

Owner's Manual

Model No.
16607709000
CE900

- Assembly
- Operation
- Adjustments
- Parts
- Warranty

CAUTION:
Read and
understand this
manual before
operating unit

SPIRIT



Retain For Future Reference

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

SPIRIT

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

Thank you for your purchase of this quality elliptical trainer from Dyaco Canada Inc. Your new elliptical 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 elliptical 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 complete and mail your registration card today and enjoy your new elliptical.

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

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

BEFORE YOU BEGIN

Thank you for choosing the SPIRIT CE900 Elliptical. 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 CE900 Elliptical provides a convenient and simple method to begin your assault on getting your body in shape and achieving a happier and healthier lifestyle.

Read this manual carefully before using the SPIRIT CE900 Elliptical. 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 CE900 Elliptical, 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 ELLIPTICAL

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

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

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

1. Read the OWNER'S OPERATING MANUAL and all accompanying literature and follow it carefully before using your elliptical.
2. It is the responsibility of the facility to ensure that all users of the elliptical 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 elliptical must be regularly checked for signs of wear and damage. Any part found defective, the part must be replaced with new spare part from the manufacturer.
6. Fitness equipment must always be installed on a flat surface, do not place the unit on a loose rug or uneven surface. It is recommended to use an equipment mat to prevent the unit from moving while it is being used, which could possibly scratch or damage the surface of your floor. Keep the elliptical 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 elliptical.
13. Always hold the handlebars when mounting, dismounting, or using the elliptical exerciser.
14. Keep your back straight when using the elliptical exerciser; do not arch your back.
15. If decals on the elliptical 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 (204 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 from 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.

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 elliptical on deeply padded, plush or shag carpet. Damage to both carpet and elliptical may result.
- Keep children under the age of 13 away from the elliptical. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- 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.
- Do not attempt to use your elliptical for any purpose other than for the purpose it is intended.
- The elliptical is not a medical device.
- 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 elliptical. 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 equipment by a person responsible for their safety.

SAVE THESE INSTRUCTIONS - THINK SAFETY!

IMPORTANT ELECTRICAL INFORMATIONS

WARNING!

Be aware that the generator is producing AC power while the elliptical trainer is being used. Do not service the elliptical trainer while the generator is spinning; serious electric shock could occur.

NEVER expose this elliptical 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).

IMPORTANT OPERATION INSTRUCTIONS

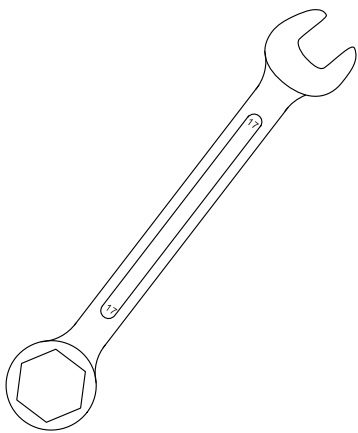
- **NEVER** operate this elliptical without reading and completely understanding the results of any operational change you request from the computer.
- Understand that changes in resistance do not occur immediately. Set your desired resistance on the computer console and release the adjustment key. The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

ASSEMBLY INSTRUCTIONS

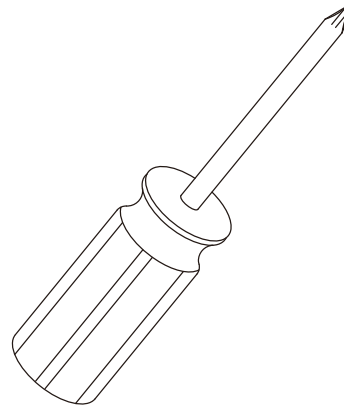
PRE-ASSEMBLY

1. Cut the straps, then 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. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) correspond to the item number from the assembly drawing for reference.

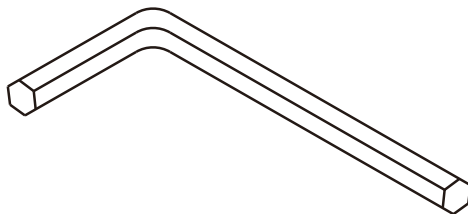
ASSEMBLY TOOLS



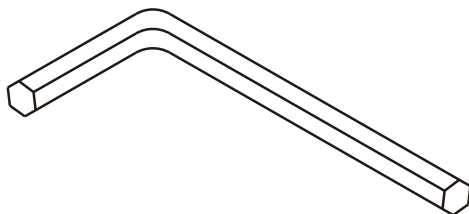
#135. 17 mm
Wrench (1 pc)



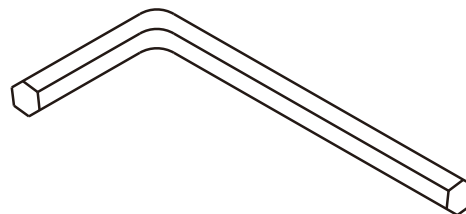
#131. Phillips Head
Screwdriver (1 pc)



#134. M10 L Allen Wrench (1 pc)



#133. 6mm L Allen Wrench (1 pc)

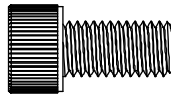


#132. 5mm L Allen Wrench (1 pc)

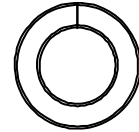
STEP 1



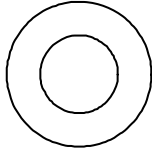
#46 – 3.5 x 12mm
Sheet Metal Screw
(2pcs)



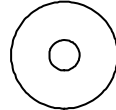
#54 – M10 x 20mm
Socket Head Cap Bolt
(12pcs)



#57 – Ø10 x 2T
Split Washer (4pcs)

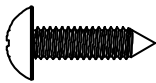


#65 – Ø3/8" x Ø19 x 1.5T
Flat Washer (4pcs)

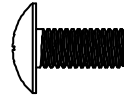


#58 – Ø4 x 14 x 1.0T
Flat Washer (2pcs)

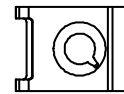
STEP 2



#47 – 5x16m/m
Sheet Metal Screw (2pcs)

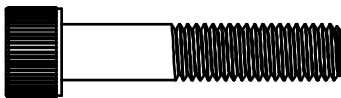


#49 – M5x12mm
Phillips Head Screw (6pcs)

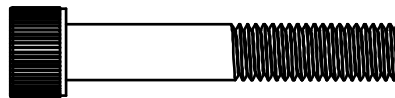


#78 – M5 x 1T Plate (2pcs)

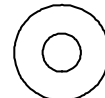
STEP 3



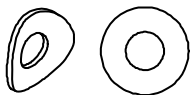
#43 – M10 x 55mm
Socket Head Cap Bolt
(2pcs)



#44 – M10 x 60mm
Socket Head Cap Bolt
(4pcs)



#63 – Ø10 x Ø25 x 1.5T
Flat Washer (10pcs)

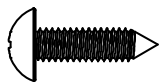


#68 – Ø10 x Ø23 x 1.5T
Curved Washer (2pcs)

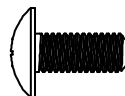


#71 – M10 x 8T
Nyloc Nut (6pcs)

