/m_Tapping Screw	2
197	J552002-Z1	M5 x 12m/m_Tapping Screw	10
198	J602001-Z1	M5 x P0.8 x 10L_Flat Phillips Head Screw	8
199	J602501-ZQ	M6 x P1.0 x 10L_Flat Phillips Head Screw	4
200	J670001-Z4	Ø28_Wire Clamp	10
201	J011008-Z1	3/8" x 2" _Hex Head Bolt	4
202	J010505Y-Y4	5/16" x UNC18 x 1-1/4" _Hex Head Bolt	1
203	J011013J-Z1	3/8" x UNC16 x 3-1/4" _Hex Head Bolt	2
204	J210072-Z2	Ø3/8" x Ø30 x 3T_Flat Washer	8
205	J210042-Z1	Ø8.5 x Ø26 x 2T_Flat Washer	2
206	J139011-Z1	3/8" x 7T_Nyloc Nut	10
207	J013026-X3	M8 x P1.25 x 16L_Hex Head Bolt	2
208	J011010AB-X3	3/8" x UNC16 x 2-1/2" _Hex Head Bolt	2
209	J020507AB-Z1	5/16" x UNC18 x 1-3/4" _Button Head Socket Bolt	2
210	J220001-Z1	Ø8 x 23 x 1.5T_Curved Washer	2
211	J260003-Z1	Ø10 x 2T_Split Washer	2
212	J031007Z-Z1	3/8" x UNC16 x 1-3/4" _Socket Head Cap Bolt	2
213	J011002-ZR	3/8" x 3/4" _Hex Head Bolt	12
214	J210003-ZJ	Ø3/8" x Ø19 x 1.5T_Flat Washer	4
215	J220010-Z1	Ø10 x 21.3 x 7.8T_Curved Washer	8
216	J260003-ZJ	Ø10 x 2T_Split Washer	12



<b>KEY NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>Q'TY</b>
<b>217</b>	J330049-Z1	L Allen Wrench(5x26x120L)	1
<b>219</b>	J330012-Z1	M8_Allen Wrench	1
<b>220</b>	J330028	12/14m/m_Wrench	1
<b>221</b>	J330027	13/14m/m_Wrench	1
<b>222</b>	J330008	Phillips Head Screw Driver	1
<b>223</b>	J330007-Z1	Short Phillips Head Screw Driver	1
<b>241</b>	N060015	Sticky Banding Stripe	2
<b>242</b>	N060014	Sticky Banding Stripe	2
<b>243</b>	N200091	Handgrip	1
<b>245</b>	J553006-YV	M8 x P1.25 x 30L_Flat Head Socket Screw	6
<b>246</b>	J160013-Z1	M8 x 1.25 x 6.5T_Square Nut	6
<b>247</b>	E061004	Transformer Power Cord (220V,Optional)	1

# TRAINING GUIDELINES

## EXERCISE

Exercise is one of the most important factors in the overall health of an individual. Listed among its benefits are:

- Increased capacity for physical work (strength endurance)
- Increased cardiovascular (heart and arteries/veins) and respiratory efficiency
- Decreased risk of coronary heart disease
- Changes in body metabolism, e.g. losing weight
- Delaying the physiological effects of age
- Physiological effects, e.g. reduction in stress, increase in self-confidence, etc.

## BASIC COMPONENTS OF PHYSICAL FITNESS

**There are four all-encompassing components of physical fitness, and we need to briefly define each and clarify its role.**

**Strength** is the capacity of a muscle to exert a force against resistance. Strength contributes to power and speed and is of great importance to a majority of sportspeople.

**Muscular Endurance** is the capacity to exert a force repeatedly over a period of time, e.g. it is the capacity of your legs to carry you 10 Km without stopping.

**Flexibility** is the range of motion about a joint. Improving flexibility involves the stretching of muscles and tendons to maintain or increase suppleness and provides increased resistance to muscle injury or soreness.

**Cardio-Respiratory Endurance** is an essential component of physical fitness. It is the efficient functioning of the heart and lungs

## AEROBIC FITNESS

The largest amount of oxygen that you can use per minute during exercise is called your maximum oxygen uptake (MVo<sub>2</sub>). This is often referred to as your aerobic capacity.

The effort that you can exert over a prolonged period of time is limited by your ability to deliver oxygen to the working muscles. Regular vigorous exercise produces a training effect that can increase your aerobic capacity by as much as 20 to 30%. An increased MVO<sub>2</sub> indicates an increased ability of the heart to pump blood, of the lungs to ventilate oxygen and of the muscles to take up oxygen.

