

Owner's Manual

Model No.
16807958000
CRS800S

- Assembly
- Operation
- Adjustments
- Parts
- Warranty

CAUTION:

You must read and understand this owner's manual before operating unit.

SPIRIT



Retain For Future
Reference

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SPIRIT

CONGRATULATIONS ON YOUR SEMI-RECUMBENT STEPPER

Thank you for your purchase of this quality Semi-Recumbent Stepper from Dyaco Canada Inc. Your new Semi-Recumbent 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 Semi-Recumbent 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 complete and mail your registration card today and enjoy your new semi-recumbent stepper.

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

The self-addressed product registration card must be completed in full and returned to Dyaco Canada Inc.

SAFETY PRECAUTIONS

IMPORTANT SAFETY INFORMATION

THIS UNIT IS INTENDED FOR HOUSEHOLD USE ONLY

READ ALL INSTRUCTIONS BEFORE USING THIS SEMI-RECUMBENT 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 Semi-Recumbent Stepper.
2. It is the responsibility of the owner to ensure that all users of the Semi-Recumbent Stepper 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 user
5. The Semi-Recumbent Stepper must be regularly checked for signs of wear and damage. Any part found defective, the part must be replaced with 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 semi-recumbent 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 Semi-Recumbent Stepper
13. Always hold the handlebars when mounting, dismounting, or using the Semi-Recumbent Stepper.
14. Keep your back straight when using the Semi-Recumbent Stepper; do not arch your back.

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 form 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 appliance.

DANGER - To reduce the risk of electric shock disconnect your Semi-Recumbent Stepper from the electrical outlet prior to cleaning and/or service work.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons, install the Semi-Recumbent Stepper on a flat level surface with access to a 110-volt, 15-amp grounded outlet with only the Semi-Recumbent Stepper plugged into the circuit.

DO NOT USE AN EXTENSION CORD UNLESS IT IS A 14 AWG OR BETTER, WITH ONLY ONE OUTLET ON THE END: 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. See Grounding Instructions, page 5.

- Do not operate Semi-Recumbent Stepper on deeply padded, plush or shag carpet. Damage to both carpet and Semi-Recumbent Stepper may result.
- Keep children away from the Semi-Recumbent Stepper. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the Semi-Recumbent Stepper if it has a damaged cord or plug. If the Semi-Recumbent 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.
- Do not attempt to use your Semi-Recumbent Stepper for any purpose other than for the purpose it is intended.
- The hand pulse sensors are not medical devices. 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 Semi-Recumbent Stepper. Quality athletic shoes are recommended to avoid leg fatigue.
- This appliance 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 use of the appliance by a person responsible for their safety.
- Keep children under the age of 13 away from this machine.

IMPORTANT ELECTRICAL INSTRUCTIONS

WARNING!

NEVER remove any cover without first disconnecting AC power.

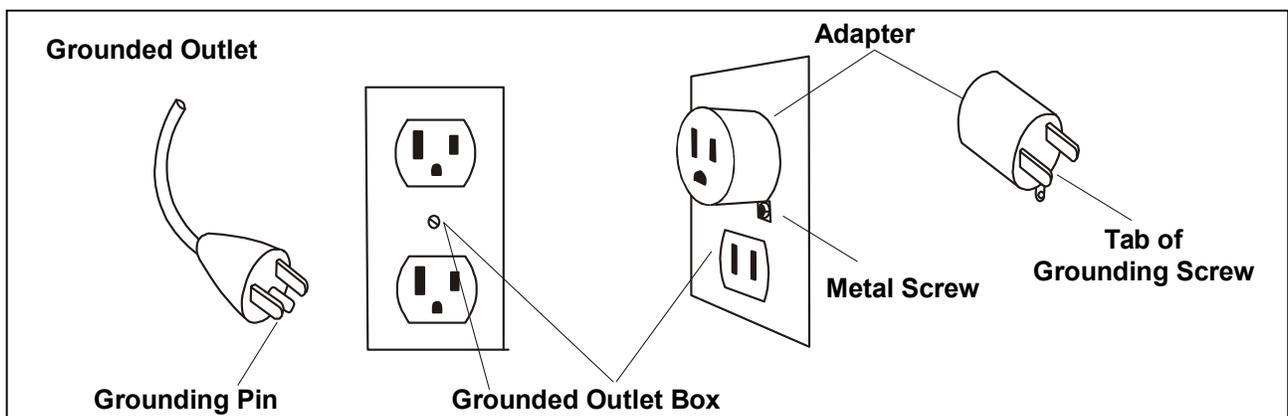
If voltage varies by ten percent (10%) or more, the performance of your Semi-Recumbent Stepper may be affected. **Such conditions are not covered under your warranty.** If you suspect the voltage is low, contact your local power company or a licensed electrician for proper testing.

NEVER expose this Semi-Recumbent Stepper to rain or moisture. This product is **NOT** designed for use outdoors, near a pool or spa, or in any other high humidity environment. The operating temperature specification is 40 to 120 degrees Fahrenheit, and humidity is 95% non-condensing (no water drops forming on surfaces).

GROUNDING INSTRUCTIONS

This product must be grounded. If the Semi-Recumbent Stepper should malfunction or breakdown, grounding provides a path of least resistance for electric current, reducing the risk of electric shock. This product is equipped with a cord having an equipment-grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician. This product is for use on a nominal 110-volt circuit, and has a grounding plug that looks like the plug illustrated below. A temporary adapter that looks like the adapter illustrated below may be used to connect this plug to a 2-pole receptacle as shown below if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet, (shown below) can be installed by a qualified electrician. The green colored rigid ear-lug, or the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.



IMPORTANT OPERATION INSTRUCTIONS

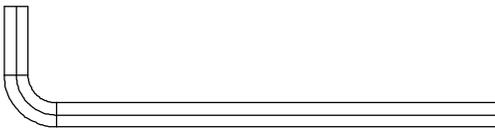
- **NEVER** operate this Semi-Recumbent Stepper without reading and completely understanding the results of any operational change you request from the computer.
- Understand that changes in resistance do not occur immediately. Set your desired resistance on the computer console and release the adjustment key. The computer will obey the command gradually.
- **NEVER** use your Semi-Recumbent Stepper during an electrical storm. Surges may occur in your facility or household power supply that could damage Semi-Recumbent Stepper components. Unplug the Semi-Recumbent Stepper during an electrical storm as a precaution.
- Use caution while participating in other activities while pedaling on your Semi-Recumbent 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.

ASSEMBLY INSTRUCTIONS

Unpacking

1. Cut the straps, then lift the box over the unit and unpack.
2. 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.
3. 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.

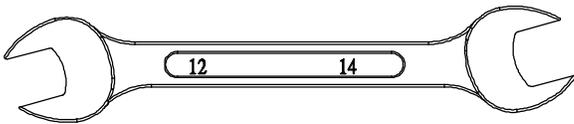
Assembly Tools



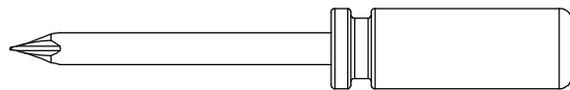
#219. M8_L Allen Wrench (1 pc)



#217. 5mm_L Allen Wrench (1 pc)



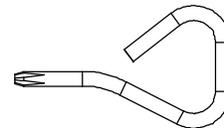
#220. 12/14m/m_Wrench (1 pc)



