

ESP0023 – EL455

*Esprit*

- by -  SPIRIT



*EL455*  
*Elliptical*

## **OWNER'S MANUAL**

**PLEASE CAREFULLY READ THIS ENTIRE MANUAL BEFORE  
OPERATING YOUR NEW ELLIPTICAL!**

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# **SPIRIT**

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

Thank you for your purchase of this quality elliptical trainer. 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.

Please take a moment at this time to record the name of the dealer 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.

Yours in Health,  
**BOYLES FITNESS Equipment Pty Ltd.**

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

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

# ***Important Safety Instructions***

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

- Do not operate the elliptical on deeply padded, plush or shag carpet. Damage to both the carpet and elliptical may result. Set the elliptical up on a hard, even surface.
- Keep children away from the elliptical. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the elliptical if it has a damaged cord or plug. If the elliptical is not working properly, call your dealer.
- Keep the cord away from heated surfaces.
- Do not operate where aerosol spray products are being used or where oxygen is being administered. Sparks from the motor may ignite a highly gaseous environment.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position, then remove the plug from the outlet.
- Do not attempt to use your elliptical 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 elliptical. Quality athletic shoes are recommended to avoid leg fatigue.

**SAVE THESE INSTRUCTIONS - THINK SAFETY!**

## ***Important Electrical Information***

### ***WARNING!***

- **NEVER** remove any cover without first disconnecting AC power supply.
- If A.C. voltage varies by ten percent (10%) or more, the performance of your elliptical 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 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.

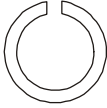
## ***Important Operation Instructions***

- **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 level on the computer console and release the adjustment key. The computer will obey the command gradually.
- **NEVER** use your elliptical during an electrical storm. Surges may occur in your household power supply that could damage elliptical components.
- Use caution while participating in other activities while using your elliptical such as watching television, reading, etc. These distractions may cause you to lose balance, which may result in serious injury.
- Always hold on to a handrail or hand bar while making control changes.  
Do not use excessive pressure on console control keys. They are precision set to properly function 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 Spirit dealer.

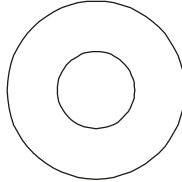
# Assembly Instructions

## ASSEMBLY PACK CHECK LIST

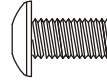
### Step 1



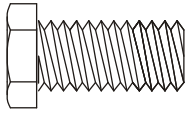
#96 - 3/8"  
Split Washer (1pc)



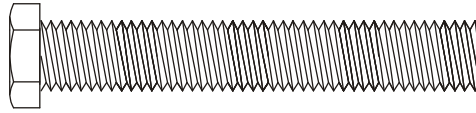
#84 - 3/8" x 23mm  
Curved Washer (2pcs)



#66 - M5 x 10mm  
Phillips Head Screw (4pcs)

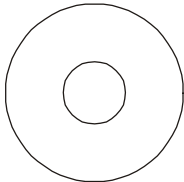


#103 - 3/8" x 3/4"  
Hex Head Bolt (2pcs)

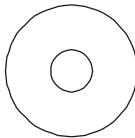


#60 - 3/8" x 2-1/4"  
Hex Head Bolt (1pc)

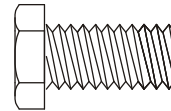
### Step 2



#79 - 5/16" x 23mm  
Flat Washer (2pcs)

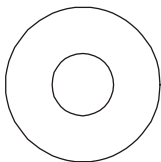


#83 - 17mm  
Wave Washer (2pcs)

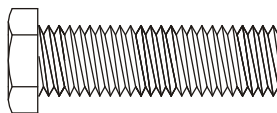


#59 - 5/16" x 15mm  
Hex Head Bolt (2pcs)

### Step 3



#80 - 5/16" x 20mm  
Flat Washer (2pcs)



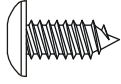
#104 - 5/16" x 1-1/4"  
Hex Head Bolt (2pcs)



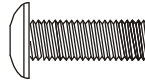
#71 - 5/16"  
Nylon Nut (2pcs)

# ASSEMBLY PACK CHECK LIST

## Step 4

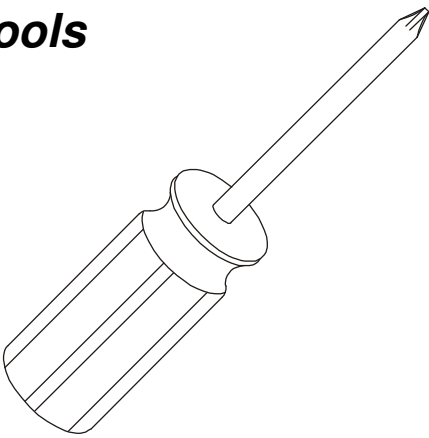


#87 - 3.5mm x 12mm  
Sheet Metal Screw (8pcs)

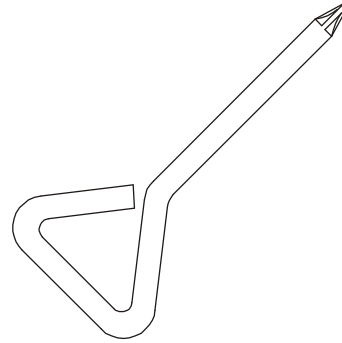


#105 - M5 x 15mm  
Phillips Head Screw (14pcs)

