OWNER'S MANUAL MODEL NO. 16807848950-1

## XS895 INCLINE STEPPER

- Assembly
- Operation
- Adjustments
- Parts
- Warranty

## CAUTION:

Read and understand this manual before operating unit





**Retain For Future Reference** 

# **Table of Contents**

Important Safety Instructions5	5
Important Electrical Instructions 6	õ
Important Operation Instructions7	7
Assembly Instructions	)
Operation of Your Console 13	3
Programmable Features 17	7
Using Heart Rate Transmitter (Optional) 23	3
Using the Spirit Fit App 25	5
General Maintenance 26	5
Exploded View Diagram 27	7
Parts List	3
Manufacturer's Limited Warranty	3



Thank you for your purchase of this quality Incline Stepper from Dyaco Canada Inc. Your new Incline 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 Incline stepper is your administrator for all Dyaco Canada Inc. 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 <u>www.dyaco.ca/warranty.html</u> and complete the online warranty registration.

Name of Dealer	
Dealer Phone #_	
Purchase Date	

# **Product Registration**

#### **RECORD YOUR SERIAL NUMBER**

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

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

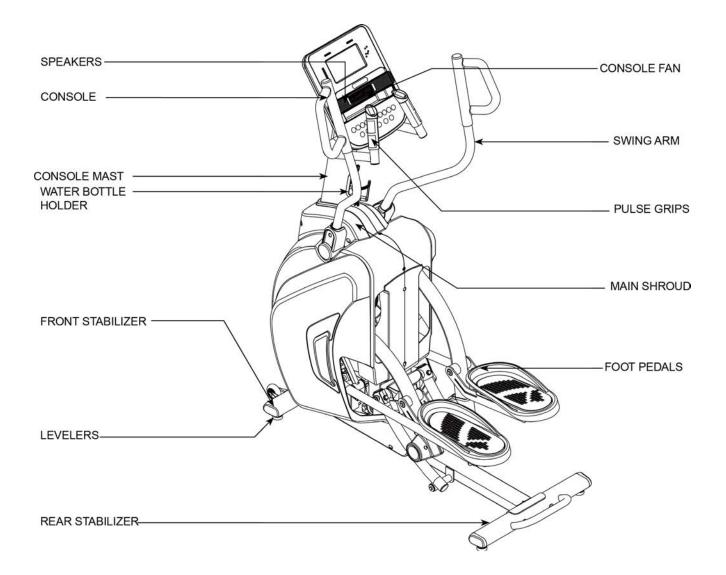
#### **REGISTER YOUR PURCHASE**

Please visit us at <u>www.dyaco.ca/warranty.html</u> to register your purchase.

# **BEFORE YOU BEGIN**

Thank you for choosing the SPIRIT XS895 incline 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 XS895 incline 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 XS895 incline 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 XS895 incline stepper, <u>please do not return the product</u>. 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.



# **IMPORTANT SAFETY INSTRUCTIONS**

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

**DANGER** - To reduce the risk of electric shock, disconnect your Incline 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 Incline Stepper on a flat level surface with access to a 120-volt,15-amp grounded outlet with only the Incline 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 operate Incline Stepper on deeply padded, plush or shag carpet. Damage to both carpet and Incline Stepper may result.
- Keep children under the age of 13 away from this machine. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the Incline Stepper if it has a damaged cord or plug. If the Incline 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 and then remove the plug from the outlet.
- Do not attempt to use your Incline 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 Incline stepper. Quality athletic shoes are recommended to avoid leg fatigue.
- This 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 use of the appliance by a person responsible for their safety.
- User weight should not exceed 400 lbs (181 kg).
- This exercise equipment is not intended for use by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
- 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 appliance is used by, on, or near children, invalids, or disabled persons.

#### SAVE THESE INSTRUCTIONS - THINK SAFETY!

# **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 treadmill 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 treadmill 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 temperature specification is 40 degrees C, and humidity is 95%, non-condensing (no water drops forming on surfaces).

**Circuit breakers:** Avoid AFCI/GFCI circuit breakers if possible. These breakers may occasionally trip during use because of the high inrush currents from the treadmill drive motor. This condition is an issue with all treadmills and other products with large motors or electric heating elements like ovens.

New laws in your area may require these breakers. If you do have these breakers and outlets in your home and are experiencing nuisance tripping, you should check to see if there are any other devices plugged into the same circuit like fluorescent lights with electronic ballasts, coffee maker, space heater, etc. Optimally the treadmill should be the only device plugged into the circuit.

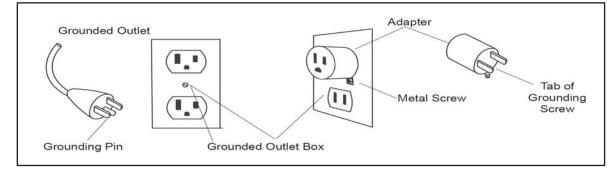
Our treadmills have surge suppressors built in to help avoid nuisance tripping. We have tested several AFCI/GFCI breakers and outlets with our products that do not trip when only the treadmill is connected. Brands we have tested are Eaton (Cutler-Hammer Series), Leviton (Smart lock pro) and Schneider Electric (Canadian home series).