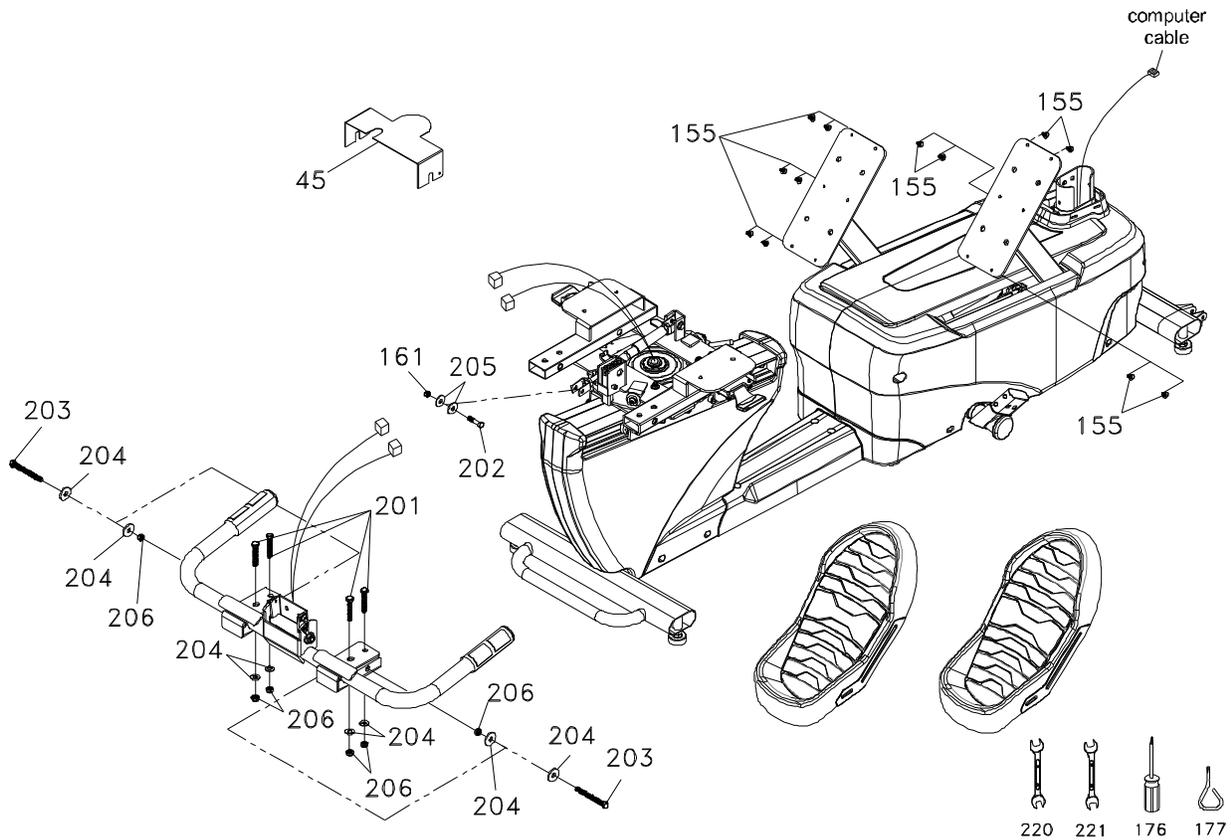
#222. Phillips Head Screw Driver (1 pc)



#221. 13/14m/m_Wrench (1 pc)



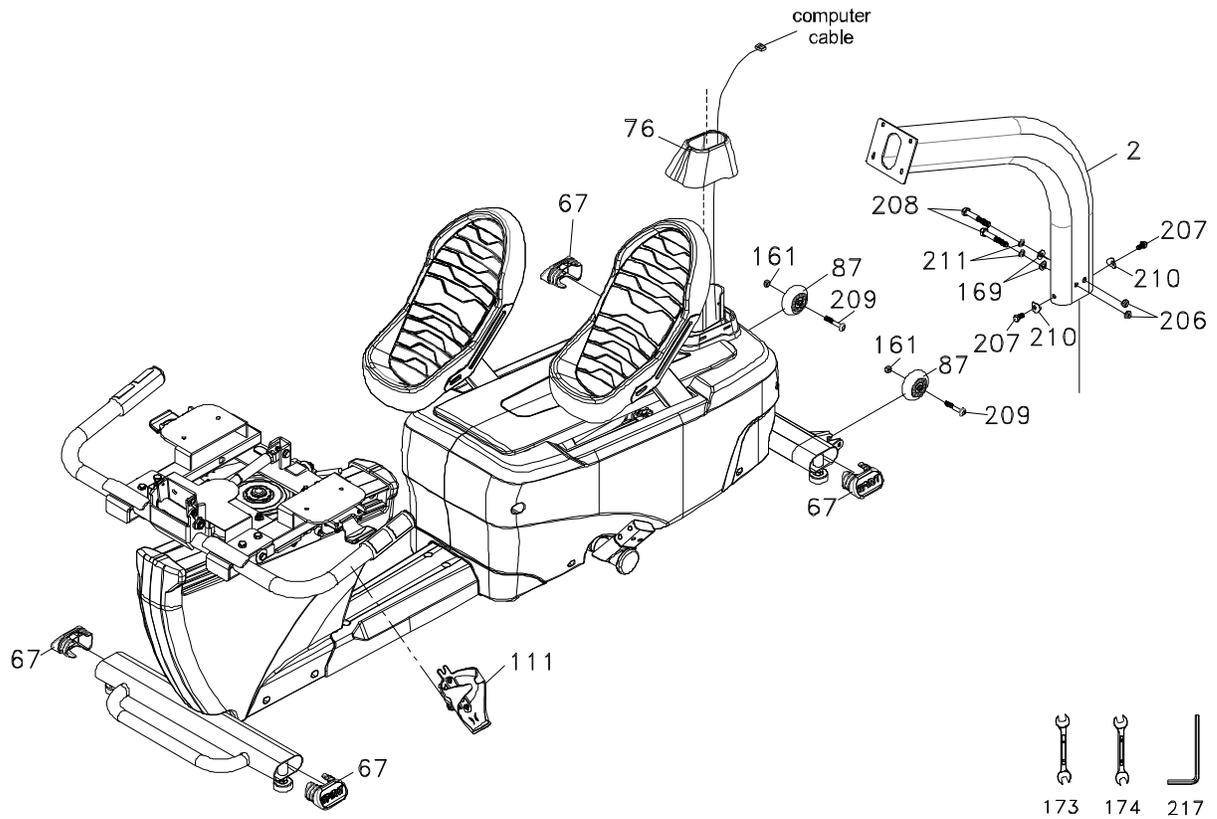
#223. Short Phillips Head Screw Driver (1 pc)



HARDWARE FOR STEP 1			
PART	TYPE	DESCRIPTION	Q'TY
203	HEX HEAD BOLT	3/8" × 3-1/4"	2
201	HEX HEAD BOLT	3/8" × 2"	4
202	HEX HEAD BOLT	5/16" × 1-1/4"	1
155	PHILLIPS HEAD SCREW	M5×12	12
204	FLAT WASHER	3/8"	8
205	FLAT WASHER	8.5×26×2T	2
206	NYLOC NUT	3/8"×7T	6
161	NYLOC NUT	5/16"×6T	1

STEP 1:

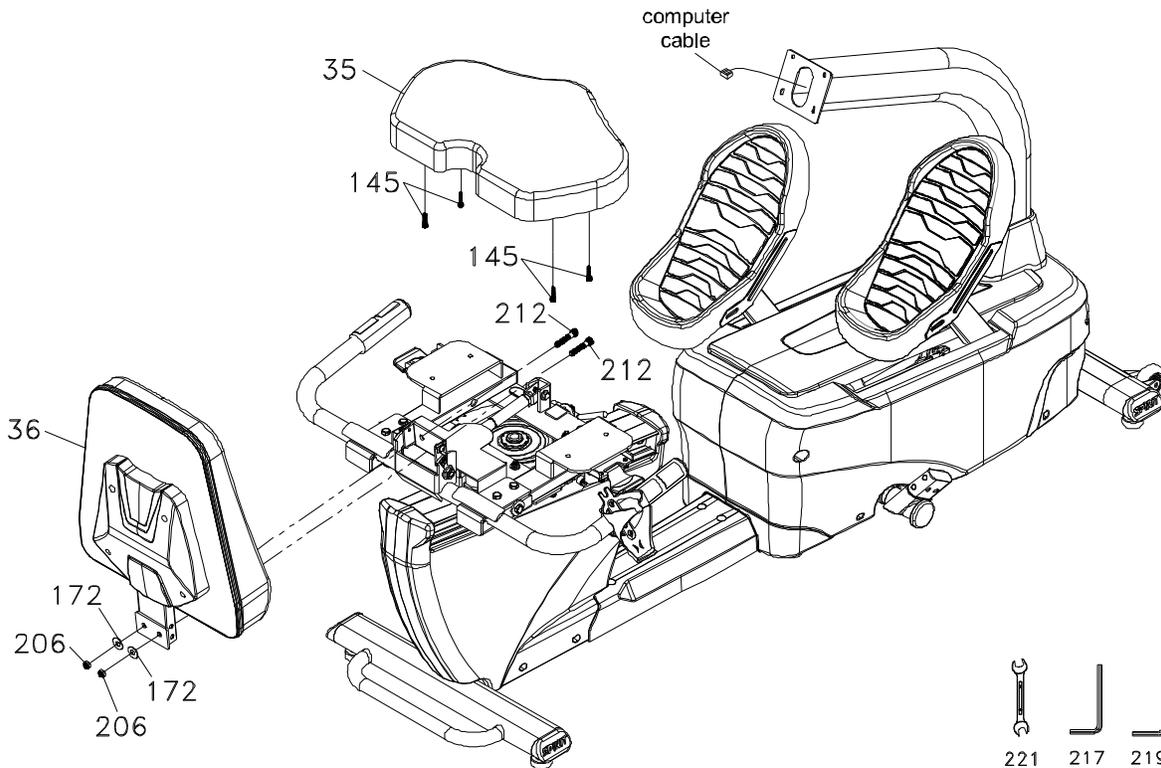
1. Secure the PEDALS with PHILLIPS HEAD SCREWS (155)
2. Install SEAT COVER (45).
3. Use HEX HEAD BOLTS (203) with FLAT WASHERS (204) and NYLOC NIUTS (206) and HEX HEAD BOLTS (201) and FLAT WASHERS (204) and NYLOC NUTS (206) to secure HANDLEBAR on the SEAT ASSEMBLY.
4. Connect HAND PULSE CABLES; arrange cables taking care so they are not crushed during seat rotation and adjustment.



HARDWARE FOR STEP 2			
PART	TYPE	DESCRIPTION	Q'TY
209	BUTTON HEAD BOLT	5/16" x 1-3/4"	2
207	HEX HEAD BOLT	M8 x 16	2
208	HEX HEAD BOLT	3/8" x 2-1/2"	2
169	FLAT WASHER	3/8"x19x1.5T	2
210	CURVED WASHER	8x23x1.5T	2
206	NYLOC NUT	3/8"x7T	2
161	NYLOC NUT	5/16"x 6T	2
211	SPLIT WASHER	10x2T	2

STEP 2:

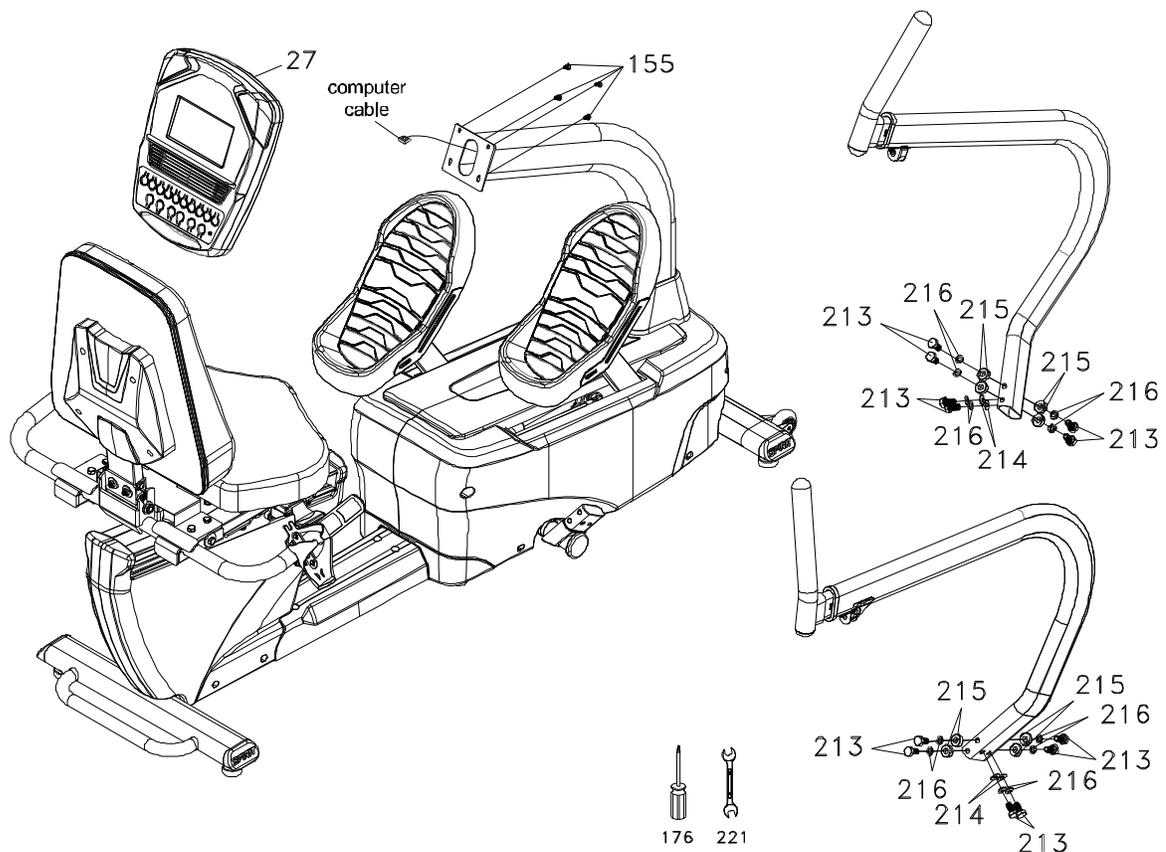
1. Install TRANSPORTATION WHEELS (87) with BUTTON HEAD SOCKET BOLTS (209) and NYLOC NUTS (161).
2. Place the CONSOLE MAST (2) through the CONSOLE MAST COVER (76) with the correct orientation. Snake the console cables through the bottom end of the console mast and out through the top.
3. Insert the mast on the MAIN FRAME and use HEX HEAD BOLTS (208) with SPLIT WASHERS (211), FLAT WASHERS (169) and NYLOC NUTS (206) to secure on the side. Then use HEX HEAD BOLTS (207) and CURVED WASHERS (210) to secure at the front and back of tube.
4. Plug in the END CAPS (67) on OVAL STABILIZER TUBES. NOTE: Do not pinch wires.
5. Install WATER BOTTLE CAGE (111).



HARDWARE FOR STEP 3			
PART	TYPE	DESCRIPTION	Q'TY
145	HEX HEAD BOLT	M6x25	4
172	FLAT WASHER	3/8" x 25x 2T	2
206	NYLOC NUT	3/8" x 7T	2
212	HEX HEAD BOLT	3/8" x 1-3/4"	2

STEP 3:

1. Put the SEAT CUSHION on the SEAT CARRIAGE and secure with HEX HEAD BOLTS (145).
2. Insert the SEAT BACK in the SEAT CARRIAGE and secure with HEX HEAD BOLTS (212), FLAT WASHERS (172) and NYLOC NUTS (206).