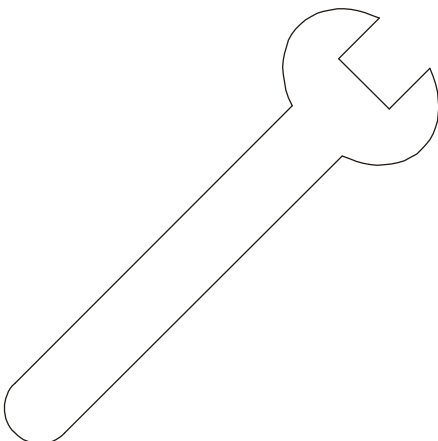
## Tools



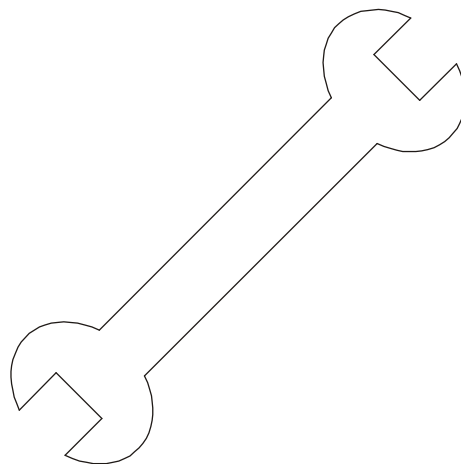
#108 - Phillips Head Screw Driver (1pc)



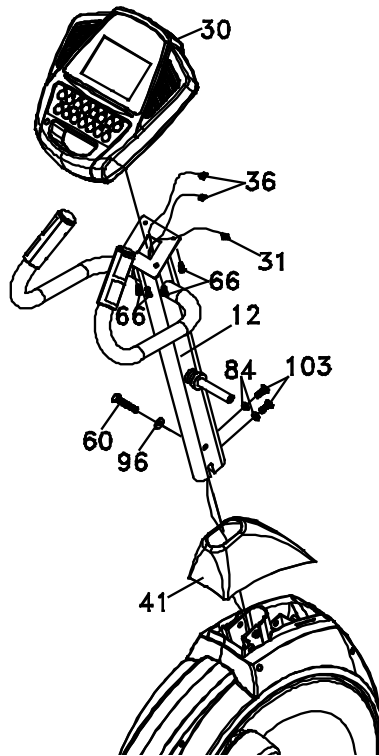
#107 - Short Phillips Head Screw Driver (1pc)



#109 - 12mm Wrench (1pc)



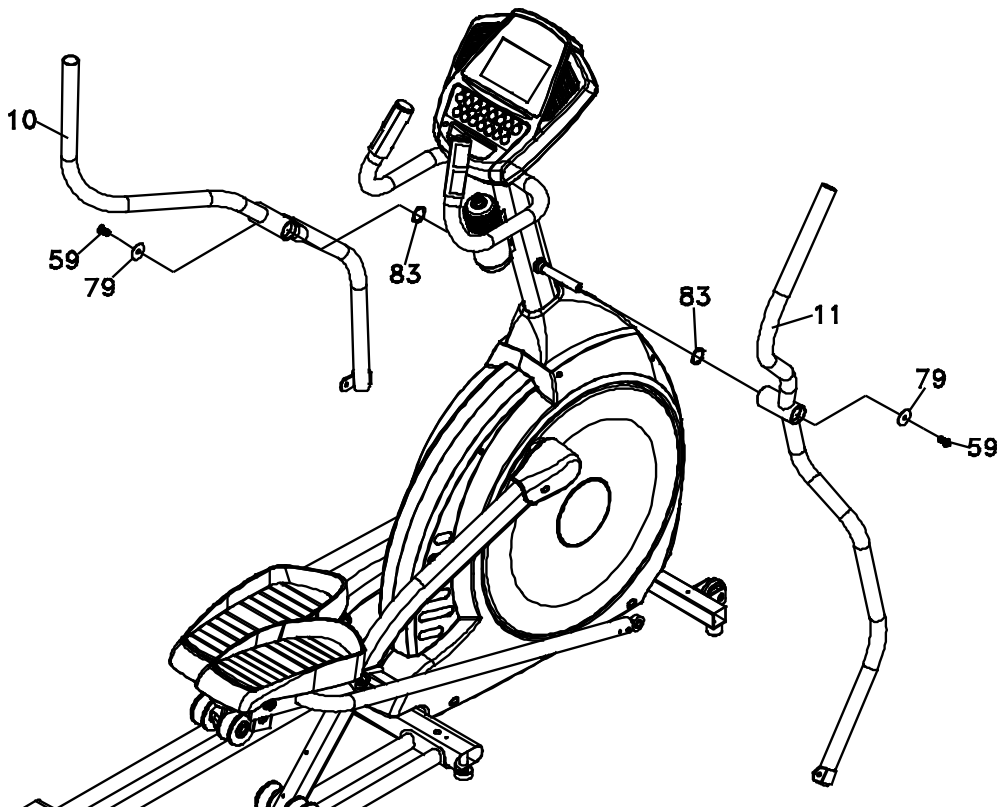
#106 - 13/14mm Wrench (1pc)