# **GROUNDING INSTRUCTIONS**

**This product must be grounded.** If the Incline 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.

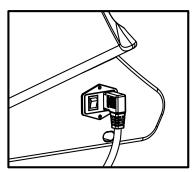
DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

This product is for use on a nominal 120-volt, 15-amp circuit and has a grounded plug that looks like the one 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-coloured rigid ear lug, or similar, 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 Incline Stepper without reading and completely understanding the results of any operational change you request from the computer.
- Understand that changes in resistance and incline do not occur immediately. Set your desired resistance level on the computer console and release the adjustment key. The computer will obey the command gradually.
- **NEVER** use your Incline Stepper during an electrical storm. Surges may occur in your household power supply that could damage Incline Stepper components. Unplug the Incline Stepper during an electrical storm as a precaution.
- Use caution while participating in other activities while using your Incline Stepper, such as watching television, reading, etc. These distractions may cause you to lose balance, which may result in serious injury.
- Always hold on to a handlebar while making control changes (incline, level, etc.).
- Do not use excessive pressure on console control keys. They are precision set to function properly with little finger pressure. If you feel the buttons are not functioning properly with normal pressure, contact your dealer.



AC Power Connector Location

# WARNING DECAL REPLACEMENT

The decal shown below has been placed on the Incline 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.



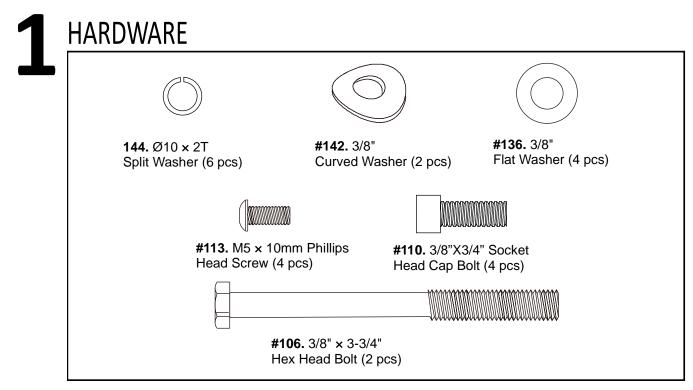
# **REMOVE THIS BAR BEFORE ASSEMBLY**

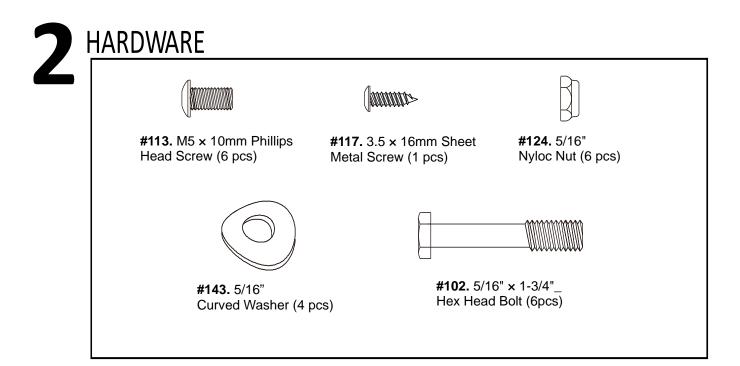


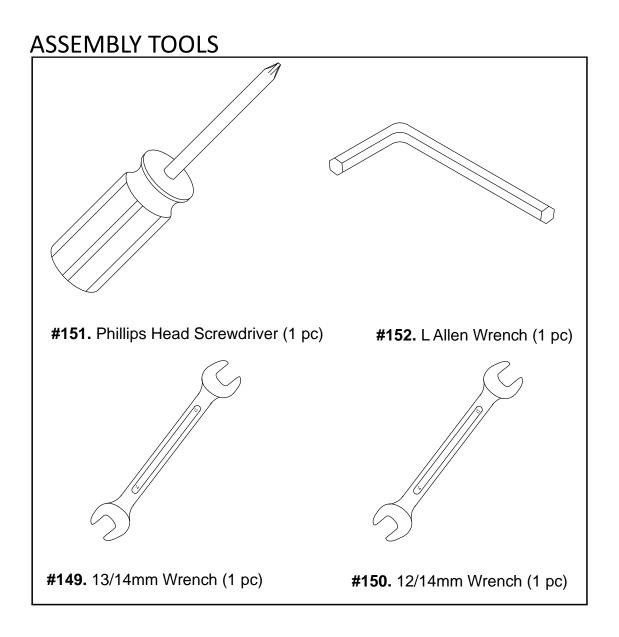


This packaging support bar is attached to the unit to keep it safe during transport. Please remove it before assembly. Thank you.

# XS895 ASSEMBLY PACK CHECKLIST





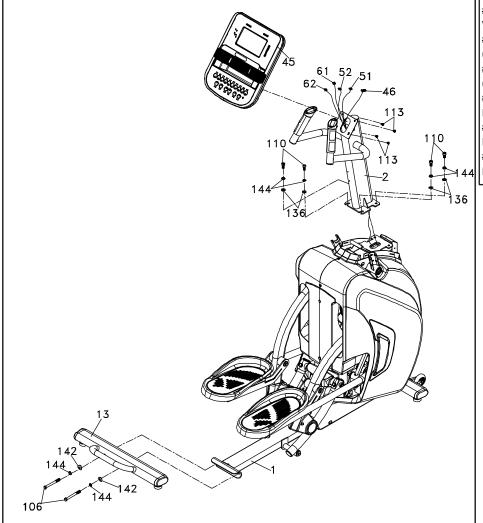


# **ASSEMBLY INSTRUCTIONS**

#### PRE-ASSEMBLY

- 1. Using a razor knife (Box Cutter), cut the banding straps that wrap around the carton. Reach under the bottom edge of the carton and pull it away from the cardboard underneath, separating the staples that join the two together. Lift the box over the unit and unpack.
- 2. Carefully remove all parts from carton and inspect for any damage or missing parts. If damaged parts are found or parts are missing, contact your dealer immediately.
- 3. Locate the hardware package. The hardware is separated into four steps. 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.

