### **Owner's Manual**

**Model No.** 16211461000 CU1000ENT

- Assembly
- Operation
- Maintenance
- Parts
- Warranty

### **CAUTION:**

Read and understand this manual before operating unit





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Thank you for purchasing our product. Please keep these instructions. Do not carry out or attempt to carry out any customisation, adjustment, repair, etc. or maintenance that is not described in this manual.



### CONGRATULATIONS ON YOUR NEW BIKE AND WELCOME TO THE SPIRIT FAMILY!

Thank you for your purchase of this quality stationary bike trainer from Dyaco Canada Inc. Your new bike 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 bike 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 <a href="https://www.dyaco.ca/warranty.html">www.dyaco.ca/warranty.html</a> and complete the online warranty registration.

Yours in Health, Dyaco Canada Inc.

Name of Dealer	
Telephone Number of Dealer_	
Purchase Date	

## **Product Registration**

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

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

Serial Number	
---------------	--

#### **REGISTER YOUR PURCHASE**

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

### **BEFORE YOU BEGIN**

Thank you for choosing the SPIRIT CU1000ENT Bike. 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 CU1000ENT Bike 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 CU1000ENT Bike. 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 CU1000ENT Bike, please do not return the product. Contact us **FIRST!** If a part is missing or defective call us toll-free at 1-888-707-1880. Our Customer Service Staff are available to assist you from 8:30 A.M. to 5:00 P.M. (Eastern Time) Monday through Friday. Be sure to have the name and model number of the product available when you contact us.



# SAFETY PRECAUTIONS

# IMPORTANT SAFETY INFORMATION READ ALL INSTRUCTIONS BEFORE USING THIS BIKE

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

Thank you for purchasing our product. Even though we make 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 bike.
- 2. It is the responsibility of the facility to ensure that all users of the bike exerciser are adequately informed of all precautions.
- 3. If dizziness, nausea, chest pains, or any other abnormal symptoms are experienced while using this equipment, STOP the workout at once. CONSULT A PHYSICIAN IMMEDIATELY.
- 4. Inspect your exercise equipment prior to exercising to ensure that all nuts and bolts are fully tightened before each use.
- 5. The bike must be regularly checked for signs of wear and damage. Any part found defective; the part must be replaced with a new spare part from the manufacturer.
- 6. Fitness equipment must always be installed on a flat surface, do not place the unit on a loose rug or uneven surface. It is recommended to use an equipment mat to prevent the unit from moving while it is being used, which could possibly scratch or damage the surface of your floor. Keep the bike 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 bike.
- 13. Always hold the handlebars when mounting, dismounting, or using the bike exerciser.
- 14. Keep your back straight when using the bike exerciser; do not arch your back.
- 15. If decals on the bike exerciser are missing or illegible, please call our customer service department toll-free at 1-888-707-1880 and order a replacement decal.
- 16. Care must be taken when lifting or moving the equipment, so as not to injure your back. Always use proper lifting techniques
- 17. User weight should not exceed 450 lbs. (205 kgs)

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

### SAVE THESE INSTRUCTIONS

# IMPORTANT SAFETY INSTRUCTIONS

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

**DANGER -** To reduce the risk of electric shock, always unplug this treadmill 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 treadmill on a flat level surface with access to a 120Vac (adapter 24Vdc/5A) grounded outlet with only the upright bike plugged into the circuit.

The upright cycle should be the only equipment in the circuit to which it is connected. 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.

- Do not operate the Upright bike on deeply padded, plush or shag carpet. Damage to both carpet and bike may result.
- Keep children away from the Bike. There are obvious pinch points and other caution areas that can cause harm.
- Keep children under the age of 13 away from the bike. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the Upright Bike if it has a damaged cord or plug. If the Upright Bike 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 operate the equipment with the air openings blocked. Keep the air openings free of lint, hair, and the like.
- 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.
- Please make sure that the power supply cord is placed in a dry area and kept away from heat.
- Do not attempt to use your bike 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 bike. Quality athletic shoes are recommended to avoid leg fatique.
- 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 exercise equipment is used by, on, or near children, invalids, or disabled persons.
- To mount and dismount the equipment safely, the one-foot pedal should be in the lowest position.
- WARNING: Injuries to health may result from incorrect or excessive training.

- Children should be supervised to ensure that they do not play with the exercise equipment.
- Notes on the correct posture and the fact the pedal crank training equipment of classes B and C are not suitable for therapeutic purposes.
- **WARNING!** Heart rate monitoring systems may be inaccurate. Over-exercising may result in serious injury or death. If you feel faint stop exercising immediately".
- Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- Never operate the exercise equipment with the air openings blocked. Keep the air openings free of lint, hair, and the like.
- Use this exercise equipment only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
- A bike should never be left unattended when plugged in. Unplug from outlet when not in use, and before putting on or taking off parts.
- Never operate this bike if it has a damaged cord or plug if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the bike to a service center for examination and repair.
- Do not carry this bike by supply cord or use cord as a handle.
- Keep the cord away from heated surfaces.
- The bike is intended for commercial use.

### **▲WARNING**

- INGESTION HAZARD: This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or cion battery can cause **Internal Chemical Burns** in as little as **2 hours**.
- KEEP new and used batteries OUT OF REACH of CHILDREN
- **Seek immediate medical attention** if a battery is suspercted to be swallowed or inserted inside any part of the body.



- a) Remove and immediately recycle or dispose of used batteries according to local regulations and keep them away from children. Do NOT dispose of batteries in household trash or incinerate them.
- b) Even used batteries may cause severe injury or death.
- c) Call a local poison control center for treatment information.
- d) Compatible battery type: CR1220
- e) Nominal battery voltage: 3V
- f) Non-rechargeable batteries are not to be recharged.
- g) Do not force discharge, recharge, disassemble, heat above temperature 85°C or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- h) Contains a non-removable battery. Only professionals are allowed to disassemble it.

### 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 upright bike 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 upright bike 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).

Circuit breakers: Avoid AFCI / GFCI circuit breakers if possible. These circuit breakers may trip occasionally during use due to the high inrush currents of the system. This condition is a problem with all equipment and other products with large motors or electric heating elements like ovens. New laws in your area may require these circuit breakers. If you have these circuit breakers and outlets in your home and are experiencing nuisance tripping, you should check if there are other devices plugged into the same circuit such as fluorescent lights with electronic ballasts, coffee makers, heaters, etc. Ideally, the equipment should be the only device plugged into the circuit. Our equipment has built-in surge suppressors to prevent nuisance tripping. We have tested several AFCI / GFCI circuit breakers and outlets with our products that do not trip when only the equipment is connected. The brands we tested are: Eaton (Cutler Hammer Series), Leviton (Smart lock Pro) and Schneider Electric (Canadian home series)

# SAVE THESE INSTRUCTIONS SERVICING OF DOUBLE-INSULATED PRODUCTS

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product, nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system, and should be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to the parts they replace. A double-insulated product is marked with the words "DOUBLE INSULATION" or "DOUBLE INSULATED." The symbol (square within a square)



# IMPORTANT OPERATION INSTRUCTIONS

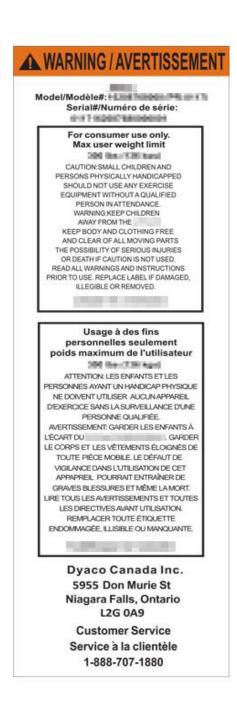
- NEVER operate this bike without reading and completely understanding the results of any
  operational change you request from the computer.
- **NEVER** use your upright bike during an electrical storm. Surges may occur in your facility or household power supply that could damage upright bike components. Unplug the upright bike during an electrical storm as a precaution.
- **All users** should have medical clearance before starting any rigorous exercise program. This is especially important for persons with a history of heart disease or other high-risk factors.
- The user should adjust the seat to a position that is comfortable during exercise.
- Understand that changes in resistance do not occur immediately. Set your desired resistance on the computer console and release the adjustment key. The computer will obey the command gradually.
- Use caution while participating in other activities while pedaling on your bike, such as watching television, reading, etc. These distractions may result in serious injury.
- Always hold on to a handlebar while making control changes.
- 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.



**POWER CONNECTOR - FRONT SIDE OF UNIT** 

# WARNING DECAL REPLACEMENT

The decal shown below has been placed on the bike. 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.

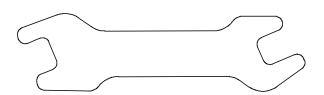


# **ASSEMBLY INSTRUCTIONS**

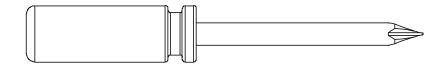
#### **UNPACKING**

- 1. Cut the straps and open the box. With 2 people, lift the cycle out of the box and carefully place it on a flat surface.
- 2. 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 numbers from the assembly drawing for reference.