HARDWARE FOR STEP 4			
PART	TYPE	DESCRIPTION	Q'TY
155	PHILLIPS HEAD SCREWS	M5 x 12	4
213	BUTTON HEAD BOLT	3/8" x 3/4"	12
214	FLAT WASHER	3/8" x 19 x 1.5T	4
215	CURVED WASHER	10x 21.3 x 7.8T	8
216	SPLIT WASHER	10x 2T	12

STEP 4:

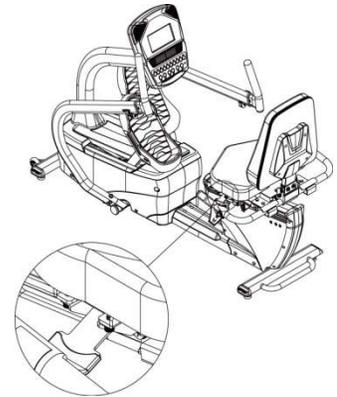
1. Connect the cables out of the mast to the CONSOLE (27), and use PHILLIPS HEAD SCREWS (155) to secure it.
2. To install LEFT and RIGHT SWING ARMS use BUTTON HEAD BOLTS (213), FLAT WASHERS (214), SPLIT WASHERS (216) and CURVED WASHERS (215).

RECUMBENT STEPPER SETUP

SEAT ROTATION

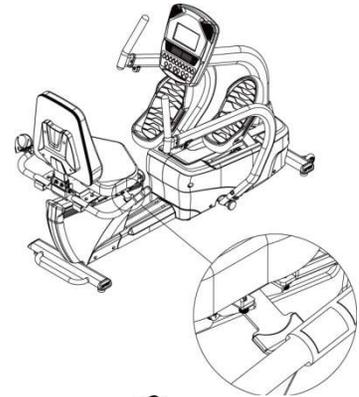
Lift left lever and hold while rotating the seat to desired position.

Release lever.



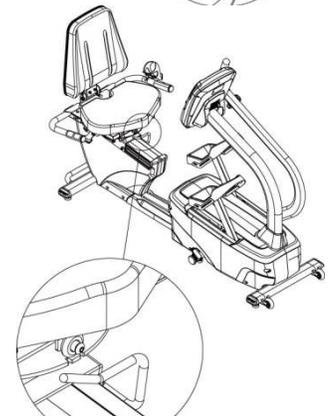
SEAT RECLINE

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



SEAT FOR/AFT ADJUSTMENT

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



HANDHOLD ADJUSTMENT

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



OPERATION OF YOUR SEMI-RECUMBENT STEPPER



POWER

When the A.C Power cord is connected to the equipment, the console will automatically power up. If there is no input to the console for 20 minutes the console will go to stand-by mode. In stand-by mode the console display will turn off. To turn the console on press any key.

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 Message Center will show the software version (i.e.: VER 1.0). The distance window shows the distance in miles or km and the time window shows the total hours of use.

The odometer will remain displayed for only a few seconds then the console will go to the start up display. The dot matrix display will be scrolling through the different profiles of the programs and the Message Center will be scrolling the start up message. You may now begin to use the console.

DOT MATRIX CENTER DISPLAY

Twenty columns of boxes (8 high) indicate each segment of a workout. The boxes only show an approximate level (resistance) of effort. They do not necessarily indicate a specific value - only an approximate percent to compare levels of intensity. In Manual Operation the resistance dot matrix window will build a profile "picture" as values are changed during a workout.

1/4 MILE TRACK

The 0.4km (1/4-mile) track (one lap) will be displayed around the dot matrix window. The flashing segment indicates your progress. Once the 1/4-mile (Metric - 0.4k) is complete this feature will begin again. There is a lap counter in the Message Center for monitoring your distance.

PULSE GRIP FEATURE

The Pulse (Heart Rate) console window will display your current heart rate in beats per minute during the workout. You must use both stainless steel sensors on the stationary handlebars or the heart rate transmitter chest strap to display your pulse. Pulse value displays anytime the upper display is receiving a Pulse signal. You may not use the Grip Pulse feature while in Heart Rate Programs.

CALORIE DISPLAY

Displays the cumulative calories burned at any given time during your workout.

Note: This is only a rough guide used for comparison of different exercise sessions, which cannot be used for medical purposes.

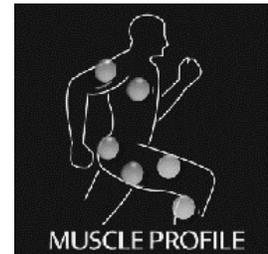
SPEAKERS

The console has built-in Speakers and an audio input jack. There is no volume control on the console. The volume must be controlled on the Audio Source.

MUSCLE ACTIVATION FIGURE

There is an anatomical figure located at the top of the console. This figure will light all areas that are activated when using the Semi-Recumbent Stepper. These will light up during any of the programs. You can control which muscles are activated by customizing the resistance profile during the set up phase of console programming. If you accept the default program profile, the selected program will determine which muscles will be activated by automatically adjusting the resistance. Generally the following guidelines hold true:

- The lower body lights will activate in three degrees of engagement: Green represents minimal muscle involvement, yellow represents medium involvement, and red represents full or heavy activation.
- These are the different scenarios for lower body muscle activation:
 - Levels 1-10: Green – Hamstrings & Gluteals light up; Amber – Arm, Pec, Quadriceps & Calves light up
 - Levels 11-20: Amber – Arm, Pec, Hamstrings & Gluteals light up; Red – Quadriceps & Calves light up



HEART RATE % PROFILE

The console LCD screen will display your current heart rate anytime when a pulse is detected. The Bar Graph, located to the right of the LCD screen, will show your current heart rate % in relation to your projected maximum heart rate, which is determined by your age that you entered during the programming phase of any of the 10 programs. The significance of the bar graph colors are as follows:

- 50-60% of maximum is Amber
- 65-80% of maximum is Amber and Green
- 85-90% or more is Amber, Green, and Red



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 and the workload may be adjusted manually by pressing the **LEVEL UP/ DOWN** keys. The dot matrix display will have only the bottom row lit at first. As you increase the work load more rows will light indicating a harder workout. The Semi-Recumbent Stepper will get harder to pedal as the rows increase.



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 Message Center will initially be displaying the Program name. When in scan mode during a program, METS will be displayed for four seconds, then move on and display Segment time, Max level. Pressing the **ENTER** key again will bring you back to the beginning.

The **STOP** key 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 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 display your Workout Summary (Average MET, Total time & Average HR). If the **STOP** key is held down for 3 seconds or a third time during the program, the console will perform a complete **RESET**. During data entry for a program the **Stop** key performs a previous screen or segment function. This allows you to go back to change programming data.



PROGRAM KEYS

The program keys are used to preview each program. When you first turn the console on you may press each program key to preview what the program profile looks like. If you decide that you want to try a program, press the corresponding program key and then press the **Enter** key to select the program and enter into the data-setting mode.

The Semi-Recumbent Stepper has a built in heart rate monitoring system. Simply grasping the hand pulse sensors on the stationary handlebars or wearing the heart rate transmitter (see Using Heart Rate Transmitter section) will start the Heart Icon blinking (this may take a few seconds). The Pulse Display Window will display your heart rate, or Pulse in beats per minute.

The console includes a built-in fan to help keep you cool. To turn the fan on, press the key on the left side of the console.

PROGRAMMING THE CONSOLE

Each of the programs can be customized with your personal information and changed to suit your needs. Some of the information is necessary to ensure the readouts are correct. You will be asked for your Age and Weight. Entering your Age is necessary during the Heart Rate programs to ensure the correct predicted target heart rate zone. Entering your Weight aides in calculating a more 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 only an estimate and tend to vary widely. They are meant only as a guide to monitor your progress from workout to workout.

ENTERING A PROGRAM AND CHANGING SETTINGS

When you enter a program, by pressing a program key, then **Enter** key, 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 Message Center. If you start a program without changing the settings, the default or saved settings will be used.

NOTE: Age and Weight default settings will change when you enter a new number. So the last Age and Weight entered will be saved as the new default settings. If you enter your Age and Weight the first time you use the Semi-Recumbent Stepper, you will not have to enter it every time you work out unless either your Age or Weight changes, or someone else enters a different Age and Weight.

PROGRAMMABLE FEATURES

MANUAL

The Manual program works as the name implies, manually. This means that you control the workload and not the computer. To start the Manual program, follow the instructions below or just press the **Start** key.