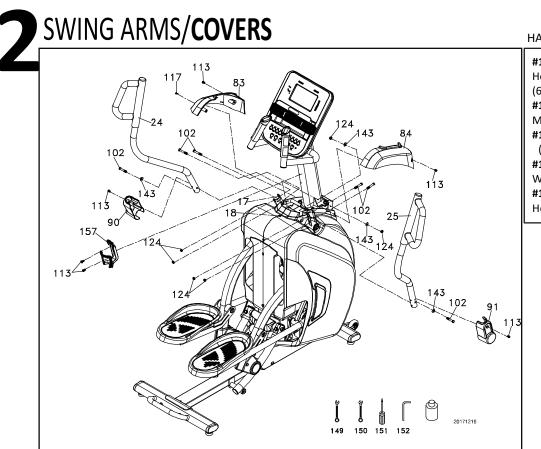
# STABILIZER/CONSOLE MAST



# #144. Ø10 × 2T Split Washer (6 pcs) #142. 3/8" Curved Washer (2 pcs) #136. 3/8" Flat Washer (4 pcs) #113. M5 × 10mm Phillips Head Screw (4 pcs) #110. 3/8" X3/4" Socket Head Cap Bolt (4 pcs) #106. 3/8" × 3-3/4" Hex Head Bolt (2 pcs)

HARDWARE STEP 1

- Attach Rear Stabilizer with handle (13) to mounting plate on the mainframe and secure with two 3/8" × 3-3/4"\_Hex Head Bolts (106) two Ø10 × 2T\_ Split Washers (144) and Ø3/8" × 23 × 2.0T\_Curved Washers (142) by using 13/14m/m Wrench (149).
- Pull the tie-on Computer Cable to have Computer Cable (46) go through the mast (2) from bottom and out of the mast on top. Secure the Console Mast (2) on the mounting plate on the Main Frame with four 3/8" × 3/4"\_Socket Head Cap Bolts (110), four Ø10 × 2T\_ Split Washers (144) and four Ø3/8" × Ø19 × 1.5T\_Flat Washers (136) by using L Allen Wrench (152).
- Take off the tie from Computer Cable (46) and plug in onto the Console Assembly (45) together with two Hand pulse Assembly (51, 52) and Resistance/ Incline (White/Red) (61, 62) cables. Place the Console on the mounting plate of the Console Mast and secure with four M5 × 10m/m Phillips Head Screws (113) by using Phillips Head Screwdriver (151)



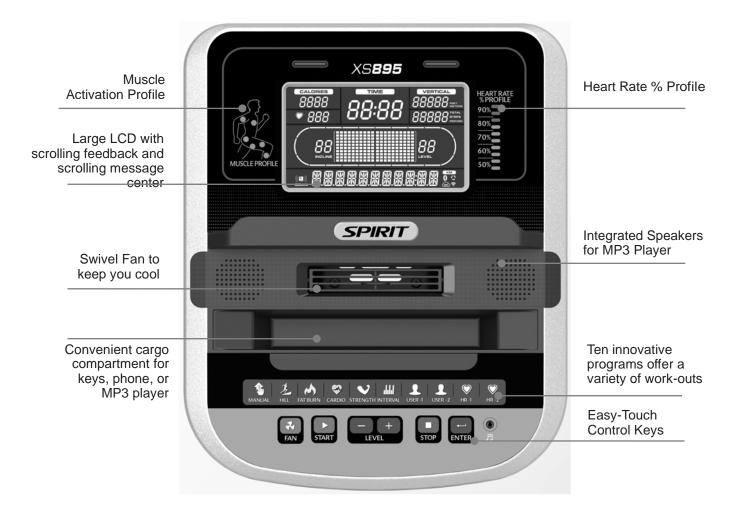
#### HARDWARE STEP 2

#113. M5 × 10mm Phillips
Head Screw
(6 pcs)
#117. 3.5 × 16mm Sheet
Metal Screw (1 pcs)
#124. 5/16" Nyloc Nut
(6 pcs)
#143. 5/16" Curved
Washer (4 pcs)
#102. 5/16" × 1-3/4"\_
Hex Head Bolt (6pcs)

- Match Left Console Mast Cover (83) with Right Console Mast Cover (84) on top of left and right Chain Covers and around the Console Mast and secure with one 3.5 × 16L\_Sheet Metal Screws (117) and two Phillips Head Screw (113) by using Phillips Head Screw Driver (151)
- Attach Upper Handle Bar (L) (24) to the mounting plates on Left Lower Handle Bar (17) and secure with three 5/16" × 1-3/4"\_Hex Head Bolts (102), two 5/16" × 19 × 1.5T\_Curved Washers (143) and three 5/16" × 7T\_Nyloc Nuts (124) by using 12/14m/m\_Wrench (150) and 13/14m/m\_Wrench (149). Use same way with same quantity of bolts to secure Upper Handle Bar (R) (25) onto the mounting plates on Right Lower Handle Bar (18).
- Install Left Handle Bar Cover (90) on Left Lower Handle Bar and secure with two M5 × 10m/m\_Phillips Head Screws (113) by using Phillips Head Screw Driver (151). Use same way with same quantity of bolts to secure Right Handle Bar Cover (91) on Upper Right Handgrip and on Right Lower Handle Bar.
- Install Drink Bottle Holder (157) on Console Mast with 2pcs of M5 x 10m/m Phillips Head Screws (113) by using Phillips Head Screwdriver (151).