## STEP 1: CONSOLE MAST ASSEMBLY

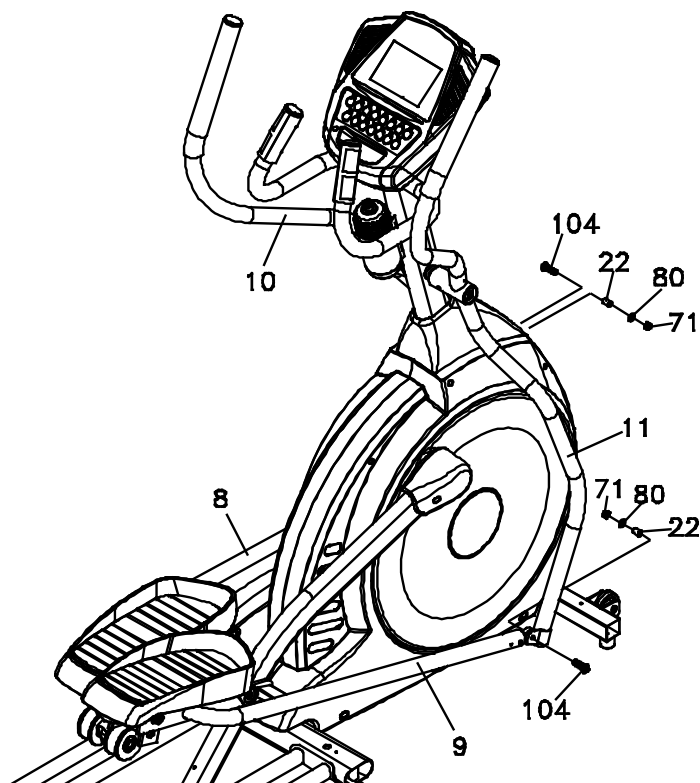
- Locate the console mast (12) and console mast cover (41) and slide the cover onto the mast as far as it will go. Make sure the cover is facing the correct way.
- At the top opening of the main body of the elliptical is a wire harness (31). Unravel and straighten out the wire harness and feed it into the bottom of the console mast tube and out of the top opening.
- Install the console mast into the receiving bracket in the top of the main body: there is one bolt already installed in the receiving bracket that will engage with the slot at the bottom of the console mast. Secure the mast with two 3/8" x 3/4" bolts (103) and curved washers (84) through the front of the mast and one 3/8" x 2-1/4" bolt and 3/8" washer (96) through the left side of the mast. Tighten all four bolts securely; don't forget the bottom bolt that is pre-installed.
- Connect the three wires (two hand pulse #36 and a computer cable #31) to the mating connectors on the back of the console. Storing the excess wire back into the console mast, carefully install the console onto the mounting plate and secure using four Phillips head screws (66).