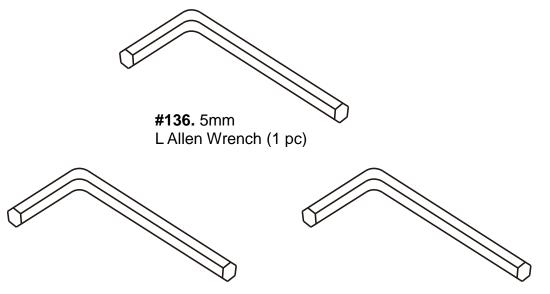
### **ASSEMBLY TOOLS**



**#137.** 13/15mm Wrench (1 pc)



**#97.** Phillips Head Screw driver (1 pc)



**#107.** M8 L Allen Wrench (1 pc)

#99. 6mm L Allen Wrench (1 pc)



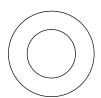
**#52 -** M8 × 20mm Socket Head Cap Bolt (4pcs)



#59 - M5 ×12mm Phillips Head Screw (4pcs)



**#53 -**  $\varnothing$ 8.5 ×  $\varnothing$ 18 × 1.5T Flat Washer (4pcs)



#60 - Ø13 x 23 x 2.0T Flat Washer (3pcs)



#61 - M10 × 55mm Socket Head Cap Bolt (3pcs)

### STEP 2



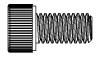
#52 - M8 × 20mm Socket Head Cap Bolt (6pcs)



**#112 -** Ø8.5 × Ø16 × 1.5T Flat Washer (12pcs)



#56 - M8 × 20mm Flat Head Countersink Bolt (4pcs)



#57 - M8 ×15mm Socket Head Cap Bolt (6pcs)



**#131 -** Ø8 x 1.5T Split Washer (6pcs)

### STEP 3



#138 - M5 × 10mm Phillips Head Screw (10pcs)

### STEP 4

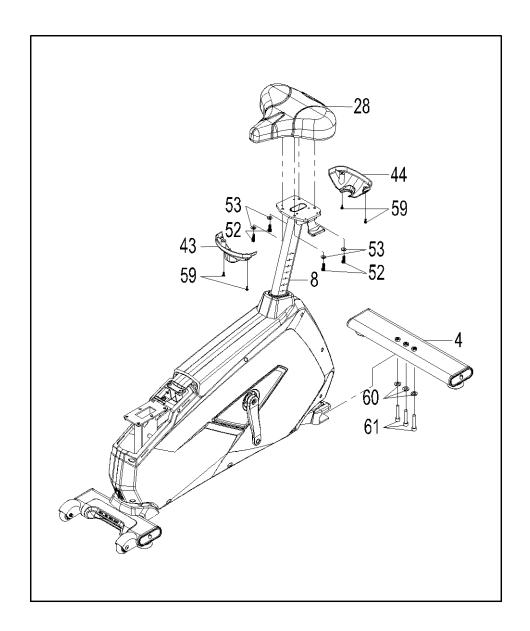


**#54 -** M5 × 12mm Phillips Head Screw (2pcs)

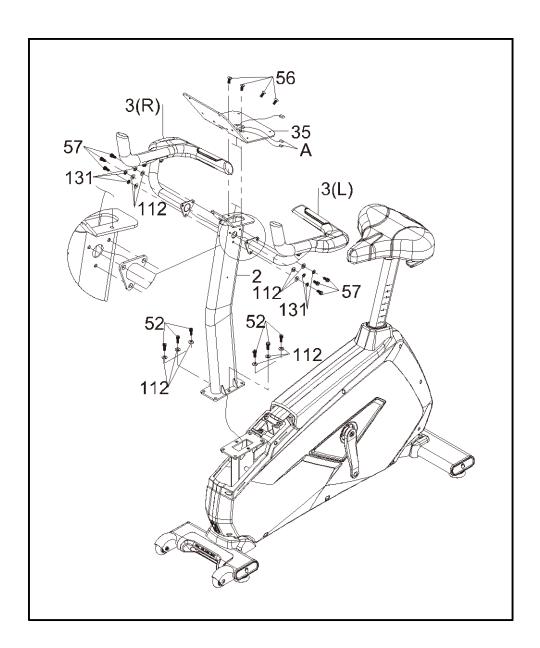


**#55 -** 3.5 × 12mm Sheet Metal Screw (4pcs)

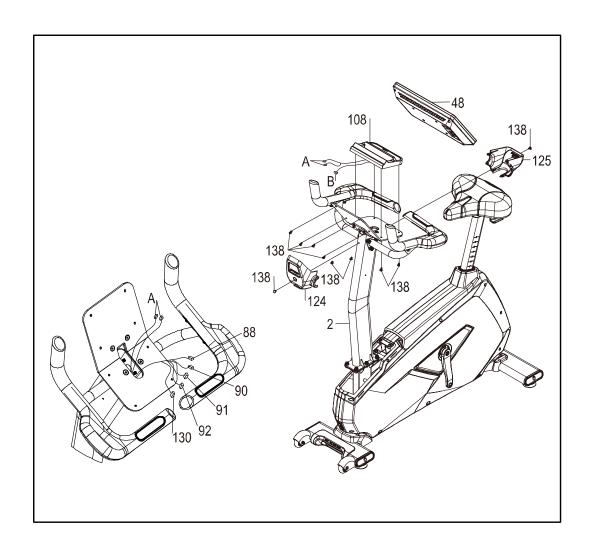
11



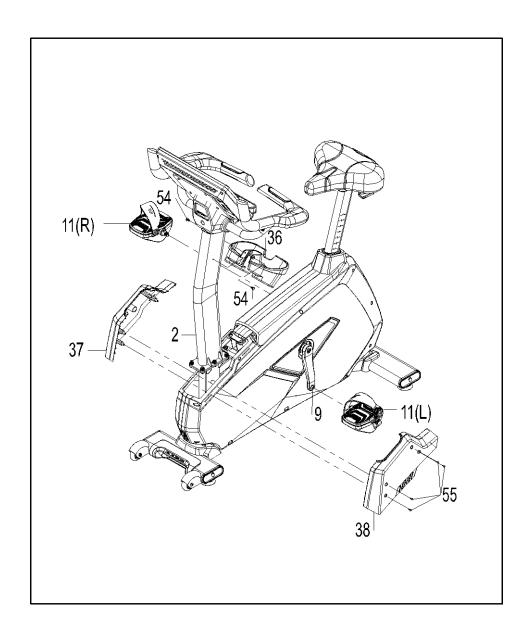
- 1. Install REAR STABILIZER (4) to MAIN FRAME (1) with 3 BOLTS (61) and 3 WASHERS (60).
- 2. Install SEAT (28) to RAIL ASSEMBLY (8) with 4 BOLTS (52) and 4 WASHERS (53).
- 3. Attach SEAT COVERS (Front &Rear) (43 & 44) to RAIL ASSEMBLY (8) with 4 SCREWS (59).



- 1. Install SCREEN PLATE (35) to CONSOLE MAST (2) with 4 BOLTS (56).
- 2. Run the WIRING HARNESS through the CONSOLE MAST (2) and SCREEN PLATE (35) then out of the top.
  - Install CONSOLE MAST (2) to MAIN FRAME (1) with 6 BOLTS (52) and 6 WASHERS (112).
- 3. Run the (#A) HANDPULSE WIRE of HANDLEBARS(3L&3R) through the CONSOLE MAST (2) and SCREEN PLATE (35). Install HANDLEBARS(3L&3R) to CONSOLE MAST (2) with 6 BOLTS (57), 6 SPLIT WASHERS (131) and 6 WASHERS (112).



- 1. Connect (#A) HANDPULSE WIRE of the KEYBOARD (108) and HANDLEBARS. Install KEYBOARD (108) to SCREEN PLATE (35) with 4 SCREWS (138).
- Connect all WIRING HARNESSES and the (#B) WIRE of KEYBOARD to corresponding connectors at the back of the CONSOLE (48).
   Install CONSOLE (48) to SCREEN PLATE (35) using 4 SCREWS (138). Be careful not to pinch any wires.
- 3. Attach CONSOLE CHIN COVER (Front& Rear) (124&125) to CONSOLE MAST (2) with 2 SCREWS (138).



- 1. Attach CONSOLE MAST COVERS (37 & 38) over CONSOLE MAST (2) using 4 SCREWS (55).
- 2. Attach BEVERAGE HOLDER (36) to CONSOLE MAST (2) using 2 SCREWS (54).
- 3. Install PEDALS (11) into CRANK ARMS (9 & 10). The left pedal has a reverse thread and will be screwed in counterclockwise.

# Getting on/off your Upright Bike

### <u>IMPORTANT</u>

The Upright Bike comes with a Stationary Handlebar.

Always hold the Stationary Handlebar when getting on and off the Upright Bike.

First-time users should familiarize themselves with using the Upright Bike by using the Stationary Handlebar first.

Caution should always be taken when getting on and off any exercise machine. Please follow the safety steps below.

**To get on,** Please hold the Stationary Handlebar with one of hands and sit on the seat. Place your left foot on the left Foot Pedal and get secure.

Lift your right foot over the machine and place on right Foot Pedal. Get balanced and begin your workout.

**To get off,** come to a complete stop and reverse the procedure.

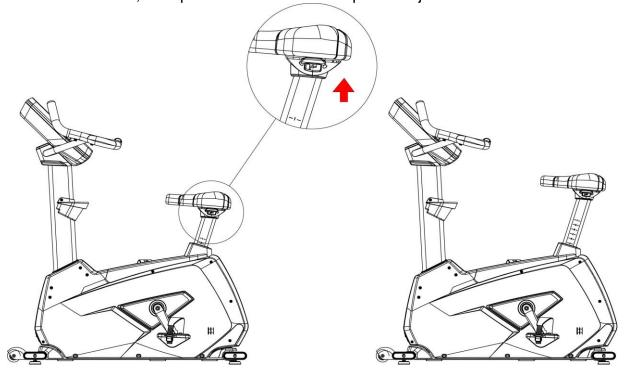
Always wear rubber-soled shoes, such as tennis shoes.

It is recommended that you keep at least one hand on the Stationary Handlebar at all times, especially when getting on or off.