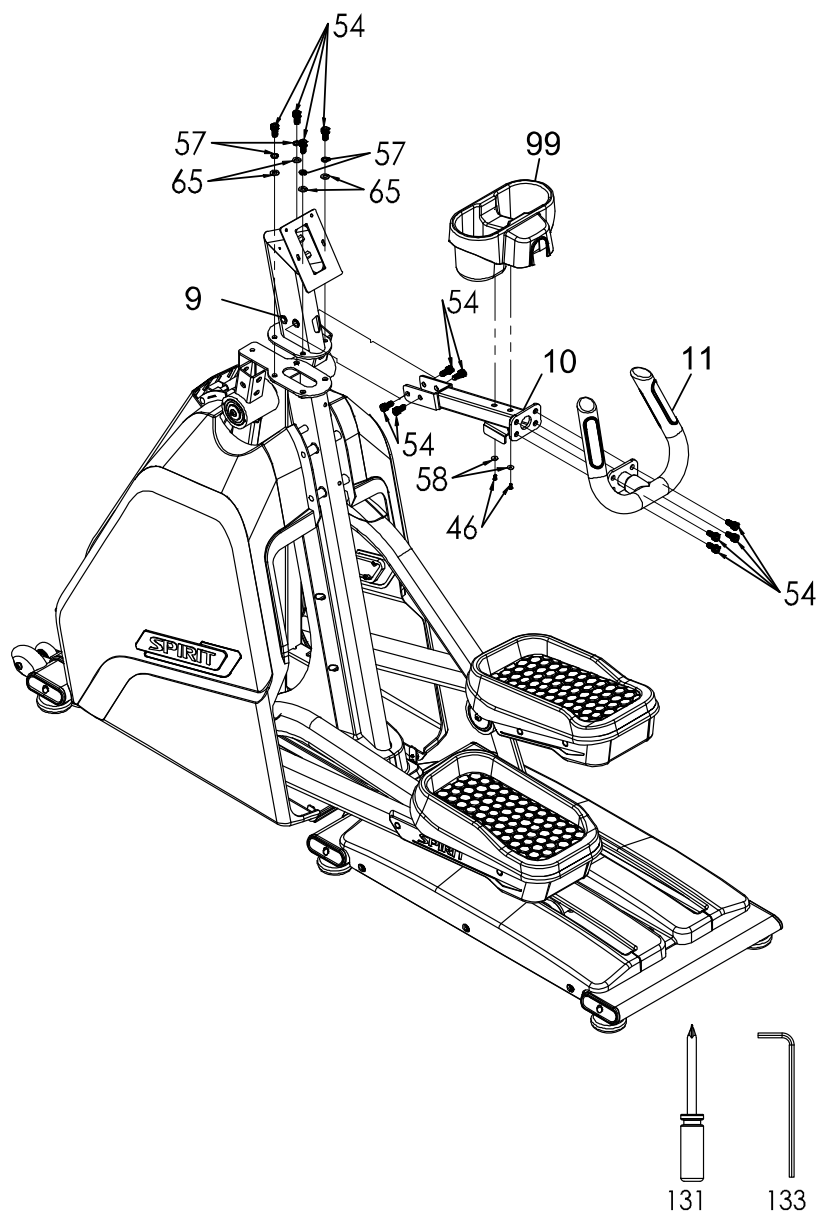
STEP 4



#46 – 3.5 x 12m/m
Sheet Metal Screw
(2pcs)

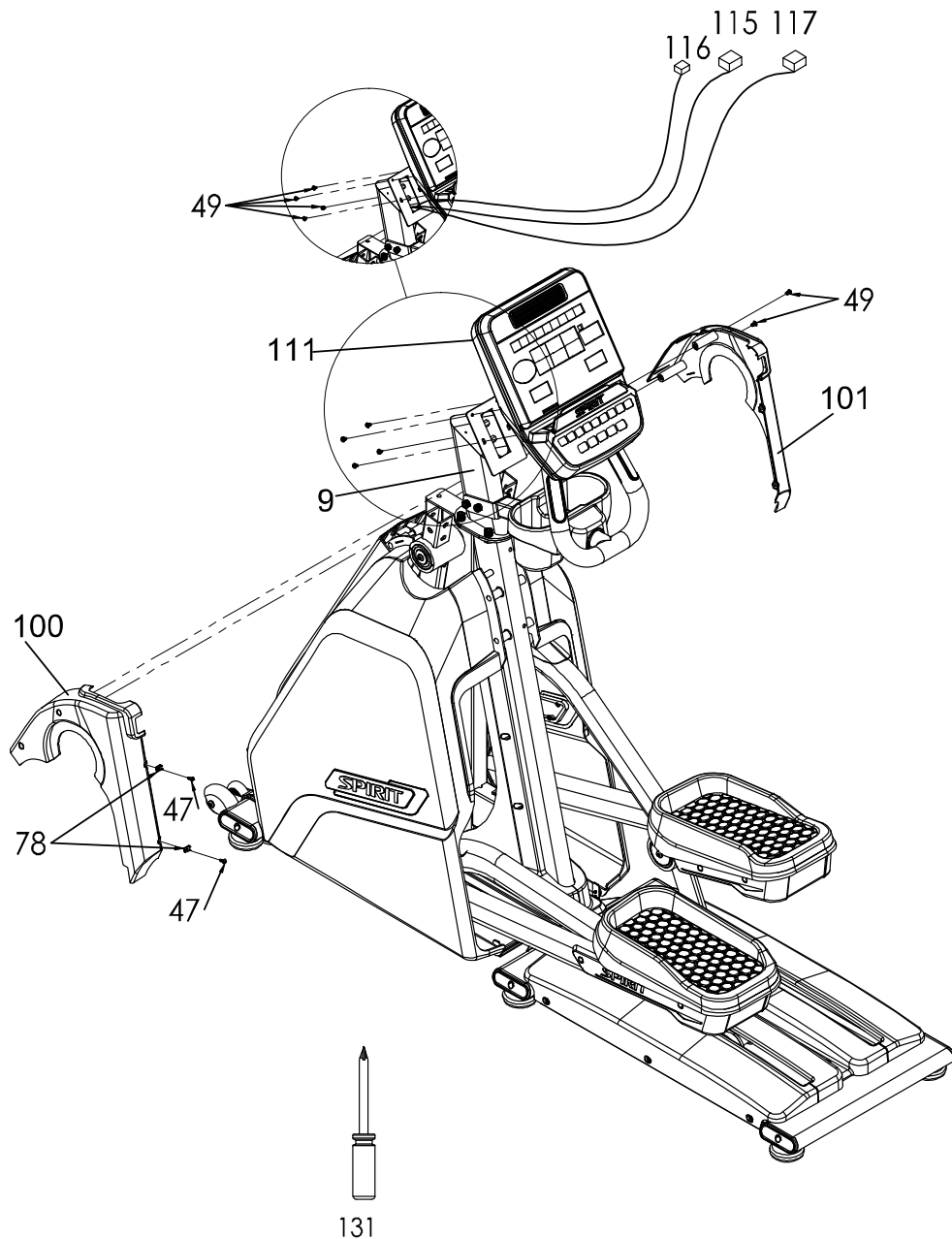


#49 – M5x12mm
Phillips Head Screw
(6pcs)