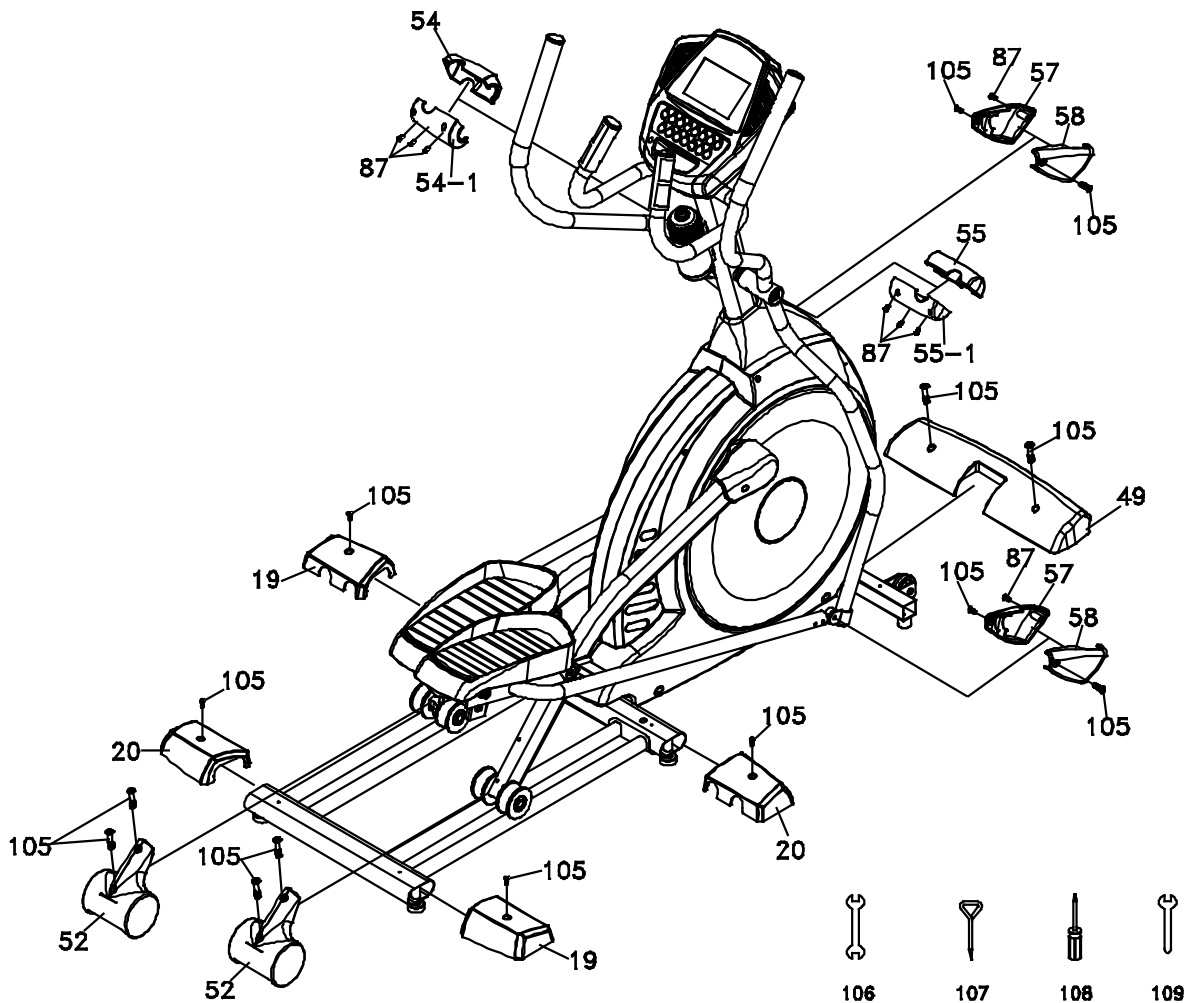
## STEP 2: SWING ARM ASSEMBLY

- Install the two Wave Washers (83) onto the Left and Right sides of the Swing Arm axle.
- Slide the Left and Right Swing Arms (10&11) onto the appropriate side of the axle. There is a small sticker on each swing arm that shows **L** (Left) or **R** (Right). Do not force the swing arms onto the axles, they should slip on but may need to be jiggled a little to align them properly. The swing arms have been installed at the factory during testing so they should fit properly.
- Install two 5/16" Flat Washers (79) onto the two 5/16" Hex Head bolts (59) and install and tighten in the threaded holes in the ends of the axle.



### STEP 3: CONNECTING ARM ASSEMBLY

- Align the hole in the rod end bearings at the ends of the Connecting Arms (8&9) with the hole in the bracket at the bottom of the Swing Arms (10&11). There is a sleeve spacer already installed in the rod ends and held in place with a twist tie; make sure these spacers do not fall out during assembly. The rod end bearing should be positioned to the inside of the swing arm brackets. Install two 5/16" Bolts (104) through the left and right swing arm brackets and the rod end and secure with 5/16" Flat Washers (80) and 5/16" Nuts (71).



#### STEP 4: BEAUTY COVERS ASSEMBLY

- Install the Connecting Arm Covers (57 & 58) over the connection of the rod end and Swing Arms with four M5 Phillips Head Screws (105) and two Self Tapping Screws (87).
- Install the two Wheel Covers (52) on the pedal arms above the Wheels with four M5 Phillips Head Screws (105).
- Install the Front Handle Bar Covers (54 & 55) and Rear Handle Bar Covers (54-1 & 55-1) over the Swing Arm axle connections with six Self Tapping Screws (87).
- Install the two Middle Stabilizer Covers (19 & 20) with two M5 x 15mm Phillips Head Screws (105).
- Install the Rear Stabilizer Covers (19 & 20) on the rearward end of the Rail Tubes and secure them with two M5 x 15mm Phillips Head Screws (105).
- Install the front stabilizer cover (49) with two M5 x 15mm Phillips Head Screws (105).

# Features

## Adjustable foot pedals and orthopedically correct foot pads.

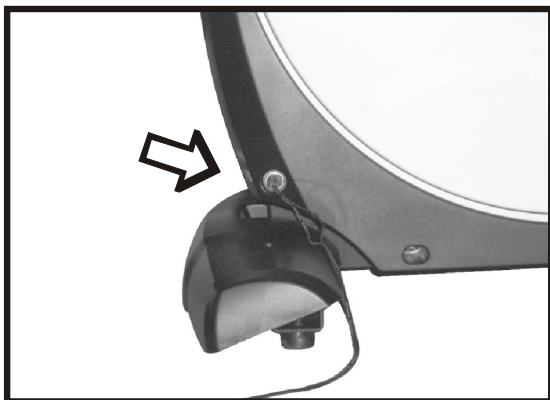
Through research performed with a leading sports scientist and physical rehabilitation expert, Spirit engineering has developed a breakthrough in pedal design. No other elliptical, at any price, offers these unique features. The history of elliptical use over the past few years tells us that many users suffer from numb toes while working out on elliptical trainers. Many other users complain of ankle, Achilles tendon, knee and/or hip pain. While researching a solution to these common problems Spirit engineers consulted Richard DeKok, P.T., M.T.C., of St. Bernards Industrial Rehabilitation Center in Jonesboro Arkansas.

Together we identified the inherent problem in elliptical designs and developed solutions to solve the problems. What we found is that when you use an elliptical you tend to push outward during the power stroke and not just straight back. This causes stress on the outer part of the foot and throws off the natural alignment of the joints. The second problem we found is that many people tend to stay up on the ball of their foot during the elliptical motion. Our solutions were simple but effective:

- The first solution was to add a 2-degree inward angle to the footpads. This might sound simple but what it does is puts the users joints back into a neutral alignment. This eases the over stressing of the ankles, knees and hips.
- The second solution was to make the foot pedal adjustable to the user's style of pedaling the elliptical. We achieved this by adding an adjustment that allows the angle of the footpad to be changed. There are three adjustments. The lowest one will set the footpads at zero (0) degrees, or flat at the bottom of the elliptical stroke. The second position sets the footpad to five (5) degrees and the top position sets the footpads to ten (10) degrees. The adjustment pull-pin is Located under the footpads.

## Transportation

The elliptical is equipped with two transport wheels, which are engaged when rear of the Elliptical is lifted.



**POWER CONNECTOR LOCATED ON FRONT, LEFT HAND SIDE OF UNIT.**

# Operation of Your Elliptical

## Getting familiar with the control panel



## 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 and the workload may be adjusted manually by pressing the Up or Down buttons. The dot matrix display will have only the bottom row lit at first. As you increase the work load more rows will light indicating a harder workout.