All equipment should be set up and operated on solid, level surfaces.

# Seat Adjustments

- When you sit on the Seat Bottom Cushion, pull the Release Lever upward. Using your feet, push down on Pedals to lessen the weight upon the seat, and adjust the Seat Bottom Cushion upward.
- 2 If you want to adjust the Seat Bottom Cushion downward, please sit on the front end of the Seat Bottom Cushion, then pull the Release Lever upward adjust.



# **CONSOLE OPERATION**



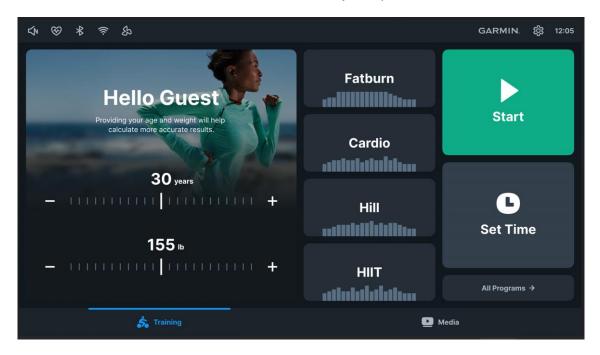
### Starting the operation

- Plug in the power cord at the front of the bike.
- When the power cord is plugged in the screen will show the initial image and then enter the ready mode which is the beginning of the bike operation.
- Main Home page: Begin operation by touching the icons.
- Quick operating buttons are convenient for basic bike functions.



#### STARTING OPERATION

When the power is turned ON, the screen will show a brief loading screen and then display the Home Screen which indicates that the machine is ready to operate.



Home Screen: Begin operation by touching the icons.

### **FUNCTIONS OF THIS BIKE**

The Touchscreen is used for operating all functions. You can directly touch any button on the screen or through the physical buttons below the console to control functions. On the lower portion of the console there is the Start button to begin the workout, Stop button to pause/stop programs, Level button to change workload.

### **QUICK START**

This is the quickest way to start a workout. After the console powers up you just press the Start button to begin. This will initiate the Quick Start mode. In Quick Start the Time will count up from zero, all workout data will start to accrue and the workload may be adjusted manually by pressing on the screen or the Up and Down buttons on lower control panel.

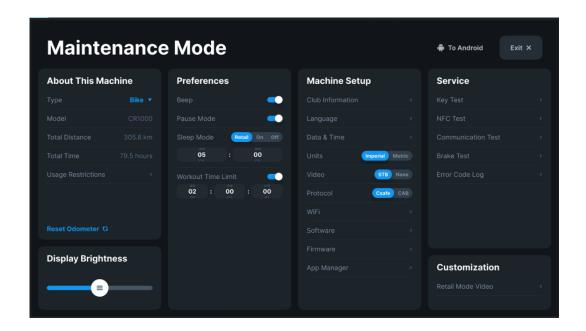
### **HEART RATE FEATURE**

The Pulse (Heart Rate) on the screen shows the current value of the heartbeats per minute. You must use both left and right stainless steel sensors to pick up your pulse. Pulse values are displayed anytime the computer receives a signal from the hand pulse sensors. You may use the hand pulse sensors while in Heart Rate Control. The CR1000/CU1000 will also pick up wireless heart rate transmitters that are Polar and Bluetooth compatible.

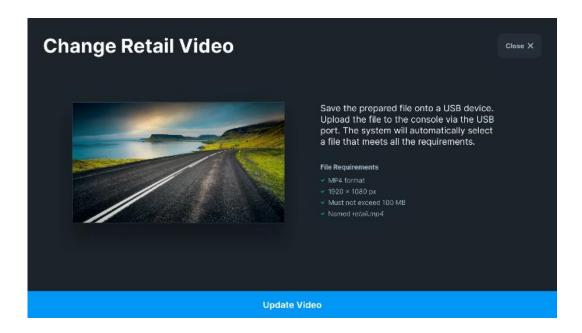
### **TOUCHSCREEN OPERATION**

#### **Maintenance Mode**

Enter the maintenance mode from the Home page by pressing "Hello Guest" 10 times to access the machine information, various settings and service procedures.

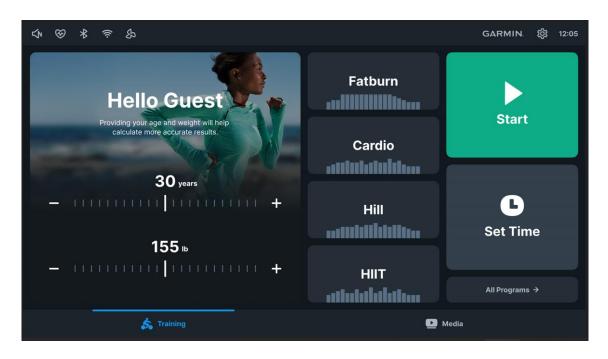


In the maintenance mode, you can upload your own visual materials via USB. Select **Retail Mode Video** under the **Customization** tab and follow the guidelines to change the videos when the console enters Retail Mode.



### **Basic Operation & Home Page**

The console interface is divided into two main sections: **Training** and **Media**. **The training** section is focused on workout data and controls, while **Media** offers various entertainment options for an exercising user. Use the tab bar on the bottom of the screen to switch between the two sections before, during or after the workout.



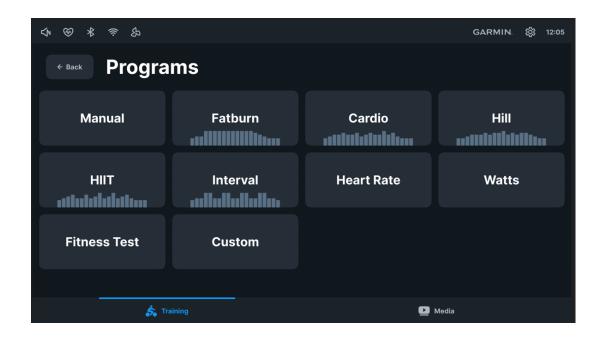
**Training** section's main screen includes a ranking list and some of the most common workout choices, such as immediate start, a timed workout, or popular workout patterns. A workout can be started by either pressing **Start** button on the screen, or using the physical **Start** key on the console.

Various tools and settings are available in the status bar on the top of the screen:

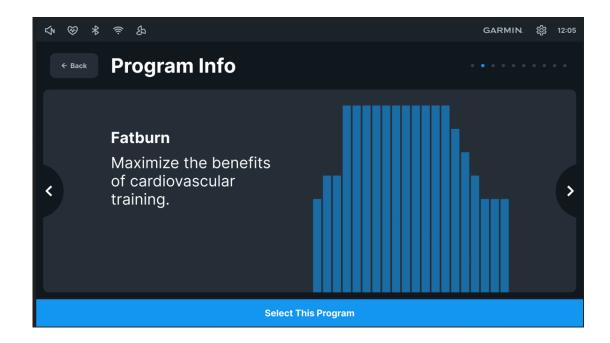
- Press the WiFi icon to open the WiFi settings.
- Press the Gear icon to change language or units of measurement.
- To pair a Garmin device, press on the **Garmin logo** (see details in **Garmin Pairing**)
  - To pair a Bluetooth device, press the **Bluetooth** icon
  - To pair a heart rate measuring device, select the **Heart Rate** icon;

### **Programs**

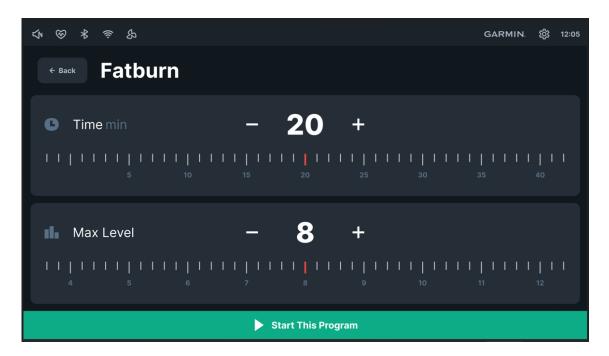
Press **All Programs** on the home page to open a full selection of the preset programs.



Tap on a program to learn more about it in the **Preview Mode**. Here, switch between programs easily by sliding left and right, or by using the arrow icons on both sides of the screen. Tap on the program card once again to enter the **Program Setup** page.



**Program Setup** page allows users to customize their workout. To change the value, drag the scale, use **Plus & Minus** buttons, or tap on the number for a direct input. Different programs offer different parameters to adjust.



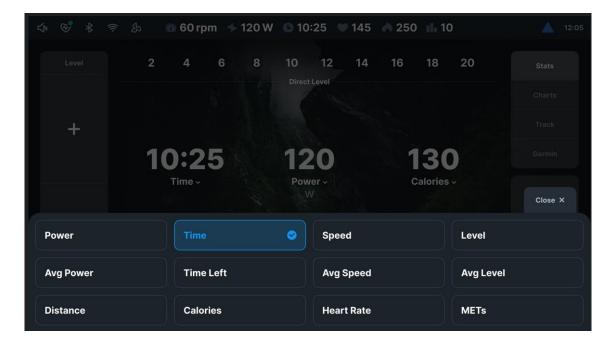
Press **Start This Program** button to start the workout with the selected parameters. Press **Back** to return to program selection.