1. Press the **Manual** key, then press the **Enter** key.
2. The 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 value and proceed on to the next screen.
3. You are now asked to enter your Weight. You may adjust the Weight value 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 finished editing the settings and can begin your workout by pressing the **Start** key.
6. Once the program starts you will be 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 **Up** key; the **Down** key will decrease the workload.
7. During the Manual program you will be able to scroll through the data in the Message Center by pressing the **Enter** key.
8. When the program ends you may press **Start** to begin the same program again or **Stop** to exit the program or you can save the program you just completed as a custom user program by pressing a **User** key and following the instructions in the Message Center.



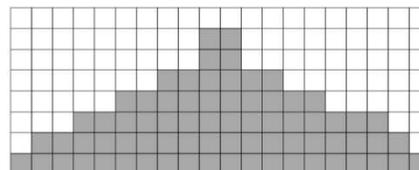
PRESET PROGRAMS

The Semi - Recumbent Stepper has five 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 which lasts for 10% of the total workout time, then a gradual regression of resistance back to approximately 10% of maximum effort

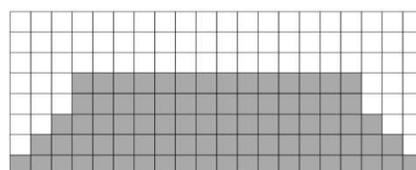
RESISTANCE LEVEL



FAT BURN

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

RESISTANCE LEVEL

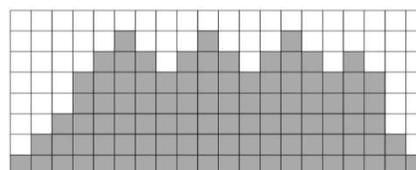


2/3

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

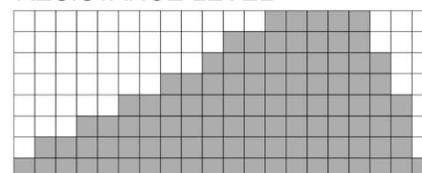
RESISTANCE LEVEL



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.

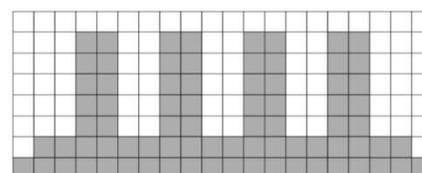
RESISTANCE LEVEL



INTERVAL

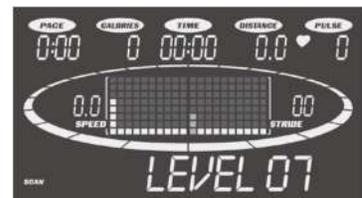
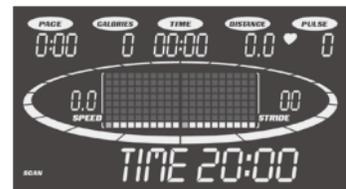
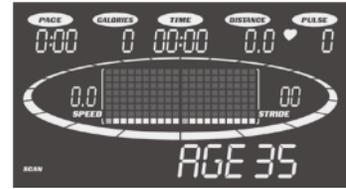
This program takes you through high levels of intensity followed by recovery periods of low intensity. This program utilizes and develops your "Fast Twitch" muscle fibers which are used when performing tasks that are intense and short in duration. These deplete your oxygen level and spike your heart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

RESISTANCE LEVEL



PROGRAMMING PRESET PROGRAMS

1. Select the desired program key then press the **Enter** key.
2. The Message Center will ask you to enter your Age. You may adjust the age setting, using the **Level 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 value using the **Level 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 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** key. You can also go back and modify your settings by pressing the **Enter** key.
7. If you want to increase or decrease the resistance at any time during the program, press the **Level Up/Down** keys 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 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 message window by pressing the **Enter** key.
9. When the program ends the Message Center 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.



CUSTOM USER DEFINED PROGRAMS

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

1. Press the **User 1** or **User 2** key. The Message Center will show a welcome message. If you had previously saved a program the message will contain your name. Then press the **Enter** key to begin programming.
2. If you have already saved a program to either **U1** or **U2**, it will be displayed and you are ready to begin. If not, you will have the option of inputting a username. In the **Message 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 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 **User** when you press the key, 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 be prompted: 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 Message Center will ask you to enter your Age. You may enter your age, using the **Level Up/Down** keys, then press the **Enter** key 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** keys, 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** key. 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 Message Center will then tell you to press **Enter** to save the program. After saving the program the 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

A word about Heart Rate:

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 usual choice of exercise intensity was 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. 60% of your MHR is the zone that burns fat while 80% is for strengthening the cardiovascular system. This 60% to 80% is the zone to stay in for maximum benefit.

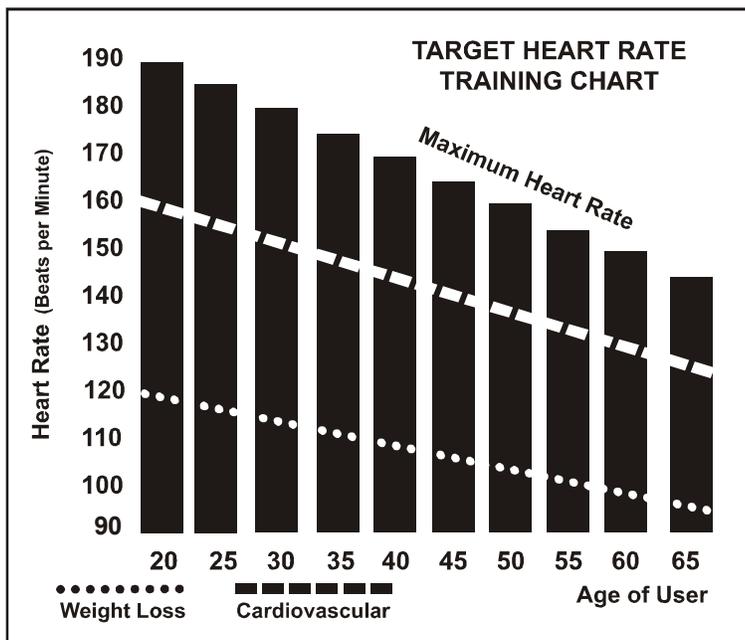
For someone who is 40 years old their target heart rate zone is calculated:

$$\begin{aligned} 220 - 40 &= 180 \text{ (maximum heart rate)} \\ 180 \times .6 &= 108 \text{ beats per minute (60\% of maximum)} \\ 180 \times .8 &= 144 \text{ beats per minute (80\% of maximum)} \end{aligned}$$

So for a 40 year old the training zone would be 108 to 144 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 80% or 60%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.



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 workout 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 up 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 A 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 with the logo centered 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 heart beat 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 transmitter). It's also recommended that you wear the transmitter strap a few minutes before your work out. Some users, because of body chemistry, have a more difficult time in 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 - distance between transmitter/receiver – to achieve a strong steady signal. The length of 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 semi-recumbent stepper for Heart Rate Control unless a steady, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem. Areas to look at for interference, which may cause erratic heart rate:

1. Microwave ovens, TV's, small appliances, etc.
2. Fluorescent lights.
3. Some household security systems.
4. Perimeter fence for a pet.
5. Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down. Normally the transmitter will be oriented so the logo is right side up.
6. 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.
7. Another Individual wearing a transmitter within 3' of your machine's console.

If you continue to experience problems contact Dyaco Canada Inc.