# **OPERATION OF YOUR INCLINE STEPPER**

GETTING FAMILIAR WITH THE CONTROL PANEL



## **POWER UP**

When power is connected to the Incline Stepper, the console will automatically power up. These models are connected directly to 120-volt, 15-amp, and there is a power switch located where the line cord plugs into the unit on the left side near the middle.

When it is first powered on, the console will perform an internal self-test. During this time, all the lights will turn on, the Message Window display will show a software version (i.e., VER 1.0), and the VERTICAL Window will display an altimeter reading. The Time Window shows how many total hours the incline has been used.

The altimeter and time 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 startup message. You may now begin to use the console.

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## **Dot Matrix Center Display**

Twenty columns of boxes (10 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. The Lap track will move in a counterclockwise direction.

# 1/4 Mile / 0.4k Track

The 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 window for monitoring your distance.

## **Pulse Grip Feature**

The Pulse (Heart Rate) window will display your current heart rate in beats per minute during the workout. You must use both stainless steel sensors on the stationary grips or the heart rate transmitter chest strap to display your pulse. Pulse value displays anytime on the upper display when 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.

## **Quick Start**

This is the quickest way to start a workout. After the console powers, 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 +/-** keys. The dot matrix display will have only the bottom row lit at first. As you increase the workload, more rows will light, indicating a harder workout. The Incline stepper trainer 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 hard 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, FPM (floors per minute) will be displayed for four seconds, then move on and display FLOORS. The data changes to Laps completed Segment time, SCAN. 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 (Total time, Avg. fpm, total floors, Avg. HR, total Laps). 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 Incline Stepper trainer 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.

## **Muscle Activation Figure**

There is an anatomical figure located at the left of the console. This figure will light all areas that are activated when using the Incline Stepper. These will light up during any of the programs. You can control which muscles are activated by changing the incline and swinging your arms. The pre-set programs will determine which lower body muscles will be activated by automatically adjusting the incline. Generally, the following guidelines hold true:

- The upper body LED's will light any time your hands aren't in contact with the pulse grip sensors.
- The lower body lights will activate in three degrees of engagement: Green represents minimal muscle involvement, Amber represents medium involvement, and Red represents full or heavy activation.
- Levels 0-7.5 incline: Amber Gluteals and Quadriceps light up; Green Hamstrings and Calves light up.
- Levels 8-20 incline: Red Gluteals light up, Amber Quadriceps light up, Green Hamstrings and Calves Light up.

## Heart Rate % Profile

The console LCD screen will display your current heart rate anytime 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 colours 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

## **Programming the Console**

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. Entering your Age is necessary during the Heart Rate programs 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 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 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 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 Incline Stepper trainer, 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 **Level +/** 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 +/- 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. You can also go back and modify your settings by pressing the **Enter** 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 **Level +** key; the **Level -** 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.

## **Programming Preset Programs**

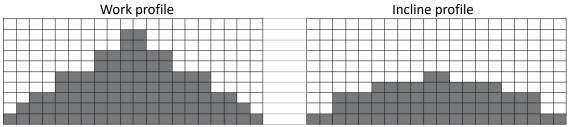
- 1. Select the desired program key, then press the Enter key.
- The Message Center will ask you to enter your Age. You may adjust the age setting using the Level +/- keys, then press the Enter key to accept the new number and proceed on to the next screen.
- 3. You are now asked to enter your Weight. You may adjust the Weight value using the Level +/- 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 asked to adjust the Incline on/off. Adjust the Incline on/off and then press **Enter**.
- 7. During the program, you will be able to scroll through the data in the message window by pressing the **Enter** key.
- 8. 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.

# Preset Programs

The Incline 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. Incline: The pedal elevation is a more gradual and sustained progression. Maximum elevation is in the middle of the workout and lasts for 10% of the duration.



# FAT BURN

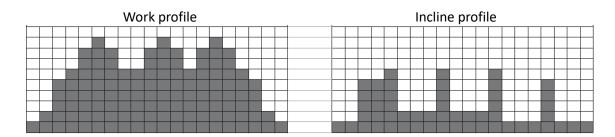
This program follows a quick progression up to the maximum resistance level (default or user input level) that is sustained for 2/3 of the workout. This program will challenge your ability to sustain your energy output for an extended period of time.

Incline: The pedal elevation is a quick and sustained progression up to the maximum value (default or user input) for 90% of the workout duration.

Work profile										Incline profile																					
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														Т	Т																

# 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. Incline: The elevation in this program is moderate. There are several elevation spikes at different points of the workout. Segments 4, 9, and 14 are maximum elevation for this program.

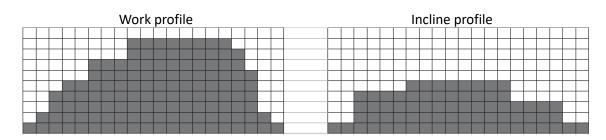


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# STRENGTH

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 follow.