## Basic information

The **Message Window** will initially be displaying Speed information. Each time the Enter button is pressed the next set of information will appear, four windows in all. In order: Speed in RPM and MPH, Work Level and Watts. If the Enter button is pressed during the Level and Watts display the Scan light will come on 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 Enter button again will bring you back to the beginning.

The Elliptical has a built in heart rate monitoring system. Simply grasping the hand pulse sensors on the stationary handle bars, or wearing the heart rate transmitter, will start the **Heart Icon** blinking (this may take a few seconds). The Pulse Display Window will display your heart rate, or Pulse, in beats per minute.

The **Stop/Reset** button actually has several functions. Pressing the Stop/Reset key once during a program will **Pause** the program for 5 minutes. If you need to get a drink, answer the phone or any of the many things that could interrupt your workout, this is a great feature. To resume your workout during Pause just press the Start key. If the Stop/Reset button is pressed twice during a workout the program will end and the console will return to the start up screen. If the Stop/Reset key is held down for 3 seconds the console will perform a complete **Reset**. During data entry for a program the Stop/Reset key performs a **Previous Screen** function. This allows you to go back one step in the programming each time you press the Stop/Reset key.

The **Program Keys** are used to preview each program. When you first turn the console on you may press each program key to preview what the program profile looks like. If you decide that you want to try a program, press the corresponding program key and then press the Enter key to select the program and enter into the data setting mode. The program keys also act as a **Number Key Pad** when you are in the data setting mode. Under each program key is a number. If you are setting new data, such as Age, weight etc., you can use these keys to enter the numbers quickly.

## Programming the console

Each of the programs can be customized with your personal information and changed to suit your needs. Some of the information asked for is necessary to ensure the readouts are correct. You will be asked for your **Age** and **Weight**. Entering your **Age** is necessary during the Heart Rate control programs to ensure the correct settings are in the program for your Age. Otherwise the work settings could be too high or low for you. Entering your **Weight** helps us to calculate a more correct **Calorie** reading.

## Manual

The Manual program works as the name implies; manually. This means that you control the workload yourself and not the computer. To start the Manual program follow the instructions below or just press the Manual button then the Enter button and follow the directions in the message window.

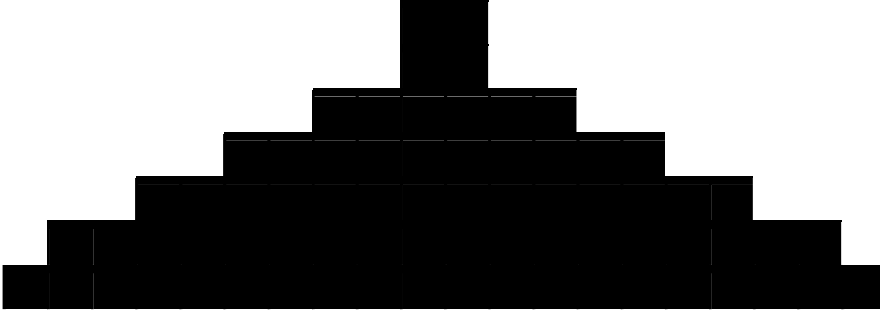
## Preset Programs

The Elliptical has five different programs that have been designed for a variety of workouts. These five programs have factory preset profiles for achieving different goals. The initial built-in level of difficulty for each program is set to a relatively easy level. You may adjust the level of difficulty for each program before beginning by following the instructions in the message window after selecting your program.

## HILL

The **Hill** program simulates going up and down a hill. The resistance in the pedals will steadily increase and then decrease during the program.

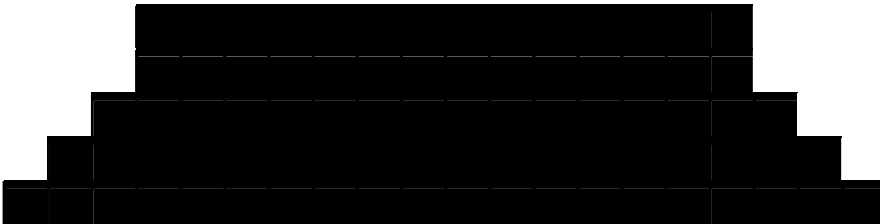
### Work Profile



## FATBURN

The **Fat Burn** program is designed, as the name implies, to maximize the burning of fat. There are many schools of thought on the best way to burn fat but most experts agree that a lower exertion level that stays at a steady workload is the best. The absolute best way to burn fat is to keep your heart rate at around 60% to 70% of its maximum potential. This program does not use heart rate but simulates a lower, steady exertion workout.

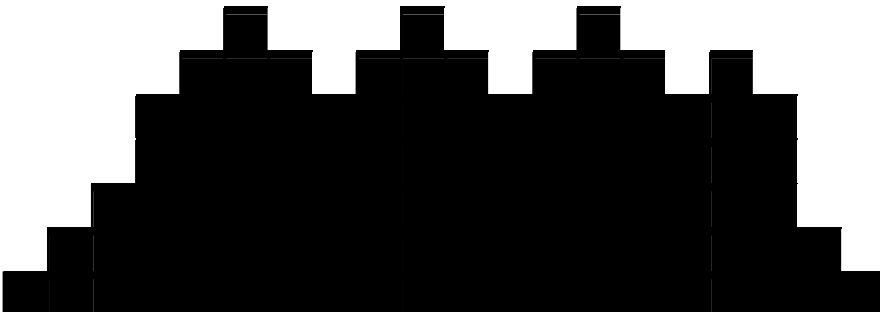
### Work Profile



## Cardio

The **Cardio** program is designed to increase your Cardio vascular function. This is exercise for your heart and lungs. It will build up your heart muscle and increase blood flow and lung capacity. This is achieved by incorporating a higher level of exertion with slight fluctuations in work.