#### **Workout Mode**

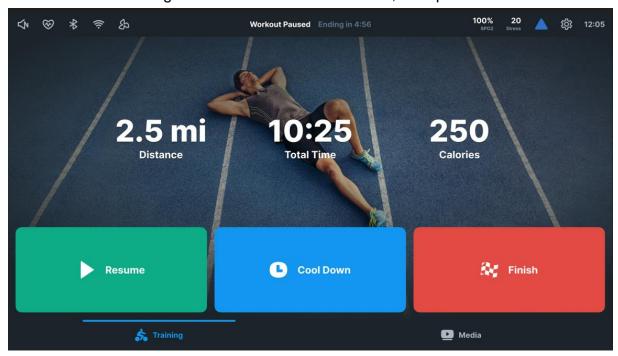
Start exercising once the console is in the workout mode and the time has started counting. Use panels on the left and right sides of the screen to control level. Choose between three workout views (Stats, Charts and Track), or go to the Media section for entertainment content. While in the Media section, please use physical keys to control level.



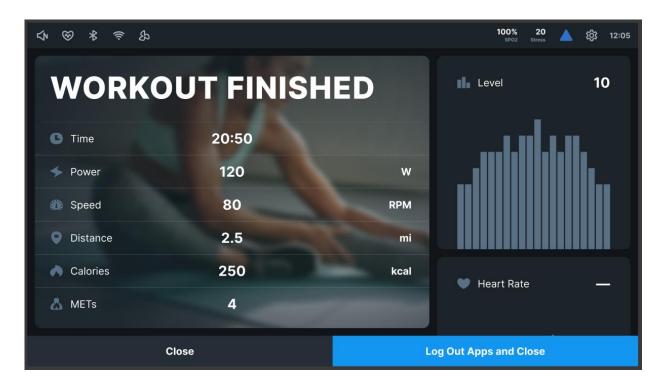
Parameters displayed in the **Stats** view can be customized: press on the number and select your preferred option.



To finish your workout, press the physical **STOP** button on the console twice, or tap on the **Pause** icon in the bottom right corner of the workout screen, then press **Finish**.



When the workout is over, the workout summary will pop up. Slide up & down on the right side of the screen to see all available charts.



#### Media

Press on the **Media** tab on the bottom of the screen to access various apps, television, and casting from your smartphone. Stable internet connection is required for all of the above.



To open an app, tap on its icon. Select from news, video and other content. Users do not have to log out when they have finished their workout: it happens automatically. Remember to check for updates regularly: access **Maintenance Mode / App Manager for managing all third party apps.** 

Customers are allowed to choose either **Mirroring** to transfer their own entertaining content from their smartphones to the console screen. To get familiar with the procedure, press **How It Works** and follow the instructions provided on the screen.



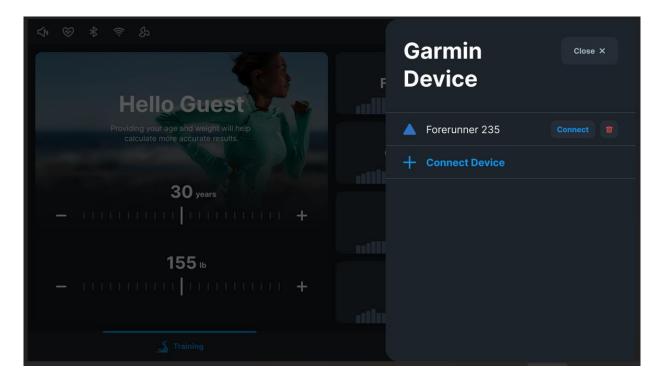


Once the content is on, use the **Floating Panel** to navigate and pause your workout when needed. Touch the panel's top edge and drag the panel around the screen to find the perfect place for it, where it will not prevent you from interacting with the content. Press **Hide Panels** to enter the full-screen mode without stats on the top and tabs on the bottom, and Show Panels to bring them back. Use the arrow button on the right side of the panel to hide & show the text labels: it allows you to further minimize the panel's size. Press **All Media** to go back to the content sources selection.

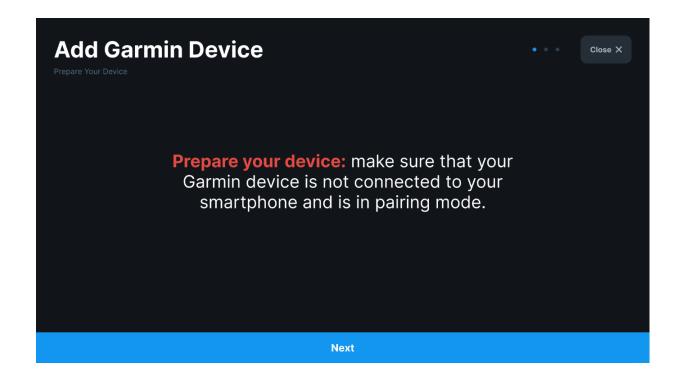


### **Garmin Pairing**

To connect to a Garmin device, one must first pair it with the console. Press on the **Garmin Logo** in the status bar, then the **Connect Device** button to run the pairing flow.



Step by step, follow the instructions provided on the screen: switch your Garmin device into pairing mode, then select it on the console screen and input the pin-code displayed on your device.



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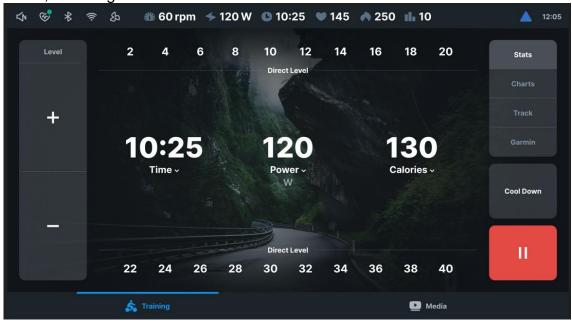
### **EXERCISE PROGRAM**

#### CHANGING THE WORKOUT DISPLAY

During your workout, you may change the display based on the view that works best for your needs. Once your workout begins, you will see 3 preset views available at the bottom of the screen: Stats, Charts, and Track.

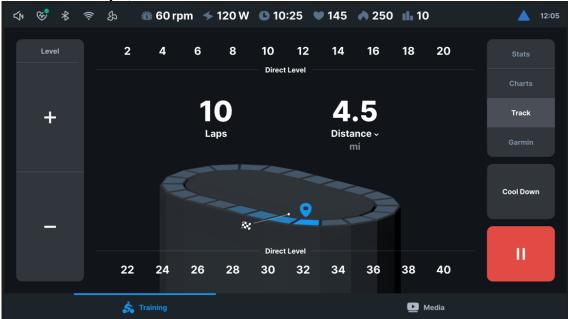
#### **Stats**

To switch the display to **Stats** view, simply tap the **Stats** button on the top side of the central screen. This view shows an overview of the real-time workout data including the Elapsed Time, Total Distance, Average Pace and other workout data.



#### TRACK

To switch the display to **Track** view, simply tap the **Track** button on the top of the central screen. This view shows a virtual track that corresponds with the current workout, as well as the total **distance**, number of **Laps**, and other workout data.

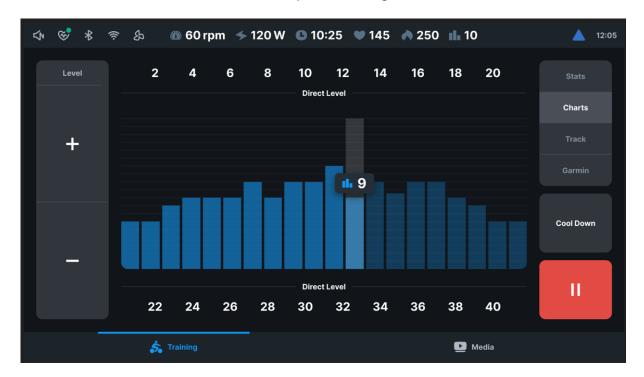


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### **EXERCISE PROGRAM**

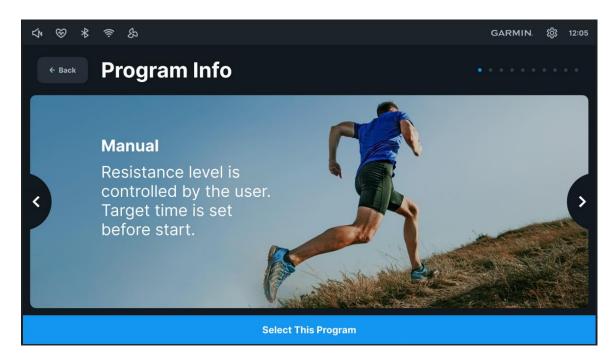
### **Charts**

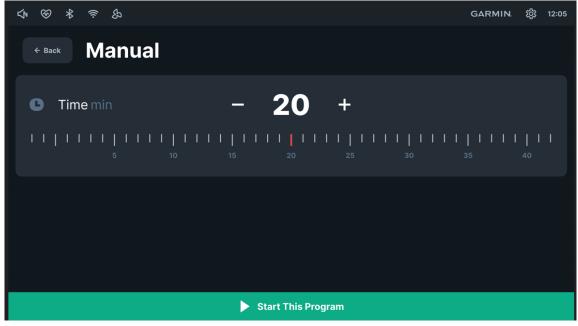
To switch the display to **Charts** view, simply tap the **Charts** button on the top of the central screen. This view shows the resistance level profile during the current workout.



### **MANUAL**

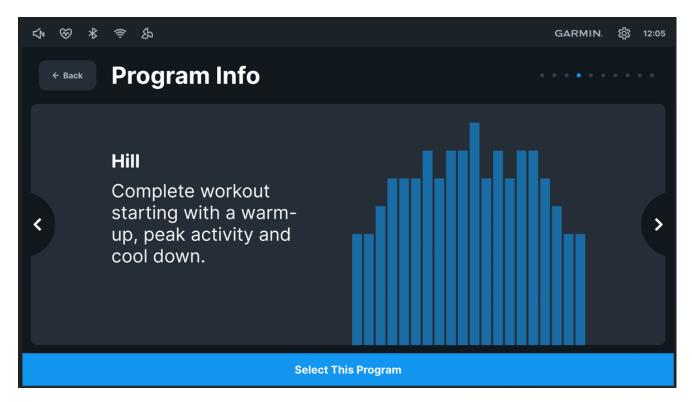
The level of resistance is controlled by the user. Increase or decrease levels at any time during your workout.