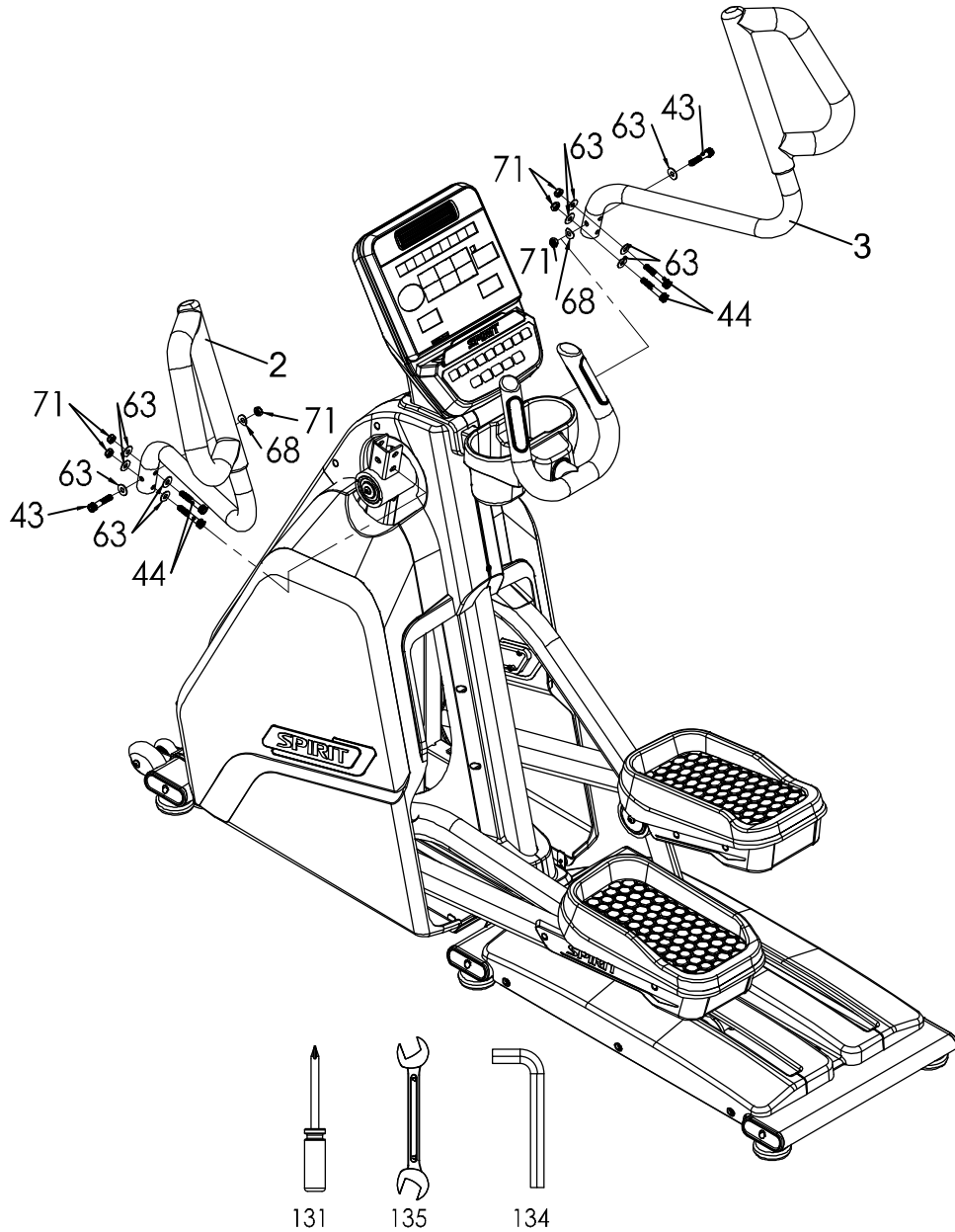
STEP 1

1. Unwind wiring harness and run wires up through CONSOLE MAST (9). Bolt CONSOLE MAST (9) to MAIN FRAME (1) using 4 BOLTS (54), 4 LOCK WASHERS (57), and 4 WASHERS (65). Do not pinch wires.
2. Run wires from CENTER HANDLEBAR (11) through HANDLEBAR BRACKET (10), into CONSOLE MAST (9) and out the top.
3. Install CENTER HANDLEBARS (11) to HANDLEBAR BRACKET (10) using 4 BOLTS (54).
4. Install HANDLEBAR BRACKET (10) to CONSOLE MAST (9) using 4 BOLTS (54).
5. Attach BOTTLE HOLDER (99) to HANDLEBAR BRACKET (10) using 2 SELF-TAPPING SCREWS (46) and 2 WASHERS (58).



STEP 2

1. Install 2 PLATES (78) to LEFT CONSOLE MAST COVER (100).
2. Attach CONSOLE MAST COVERS (100 & 101) to MAIN FRAME (1) using 2 SELF-TAPPING SCREWS (47). Use 2 SCREWS (49) to connect covers to each other.
3. Plug in all wires from wiring harness to CONSOLE (111).
4. Install CONSOLE (111) to CONSOLE MAST (9) using 4 SCREWS (49). Be careful not to pinch any wires.



STEP 3

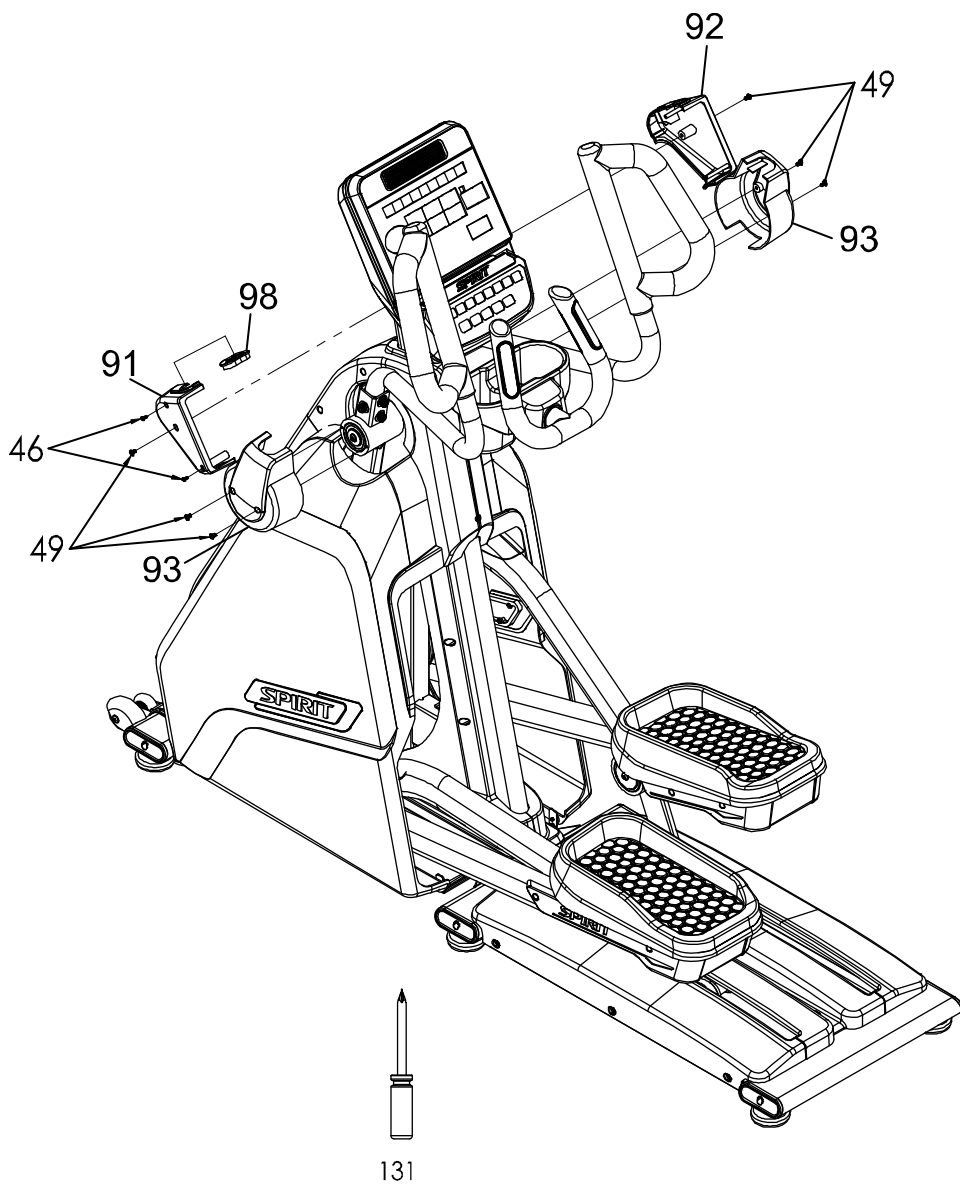
1. Install LEFT SIDE HANDLEBAR (2) to SWING ARM (12).

a) First install 2 longer BOLTS (44) with a WASHER (63) on both sides of SWING ARM (12) and a NUT (71). Do not tighten yet.

b) Then install 1 SHORTER BOLT (43) with a WASHER (63) through the SWING ARM (12) and HANDLEBAR (2), using a CURVED WASHER (68) and a NUT (71) on the back side.

c) Tighten after all hardware is installed.