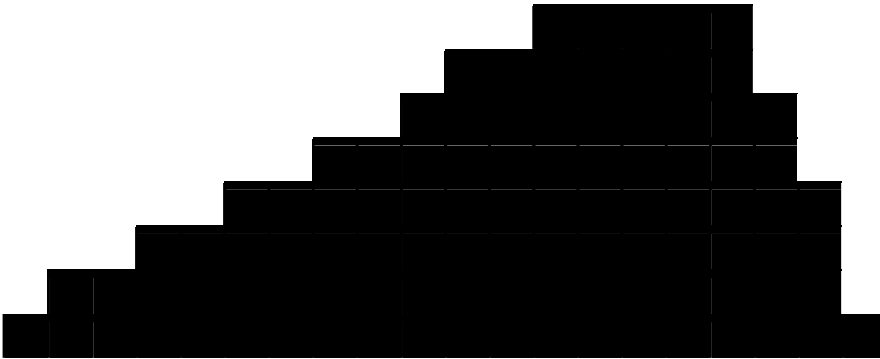
### Work Profile



## Strength

The **Strength** program is designed to increase muscular strength in your lower body. This program will steadily increase in resistance to a high level and then keeps you there. This is designed to strengthen and tone your legs and glutes.

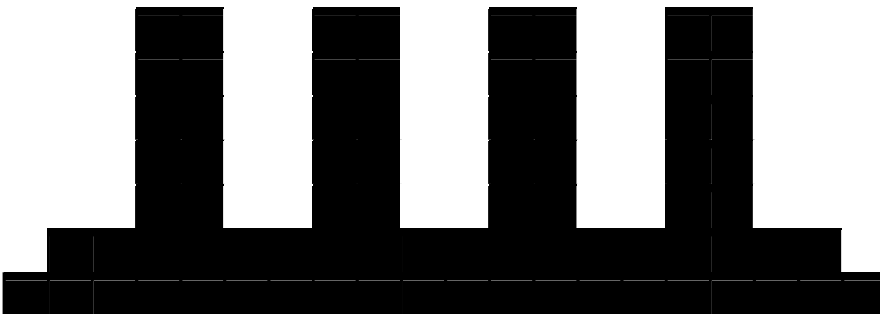
### Work Profile



## Interval

The **Interval** program takes you through high levels of intensity followed by periods of low intensity. This program increases your endurance by depleting your oxygen level followed by periods of recovery to replenish oxygen. Your cardio vascular system gets programmed to use oxygen more efficiently this way.

### Work Profile



## Programming Preset Programs:

1. Select the desired program button then press the **Enter** key.
2. The message window will ask you to enter your **Weight**. You may adjust the weight 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 **Age**. You may adjust the age 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 also would be distorted and not a true representation of the actual profile. When you make a change to the workload, the message window will show the current column and program maximum levels of work.

8. During the program you will be able to scroll through the data in the message window by pressing the **Enter** key.
9. When the program ends the message window will show a summary of your workout. The summary will be displayed for a short time, then the console will return to the start-up display.

## Custom User Defined Programs

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

1. Press the **User 1** or **User 2** key. The message window will show a welcome message. If you had previously saved a program the message will contain your name. Then press the **Enter** key to begin programming.
2. When you press enter, the message window will show "Name – A", if there is no name saved. If the name "David" had been previously saved the message window will show "Name – David" and the D will be blinking. If there is a name saved you can change it or you may press the Stop key to keep the name and continue to the next step. If you want to enter a name use the Up and/or the Down key to change the first letter then press Enter to save the first letter and continue to the next letter. When you have finished entering the name press the Stop key to save the name and continue to the next step.
3. 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.
4. 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.
5. Next is **Time**. You may adjust the Time and press enter to continue.
6. Now you are asked to adjust the **Max Level**. This is the peak exertion level you will experience during the program. The factory setting is level seven. Adjust the level and then press enter.
7. Now the first column will be blinking and you are asked to adjust the level for the first segment of the workout. When you finish adjusting the first segment, or if you don't want to change, then press enter to continue to the next segment.
8. The next segment will show the same level as the previously adjusted segment. Repeat the same process as the last segment then press enter. Continue this process until all twenty segments have been set.
9. The message window will then tell you to press enter to save the program. After saving the program the message window says "New program saved" then will give you the option to Start or modify the program. Pressing Stop will exit to the start up screen.
10. If you want to increase or decrease the workload at any time during the program press the Up or Down key. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
11. During the User 1 or User 2 program you will be able to scroll through the data in the message window by pressing the **Enter key**.