HEART RATE PROGRAM OPERATION

Note: You must wear the heart rate transmitter strap for these programs

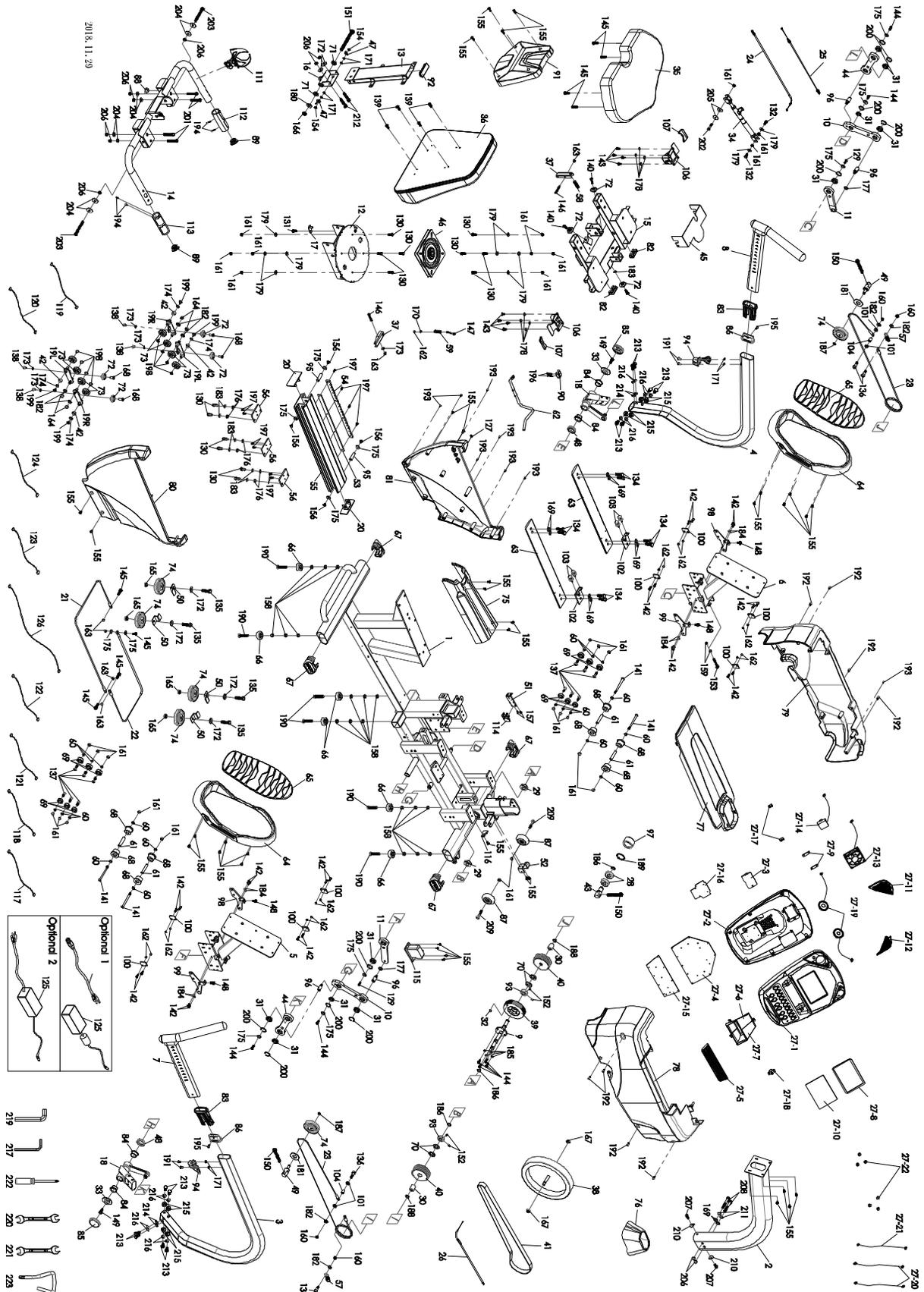
Both programs operate the same, the only difference is that **HR1** is set to 60% and **HR2** is set to 80% of the maximum heart rate. They both are programmed the same way.

To start an HR program follow the instructions below or just select the **HR1** or **HR2** program, then the **Enter** key and follow the directions in the Message Center.

After selecting your heart rate target the program will attempt to keep you at or within 3-5 heart beats per minute of this value. Follow the prompts in the Message Center to maintain your selected heart rate value.

1. Press the **HR 1** or **HR 2** key then press the **Enter** key.
2. The Message Center will ask you to enter your Age. You may enter your age, using the **Level Up/Down** keys, then press the **Enter** key to accept the new value 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** 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 the Heart Rate Target. This is the heart rate level you will strive to maintain during the program. Adjust the level using the **Level Up/Down** keys, then press **Enter**.
Note: The heart rate that appears is based on the % you accepted in Step 1. If you change this number it will either increase or decrease the % from Step 1.
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 screen.*
7. If you want to increase or decrease the workload 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. During the HR 1 or HR 2 programs you will be able to scroll through the data in the Message Center by pressing the **Enter** key.
9. When the program ends you may press **Start** to begin the same program again or **Stop** to exit the program.

EXPLODED VIEW DIAGRAM



PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	Q'TY
1	9580001	Main Frame	1
2	9580002	Console Mast	1
3	9580003	Swing Arm (R)	1
4	9580004	Swing Arm (L)	1
5	9580005	Pedal Plate (R)	1
6	9580006	Pedal Plate (L)	1
7	9580007	Handle Slider (R)	1
8	9580008	Handle Slider (L)	1
9	9580009	Drive Pulley	1
10	9580010	Lower Linkage A	2
11	9580011	Lower Linkage B	2
12	9580012	Seat Carriage	1
13	9580013	Seat Back Bracket	1
14	9580014	Handle Bar	1
15	9580015	Rotate Seat Assembly	1
16	9580016	Seat Back Bracket	1
17	9580017	Cantilever Anchor Assembly	1
18	9580018	Swing Arm Drive Weldment	2
19L	9580019L	Seat Wheel Adjustment Plate(L)	2
19R	9580019R	Seat Wheel Adjustment Plate(R)	2
20	9580020	Seat Stop Assembly	2
21	9580021	Front Connecting Cable	1
22	9580022	Rear Connecting Cable(800L)	1
23	9580023	Drive Cable(1820L)	2
24	9580024	Steel Cable	1
25	9580025	Drive Cable(45L)	1
26	9580026	Drive Cable(55L)	1
27	9580027	Console Assembly	1
28	9580028	6203_Ball Bearing	2
29	9580029	6003_Ball Bearing	2
30	9580030	One Way Bearing	2
31	9580031	6902_Ball Bearing	10
32	9580032	Magnet	1
33	9580033	Ø9 × Ø49 × 1.5T_Cup Washers	2
34	9580034	Locking Gas Cylinder	1
35	9580035	Seat Cushion	1
36	9580036	Seat Back	1
37	9580037	Seat Position Latch	2
38	9580038	Fly Wheel	1
39	9580039	Ø106 × 22L_Drive Wheel	1
40	9580040	Ø84 × 32L_Cable Drive Pulley	2
41	9580041	Belt (8PJ), 1321mm	1
42	9580042	5/8" × 13.2 × 8L_Sleeve	4

KEY NO.	PART NO.	DESCRIPTION	Q'TY
43	9580043	Adjustable Idler Wheel Axle	1
44	9580044	Lower Linkage	2
45	9580045	Safety Cover	1
46	9580046	Rotate Disk	1
47	9580047	Scale Arrowhead	2
48	9580048	Flywheel Axle Set Collar (R)	2
49	9580049	Cable Guide Wheel Axle	2
50	9580050	Shroud Bracket	4
51	9580051	Sensor Bracket	1
52	9580052	Shroud Fixing Plate	1
53	9580053	Seat Track Fixing Plate	1
54	9580054	Rack, Seat Position	1
55	9580055	Aluminum Track	1
56	9580056	Backing Plate	3
57	9580057	Ø15.5 × 26.5L_Spring	2
58	9580058	Ø13.5 × 54L_Spring	1
59	9580059	Ø13.5 × 30L_Spring	1
60	9580060	Metal Sleeve(8.2×12.7x5Lmm)	20
61	9580061	Metal Sleeve(8.1x12x56.2Lmm)	4
62	9580062	Ø10 × 386L_Seat Front/Aft Adjustment Lever	1
63	9580063	Aluminum Track	2
64	9580064	Pedal	2
65	9580065	Pedal Foam Cushion	2
66	9580066	Leveling Foot	6
67	9580067	End Cap, Oval Stabilizer Tube	4
68	9580068	Transportation Wheel, Aluminum Axle	8
69	9580069	Transportation Wheel	12
70	9580070	Ø18 × Ø32 × 1.5T_High-Performance Polymer Washer	4
71	9580071	Podwer metallurgy Sleeve	2
72	9580072	PU Wheel	7
73	9580073	Ø38_Seat Track Wheel	8
74	9580074	Roller	6
75	9580075	Bottom Step Cover	1
76	9580076	Console Mast Cover	1
77	9580077	Top Cover	1
78	9580078	Shroud (R)	1
79	9580079	Shroud (L)	1
80	9580080	Rear Shroud (R)	1
81	9580081	Rear Shroud (L)	1
82	9580082	Slider Sleeve	2
83	9580083	Hollow Plug(30×70×98.5L)	2
84	9580084	WFM-2528-16_Plastic Bushing	4
85	9580085	End Cap	2
86	9580086	Slide End Cap Spacer	2
87	9580087	Ø65_Transportation Wheel	2