Incline: There is a quick climb to a moderate, sustained elevation that lasts the majority of the workout length.



## 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 27 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.

Incline: This program will spike similar to the resistance profile but in different segments (columns); this means that all of your lower extremity muscles will be equally challenged throughout this program. The incline alternates between 25 & 65 % of maximum elevation.

	Work profile								Incline profile																						
				_		-	-	-			_													_	_						
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## **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.
- 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 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 space). 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 **Level +/** 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 +/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 **Level +/-keys** or the numeric keypad; 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 +/- 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. Now you are asked to adjust the Max Incline Level of the program; press **Enter** when incline has been selected.
- 11. Now the first column will be blinking, and you are asked to adjust the incline level for the first segment (SEGMENT >1) of the workout by using the Level +/- 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.
- 12. The next segment will show the same workload incline 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.
- 13. The Message Center will then tell you to press **Enter** to save the program. After saving the program, the Message Center says "PROG SAVED," then will give you the option to **Start** or modify the program. Pressing **Stop** will exit to the start-up screen.

# **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 HRC program, follow the instructions below or just select the HR1 or HR2 program, then the Enter button 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 heartbeats 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 +/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 +/- 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 +/- 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. If you want to increase or decrease the workload at any time during the program, press the **Level +/-.** This will allow you to change your target heart rate at any time during the program.
- 7. 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.
- 8. When the program ends, you may press **Start** to begin the same program again or **Stop** to exit the program.

## HEART RATE

#### Before we get started, 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.

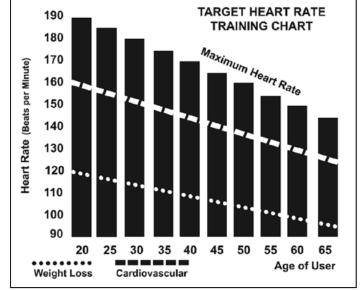
To determine the benefits range in which you wish to train, you must first determine your Maximum Heart Rate. This can be accomplished by using the following formula: 220 minus your age. This will give you the Maximum heart rate (MHR) for someone of your age. To determine the effective heart rate range 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:

220 – 40 = 180 (maximum heart rate) 180 x .6 = 108 beats per minute (60% of maximum) 180 x .8 = 144 beats per minute (80% of maximum) 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.

With all Heart Rate Control Incline stepper machines, you may use the heart rate monitor feature without using the Heart Rate Control program. This function can be used during manual mode or during any of the nine different programs. The Heart Rate Control program automatically controls resistance at the pedals.

# 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 with the logo 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 ribbed oval areas on the reverse side of the belt and both sides 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 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). The replacement battery is Panasonic CR2032.

#### ERRATIC OPERATION

*Caution!* Do not use this Incline Stepper for Heart Rate 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 that may cause erratic heart rate:

- 1. Microwave ovens, TVs, 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.
- 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 your dealer.

# **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 THE SPIRIT FIT APP**

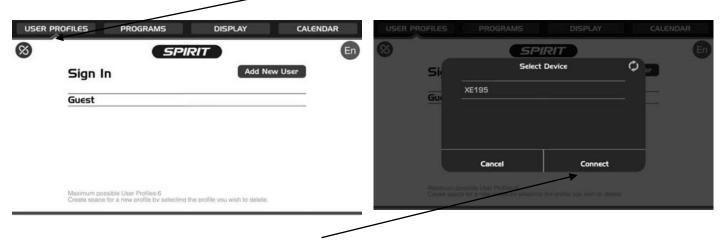
In order to help you achieve your exercise goals, your new exercise machine comes equipped with a Bluetooth<sup>®</sup> transceiver that will allow it to interact with selected phones or tablet computers via the Spirit Fit App.

Just download the free Spirit Fit App from the Apple Store or Google Play, and then follow the instructions in the App to sync with your exercise machine. Now you can view current workout data on three different Display screens on your device. You can also easily switch back and forth from the workout display view to internet/social media/email sites via icons on the display screen. When your workout is finished, the data is automatically saved to the built-in personal calendar for future reference.

The Spirit Fit App also allows you to sync your workout data with one of many fitness cloud sites we support: iHealth, MapMyFitness, Record or Fitbit, with more to come.

#### Syncing the App with your exercise machine:

- 1. Download the App.
- 2. Open the App on your device (phone or tablet) and make sure Bluetooth<sup>®</sup> is enabled on your device (phone or tablet).
- 3. In the App, click the icon in the top left corner to search for your Spirit equipment (shown right).



- 4. After the equipment is detected, click Connect. When the App and equipment are synced, the Bluetooth<sup>®</sup> icon on the equipment's console display will light up. You may now start using your new Spirit Fitness product.
- 5. When your workout is finished, the data is automatically saved, and you will be prompted to sync your data with each available fitness cloud site. Please note you will have to download the applicable compatible fitness App, such as iHealth, MapMyFitness, Record, Fitbit, etc., in order for the icon to be active and available.

# \*Note: Your device will need to be running on a minimum operating system of iOS 7 or Android 4.4 for the Spirit Fit App to operate properly.