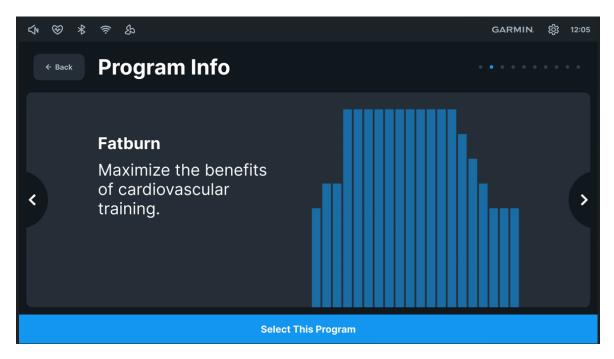
### HILL

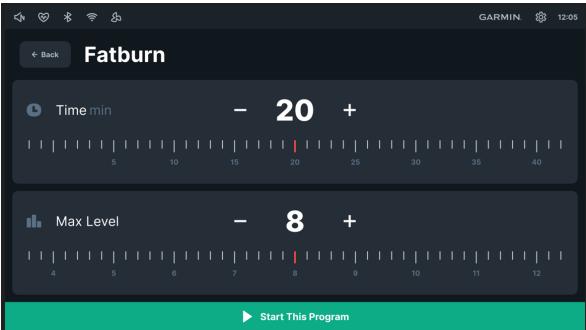
This program follows a triangle or pyramid type of gradual progression from approximately 10% of maximum effort (the level that you chose before starting this program) up to a maximum effort which lasts for 10% of the total workout time, then a gradual regression of resistance back to approximately 10%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



### **FAT BURN**

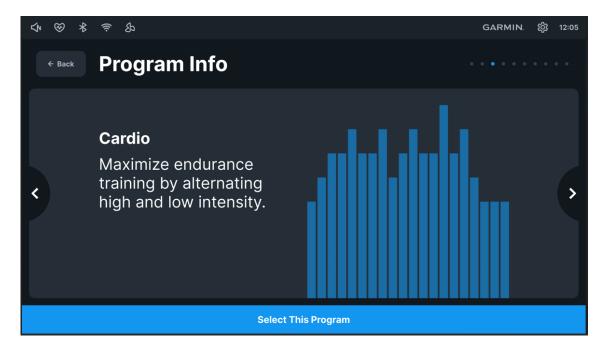
This program follows a quick progression up to the maximum resistance level (default or user input level) that is sustained for 2/3 of the workout. This program will challenge your ability to sustain your energy output for an extended period of time.





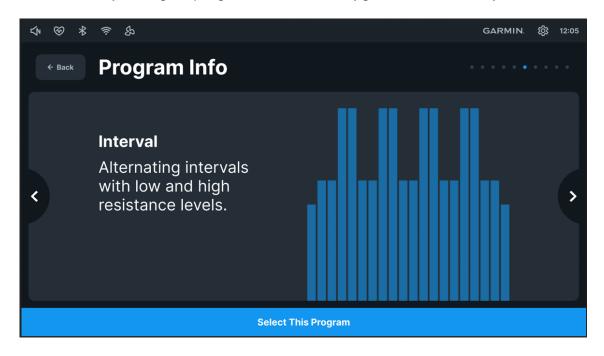
#### **CARDIO**

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.



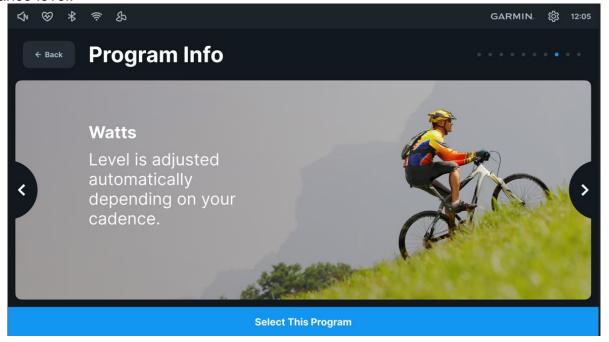
#### INTERVAL

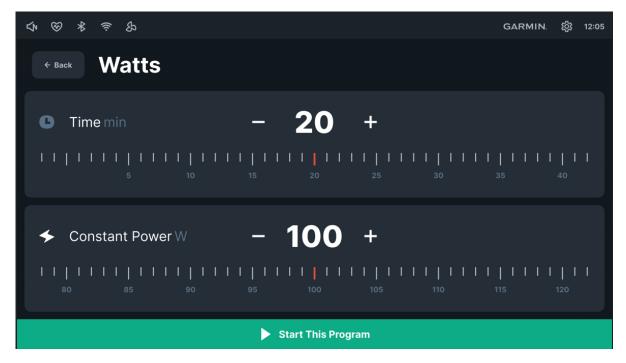
This program takes you through high levels of intensity followed by recovery periods of low intensity. This program utilizes and develops your fast twitch muscle fibers which are used when performing tasks that are intense and short in duration. These deplete your oxygen level and spike your heart rate,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



#### **WATTS**

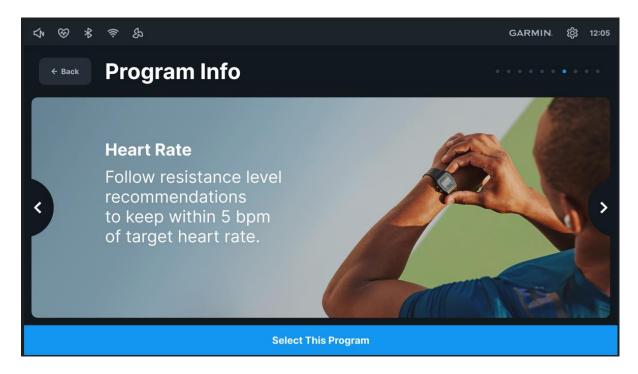
A watts program is a controllable constant power whose level adjusts when the speed is changed. Choose either faster pedalling at a lower resistance level or slower pedalling at a higher resistance level.

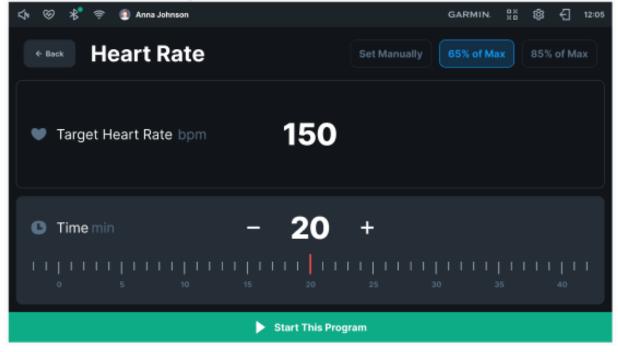




### **HEART RATE**

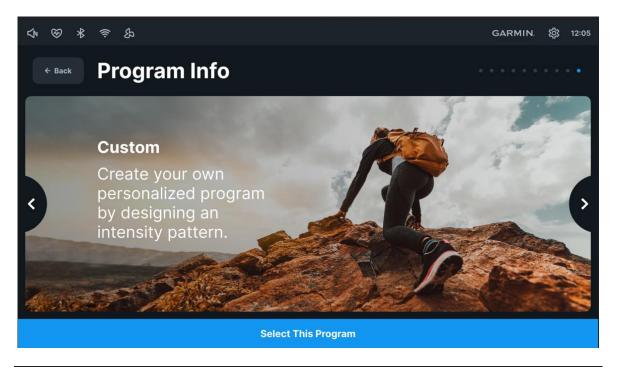
The default value is 65% of your projected rate maximum. You have the option of changing your target heart rate. The machine will attempt to keep you within five beats of your target heart rate.

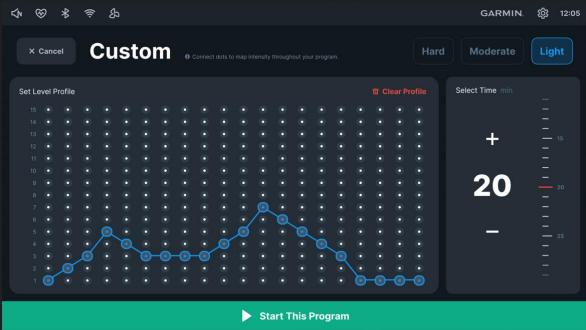




# **CUSTOM**

You will create the desired resistance levels for each of the 20 segments of the program using the keyboard on the screen. You may change these levels at any time during the workout.