## Heart Rate programs

### Before we get started, a word about Heart Rate:

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

To determine the 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:

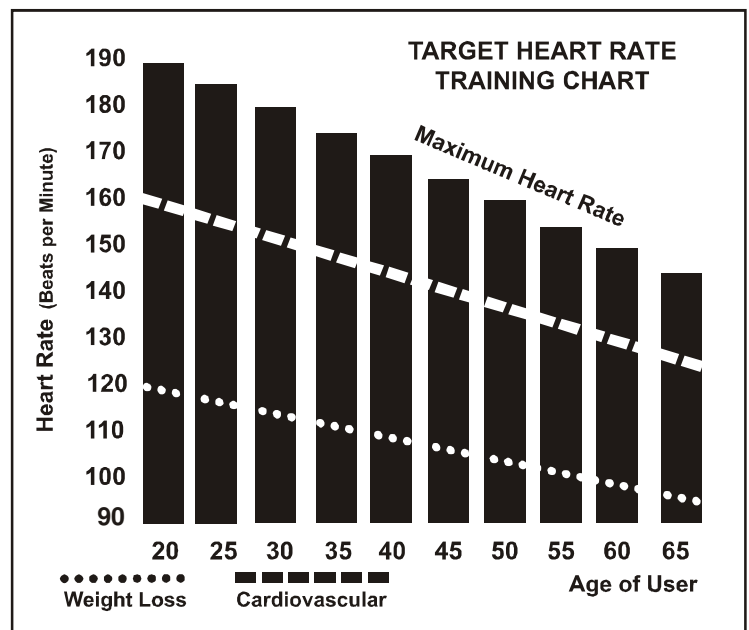
$220 - 40 = 180$  (maximum heart rate)  
 $180 \times .6 = 108$  beats per minute (60% of maximum)  
 $180 \times .8 = 144$  beats per minute (80% of maximum)

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

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

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

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



## 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 know 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.

## Heart Rate Control Program operation

**You must have your hands in contact with the hand pulse sensors at all times for the heart rate program to work.**

To start the **HRC** program follow the instructions below or just select the HRC program then the Enter button and follow the directions in the message window.

1. Select the **HRC** program then press the **Enter** key.
2. The message window will ask you to enter your **Weight**. You may enter your weight 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 **Age**. You may adjust the age number using the Up and 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 the **HRC** percent. The default is 70%; you may select 60% or 80% also. Adjust the level and then press enter.
6. You are now asked to select the Target heart rate Level. This is the heart rate level you will experience during the program. Adjust the level and then press enter.
7. 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.
8. If you want to increase or decrease the workload at any time during the program press the Up or Down key. This will allow you to change your target heart rate at any time during the program.
9. During the HRC program you will be able to scroll through the data in the message window by pressing the adjacent **Display** key.
10. When the program ends the message window will show a summary of your workout. The summary will be displayed for a short time then the console will return to the start-up display.

## Maintenance:

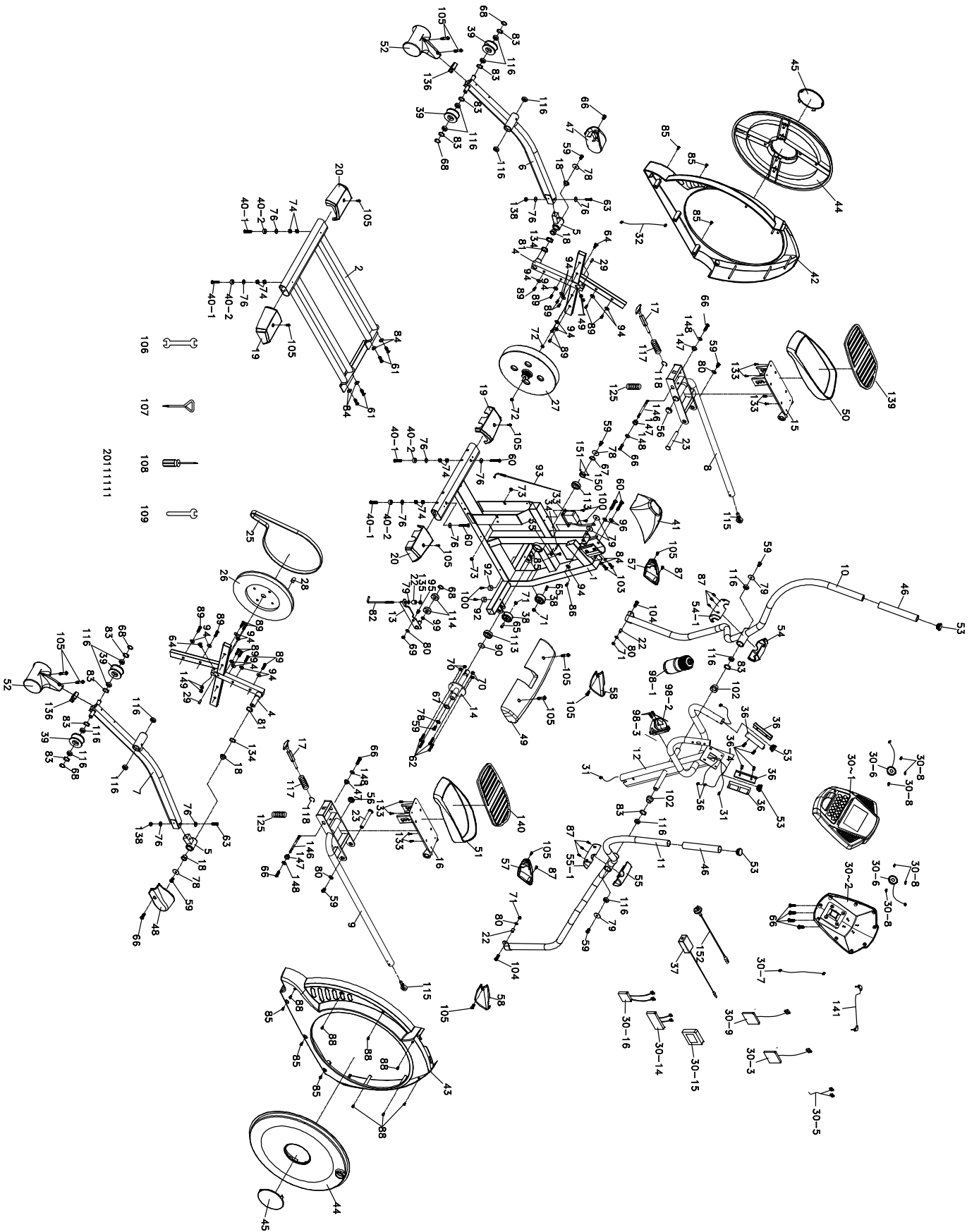
1. Wipe down all areas in the sweat path with a damp cloth after each workout.
2. If a squeak, thump, clicking or rough feeling develops the main cause is most likely one of two reasons:
  - i. The hardware was not sufficiently tightened during assembly. All bolts that were installed during assembly 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. There are 4 leveling pads on the bottom of the rear rails, use a 14mm wrench (or adjustable wrench) to adjust the levelers.