## ANAEROBIC TRAINING

This means “without oxygen” and is the output of energy when the oxygen supply is insufficient to meet the body’s long-term energy demands. (For example, 100-meter sprint).

## The Training Threshold

**This is the minimum level of exercise which is required to produce significant improvements in any physical fitness parameter.**

## Progression

As you become fitter, a higher intensity of exercise is required to create an overload and therefore provide continued improvement

## Overload

This is where you exercise at a level above that which can be carried out comfortably. The intensity, duration and frequency of exercise should be above the training threshold and should be gradually increased as the body adapts to the increasing demands. As your fitness level improves, so the training threshold should be raised.

Working through your program and gradually increasing the overload factor is important.

## Specificity

Different forms of exercise produce different results. The type of exercise that is carried out is specific both to the muscle groups being used and to the energy source involved.

There is little transfer of the effects of exercise, i.e. from strength training to cardiovascular fitness.

That is why it is important to have an exercise program tailored to your specific needs.

## Reversibility

If you stop exercising or do not do your program often enough, you will lose the benefits you have gained. Regular workouts are the key to success.

## WARM-UP

Every exercise program should start with a warm-up where the body is prepared for the effort to come. It should be gentle and preferably use the muscles to be involved later.

Stretching should be included in both your warm-up and cool-down and should be performed after 3-5 minutes of low-intensity aerobic activity or callisthenic type exercise.

## Warm Down or Cool Down

This involves a gradual decrease in the intensity of the exercise session. Following exercise, a large supply of blood remains in the working muscles. If it is not returned promptly to the central circulation, pooling of blood may occur in the muscles

## Heart Rate

As you exercise, so the rate at which your heartbeat also increases. This is often used as a measure of the required intensity of exercise. You need to exercise hard enough to condition your circulatory system and increase your pulse rate, but not enough to strain your heart.

Your initial level of fitness is important in developing an exercise program for you. If you are starting off, you can get a good training effect with a heart rate of 110-120 beats per minute (BPM). If you are fitter, you will need a higher threshold of stimulation.

To begin with, you should exercise at a level that elevates your heart rate to about 65 to 70% of your maximum. If you find this is too easy, you may want to increase it, but it is better to lean on the conservative side.

As a rule of thumb, the maximum heart rate is 220 minus your age. As you increase in age, so your heart, like other muscles, loses some of its efficiency. Some of its natural loss is won back as fitness improves.

The following table is a guide to those who are "starting fitness."

Age	25	30	35	40	45	50	55	60	65
Target heart Rate 10 Second Count	23	22	22	21	20	19	19	18	18
Beats per Minute	138	132	132	126	120	114	114	108	108

## Pulse Count

The pulse count (on your wrist or carotid artery in the neck, taken with two index fingers) is done for ten seconds, taken a few seconds after you stop exercising. This is for two reasons: (a) 10 seconds is long enough for accuracy, (b) the pulse count is to approximate your BPM rate at the time you are exercising. Since heart rate slows as you recover, a longer count isn't as accurate.

The target is not a magic number but a general guide. If you're above average fitness, you may work quite comfortably, a little above that suggested for your age group.

The following table is a guide to those who are keeping fit. Here we are working at about 80% of maximum.

Age	25	30	35	40	45	50	55	60	65
Target heart Rate									
10 Second Count	26	26	25	24	23	22	22	21	20
Beats per Minute	156	156	150	144	138	132	132	126	120

Don't push yourself too hard to reach the figures on this table. It can be very uncomfortable if you overdo it. Let it happen naturally as you work through your program. Remember, the target is a guide, not a rule; a little above or below is just fine.

Two final comments:(1) don't be concerned with day-to-day variations in your pulse rate; being under pressure or not enough sleep can affect it;(2) your pulse rate is a guide, don't become a slave to it.

## ENDURANCE CIRCUIT TRAINING

Cardiovascular endurance, muscle, strength, flexibility and coordination are all necessary for maximum fitness. The principle behind circuit training is to give a person all the essentials at one time by going through your exercise program moving as fast as possible between each exercise. This increases the heart rate and sustains it, which improves the fitness level. Do not introduce this circuit training effect until you have reached an advanced program stage.

## Body Building

Is often used synonymously with strength training. The fundamental principle here is OVERLOAD. Here, the muscle works against greater loads than usual. This can be done by increasing the load you are working against.

## Patronization

This is the term used to vary your exercise program for both physiological and psychological benefits. In your overall program, you should vary the workload, frequency and intensity. The body responds better to variety, and so do you. In addition, when you feel yourself getting "stale", bring in periods of lighter exercise to allow the body to recuperate and restore its reserves. You will enjoy your program more and feel better about it.