# **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 several 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. Dirt build-up on the rear rails and polyurethane wheels are also a source of noise. Noise from build-up on the rails can cause a thumping sound that you would swear is coming from inside the main body of the machine because noise travels and is amplified in the tubing of the frame. Clean the rails and wheels with a lint-free cloth and rubbing alcohol. Stubborn build-up can be removed with your thumbnail or a nonmetallic scraper, like the back edge of a plastic knife. After cleaning, apply a small amount of lubricant on the rails with your fingers or a lint-free cloth. You only need a thin coat of lubrication; wipe off any excess.
  - iii. The crank arm nut needs to be retightened.
  - iv. If squeaks or other noises persist, check that the unit is properly levelled. There are 2 levelling pads on the bottom of the rear stabilizer; use a 14mm wrench (or adjustable wrench) to adjust the levellers.

## Engineering Mode Menu

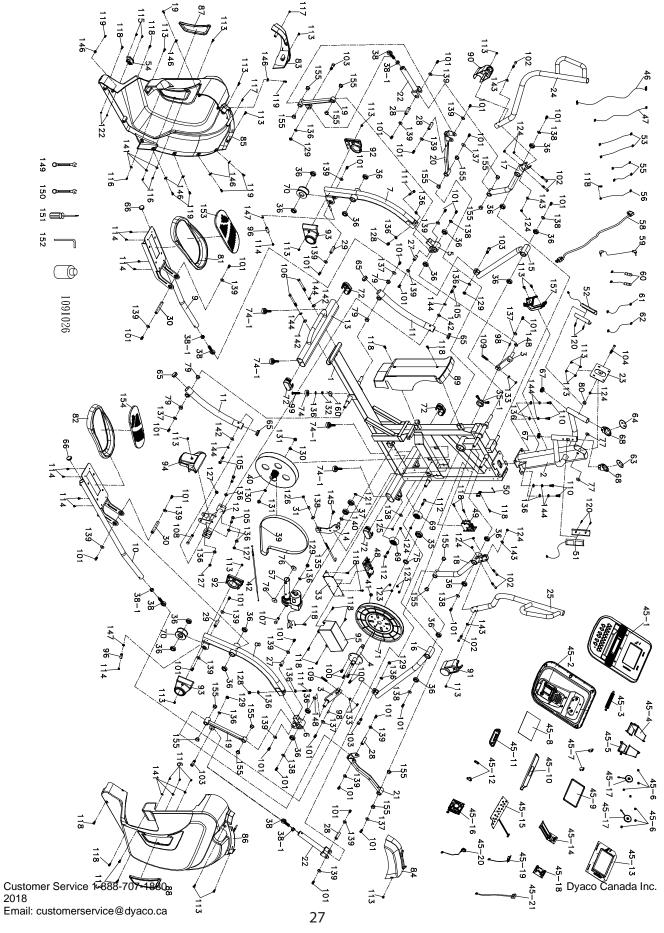
The console has built-in maintenance/diagnostic software. The software will allow you to change the console settings from English to Metric and turn off the beeping of the speaker when a key is pressed, for example. To enter the Engineering Mode Menu, press and hold down the **Start**, **Stop** and **Enter** keys. Keep holding the keys down for about 5 seconds, and the message center will display Engineering Mode Menu. Press the **Enter** button to access the menu below:

- 1. KeyTest (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)
  - i. Display Mode (Turn off to have the console power down automatically after 20 minutes of inactivity)
  - ii. Pause Mode (Turn on allow 5 minutes of pause, turn off to have the console pause indefinitely)
  - iii. ODO Reset (Resets the odometer)
  - iv. Units (Sets the display to readout in English or Metric display measurements)
  - v. Beep (Turns off the speaker, so no beeping sound is heard)
  - vi. Motor Test
  - vii. Safety
- 4. Security (Allows the keypad to be locked to prevent unauthorized use)

**Incline Calibration:** If there is a problem with the incline, try running the calibration. Press the Start key, Level up key & Stop key at the same time. Hold them down for 5 seconds and press the Start key. The Incline calibration will start and run automatically. If the problem persists, contact the service department.

**Bluetooth mode**: Press the ENTER and the START key at the same time. Hold them down for 5 seconds, and the Message Window will display "BLUETOOTH." Press the Level +/ - keys to choose ON/OFF. When finish, press STOP or ENTER key to exit.

# **EXPLODED VIEW DIAGRAM**



# **PARTS LIST**

NO.	PART	DESCRIPTION	Q'TY
1	8489501	Main Frame	1
2	8489502	Console Mast	1
3	8489503	Crank Arm Assembly	2
4	8489504	Crank Axle	1
5	8489505	Bushing Housing, Pedal Arm (L)	1
6	8489506	Bushing Housing, Pedal Arm (R)	1
7	8489507	Pedal Arm(L)	1
8	8489508	Pedal Arm(R)	1
9	8489509	Pedal Assembly (L)	1
10	8489510	Pedal Assembly (R)	1
11	8489511	Rear Rail Assembly	2
12	8489512	Incline Bracket	1
13	8489513	Rear Stabilizer	1
14	8489514	Idler Wheel Assembly	1
15	8489515	Pedal Bar Assembly (L)	1
16	8489516	Pedal Bar Assembly (R)	1
17	8489517	Lower Handlebar (L)	1
18	8489518	Lower handlebar (R)	1
19	8489519	Swing Arm A	2
20	8489520	Swing Arm B (L)	1
21	8489521	Swing Arm B (R)	1
22	8489522	Swing Arm C	2
23	8489523	Console Holder Assembly	1
24	8489524	Upper Handle Bar (L)	1
25	8489525	Upper Handle Bar (R)	1
27	8489527	Rotate Axle A	2
28	8489528	Axle	4
29	8489529	Axle for Slide Wheel	2
30	8489530	Pedal Axle	2
31	8489531	Ø11.9 × Ø8.5 × 15m/m_Rod End Sleeve	1
33	8489533	Controller Fixing Plate	1
35	8489535	6005_Bearing	1
35-1	8489535-1-1	6005-2RSB10+2M5_Bearing	1
36	8489536	6003_Bearing	20
37	8489537	6203_Bearing	2
38	8489538-1	M12 × P1.75_Rod End Bearing	4
38-1	8489538-1-1	M12 × P1.75 × 10T_Luck Nut	4
39	8489539	Drive Belt	1
40	8489540	Flywheel	1
41	8489541	Ø15 × 7T_Magnet	1
42	8489542	Steel Cable	1