2. Repeat process for RIGHT SIDE HANDLEBAR (3).



STEP 4

1. Attach CONSOLE BRACKET COVERS (91 & 92) to CONSOLE MAST (9) using 1 SCREW (49). Connect covers together using 2 SELF-TAPPING SCREWS (46).
2. Attach left SWING ARM HINGE COVER (93) to SWING ARM (12) using 2 SCREWS (49). Repeat for right side.

OPERATION OF YOUR ELLIPTICAL

Integrated adjustable fan for workout comfort

Easy to read Lap counter

Large LED matrix window to track workout progress

Tablet friendly reading rack holder



Premium, Ultra-bright blue LED display

LED heart rate graph

POWER UP

Spirit Fitness commercial elliptical trainers have a built-in generator for power and do not need to be plugged into an AC outlet. To power up the elliptical trainer simply start to pedal, the console will turn on automatically.

When initially powered on, the console will perform an internal self-test. During this time the display may not light up for a few seconds. Continue pedaling and the display will light up. Once powered on, the Message Window will be scrolling the start-up message. You may now begin your workout program. Select a program or start to begin.

C-SAFE FEATURE

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

CONSOLE OPERATION

QUICK START

This is the quickest way to start a workout. After the console powers up you just press the Start key to begin. This will initiate the Quick Start mode. In Quick Start the Time will count up from zero, all workout data will start to accrue and the workload may be adjusted manually by pressing the Up and Down buttons. The dot matrix display will show just the bottom row lit. As you increase the workload more rows will light be indicating a harder workout. The elliptical trainer will get harder to pedal as the rows increase. The dot matrix has 24 columns of lights and each column represents 1 minute. At the end of the 24th column (or 24 minutes of work) the display will wrap around and start at the first column again.

There are 40 levels of resistance – displayed as 10 rows of lights – available for plenty of variety. The first 10 levels are very easy workloads, and the changes between levels are set to a good progression for de-conditioned users. Levels 10-20 are more challenging but the increases from one level to the next remain small. Levels 20-30 start getting tough as the levels jump more dramatically. Levels 30-40 are extremely hard and are good for short interval peaks and elite athletic training.

BASIC INFORMATION

The Dot Matrix, or Profile Window, will display the workout Profile. The Message window displays pertinent exercise data. There is a Strides Per Minute window for pedal speed and a Level window indicating machine resistance. A Heart Rate data window and bar graph show how hard you are working and a lap counter provides distance information.

The Message Window will initially be displaying Watts, Time Elapsed, Calories and Distance information. On the left of the Message Window is a button labeled Scan. When the Scan button is pressed the next set of information will appear: METs, Time Remaining, Calories/Hour and Strides (total stride count). Pressing the Scan button, the Scan mode is activated and the Message Window will show each set of data for four seconds then switch to the next set of data in a continuous loop. Pressing the Scan button again will bring you back to the beginning.

To the right of the Profile Window is a Heart Icon, Heart Rate number display and a Bar Graph. The elliptical trainer has a built-in heart rate monitoring system. Simply grasping the hand pulse sensors, or wearing a heart rate chest belt transmitter, will start the Heart Icon blinking (this may take a few seconds). The Heart Rate window will display your heart rate, or Pulse, in beats per minute. The Bar Graph represents the percentage of your maximum heart rate you are currently achieving.

NOTE: You must enter your age during program setup for the Bar Graph to be accurate.

The Stop key button actually has several functions. Pressing the Stop key once during a program will pause the program for 5 minutes (when you stop pedaling without AC power the display will turn off but the memory will be saved for 5 minutes just like the pause mode). 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 or start pedaling. If the Stop key is pressed twice during a workout, the program will end and the console will return to the start-up screen. If the Stop key button is held down for 3 seconds, the console will perform a complete Reset. During data entry for a program the Stop key performs a Previous Screen function. This allows you to go back one step in the programming each time you press the Stop key button.

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 set-up mode.

Fans:

The console includes a built-in fan to help keep you cool. To turn the fan on, press the key on the upper right side of the console. This is a 3-speed fan and each time you press the key the airflow will increase accordingly. After the third setting the fan will turn off when the key is pressed again.



NUMBER KEY PAD

When you are in the data set-up mode setting new data such as age, weight etc., you can use these keys to enter the numbers quickly.

The console includes a built-in fan to help keep you cool. To turn the fan on, press the key on the upper right side of the console. This is a 3-speed fan and each time you press the key the airflow will increase accordingly. After the third setting the fan will turn off when the key is pressed again.

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 ensures that the Heart Rate bar graph shows the correct number. Your Age is also necessary during the Heart Rate control program to ensure the correct settings are in the program for your Age. Otherwise the work settings could be too high or low for you; entering your Weight 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 fit test monitoring equipment. This is because every person is different and burns calories at a different rate. Some good news is that you will continue to burn calories at an accelerated rate for at least an hour after you have finished exercising!

ENTERING A PROGRAM & CHANGING SETTINGS

When you enter a program (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 Window. If you start a program without changing the settings, the default, or pre-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 Age and Weight the first time you use the elliptical you will not have to enter it every time you work out unless either Age or Weight has changed or someone else enters a different Age and Weight.*

PROGRAMMABLE FEATURES

MANUAL PROGRAM

The Manual program works as the name implies, manually. This means that you control the workload yourself and the computer will not make any automatic program change.

To start the Manual program, follow the instructions below or just press the Manual button then the Enter button and follow the directions in the Message Window.

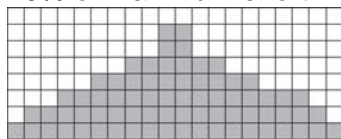
1. Press the Manual key then press the Enter key.
2. The Message Window will ask you to enter your Age. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your Weight.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

PRESET PROGRAMS

The elliptical trainer 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.

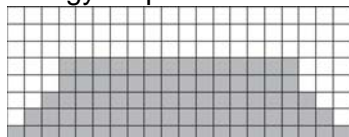
HILL

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.



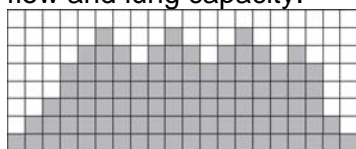
FAT BURN

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.



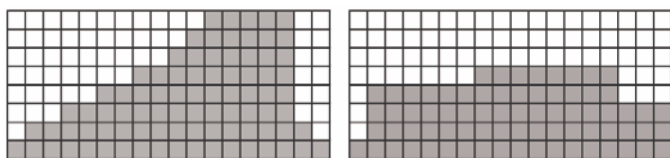
CARDIO

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.



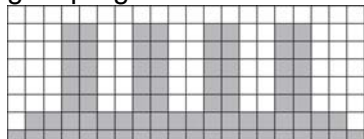
STRENGTH

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



INTERVAL

This program takes you through high levels of intensity followed by recovery periods of low intensity. This program utilizes and develops your “Fast Twitch” muscle 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.