## **Muscle Soreness**

For the first week or so, this may be the only indication you have that you are on an exercise program. This, of course, does depend on your overall fitness level. A confirmation that you are on the correct program is a very slight soreness in most major muscle groups. This is quite normal and will disappear in a matter of days.

If you experience major discomfort, you may be on a program that is too advanced, or you have increased your program too rapidly.

If you experience PAIN during or after exercise, your body is telling you something.

Stop exercising and consult your doctor.

## **WHAT TO WEAR**

Wear clothing that will not restrict your movement in any way while exercising. Clothes should be light enough to allow the body to cool. Excessive clothing that causes you to perspire more than you normally would while exercising gives you no advantage. The extra weight you lose is body fluid and will be replaced with the next glass of water you drink. It is advisable to wear a pair of gym or running shoes or "sneakers."

## **Breathing during Exercise**

Do not hold your breath while exercising. Breathe normally as much as possible. Remember, breathing involves the intake and distribution of oxygen, which feeds the working muscles.

## **Rest periods**

Once you start your exercise program, you should continue through to the end. Do not break off halfway through and then restart at the same place later on without going through the warm-up stage again.

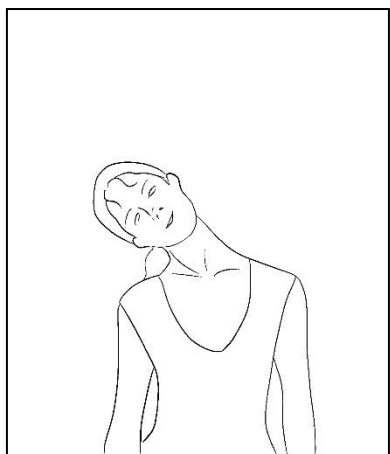
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half-minute to one minute rest periods

# STRETCHING

Stretching should be included in both your warm-up and cool-down and should be performed after 3-5 minutes of low-intensity aerobic activity or callisthenic type exercise. Movements should be performed slowly and smoothly, with no bouncing or jerking. Move into the stretch until slight tension; no pain is felt in the muscle and hold for 20-30 seconds. Breathing should be slow, rhythmical and under control, making sure never to hold your breath.

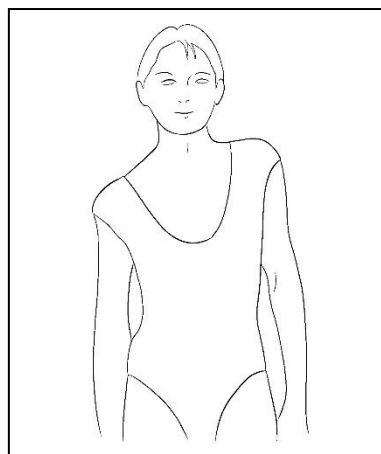
## HEAD ROLLS

Rotate your head to the right for one count, feeling the stretch up the left side of your neck. Next, rotate your head back for one count, stretch your chin to the ceiling, and let your mouth open. Rotate your head to the left for one count, and finally, drop your head to your chest for one count.



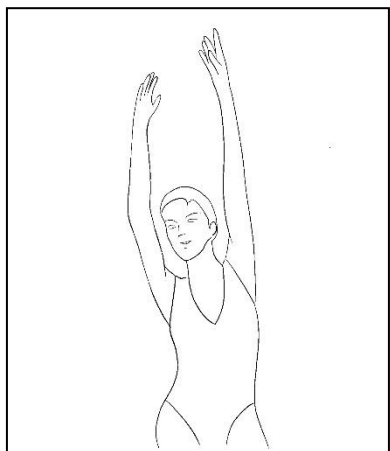
## SHOULDER LIFTS

Lift your right shoulder toward your ear for one count. Then lift your left shoulder for one count as you lower your right shoulder.



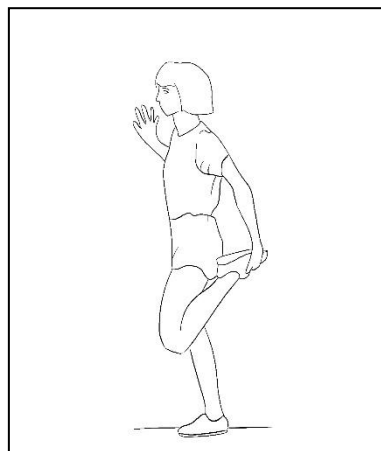
## SIDE STRETCHES

Open your arms to the side and continue lifting them until they are over your head. Reach your right arm as far upward toward the ceiling as you can for one count. Feel the stretch up your right side. Repeat this action with your left foot left arm.