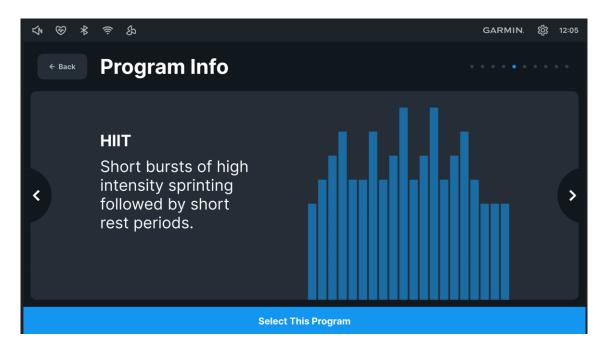


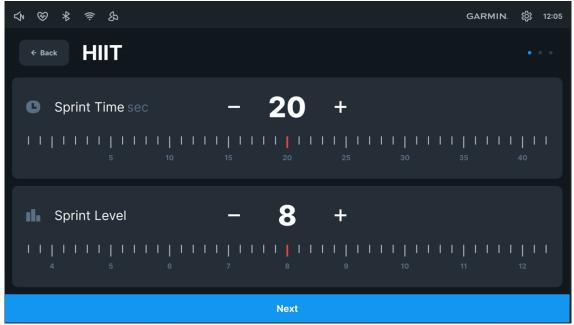
# TO BEGIN A CUSTOM PROGRAM:

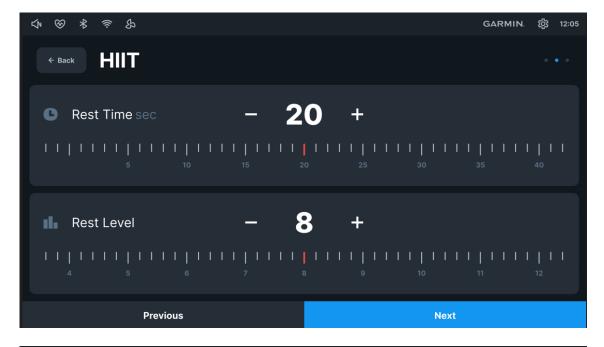
- 1. Select the Custom program to begin customizing the program with your personal data.
- 2. To adjust the resistance level profiles, use the on-screen interface to complete the desired workout profile and desired workout time. Once complete, press **Start this program**.

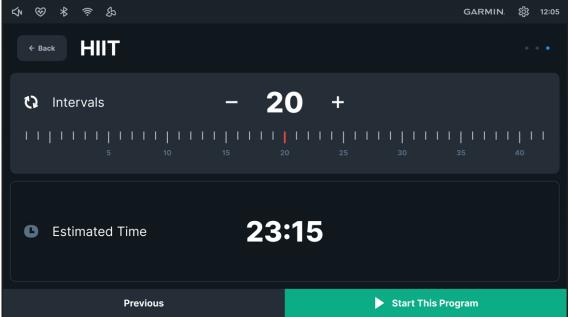
# **HIIT PROGRAM**

The HIIT, or High Intensity Interval Training, program takes advantage of the latest trend in fitness. During the program you will perform short bursts of high intensity sprinting followed by short rest periods. HIIT is a fully customizable interval training program. You can enter the number of intervals, time of each interval Sprint and Rest periods and the work intensity of the levels.







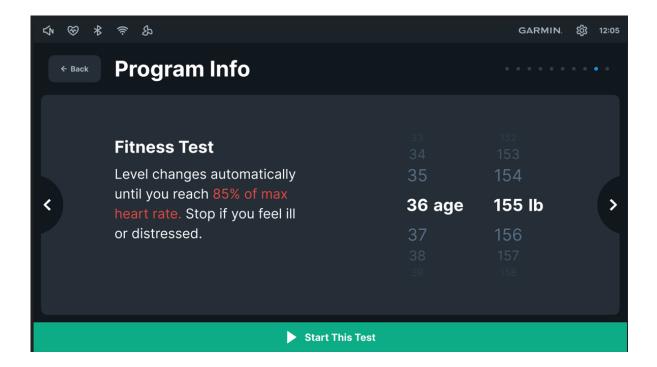


- 1. Select this program to begin customizing the program with your personal data,
- 2. **Next** is to set Sprint time/Sprint Level and Rest time/Rest Level.
- 3. Finally, set the number of intervals you want to do. One interval stands for 1 Sprint and 1 Rest segment.
- 4. Press **Start this program** to begin the HIIT program. The program starts with a 3-minute warm-up period with the resistance level set to 50% of the sprint speed selected previously. You can manually adjust the resistance level during warm-up if you wish.

### FITNESS TEST

The VO2 program is based on the YMCA protocol and is a sub-maximal test that uses pre-determined, fixed work levels that are based on your heart rate readings as the test progresses. The test will take anywhere between 6 to 15 minutes to complete, depending on your level of fitness. The test ends when your heart rate reaches 85% of maximum at any time during the test or your heart rate is between 110 bpm and 85% at the end of two consecutive stages. At the end of the test, a VO2 max score will be given. VO2max stands for Volume of Oxygen uptake which is a measurement of how much oxygen you need to perform a known amount of work. The YMCA protocol uses two to four, 3-minute stages of continuous exercise (see charts below). You will be asked to choose either, Male or Female at the beginning of the test.

This choice determines which test parameters will be used during the test as shown in the charts below.



Workload chart for male or very fit female:

1st Stage				300 kgm/min					
HR		< 90			90 - 105			> 105	
2nd Stage		900 kgm/min			750 kgm/min			600 kgm/min	
HR	HR <120	HR 120-135	HR >135	HR <120	HR 120-135	HR >135	HR <120	HR 120-135	HR >135
3rd stage	1350 kgm/min	1200 kgm/min	1050 kgm/min	1200 kgm/min	- 1050 kgm/min	900 kgm/min	1050 kgm/min	900 kgm/min	750 kgm/min

Workload chart for female or de-conditioned male

1st Stage			150 kgm/min	
Heart Rate	HR<80	HR: 80-90	HR: 90-100	HR>100
2nd Stage	750 kgm/min	600 kgm/min	450 kgm/min	300 kgm/min
3rd Stage	900 kgm/min	750 kgm/min	600 kgm/min	450 kgm/min
4th Stage (if needed)	1050 kgm/min	900 kgm/min	700 kgm/min	600 kgm/min

# **Before the Test:**

- Make sure you are in good health; check with your physician before performing any exercise if you are over the age of 35 or persons with pre-existing health conditions.
- Make sure you have warmed up and stretched before taking the test.
- Do not take in caffeine before the test.
- Hold the hand grips gently, do not tense up.

# **During the Test**

- The console must be receiving a steady heart rate for the test to begin. You may use the hand pulse sensors or wear a heart rate chest strap transmitter.
- You must maintain a steady 50 rpm pedal speed. If your pedal speed drops below 48 rpm or goes above 52 rpm the console will emit a steady beeping sound until you are within this range.
- You may scroll through the various data readings by pressing the Display button under the Message Window.
- The Message Window will always display your pedal speed on the right side to help you maintain 50 rpm.
- The data shown during the test is:
  - 1. Work in KGM is actually an abbreviated form of kg-m/min. Which is a work measurement of kilogram-force meter/minute
  - 2. Work in Watts (1 watt is equal to 6.11829727787 kg-m/min.)
  - 3. HR is your actual heart rate; TGT is the target heart rate to reach to end of the test.
  - 4. Time is the total elapsed time of the test.

### **After The Test:**

- Cool down for about one to three minutes.
- Take note of your score because the console will automatically return to the start-up mode after a few minutes.

# What your score means:

VO2max Chart for males and very fit females

	18-25	26-35	36-45	46-55	56-65	65+
	years old	years old	years old	years old	years old	years old
excellent	>60	>56	>51	>45	>41	>37
good	52-60	49-56	43-51	39-45	36-41	33-37
above average	47-51	43-48	39-42	35-38	32-35	29-32
average	42-46	40-42	35-38	32-35	30-31	26-28
below average	37-41	35-39	31-34	29-31	26-29	22-25
poor	30-36	30-34	26-30	25-28	22-25	20-21
very poor	<30	<30	<26	<25	<22	<20

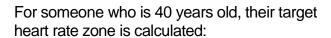
**VO2max Chart for females and de-conditioned males** 

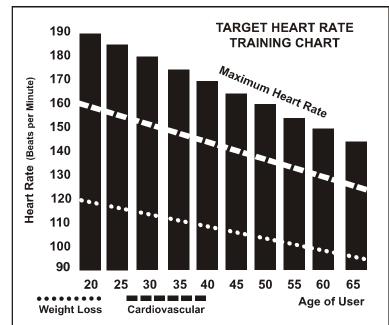
	18-25	26-35	36-45	46-55	56-65	65+
	years old	years old	years old	years old	years old	years old
excellent	56	52	45	40	37	32
good	47-56	45-52	38-45	34-40	32-37	28-32
above average	42-46	39-44	34-37	31-33	28-31	25-27
average	38-41	35-38	31-33	28-30	25-27	22-24
below average	33-37	31-34	27-30	25-27	22-24	19-22
poor	28-32	26-30	22-26	20-24	18-21	17-18
very poor	<28	<26	<22	<20	<18	<17

# **HEART RATE PROGRAMS**

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

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





220 - 40 = 180 (maximum heart rate)

 $180 \times .65 = 117$  beats per minute (65% of maximum)

 $180 \times .85 = 153 \text{ beats per minute } (85\% \text{ of maximum})$ 

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

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

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

With all Heart Rate Control bike equipment, 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. " **WARNING**" Heart rate monitoring system may be inaccurate. Over exercise may result in injury or death. If you feel faint stop exercising immediately.

# 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.

# **GENERAL MAINTENANCE**

Wipe down all areas in the sweat path with a damp cloth after each workout.