NO.	PART	DESCRIPTION	Q'TY
45	8489545	Console Assembly	1
46	8489546	1700m/m_Computer Cable	1
47	8489547	700m/m_Computer Cable	1
48	8489548	Incline Controller	1
49	8489549	Gear Motor	1
50	8489550	Sensor W/Cable	1
51	8489551	850m/m_Handpulse W/Cable Assembly	1
52	8489552	850m/m_Handpulse W/Cable Assembly(Red)	1
53	8489553	400m/m_Connecting Wire, Controller(Red)	2
54	8489554	AC Input Module	1
55	8489555	80m/m_Connecting Wire (White)	2
56	8489556	200m/m_Ground Wire	1
57	8489557	Incline Motor	1
58	8489558	Power Cord	1
59	8489559	400m/m_Audio Cable	1
60	8489560	Resistance Button W/Cable	2
61	8489561	800m/m_Handle Wire, Resistance(White)	1
62	8489562	800m/m_Handle Wire, Incline(Red)	1
63	8489563	Handgrip Resistance Label(LEVEL)	1
64	8489564	Handgrip Resistance Label(INCLINE)	1
65	8489565	Ø38_Round Cap	4
66	8489566	32 × 2.5T_Round Cap	2
67	8489567	Ø32 × 1.8T_Round Cap	2
68	8489568	Handgrip End Cap	2
69	8489569	Ø65 Transportation Wheel(PU)	2
70	8489570	Ø72_Slide Wheel , Urethane	2
71	8489571	Ø330_Drive Pulley	1
72	8489572	$\phi$ 40 × $\phi$ 80 Oval End Cap	4
74	8489574	Ø35 × 10m/m_Rubber Foot	1
74-1	8489574-1	Rubber Foot Assembly	4
75	8489575	Spacer Bushing	1
76	8489576	3/8" × 35 × 5T_Nylon Washer	2
77	8489577	5/16" × 25 × 3T Nylon Washer	2
79	8489579	Bushing(WFM-1719-12)	4
80	8489580	Ø13m/m_Bolt Cap	1
81	8489581	Pedal (L)	1
82	8489582	Pedal (R)	1
83	8489583	Console Mast Cover-L	1
84	8489584	Console Mast Cover(R)	1
85	8489585	Chain Cover(L)	1
86	8489586	Side Case(R)	1
87	8489587	Side Case Plate(L)	1

NO.	PART	DESCRIPTION	Q'TY
88	8489588	Side Case Plate(R)	1
89	8489589	Rear Side Case	1
90	8489590	Handle Bar Cover (L)	1
91	8489591	Handle Bar Cover (R)	1
92	8489592	Slide Wheel Cover(L)	2
93	8489593	Slide Wheel Cover(R)	2
94	8489594	Incline Cover	1
95	8489595	Controller Cover	1
96	8489596	Ø15 × Ø8.6 × 38.5L_Sleeve	2
98	8489598	7 × 7 × 19m/m_Woodruff Key	2
99	8489599	3/8" × 2"_Flat Head Socket Bolt	1
100	84895100	1/4" × UNC20 × 3/4"_Hex Head Bolt	4
101	84895101	5/16" × 15m/m_Hex Head Bolt	32
102	84895102	5/16" × 1-3/4"_Hex Head Bolt	6
103	84895103	M10 × P1.5 × Ø12 × 20L_Bolt	4
104	84895104	5/16" × UNC18 × 2-1/2"_Hex Head Bolt	1
105	84895105	3/8" × 2-1/4"_Hex Head Bolt	4
106	84895106	3/8" × 3-3/4"_Hex Head Bolt	2
107	84895107	Ø10 × 40L_Incline Set Screws	1
108	84895108	3/8" × 2-1/2"_Hex Head Bolt	1
109	84895109	M8 × 35m/m_Socket Head Cap Bolt	2
110	84895110	3/8" × 3/4"_Socket Head Cap Bolt	4
111	84895111	3/8" × 2-1/4"_Socket Head Cap Bolt	2
112	84895112	5/16" × UNC18 × 1-3/4"_Button Head Socket Bolt	2
113	84895113	M5 × 10m/m_Phillips Head Screw	23
114	84895114	M5 × 10m/m_Phillips Head Screw	10
115	84895115	M4 × 12m/m_Phillips Head Screw	2
116	84895116	3.5 × 12m/m_Sheet Metal Screw	6
117	84895117	3.5 × 16m/m_Sheet Metal Screw	2
118	84895118	5 × 19m/m_Tapping Screw	17
119	84895119	5 × 16m/m_Tapping Screw	7
120	84895120	3 × 20m/m_Tapping Screw	4
121	84895121	Ø17_C Ring	1
122	84895122	M4 × P0.7 × 5T_Nyloc Nut	2
123	84895123	1/4" × 8T_Nyloc Nut	4
124	84895124	5/16" × 7T_Nyloc Nut	9
125	84895125	M8 × 7T_Nyloc Nut	1
126	84895126	M8 × 9T_Nyloc Nut	1
127	84895127	3/8" × 7T_Nyloc Nut	3
128	84895128	3/8" × 11T_Nyloc Nut	2
129	84895129	M10 × 8T_Nyloc Nut	5