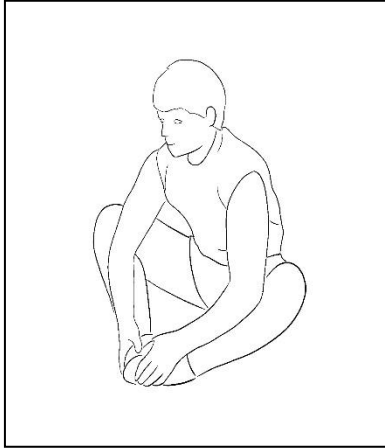
## QUADRICEPS STRETCH

With one hand against a wall for balance, reach behind you and pull your right foot up. Bring your heel as close to your buttocks as possible. Hold for 15 counts and repeat with left foot up.



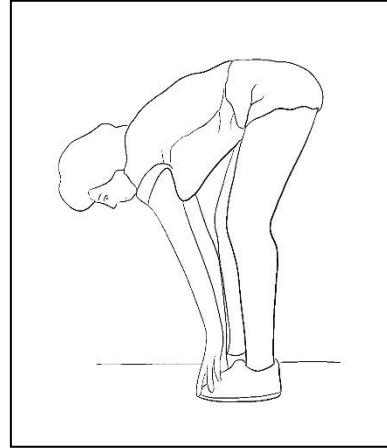
### **INNER THIGH STRETCH**

Sit with the soles of your feet together with your knees pointing outward. Pull your feet as close to your groin as possible. Gently push your knees towards the floor. Hold for 15 counts.



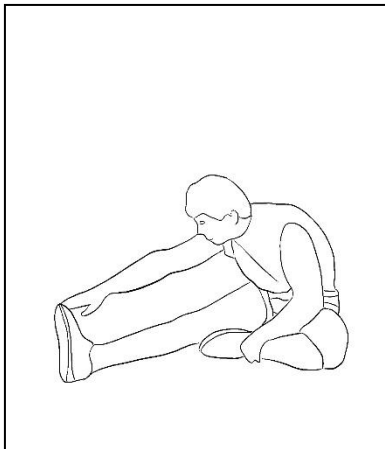
### **TOE TOUCHES**

Slowly bend forward from your waist, letting your back and shoulders relax as you stretch toward your toes. Reach down as far as you can and hold for 15 counts.



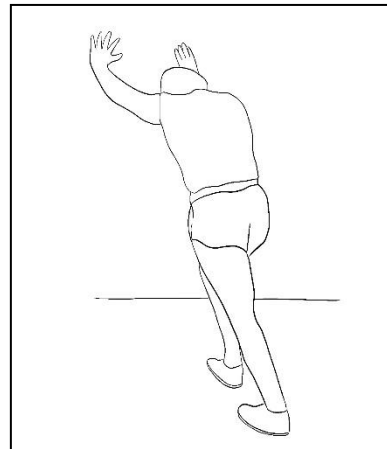
### **HAMSTRING STRETCHES**

Sit with your right leg extended. Rest the sole of your left foot against your right inner thigh. Stretch your toe as far as possible. Hold for 15 counts. Relax and then repeat with left leg extended.



### **CALF / ACHILLES STRETCH**

Lean against a wall with your left leg in front of the right and your arms forward. Keep toward your right leg straight, and the left foot on the floor, then bend the left leg and lean forward by moving your hips toward the wall. Hold, then repeat on the other side for 15 counts.



# MANUFACTURER'S LIMITED WARRANTY

Dyaco Canada Inc. warrants all its Spirit steppers for a period of time listed below, from the date of retail sale, as determined by a sales receipt. Dyaco Canada Inc.'s responsibilities include providing new or remanufactured parts, at Dyaco Canada Inc.'s option, and technical support to our independent dealers and servicing organizations. In the absence of a dealer or service organization, these warranties will be administered by Dyaco Canada Inc. directly to the facility. The warranty period applies to the following components:

## Home Warranty

Frame, Motor & Deck	Lifetime
Electronics	10 Years
Parts	10 Years
Labour	2 Years

## Light Commercial Warranty (Non-dues paying facility)

Frame	Lifetime
Electronics	5 Years
Parts	5 Years
Labour	2 Years

**This warranty is not transferable and is extended only to the original owner.**

## NORMAL RESPONSIBILITIES OF THE FACILITY

The facility is responsible for the items listed below:

1. The warranty registration can be completed online. Visit [www.dyaco.ca/warranty.html](http://www.dyaco.ca/warranty.html) and complete the warranty registration.
2. Proper use of the stepper in accordance with the instructions provided in this manual.
3. Proper installation in accordance with instructions provided with the stepper and with all local electric codes.
4. Proper connection to a grounded power supply of sufficient voltage, replacement of blown fuses, repair of loose connections or defects in facility wiring.
5. Expenses for making the stepper accessible for servicing, including any item that was not part of the stepper at the time it was shipped from the factory.
6. Damages to the stepper finish during shipping, installation or following installation.
7. Routine maintenance of this unit as specified in this manual.

## EXCLUSIONS

This warranty does not cover the following:

1. CONSEQUENTIAL, COLLATERAL, OR INCIDENTAL DAMAGES SUCH AS PROPERTY DAMAGE AND INCIDENTAL EXPENSES RESULTING FROM ANY BREACH OF THIS WRITTEN OR ANY IMPLIED WARRANTY.  
Note: Some areas do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.
2. Service call reimbursement to the facility. Service call reimbursement to the dealer that does not involve malfunction or defects in workmanship or material, for units that are beyond the warranty period, for units that are beyond the service call reimbursement period, for steppers not requiring component replacement.
3. Damages caused by services performed by persons other than authorized Dyaco Canada Inc. service companies; use of parts other than original Dyaco Canada Inc. parts; or external causes such as corrosion, discoloration of paint or plastic, alterations, modifications, abuse, misuse, accident, improper maintenance, inadequate power supply, or acts of God.
4. Products with original serial numbers that have been removed or altered.
5. Products that have been: sold, transferred, bartered, or given to a third party.
6. Products that do not have a warranty registration card on file at Dyaco Canada Inc. Dyaco Canada Inc. reserves the right to request proof of purchase if no warranty record exists for the product.
7. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE.
8. Warranties outside of Canada may vary. Please contact your local dealer or Dyaco Canada for details.

## SERVICE

The sales receipt establishes the labour warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. This written warranty gives you specific legal rights. Service under this warranty must be obtained by following these steps, in order:

1. Contact your selling authorized Spirit dealer or Dyaco Canada.
2. If you have any questions about your new product or questions about the warranty contact Dyaco Canada Inc. at 1-888-707-1880.
3. If no local service is available, Dyaco Canada Inc. will repair or replace the parts, at Dyaco Canada Inc.'s option, within the warranty period at no charge for parts. All transportation costs, both to our factory and upon return to the facility, are the responsibility of the facility. The facility is responsible for adequate packaging upon return to Dyaco Canada Inc. Dyaco Canada Inc. is not responsible for damages that occur during shipping. Make all freight damage claims with the appropriate freight carrier. DO NOT SHIP ANY UNIT TO OUR FACTORY WITHOUT A RETURN AUTHORIZATION NUMBER. All units arriving without a return authorization number will be refused.
4. For any further information, or to contact our service department by mail, send your correspondence to:

Dyaco Canada Inc.  
5955 Don Murie Street  
Niagara Falls, ON  
L2G 0A9

Product features or specifications as described or illustrated are subject to change without notice. All warranties are made by Dyaco Canada.  
Customer Service 1-888-707-1880  
Email: [customerservice@dyaco.ca](mailto:customerservice@dyaco.ca)



# dyaco

Please visit us online for information about our other brands and products manufactured and distributed by Dyaco Canada Inc.

**SPIRIT**

[spiritfitness.ca](http://spiritfitness.ca)

**X** XTERRA

[xterrafitness.ca](http://xterrafitness.ca)

**UFC**

[dyaco.ca/UFC/UFC-home.html](http://dyaco.ca/UFC/UFC-home.html)

**SOLE**  
FITNESS

[solefitness.ca](http://solefitness.ca)

**EVERLAST**

[dyaco.ca/products/everlast.html](http://dyaco.ca/products/everlast.html)

**Johnny G**  
by SPIRIT

[spiritfitness.ca/johnnyg.html](http://spiritfitness.ca/johnnyg.html)

**TRAINOR**  
**SPORTS**

[trainorsports.ca](http://trainorsports.ca)

For more information, please contact Dyaco Canada Inc.  
T: 1-888-707-1880 | 5955 Don Murie St., Niagara Falls, Ontario L2G 0A9 | [sales@dyaco.ca](mailto:sales@dyaco.ca)

Dyaco Canada Inc. [dyaco.ca](http://dyaco.ca)