If a squeak, thump, clicking or rough feeling develops the main cause is most likely one of two reasons:

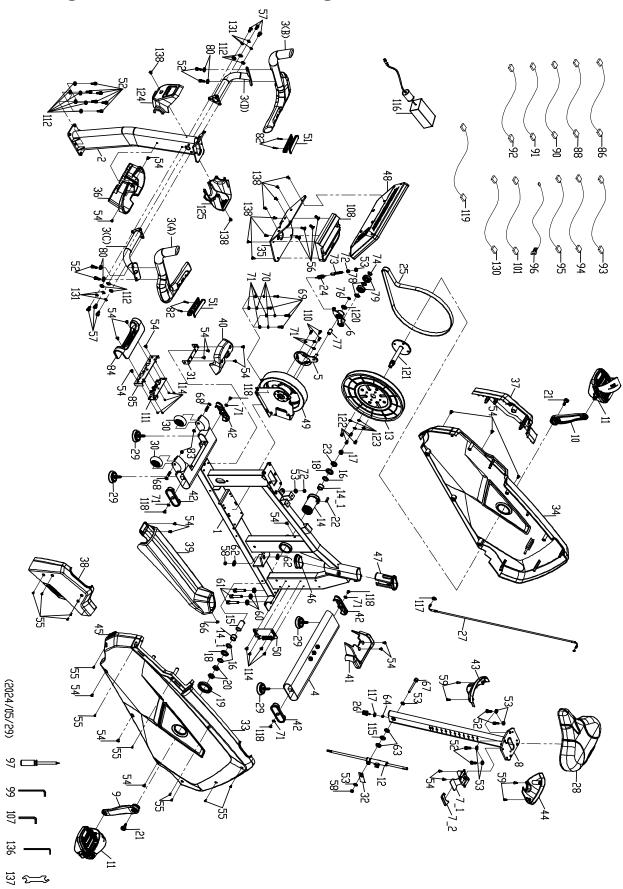
- a. The hardware was not sufficiently tightened during assembly. All bolts that were installed during assembly need to be tightened as much as possible. It may be necessary to use a larger wrench than the one provided if you cannot tighten the bolts sufficiently. I cannot stress this point enough; 90% of calls to the service department for noise issues can be traced to loose hardware.
- b. The crank arm nut needs to be retightened
- c. If squeaks or other noises persist, check that the unit is properly levelled. There are 2 leveling pads on the bottom of the rear and front stabilizers. Use a 14mm wrench (or adjustable wrench) to adjust the levellers.

## **WARNING**

The effect that the safety level of the equipment can be maintained only if it is examined regularly for damage and wear.

- i. Replace defective components immediately and/or keep the equipment out of use until repair.
- ii. The components which are most susceptible to wear: Belt \ PU wheel \ Bearing \ Idler.

# **EXPLODED VIEW DIAGRAM**



# **PARTS LIST**

KEY NO.	DESCRIPTION	Q'TY
1	Main Frame	1
2	Console Mast	1
3(A)	Seat Handlebar (L)	1
3(B)	Seat Handlebar (R)	1
3(C)	Handgrip Stabilizer Assembly (L)	1
3(D)	Handgrip Stabilizer Assembly (R)	1
4	Rear Stabilizer	1
5	Idler Bracket	1
6	Idler Wheel Assembly (Lower)	1
7-1	Release Lever	1
7-2	Nylon Handgrip	1
8	Rail Assembly	1
9	Crank Arm(L)	1
10	Crank Arm(R)	1
11	Pedal (L.R)	1
12	Shaft	1
13	Drive Pulley	1
14	Bearing Bracket	1
15	Core	1
16	Back Plate	3
17	Magnet	1
18	Plate	2
19	M50 × P1.5 × 11T Nut	1
20	M20 × P1.0 × 6T Nut	2
21	M8 × P1.0 × 25L_Arbor Screw	2
22	Woodruff Key	1
23	Axle Back Plate	1
24	Tension Spring, Idler Assembly	1
25	Drive Belt	1
26	Rubber Foot	1
27	Steel Cable	1
28	Seat	1
29	Adjustment Foot	4
30	Transportation Wheel	2
31	Chain Cover Attaching Plate	1
32	Fixing Plate	1
33	Chain Cover (L)	1
34	Chain Cover (R)	1
35	Screen Plate	1
36	Beverage Holder	1
37	Console Mast Cover (R)	1
38	Console Mast Cover (L)	1
39	Console Mast Cover	1
40	Front Stabilizer Cover	1

41       Rear Stabilizer Cover         42       Cap         43       Front Seat Cover         44       Rear Seat Cover         45       On/Off Switch Bracket         46       40 × 80 × 23L_Slider Sleeve         47       40 × 80_Slider Sleeve         48       Console Assembly         49       Induction Brake         50       Generator/Brake Controller         51       30mm_Handpulse W/Cable Assembly         52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer         64       M6 × P1.0 × 5.0T_Nut	1
43       Front Seat Cover         44       Rear Seat Cover         45       On/Off Switch Bracket         46       40 × 80 × 23L_Slider Sleeve         47       40 × 80_Slider Sleeve         48       Console Assembly         49       Induction Brake         50       Generator/Brake Controller         51       30mm_Handpulse W/Cable Assembly         52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	
44       Rear Seat Cover         45       On/Off Switch Bracket         46       40 × 80 × 23L_Slider Sleeve         47       40 × 80_Slider Sleeve         48       Console Assembly         49       Induction Brake         50       Generator/Brake Controller         51       30mm_Handpulse W/Cable Assembly         52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	4
45  On/Off Switch Bracket  46  40 × 80 × 23L_Slider Sleeve  47  40 × 80_Slider Sleeve  48  Console Assembly  49  Induction Brake  50  Generator/Brake Controller  51  30mm_Handpulse W/Cable Assembly  52  M8 × P1.25 × 20L_Socket Head Cap Bolt  53  Ø8.5 × Ø18 × 1.5T_Flat Washer  54  M5 × P0.8 × 12L_Phillips Head Screw  55  3.5 × 12L_Sheet Metal Screw  56  M8 × P1.25 × 20L_Flat Head Countersink Bolt  57  M8 × P1.25 × 15L_Socket Head Cap Bolt  58  M8 × 7T_Nylon Nut  59  M5 × P0.8 × 12L_Phillips Head Screw  60  Ø13 × Ø23 × 2.0T_Flat Washer  61  M10 × P1.5 × 55L_Socket Head Cap Bolt  62  Ø8.5 × Ø26 × 2.0T_Flat Washer  63  Ø10 × Ø24 × 3T_Nylon Washer	1
46       40 × 80 × 23L_Slider Sleeve         47       40 × 80_Slider Sleeve         48       Console Assembly         49       Induction Brake         50       Generator/Brake Controller         51       30mm_Handpulse W/Cable Assembly         52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	1
46       40 × 80 × 23L_Slider Sleeve         47       40 × 80_Slider Sleeve         48       Console Assembly         49       Induction Brake         50       Generator/Brake Controller         51       30mm_Handpulse W/Cable Assembly         52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	1
47       40 × 80_Slider Sleeve         48       Console Assembly         49       Induction Brake         50       Generator/Brake Controller         51       30mm_Handpulse W/Cable Assembly         52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	1
49         Induction Brake           50         Generator/Brake Controller           51         30mm_Handpulse W/Cable Assembly           52         M8 x P1.25 x 20L_Socket Head Cap Bolt           53         Ø8.5 x Ø18 x 1.5T_Flat Washer           54         M5 x P0.8 x 12L_Phillips Head Screw           55         3.5 x 12L_Sheet Metal Screw           56         M8 x P1.25 x 20L_Flat Head Countersink Bolt           57         M8 x P1.25 x 15L_Socket Head Cap Bolt           58         M8 x 7T_Nylon Nut           59         M5 x P0.8 x 12L_Phillips Head Screw           60         Ø13 x Ø23 x 2.0T_Flat Washer           61         M10 x P1.5 x 55L_Socket Head Cap Bolt           62         Ø8.5 x Ø26 x 2.0T_Flat Washer           63         Ø10 x Ø24 x 3T_Nylon Washer	1
50         Generator/Brake Controller           51         30mm_Handpulse W/Cable Assembly           52         M8 x P1.25 x 20L_Socket Head Cap Bolt           53         Ø8.5 x Ø18 x 1.5T_Flat Washer           54         M5 x P0.8 x 12L_Phillips Head Screw           55         3.5 x 12L_Sheet Metal Screw           56         M8 x P1.25 x 20L_Flat Head Countersink Bolt           57         M8 x P1.25 x 15L_Socket Head Cap Bolt           58         M8 x 7T_Nylon Nut           59         M5 x P0.8 x 12L_Phillips Head Screw           60         Ø13 x Ø23 x 2.0T_Flat Washer           61         M10 x P1.5 x 55L_Socket Head Cap Bolt           62         Ø8.5 x Ø26 x 2.0T_Flat Washer           63         Ø10 x Ø24 x 3T_Nylon Washer	1
51       30mm_Handpulse W/Cable Assembly         52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	1
52       M8 × P1.25 × 20L_Socket Head Cap Bolt         53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	1
<ul> <li>M8 x P1.25 x 20L_Socket Head Cap Bolt</li> <li>Ø8.5 x Ø18 x 1.5T_Flat Washer</li> <li>M5 x P0.8 x 12L_Phillips Head Screw</li> <li>3.5 x 12L_Sheet Metal Screw</li> <li>M8 x P1.25 x 20L_Flat Head Countersink Bolt</li> <li>M8 x P1.25 x 15L_Socket Head Cap Bolt</li> <li>M8 x 7T_Nylon Nut</li> <li>M5 x P0.8 x 12L_Phillips Head Screw</li> <li>Ø13 x Ø23 x 2.0T_Flat Washer</li> <li>M10 x P1.5 x 55L_Socket Head Cap Bolt</li> <li>Ø8.5 x Ø26 x 2.0T_Flat Washer</li> <li>Ø10 x Ø24 x 3T_Nylon Washer</li> </ul>	2
53       Ø8.5 × Ø18 × 1.5T_Flat Washer         54       M5 × P0.8 × 12L_Phillips Head Screw         55       3.5 × 12L_Sheet Metal Screw         56       M8 × P1.25 × 20L_Flat Head Countersink Bolt         57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	14
54       M5 x P0.8 x 12L_Phillips Head Screw         55       3.5 x 12L_Sheet Metal Screw         56       M8 x P1.25 x 20L_Flat Head Countersink Bolt         57       M8 x P1.25 x 15L_Socket Head Cap Bolt         58       M8 x 7T_Nylon Nut         59       M5 x P0.8 x 12L_Phillips Head Screw         60       Ø13 x Ø23 x 2.0T_Flat Washer         61       M10 x P1.5 x 55L_Socket Head Cap Bolt         62       Ø8.5 x Ø26 x 2.0T_Flat Washer         63       Ø10 x Ø24 x 3T_Nylon Washer	8
55       3.5 x 12L_Sheet Metal Screw         56       M8 x P1.25 x 20L_Flat Head Countersink Bolt         57       M8 x P1.25 x 15L_Socket Head Cap Bolt         58       M8 x 7T_Nylon Nut         59       M5 x P0.8 x 12L_Phillips Head Screw         60       Ø13 x Ø23 x 2.0T_Flat Washer         61       M10 x P1.5 x 55L_Socket Head Cap Bolt         62       Ø8.5 x Ø26 x 2.0T_Flat Washer         63       Ø10 x Ø24 x 3T_Nylon Washer	23
56       M8 x P1.25 x 20L_Flat Head Countersink Bolt         57       M8 x P1.25 x 15L_Socket Head Cap Bolt         58       M8 x 7T_Nylon Nut         59       M5 x P0.8 x 12L_Phillips Head Screw         60       Ø13 x Ø23 x 2.0T_Flat Washer         61       M10 x P1.5 x 55L_Socket Head Cap Bolt         62       Ø8.5 x Ø26 x 2.0T_Flat Washer         63       Ø10 x Ø24 x 3T_Nylon Washer	11
57       M8 × P1.25 × 15L_Socket Head Cap Bolt         58       M8 × 7T_Nylon Nut         59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	4
<ul> <li>58  M8 x 7T_Nylon Nut</li> <li>59  M5 x P0.8 x 12L_Phillips Head Screw</li> <li>60  Ø13 x Ø23 x 2.0T_Flat Washer</li> <li>61  M10 x P1.5 x 55L_Socket Head Cap Bolt</li> <li>62  Ø8.5 x Ø26 x 2.0T_Flat Washer</li> <li>63  Ø10 x Ø24 x 3T_Nylon Washer</li> </ul>	6
59       M5 × P0.8 × 12L_Phillips Head Screw         60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	2
60       Ø13 × Ø23 × 2.0T_Flat Washer         61       M10 × P1.5 × 55L_Socket Head Cap Bolt         62       Ø8.5 × Ø26 × 2.0T_Flat Washer         63       Ø10 × Ø24 × 3T_Nylon Washer	4
61       M10 x P1.5 x 55L_Socket Head Cap Bolt         62       Ø8.5 x Ø26 x 2.0T_Flat Washer         63       Ø10 x Ø24 x 3T_Nylon Washer	3
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63 Ø10 x Ø24 x 3T_Nylon Washer	2
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66 M5 × 6mm_Phillips Head Screw	1
67 M8 × 80mm_Socket Head Cap Bolt	1
68 5/16" × UNC18 × 1-3/4"_Button Head Socket Bolt	2
69 1/4" × UNC20 × 3/4"_Hex Head Bolt	4
70 Ø1/4"_Split Washer	4
71 Ø1/4" × 13 × 1.0T Flat Washer	11
72 M8 × 6T Nut	2
73 M8 × 80mm_J Bolt	_ <del>_</del>
74 Ø17_C Ring	1
76 Ø10_C Ring	1
77 Powder metallurgy Sleeve	1
<b>78</b> Ø17 × Ø23.5 × 1.0T_Flat Washer	2
<b>79</b> 6203_Bearing	2
80 Ø8 × Ø20 × 3T_Flat Washer	4
82 3 × 20mm_Tapping Screw	4
83 5/16" × 6T_Nylon Nut	2
84 TVC Cover	1
85 Transfer Board	1
86 800mm_Handpulse Wire	1
88 1350mm_Communication Cable	1
90 1450mm_Connecting Wire	1
91 2000mm_6P Computer Cable	1
92 1950mm_Console Power Cord	•