NO.	PART	DESCRIPTION	Q'TY
130	84895130	3/8" × UNF26 × 4T_Nut	2
131	84895131	3/8" × UNF26 × 11T_Nut	2
132	84895132	3/8" × 7T_Nut	1
133	84895133	M8 × 6.3T_Nut	4
135	84895135	M8 × 170m/m_J Bolt	1
136	84895136	Ø3/8" × Ø19 × 1.5T_Flat Washer	18
137	84895137	Ø8.5 × Ø26 × 2.0T_Flat Washer	6
138	84895138	Ø5/16" × Ø23 × 1.5T_Flat Washer	8
139	84895139	Ø5/16" × Ø23 × 3T_Flat Washer	20
140	84895140	Ø17 × Ø23.5 × 1.0T_Flat Washer	1
141	84895141	Ø5 × Ø15 × 1.2T_Flat Washer	6
142	84895142	Ø3/8" × 23 × 2.0T_Curved Washer	4
143	84895143	Ø5/16" × 19 × 1.5T_Curved Washer	4
144	84895144	Ø10 × 2T_Split Washer	8
145	84895145	M8 × 20m/m_Carriage Bolt	1
146	84895146	M5_Speed Nut Clip	7
147	84895147	E7_E-Clip	2
148	84895148	Ø17.5 × 23.5 × 0.3T_Rubber Pad	2
149	84895149	13/14m/m_Wrench	1
150	84895150	12/14m/m_Wrench	1
151	84895151	Phillips Head Screw Driver	1
152	84895152	L Allen Wrench	1
153	84895153	Pedal Foam (L)	1
154	84895154	Pedal Foam (R)	1
155	84895155	J4FM-1719-09_Bushing	16
157	84895157	Drink Bottle Holder	1
160	84895160-1	Foot Pad Adjusting Plate	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 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 your 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 o 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 for 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.

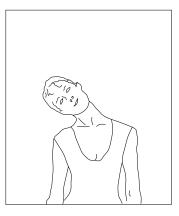
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half-minute to one-minute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

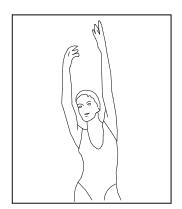
#### **HEAD ROLLS**

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.



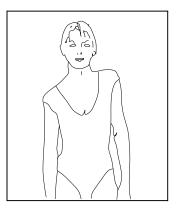
#### SIDE STRETCHES

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.



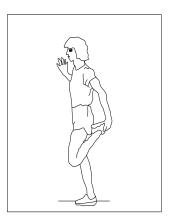
#### SHOULDER LIFTS

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.



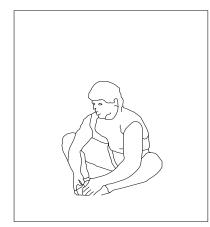
#### **QUADRICEPS STRETCH**

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.



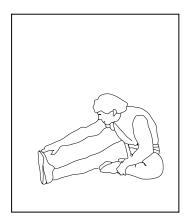
#### **INNER THIGH STRETCH**

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.



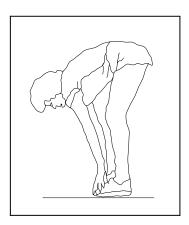
#### HAMSTRING STRETCHES

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.



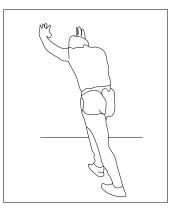
#### TOUCHES

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.



#### **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 Incline Stepper 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 a consumer. The warranty period applies to the following components:

Warranty	Frame	Brake	Parts	Labour	
Light Commercial	Lifetime	5 Years	3 Years	1 Year	
(5 Hours use or less in a non-dues paying facility) Residential	Lifetime	5 Years	10 Years	1 Year	

The consumer is responsible for the items listed below

- 1. The warranty registration can be completed online: Go to www.dyaco.ca/warranty.html and complete the online warranty registration.
- 2. Proper use of the incline stepper in accordance with the instructions provided in this manual.
- 3. Proper installation in accordance with instructions provided with the incline 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 house wiring.
- 5. Expenses for making the incline stepper accessible for servicing, including any item that was not part of the incline stepper at the time it was shipped from the factory.
- 6. Damages to the incline 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.

- Service call reimbursement to the consumer. 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 incline stepper not requiring component replacement, or incline stepper, not in ordinary household use.
- 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 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 owner, are the responsibility of the owner. The owner 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.

Customer Service 1-888-707-1880 2018 Email: customerservice@dyaco.ca



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











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For more information, please contact Dyaco Canada Inc. T: 1-888-707-1880 2 5955 Don Murie St., Niagara Falls, Ontario L2G 0A9 2 sales@dyaco.ca

Dyaco Canada Inc. dyaco.ca