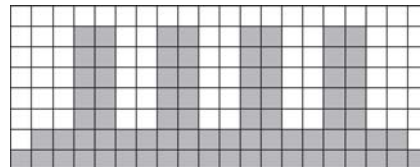


PROGRAMMING PRESET PROGRAMS

1. Select the desired program button then press the Enter key.
2. The Message Window will ask you to enter your Age. You may adjust the age setting, using the Up and Down keys, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your Weight. You may adjust the weight number using the Up and Down keys, then press Enter to continue.
4. Next is Time. You may adjust the Time and press Enter to continue.
5. Now you are asked to adjust the Max Level. This is the peak exertion level you will experience during the program (at the top of the hill). Adjust the level and then press Enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Stop key to go back one level, or screen.
7. If you want to increase or decrease the workload at any time during the program press the Up or Down key. This will change the workload settings of the entire profile, although the profile picture on the screen will not change. The reason for this is so that you can see the entire profile at all times. If the profile picture is changed it will look distorted and not a true representation of the actual profile.
When you make a change to the workload, the Message Window will show both the current column and program maximum levels of work.
8. During the program, you will be able to scroll through the data in the Message Window by pressing the Scan key next to the Message Window.
9. When the program ends the Message Window and data windows 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.

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. Press the HIIT key then Enter. The Message Window will ask you to enter your Age. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
2. You are now asked to enter your Weight. You may adjust the Weight number using the Up and Down keys or the numeric key pad then press enter to continue.
3. Next you are asked for the number of intervals you want to do. The default is 10 and the range available is 3 to 15. One interval equals 1 Sprint and 1 Rest segment.
4. Now you are asked to adjust the Sprint Level. This is the resistance level you will experience during the Sprint segments of the program. Adjust the level and then press Enter.
5. Now you are asked to adjust the Rest Level. This is the resistance level you will experience during the Rest segments of the program. Adjust the level and then press Enter.
6. Next is entering the Interval time. The Message window shows: Sprint :30 | Rest :30. The

Sprint time will be blinking. You may use the + - keys to adjust the Sprint time from 20 to 60 seconds then press Enter. The time for the Rest period will blink and you can adjust the time using the +- keys and press Enter.

7. The Message window will now display the total time for the HIIT workout; now press Start to begin. There is a 3-minute warm-up period before the first Sprint begins. The resistance level during warm-up is set to 5 but can be adjusted manually.
8. The dot matrix display in the HIIT program is a speed indication display, not a power or resistance display. During the sprint the dot matrix display will show a blinking LED at the first Sprint segment. That is the target speed LED and indicates 90 pedal rpm. As you pedal faster the lights below the target speed LED light up the faster you go. When you exceed 90 rpm the target LED will move up showing you are past the target speed. You should maintain at least 90 rpm throughout the Sprint segments. The rest segments of the HIIT program are set to resistance level 5 and you can pedal at any speed you choose as your heart rate recovers. You can manually adjust the resistance levels during the Sprint and Rest segments.
9. At the end of the last Sprint there is a 3-minute cool-down period. You can bypass this by pressing the Stop key and the workout summary will be displayed.

CONSTANT WATT PROGRAM

The Watts program maintains a constant work load. The resistance Level adjusts when the speed is changed. To start the Constant Watt program, follow the instructions below or just press the Watt key then the Enter button and follow the directions in the Message Window.

1. Press the Watt key then press the Enter key.
2. The Message Window will ask you to enter your Age. Input your Age, using the Up/Down keys or the numeric key pad, then press the Enter key to accept the new age and proceed on to the next screen.
3. You are now asked to enter your Weight. Adjust Weight using the Up/Down keys or the numeric key pad, then press Enter to continue.
4. Next is Time. Adjust the Time then press Enter to continue.
5. Now you are asked to adjust the Target Watt Level. This is the constant power you will experience during the program. Adjust using the Up/Down keys, then press Enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. *Note: At any time during the editing of data, you can press the Stop key to go back one level, or screen.*
7. If you want to increase or decrease the workload at any time during the program, press the Up/Down key. This will allow you to change your target Watt level at any time during the program.
8. During the Constant Power program you will be able to scroll through the data in the Message Window by pressing the adjacent Scan key.

When the program ends, you may press Start to begin the same program again or Stop to exit the program

HEART RATE PROGRAM

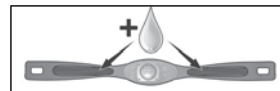
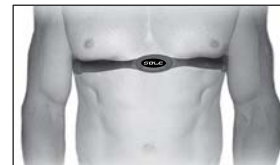
To start the HR program, follow the instructions below or just press the HR key then the Enter button and follow the directions in the Message Window.

1. Press the HR key then press the Enter key.
2. The message window will ask you to enter your Age. You may enter your Age, using the Up/Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your Weight. You may adjust the Weight number using the Up/Down keys or the numeric key pad, then press Enter to continue.
4. Next is Time. You may adjust the Time and press Enter to continue.
5. Now you are asked to adjust your target Heart Rate. This is the heart rate level you will try to maintain during the program. Adjust the value and then press Enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. Note: At any time during the editing of data you can press the Stop key to go back one level, or screen.
7. If you want to increase or decrease the resistance at any time during the program press the Up/Down key. This will allow you to change your target heart rate at any time during the program.
8. The program will automatically increase or decrease the amount of resistance, depending on whether your heart rate is above or below your target.
9. During the HR program you will be able to scroll through the data in the Message Window by pressing the adjacent Display key.

USING A HEART RATE TRANSMITTER (optional)

How to wear your wireless chest strap transmitter:

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



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

ERRATIC OPERATION

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

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

1. Microwave ovens, TV's, small appliances, etc.
2. Fluorescent lights.
3. Some household security systems.
4. Perimeter fence for a pet.
5. Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down. Normally the transmitter will be oriented so the logo is right side up.
6. The antenna that picks up your heart rate is very sensitive. If there is an outside noise source, turning the whole machine 90 degrees may de-tune the interference.
7. Another Individual wearing a transmitter within 3' of your machine's console.

If you continue to experience problems contact Dyaco Canada Inc.

HEART RATE

A word about Heart Rate:

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

To determine the benefit range in which you wish to train, you must first determine your Maximum Heart Rate. This can be accomplished by using the following formula: 220 minus your age. This will give you the Maximum heart rate (MHR) for someone of your age. To determine the effective heart rate range for specific goals you simply calculate a percentage your MHR. Your Heart rate training zone is 50% to 90% of your maximum heart rate. 60% of your MHR is the zone that burns fat while 80% is for strengthening the cardio vascular system. This 60% to 80% is the zone to stay in for maximum benefit.

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

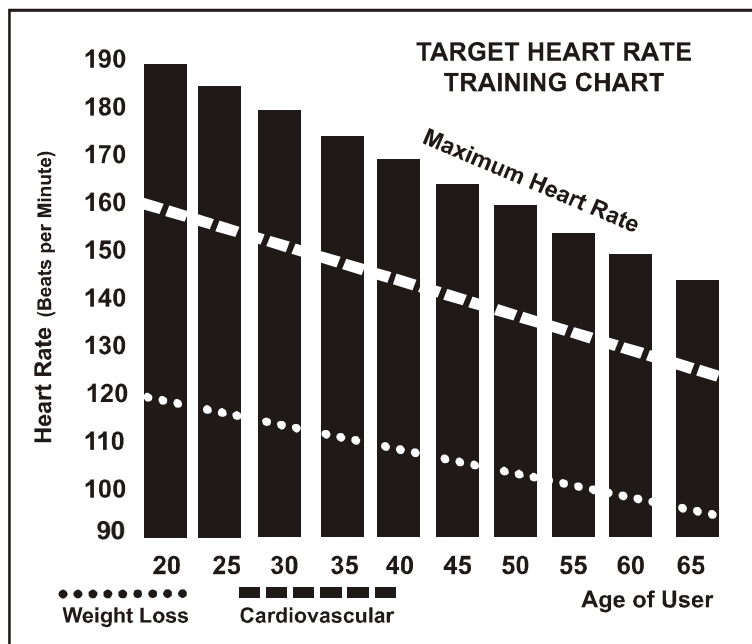
$$\begin{aligned} 220 - 40 &= 180 \text{ (maximum heart rate)} \\ 180 \times .6 &= 108 \text{ beats per minute (60\% of maximum)} \\ 180 \times .8 &= 144 \text{ beats per minute (80\% of maximum)} \end{aligned}$$

So, for a 40 year old the training zone would be 108 to 144 beats per minute.