KEY NO.	DESCRIPTION	Q'TY
93	200mm_DC Power Cord	1
94	1100mm_Connecting Wire	1
95	400mm_Wire Brake Coil Harness	1
96	800mm_Sensor W/Cable	1
97	Phillips Head Screwdriver	1
99	6mm_L Allen Wrench	1
101	800mm_Handpulse Wire	1
107	8mm_L Allen Wrench	1
108	Keyboard	1
110	M5 x 15L_Socket Head Cap Bolt	3
111	Board	1
112	Ø8.5 x Ø16 x 1.5T_Flat Washer	12
114	M3 × 6mm_Phillips Head Screw	9
115	Ø8.5 x Ø26 x 2.0T_Flat Washer	1
116	Power Adaptor	1
117	Ø6 x Ø19 x 3.0T_Flat Washer	2
118	M5 x 15mm_Phillips Head Screw	4
119	Power Cord	1
120	Ø3/8" x 25 x 2T_Flat Washer	1
121	Crank Axle	1
122	M6 x 12mm_Socket Head Cap Bolt	4
123	Ø1/4" x 13 x 1.0T_Flat Washer	4
124	Console Chin Cover (Front)	1
125	Console Chin Cover (Rear)	1
130	1400mm_Connecting Wire	1
131	Ø8 x 1.5T_Split Washer	6
136	5mm_L Allen Wrench	1
137	13/15mm_Wrench	1
138	M5 x P0.8 x 10L_Phillips Head Screw	10

# 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 of 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, the rate at which your heart beats 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, 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, and (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 have 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 the maximum.

Age	25	30	35	40	45	50	55	60	65	
	26	26			23		22	21	20	
Beats per Minute	156	156	150	144	138	132	132	126	120	

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

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

#### **ENDURANCE CIRCUIT TRAINING**

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

## **Body Building**

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

#### **Patronization**

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

#### **Muscle Soreness**

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

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

If you experience PAIN during or after exercise, your body is telling you something. Stop exercising and consult your doctor.

# WHAT TO WEAR

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

#### **Breathing During Exercise**

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

### **Rest periods**

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

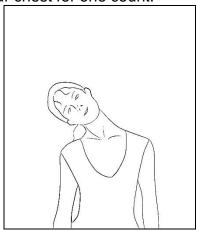
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half-minute to one-minute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

# **STRETCHING**

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

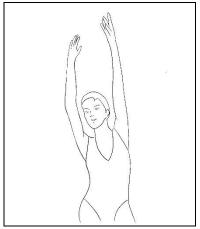
#### **HEAD ROLLS**

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



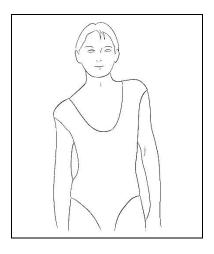
#### SIDE STRETCHES

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



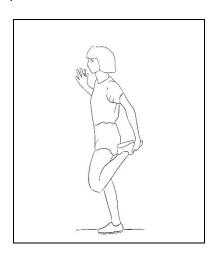
#### SHOULDER LIFTS

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



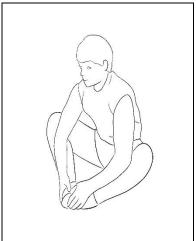
#### QUADRICEPS STRETCH

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



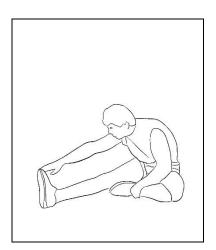
#### INNER THIGH STRETCH

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



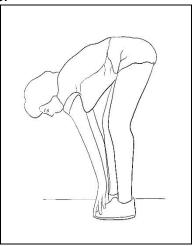
#### HAMSTRING STRETCHES

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



#### **TOE TOUCHES**

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



#### **CALF / ACHILLES STRETCH**

Lean against a wall with your left leg in front of the right and your arms forward. Keep 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 the period of time listed below, from the date of retail sale, as determined by a sales receipt or in the absence of 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:

#### **Commercial Warranty (Dues Paying Facility)**

Frame 10 years Brake 5 years

Parts 3 years / Console Parts 2 years
Labour 3 years / Console Labour 1 year
Wear Items 6 months

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

The warranty shall not apply to exercise units which are subject to misuse, neglect, accident or unauthorized repair and alterations. This warranty is provided herein in lieu of all other express warranties, any implied warranties, including any implied warranties of merchantability or fitness for a particular purpose, are limited in duration to the first 12 months from the date of purchase. All other obligations or liabilities, including liability for consequential damages, are hereby excluded.

#### REPAIR PARTS AND SERVICE

All of the parts for the bike shown in the figure can be ordered from Dyaco Canada Inc. 5955 DON MURIE STREET, NIAGARA FALLS, ON L2G 0A9. When ordering parts, the parts will be sent and billed at the current prices. Prices may be subject to change without notice. Check or money order must accompany all orders. Standard hardware items are available at your local hardware store.

To ensure prompt and correct handling of any errors, or to answer any questions, please call our Toll-Free number: 1-888-707-1880, or local number 1-905-353-8955 or fax 1-905-353-8968 or email customerservice@dyaco.ca or visit us at www.dyaco.ca. Office hours are from 8:30 AM to 5:00 PM Monday to Friday Eastern Standard Time.

Always include the following information when ordering parts

- \_ Model and serial number
- \_ Name of each part
- Part number of each part



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