KEY NO.	PART NO.	DESCRIPTION	Q'TY
88	9580088	Ø7_HGP Wire Grommet	1
89	9580089	Button Head Plug	2
90	9580090	Lever Anchor	1
91	9580091	Seat Back Cover	1
92	9580092	Square End Cap	1
93	9580093	Main Frame Housing	2
94	9580094	Quick Release	2
95	9580095	Seat Stop Axle	2
96	9580096	Axle	4
97	9580097	Ø52 × Ø40 × 28L_Bearing	1
98	9580098	Adjusting Plate (L)	2
99	9580099	Adjusting Plate (R)	2
100	95800100	Plastic flaps	8
101	95800101	Ø25 × Ø10 × 3T_Nylon WasherA	4
102	95800102	Cushion Fixing Plate	2
103	95800103	Rubber Foot	4
104	95800104	Podwer metallurgy Sleeve	2
106	95800106	Release Lever	2
107	95800107	Nylon Handgrip	2
111	95800111	Drink Bottle Holder	1
112	95800112	750m/m_Hand Pulse W/Cable Assembly(L)	1
113	95800113	900m/m_Hand Pulse W/Cable Assembly(R)	1
114	95800114	Optical Sensor Board	1
115	95800115	Gear Motor	1
116	95800116	400m/m_Sensor W/Cable	1
117	95800117	250m/m_Conneting Wire	1
118	95800118	350m/m_Encoder Cable	1
119	95800119	300m/m_Handpulse Wire	1
120	95800120	300m/m_Handpulse Wire(White)	1
121	95800121	100m/m_DC Power Cord	1
122	95800122	1550m/m_Computer Cable	1
123	95800123	550m/m_Handpulse Wire	1
124	95800124	550m/m_Handpulse Wire(White)	1
125	95800125	Power Adapter, 12VDC	1
126	95800126	2900m/m_Hand Pulse Cable, Lower	1
127	95800127	Block	1
129	95800129	M6 × 15m/m_Hex Head Bolt	2
130	95800130	5/16" × UNC18 × 3/4" _Hex Head Bolt	14
131	95800131	5/16" × UNC18 × 3/4" _Hex Head Bolt	1
132	95800132	5/16" × UNC18 × 5/8" _Hex Head Bolt	2
133	95800133	3/8" × 19m/m_Hex Head Bolt	8
134	95800134	3/8" × 1-1/4" _Hex Head Bolt	8
135	95800135	M10 × 40m/m_Hex Head Bolt	4
136	95800136	M8 × P1.25_Bolt	4
137	95800137	5/16" × UNC18 × 1" _Button Head Socket Bolt	12

KEY NO.	PART NO.	DESCRIPTION	Q'TY
138	95800138	M6 × 10m/m Button Head Socket Bolt	4
139	95800139	M8 × 20m/m Button Head Socket Bolt	4
140	95800140	M8 × 25m/m Button Head Socket Bolt	3
141	95800141	5/16" × UNC18 × 95m/m Button Head Socket Bolt	4
142	95800142	M5 × P0.8 × 15m/m Socket Head Cap Bolt	24
143	95800143	M6 × P1.0 × 12m/m Socket Head Cap Bolt	8
144	95800144	M6 × P1.0 × 15m/m Socket Head Cap Bolt	8
145	95800145	M6 × 25m/m Socket Head Cap Bolt	8
146	95800146	M6 × 38m/m Socket Head Cap Bolt	2
147	95800147	M5 × P0.8 × 45m/m Socket Head Cap Bolt	1
148	95800148	M8 × P1.25 × 12m/m Socket Head Cap Bolt	4
149	95800149	M8 × P1.25 × 20m/m Socket Head Cap Bolt	2
150	95800150	M10 × P1.5 × 75m/m Socket Head Cap Bolt	3
151	95800151	M12 × P1.75 × 120m/m Socket Head Cap Bolt	1
152	95800152	M5 × P0.8 × 10m/m Slotted Set Screw	4
153	95800153	M6 × 57m/m Eye Bolt	1
154	95800154	M5 × 6m/m Phillips Head Screw	2
155	95800155	M5 × 12m/m Phillips Head Screw	35
156	95800156	M6 × 10m/m Phillips Head Screw	4
157	95800157	M4 × P0.7 × 10m/m Phillips Head Screw	2
158	95800158	3/8" × 7T Luck Nut	18
159	95800159	M6 × P1.0 × 5T Luck Nut	2
160	95800160	M8 × 6T Luck Nut	4
161	95800161	5/16" × 6T Nyloc Nut	29
162	95800162	M5 × 5T Nyloc Nut	17
163	95800163	M6 × 6T Nyloc Nut	6
164	95800164	M8 × 7T Nyloc Nut	4
165	95800165	M10 × 8T Nyloc Nut	4
166	95800166	M12 Nyloc Nut	1
167	95800167	M10 × P1.5 × 8T Nut	2
168	95800168	M6 × 19L Nut	4
169	95800169	Ø3/8" × Ø19 × 1.5T Flat Washer	10
170	95800170	Ø5 × Ø10 × 1T Flat Washer	1
171	95800171	Ø5 × Ø12 × 1T Flat Washer	8
172	95800172	Ø3/8" × Ø25 × 2T Flat Washer	6
173	95800173	Ø1/4" × 13 × 1T Flat Washer	5
174	95800174	Ø1/4" × Ø16 × 1T Flat Washer	4
175	95800175	Ø6 × Ø19 × 3T Flat Washer	12
176	95800176	Ø5/16" × 16 × 1.5T Flat Washer	6
177	95800177	Ø3/8" × 20 × 3T Flat Washer	2
178	95800178	Ø6.6 × Ø12 × 1.5T Flat Washer	8
179	95800179	Ø8.5 × Ø18 × 1.5T Flat Washer	10
180	95800180	Ø1/2" × Ø26 × 2.0T Flat Washer	1
181	95800181	Ø45 × Ø21.8 × 2.5T Flat Washer	2
182	95800182	Ø8 × Ø18 × 3T Knurled Lock Washer	8