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

The two most popular reasons for, or goals, of exercise are cardiovascular fitness (training for the heart and lungs) and weight control. The black columns on the chart above represent the Maximum Heart Rate for a person whose age is listed at the bottom of each column. The training heart rate, for either cardiovascular fitness or weight loss, is represented by two different lines that cut diagonally through the chart. A definition of the lines' goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 80% or 60%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.

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 workout than just heart rate. Your stress level, physical health, emotional health, temperature, humidity, the time of day, the last time you ate and what you ate, all contribute to the intensity at which you should workout. If you listen to your body, it will tell you all of these things.

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

The scale is as follows:

Rating Perception of Effort

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

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

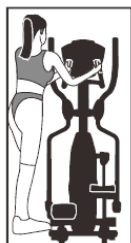
HOW TO USE THE ELLIPTICAL

GETTING ON / OFF YOUR ELLIPTICAL

IMPORTANT

- The elliptical comes with two Dual Action Handles and a Stationary Handlebar.
- Always hold the Stationary Handlebar when getting on and off the elliptical.
- First time users should familiarize themselves with using the elliptical by using the Stationary Handlebar first and then progressing to the Dual Action Handles.
- Once you have familiarized yourself with using the elliptical, you can progress to using the Dual Action Handles to provide a total body workout. Hands can be positioned on the Dual Action Handles at the most appropriate position for your height and arm length.

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



Ensure the left Foot Pedal is in the lowest position and grasp the Stationary Handlebar with both hands.

Place your left foot on the left Foot Pedal and get secure.

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



Important

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. If you are performing a walking action with your arms, or doing upper body strength training exercises, ensure you are well balanced.

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



CORRECT POSITION



Your body should be in an upright position so that your back is straight.

Always try and use the elliptical in a rhythmical and smooth motion. If you find yourself feeling uncomfortable, or experience a surging type feeling, there is probably too much tension.



The elliptical can be used in forward or reverse motion.



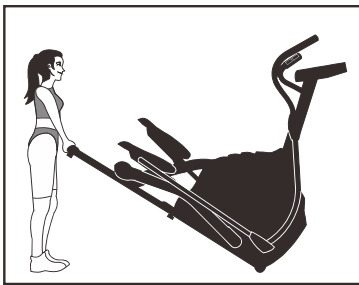
When going in reverse, bend your knees slightly more. More emphasis is on the buttocks and hamstrings in the reverse motion.

MOVING YOUR ELLIPTICAL

The elliptical can be moved. Recommended to have 2 people for its high weight.



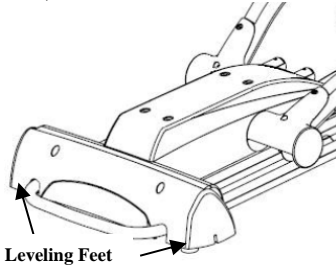
1. At the rear of the machine squat down and grasp the rear stabilizer bar.



2. Lift the rear of the machine using your legs until the wheels in the front engage with the ground.

HOW TO LEVEL THE ELLIPTICAL

If the elliptical rocks slightly on your floor during use, turn one of the 6 leveling feet beneath the front, middle and rear of the frame until the rocking motion is eliminated.



ELLIPTICAL LUBRICATION

1. Pour 2c.c of the lubricant on the top surface of the rail. You must lubricate the rails every three months.
2. If you feel the exercise is not smooth or you hear noise during your exercise, lubricate the middle rail with 2 c.c. of the lubricant.



GENERAL MAINTENANCE

1. Wipe down all areas in the sweat path with a damp cloth after each workout.
2. If a squeak, thump, clicking or rough feeling develops the main cause is most likely one of two reasons:
 - I. The hardware was not sufficiently tightened during assembly. All bolts that were installed during assembly need to be tightened as much as possible. It may be necessary to use a larger wrench than the one provided if you cannot tighten the bolts sufficiently. I cannot stress this point enough; 90% of calls to the service department for noise issues can be traced to loose hardware or the rear rails being dirty.
 - 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 non-metallic 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.
3. If squeaks or other noises persist, check that the unit is properly leveled before calling the service department.

Cleaning

Almost all surfaces are washable. A damp cloth is sufficient to clean most surfaces of this unit. Be careful not to drip water on the monitor. A mild liquid soap may be added if needed.

ELLIPTICAL NOISES

Your new elliptical is engineered and manufactured to the strictest industry standards and tolerances. All elliptical trainers, no matter who the manufacturer, have a multitude of moving linkages and parts. Be aware that even with the tightest mechanical tolerances there still could be a slight amount of play between some parts. This inherent play can result in slight noises during use such as clicks and small thumps. Please expect that the elliptical will not be completely silent.

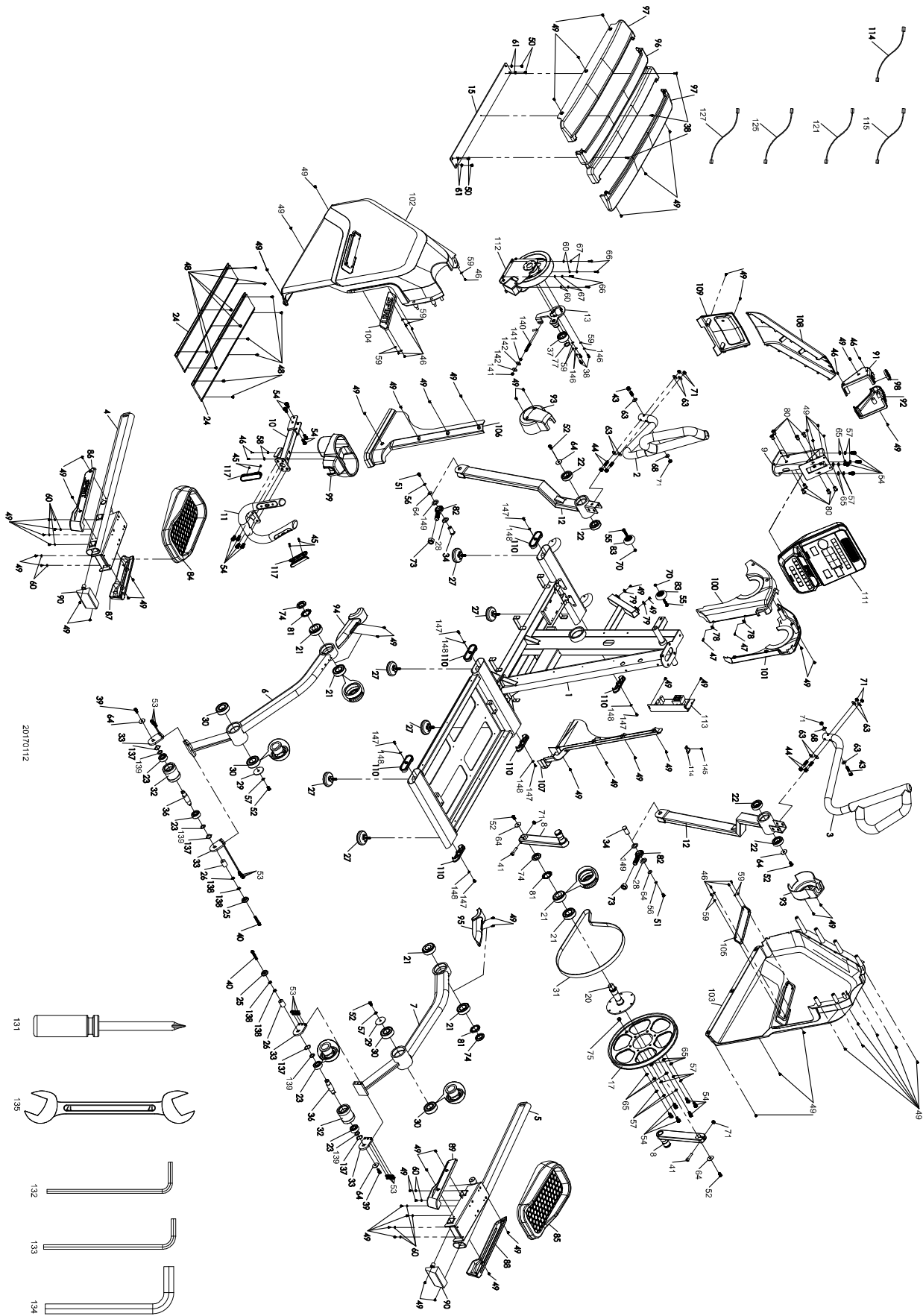
MAINTENANCE MODE MENU

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

1. Key Test (Will allow you to test all the keys to make sure they are functioning)
2. Display Test (Tests all the display functions)
3. Sleep Mode (Turn on to have the console power down automatically after 20 minutes of inactivity)
4. Odometer Reset (Resets the odometer)
5. Units (Sets the display to read out in English or Metric display measurements)
6. Speaker (Turns off the speaker so no beeping sound is heard)
7. Brake Test (Tests the brake resistance)
8. Sensor Test (Tests the speed sensor function)
9. Unit Type (Sets machine type; Bike or Elliptical)
10. Bootloader
11. CSafe test (tests the CSafe functions)

If an error occurs while running a test, please hold the Stop button for 3 seconds to clear the error.

EXPLODED VIEW DIAGRAM



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PARTS LIST

KEY NO	PART NO	DESCRIPTION	Q'TY
1	7090001	Main Frame	1
2	7090002	Handlebar (L)	1
3	7090003	Handlebar (R)	1
4	7090004	Connecting Arm (L)	1
5	7090005	Connecting Arm (R)	1
6	7090006	Pedal Arm (L)	1
7	7090007	Pedal Arm (R)	1
8	7090008	Crank Arm Assembly	2
9	7090009	Console Mast	1
10	7090010	Handlebar Bracket	1
11	7090011	Center Handlebar	1
12	7090012	Swing Arm	2
13	7090013	Idler Wheel Assembly	1
15	7090015	Aluminum Track	1
17	7090017	Flywheel Pulley(Ø400x32)	1
20	7090020	Arbor	1
21	7090021	Ø72 x Ø35 x 24.3T_Bearing	6
22	7090022	6206_Bearing	4
23	7090023	Ø47 x Ø20 x 18T_Bearing	4
24	7090024	Rail	2
25	7090025	PU Wheel	2
26	7090026	Arbor	2
27	7090027	Foot Pad	6
28	7090028	Ø20.7 x Ø45 x 2.5T_Flat Washer	2
29	7090029	Ø59 x 3T_Wheel Cover	2
30	7090030	Ø72 x Ø35 x 23T_Bearing	4
31	7090031	Drive Belt	1
32	7090032	Transportation Wheel	2
33	7090033	Back Plate	4
34	7090034	Rod End Sleeve	2
36	7090036	Transportation Wheel Axle	2
37	7090037	Ø59 x 26T_Bearing	1
38	7090038	M5 x 15m/m_Socket Head Cap Bolt	6
39	7090039	M8 x 20m/m_Socket Head Cap Bolt	2
40	7090040	M8 x 55m/m_Socket Head Cap Bolt	2
41	7090041	M10 x 60m/m_Socket Head Cap Bolt	2
43	7090043	M10 x 55m/m_Socket Head Cap Bolt	2

KEY NO	PART NO	DESCRIPTION	Q'TY
44	7090044	M10 x 60m/m_Socket Head Cap Bolt	4
45	7090045	3 x 20m/m_Tapping Screw	4
46	7090046	3.5 x 12m/m_Sheet Metal Screw	13
47	7090047	5 x 16m/m_Sheet Metal Screw	2
48	7090048	M6 x 10m/m_Phillips Head Screw	12
49	7090049	M5 x P0.8 x 12L_Phillips Head Screw	72
50	7090050	M8 x 12m/m_Button Head Socket Bolt	4
51	7090051	M8 x P1.25 x 15m/m_Socket Head Cap Bolt	2
52	7090052	M10 x P1.5 x 15m/m_Button Head Socket Bolt	6
53	7090053	M10 x 20m/m_Button Head Socket Bolt	12
54	7090054	M10 x P1.5 x 20m/m_Socket Head Cap Bolt	18
55	7090055	5/16" x 1-3/4"_Button Head Socket Bolt	2
56	7090056	Ø8.5 x 1.5T_Split Washer	2
57	7090057	Ø10 x 2T_Split Washer	12
58	7090058	Ø4 x 14 x 1.0T_Flat Washer	2
59	7090059	Ø5 x Ø15 x 1.0T_Flat Washer	12
60	7090060	Ø6.6 x Ø12 x 1.5T_Flat Washer	16
61	7090061	Ø8.5 x Ø16 x 1.5T_Flat Washer	4
63	7090063	Ø10 x Ø25 x 1.5T_Flat Washer	10
64	7090064	Ø3/8" x 35 x 2.0T_Flat Washer	8
65	7090065	Ø3/8" x Ø19 x 1.5T_Flat Washer	10
66	7090066	1/4" x UNC20 x 3/4"_Hex Head Bolt	4
67	7090067	Ø1/4"_Split Washer	4
68	7090068	Ø10 x Ø23 x 1.5T_Curved WasherR38	2
70	7090070	5/16" x 7T_Nyloc Nut	2
71	7090071	M10 x 8T_Nyloc Nut	8
73	7090073	M20 x 15T_Nut	2
74	7090074	M35 x P1.5 x 8T_Nut	3
75	7090075	Magnet(Ø15x7T)	1
77	7090077	Ø28_C Ring	1
78	7090078	M5 x P0.8 x 1T_Plate	2
79	7090079	M5_Speed Nut Clip	2
80	7090080	M10 x 1.5L_Hex Blind Nut	8
81	7090081	Bolt	3
82	7090082	Rod End Bearing	2
83	7090083	Transportation Wheel(PU.Ø65)	2
84	7090084	Pedal (L)	1
85	7090085	Pedal (R)	1

KEY NO	PART NO	DESCRIPTION	Q'TY
86	7090086	Pedal Arm Cover A(L)	1
87	7090087	Pedal Arm Cover B(L)	1
88	7090088	Pedal Arm Cover A(R)	1
89	7090089	Pedal Arm Cover B(R)	1
90	7090090	Rear Shroud	2
91	7090091	Chin Cover(L)	1
92	7090092	Chin Cover(R)	1
93	7090093	Handle Bar Cover	2
94	7090094	Cover (L)	1
95	7090095	Cover (R)	1
96	7090096	Slide Wheel Cover A	1
97	7090097	Slide Wheel Cover B	2
98	7090098	Protective Rubber	1
99	7090099	Drink Bottle Holder	1
100	70900100	Console Mast Cover(L)	1
101	70900101	Console Mast Cover(R)	1
102	70900102	Side Case (L)	1
103	70900103	Side Case (R)	1
104	70900104	Side Case Plate(L)	1
105	70900105	Side Case Plate(R)	1
106	70900106	Console Mast Inner Cover(L)	1
107	70900107	Console Mast Inner Cover(R)	1
108	70900108	Front Shroud	1
109	70900109	Power Switch Cover	1
110	70900110	Cap	6
111	70900111	Console Assembly	1
112	70900112	Generator/Resistance	1
113	70900113	Generator/Brake Controller	1
114	70900114	300m/m_Sensor W/Cable	1
115	70900115	1100m/m_Handpulse Wire	2
117	70900117	30m/m_Handpulse W/Cable Assembly	2
121	70900121	Power Cord	1
125	70900125	1400m/m_Computer Cable	1
127	70900127	400m/m_Wire Brake Coil Harness(Red)	1
131	70900131	Phillips Head Screw Driver	1
132	70900132	5 mm L Allen Wrench	1
133	70900133	6_L Allen Wrench	1
134	70900134	M10 L Allen Wrench	1