KEY NO.	PART NO.	DESCRIPTION	Q'TY
183	95800183	Ø8 × 1.5T_Spring Washer	7
184	95800184	Ø5 × 1.5T_Spring Washer	8
185	95800185	M6 × 1T_Spring Washer	4
186	95800186	Ø17_C Ring	3
187	95800187	Ø10_C Ring	2
188	95800188	Ø16_C Ring	2
189	95800189	Ø40_C Ring	1
190	95800190	3/8" × 2" Flat Head Socket Bolt	6
191	95800191	M5 × 6m/m_Phillips Head Screw	4
192	95800192	M5 × P0.8 × 12L_Phillips Head Screw	8
193	95800193	3.5 × 12m/m_Sheet Metal Screw	8
194	95800194	3 × 20m/m_Tapping Screw	4
195	95800195	Ø5 × 16L_Tapping Screw	2
196	95800196	M5 × 25m/m_Tapping Screw	2
197	95800197	M5 × 12m/m_Tapping Screw	10
198	95800198	M5 × P0.8 × 10L_Flat Phillips Head Screw	8
199	95800199	M6 × P1.0 × 10L_Flat Phillips Head Screw	4
200	95800200	Ø28_Wire Clamp	10
201	95800201	3/8" × 2" Hex Head Bolt	4
202	95800202	5/16" × UNC18 × 1-1/4" Hex Head Bolt	1
203	95800203	3/8" × UNC16 × 3-1/4" Hex Head Bolt	2
204	95800204	Ø3/8" × Ø30 × 3T_Flat Washer	8
205	95800205	Ø8.5 × Ø26 × 2T_Flat Washer	2
206	95800206	3/8" × 7T_Nyloc Nut	10
207	95800207	M8 × P1.25 × 16L_Hex Head Bolt	2
208	95800208	3/8" × UNC16 × 2-1/2" Hex Head Bolt	2
209	95800209	5/16" × UNC18 × 1-3/4" Button Head Socket Bolt	2
210	95800210	Ø8 × 23 × 1.5T_Curved Washer	2
211	95800211	Ø10 × 2T_Spring Washer	2
212	95800212	3/8" × UNC16 × 1-3/4" Socket Head Cap Bolt	2
213	95800213	3/8" × 3/4" Hex Head Bolt	12
214	95800214	Ø3/8" × Ø19 × 1.5T_Flat Washer	4
215	95800215	Ø10 × 21.3 × 7.8T_Curved Washer	8
216	95800216	Ø10 × 2T_Spring Washer	12
217	95800217	L Allen Wrench(5×26×120L)	1
219	95800219	M8 Allen Wrench	1
220	95800220	12/14m/m_Wrench	1
221	95800221	13/14m/m_Wrench	1
222	95800222	Phillips Head Screw Driver	1
223	95800223	Short Phillips Head Screw Driver	1

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:
 - I. 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. I cannot stress this point enough; 90% of calls to the service department for noise issues can be traced to loose hardware.
 - II. If squeaks or other noises persist, check that the unit is properly leveled. There are 2 leveling pads on the front and 2 leveling pads on the back of the unit.

STEP RAIL AND CARRIAGE MAINTENANCE

Dirt and dust can accumulate on the pedal carriage components causing a rough feel which means the rails and wheels most likely need cleaning.

1. Remove mast cover and center cover.
2. Firmly press in at the bottom of the small mast cover at the front and rear and pull up.
 - a. Firmly press in at the top of the main cover near the top and pull up on the center cover. Repeat this process at all four corners of the cover.
 - b. Slide the mast and center covers up the mast tube. Tie a rag around the tube and let the covers rest on it so they stay in place.
3. Move the pedals so one is all the way forward. Clean the wheels and rails using a rag and alcohol.
4. Replace the covers when done.



ENGINEERING MODE MENU

The console has built in maintenance/diagnostic software. The software will allow you to change the console settings from English to Metric and turn off the beeping of the speaker when a key is pressed for example. To enter the Engineering Mode Menu, 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 Engineering Mode Menu. 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. **LCD Test** (Tests all the display functions)
3. **Functions** (Press Enter to access settings and Up arrow to scroll)
 - a. **Display Mode** (Turn off to have the console power down automatically after 20 minutes of inactivity)
 - b. **Pause Mode** (Turn on allow 5 minutes of pause, turn off to have the console pause indefinitely)
 - c. **ODO Reset** (Resets the odometer)
 - d. **Motor Test** (Continually runs the tensioning gear motor)
 - e. **SAFETY**
 - f. **SENSOR TEST**
4. **Security** (Allows the keypad to be locked to prevent unauthorized use)

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 sports people.

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 the most 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 (MVo₂). 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 MVO₂ 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 heart beat 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

This is often used synonymously with strength training. The fundamental principal 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 for 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.

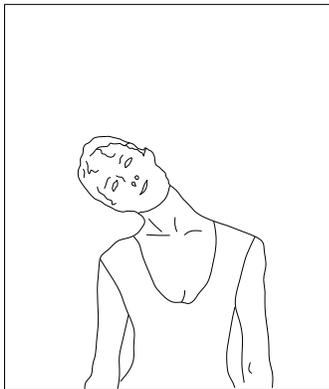
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half minute to one minute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

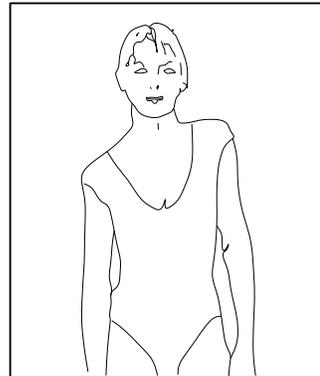
HEAD ROLLS

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, stretching your chin to the ceiling and letting your mouth open. Rotate your head to the left for one count, and finally, drop your head to your chest for one count.



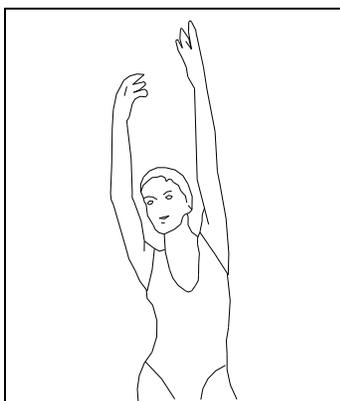
SHOULDER LIFTS

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



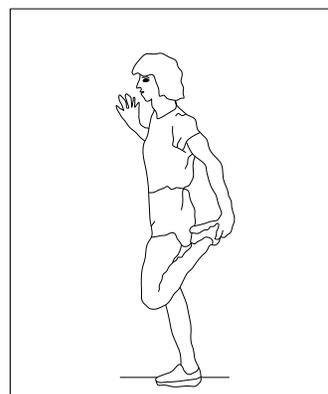
SIDE STRETCHES

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 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.



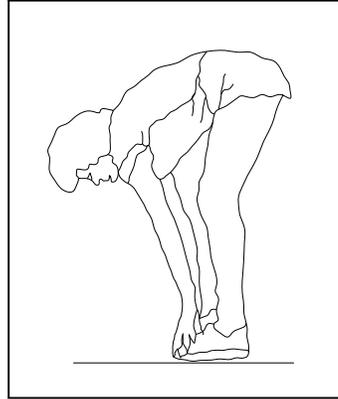
INNER THIGH STRETCH

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



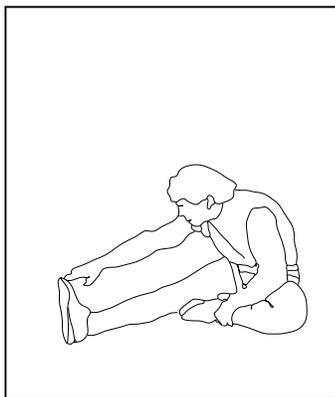
TOUCHES

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.



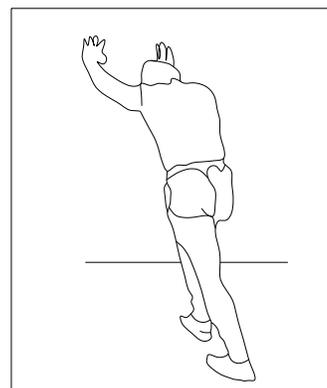
HAMSTRING STRETCHES

Sit with your right leg extended. Rest the sole of your left foot against your right inner thigh. Stretch 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 toe 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 bike parts 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	Lifetime
Electronics	10 Years
Parts	10 Years
Labour	2 Years

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 card must be completed and returned to the address listed on the card within 10 days of the original purchase.
2. Proper use of the bike in accordance with the instructions provided in this manual.
3. Proper installation in accordance with instructions provided with the bike 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 bike accessible for servicing, including any item that was not part of the bike at the time it was shipped from the factory.
6. Damages to the bike 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 bike 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, 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 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 Inc.



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