KEY NO	PART NO	DESCRIPTION	Q'TY
135	70900135	17m/m_Wrench	1
137	70900137	Ø20_Wave Washer	4
138	70900138	Ø8 x 1.5T_Spring Washer	4
139	70900139	Back Plate	4
140	70900140	M8 x 170m/m_J Bolt	1
141	70900141	M8 x 6.3T_Luck Nut	2
142	70900142	Ø3/8" x Ø25 x 2.0T_Flat Washer	2
145	70900145	M5 x 10L_Phillips Head Screw	1
146	70900156	Ø5 x 1.5T_Spring Washer	3
147	70900147	M5 x P0.8 x 15L_Phillips Head Screw	6
148	70900148	Ø1/4" x 13 x 1.0T_Flat Washer	6
149	70900149	Ø20.3 x Ø38 x 2T_Flat Washer	2

TRAINING GUIDELINES

EXERCISE

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

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

BASIC COMPONENTS OF PHYSICAL FITNESS

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

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

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

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

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

AEROBIC FITNESS

The largest amount of oxygen that you can use per minute during exercise is called your maximum oxygen uptake (MVo₂). This is often referred to as your aerobic capacity.

The effort that you can exert over a prolonged period of time is limited by your ability to deliver oxygen to the working muscles. Regular vigorous exercise produces a training effect that can increase your aerobic capacity by as much as 20 to 30%. An increased MVO₂ indicates an increased ability of the heart to pump blood, of the lungs to ventilate oxygen and of the muscles to take up oxygen.

Anaerobic Training

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

The Training Threshold

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

Progression

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

Overload

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

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

Specificity

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

There is little transfer of the effects of exercise, i.e. from strength training to cardiovascular fitness. That is why it is important to have an exercise program tailored to your specific needs.

Reversibility

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

WARM UP

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

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

Warm Down or Cool Down

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

Heart Rate

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

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

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

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

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

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

Pulse Count

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

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

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

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

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

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

ENDURANCE CIRCUIT TRAINING

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

Body Building

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

Patronization

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

Muscle Soreness

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

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

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

WHAT TO WEAR

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

Breathing During Exercise

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

Rest periods

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

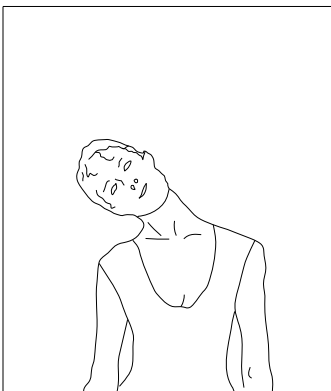
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half minute to one minute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

STRETCHING

Stretching should be included in both your warm up and cool down, and should be performed after 3-5 minutes of low intensity aerobic activity or callisthenic type exercise. Movements should be performed slowly and smoothly, with no bouncing or jerking. Move into the stretch until slight tension, not pain, is felt in the muscle and hold for 20-30 seconds. Breathing should be slow, rhythmical and under control, making sure never to hold your breath.

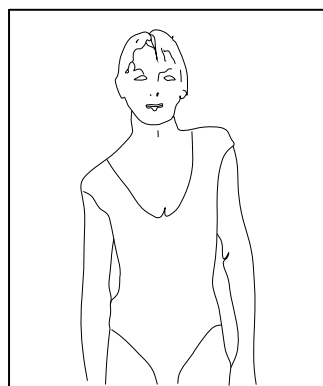
HEAD ROLLS

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



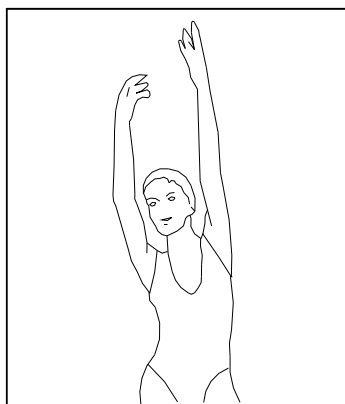
SHOULDER LIFTS

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



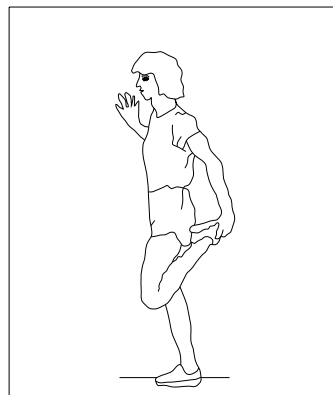
SIDE STRETCHES

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



QUADRICEPS STRETCH

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



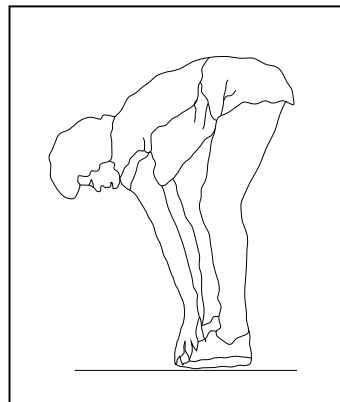
INNER THIGH STRETCH

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



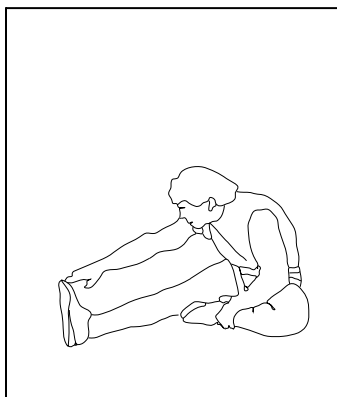
TOUCHES

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



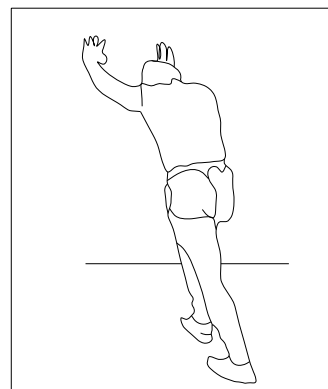
HAMSTRING STRETCHES

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



CALF / ACHILLES STRETCH

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



MANUFACTURER'S LIMITED WARRANTY

Dyaco Canada Inc. warrants all its elliptical 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:

Commercial Warranty (All Facilities)

Frame	Lifetime
Brake	5 Years
Parts	3 Years
Labour	3 Years

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

NORMAL RESPONSIBILITIES OF THE FACILITY

The facility is responsible for the items listed below:

1. The warranty registration card must be completed and returned to the address listed on the card within 10 days of the original purchase.
2. Proper use of the elliptical in accordance with the instructions provided in this manual.
3. Expenses for making the elliptical accessible for servicing, including any item that was not part of the elliptical at the time it was shipped from the factory.
4. Damages to the elliptical finish during shipping, installation or following installation.
5. Routine maintenance of this unit as specified in this manual.

EXCLUSIONS

This warranty does not cover the following:

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

SERVICE

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

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

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

Product features or specifications as described or illustrated are subject to change without notice. All warranties are made by Dyaco Canada Inc.