## Maintenance Menu in console software:

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 menu (may be called Engineering mode, depending on version) press and hold down the Start, Stop and Enter keys. Keep holding the keys down for about 5 seconds and the message window will display "ALTXXXX Engineering mode". Press the enter button to access the menu below:

- a. **Key test** (will allow you to test all the keys to make sure they are functioning)
- b. **Display test** (tests all the display functions)
- c. **Functions** (Press enter to access settings)
  - i. **Sleep mode** (Turn on to have the console power down automatically after 20 minutes of inactivity)
  - ii. **Pause Mode** (Turn on allow 5 minutes of pause, turn off to have the console pause indefinitely)
  - iii. **ODO reset** (reset the odometer)
  - iv. **Units** (Set to English or Metric display readings)
  - v. **Beep** (Turn on or off the beep when a key is pressed)
  - vi. **Motor test** (continually runs the tensioning gear motor)
  - vii. **Exit**
- d. **Security** (Allows you to lock the keypad so no unauthorized use is allowed)
- e. **Factory settings** (Access only allowed by manufacturing)

# ESP0023 –EL455 Explode Drawing



## ESP0023 –EL455 Parts List

NO.	DESCRIPTION	O'TY
1	Main Frame	1
2	Rear Rail Assembly	1
4	Cross Bar	2
5	Bushing Housing, Pedal Arm	2
6	Pedal Arm (L)	1
7	Pedal Arm (R)	1
8	Connecting Arm (L)	1
9	Connecting Arm (R)	1
10	Swing Arm (L)	1
11	Swing Arm (R)	1
12	Console Mast	1
13	Idler Wheel Assembly	1
14	Crank Axle	1
15	Adjustable Pedal (L)	1
16	Adjustable Pedal (R)	1
17	Locking Pin Assembly	2
18	WFM-2528-21_Bushing	4
19	Rear Stabilizer Cover (A)	2
20	Rear Stabilizer Cover (B)	2
22	Rod End Sleeve	3
23	Carriage Bolt	2
25	Drive Belt	1
26	Drive Pulley	1
27	Flywheel	1
28	Magnet	1
29	7 × 7 × 25L_Woodruff Key	2
30	Console Assembly	1
30~1	Console Top Cover	1
30~2	Console Bottom Cover	1
30~3	Amplifier Controller	1
30~5	Sound Board	1
30~6	250m/m_Speaker W/Cable	2
30~7	200m/m_Amplifier Cable	1
30~8	Speaker Grill Anchor	6
30~9	300m/m_W/Receiver, HR	1
30~14	Main Key Board	1
30~15	Console Display Board	1
30~16	Interface Board	1
31	1000m/m_Computer Cable	1
32	600m/m_DC Power Cord	1
33	Gear Motor	1
34	300m/m_Sensor W/Cable	1
35	Sensor Rack	1
36	850m/m_Handpulse W/Cable Assembly	2
36~4	Ø3 × 20m/m_Tapping Screw	4
37	Power Adaptor	1



NO.	DESCRIPTION	O'TY
38	Transportation Wheel	2
39	Slide Wheel , Urethane	4
40~1	3/8" × 2" _Flat Head Socket Bolt	4
40~2	Rubber Foot	4
41	Console Mast Cover	1
42	Side Case (L)	1
43	Side Case (R)	1
44	Round Disk	2
45	Round Disk Cover	2
46	Handgrip Foam	2
47	Pedal Arm Cover (L)	1
48	Pedal Arm Cover (R)	1
49	Front Stabilizer Cover	1
50	Pedal (L)	1
51	Pedal (R)	1
52	Slide Wheel Cover	2
53	Button Head Plug	4
54	Front Handle Bar Cover (L)	1
54~1	Rear Handle Bar Cover (L)	1
55	Front Handle Bar Cover (R)	1
55~1	Rear Handle Bar Cover (R)	1
56	32 × 2.5T _Round Cap	2
57	Connecting Arm Cover (L)	2
58	Connecting Arm Cover (R)	2
59	5/16" × 15m/m _Hex Head Bolt	8
60	3/8" × 2-1/4" _Hex Head Bolt	4
61	3/8" × 3-3/4" _Hex Head Bolt	4
62	1/4" × 3/4" _Hex Head Bolt	4
63	3/8" × 2-1/4" _Socket Head Cap Bolt	2
64	<b>M8 × 40L _Socket Head Cap Bolt</b>	2
65	5/16" × 2" _Button Head Socket Bolt	2
66	M5 × 10m/m _Phillips Head Screw	10
67	Ø25 _C Ring	<b>2</b>
68	Ø17 _C Ring	5
69	M8 × 7T _Nyloc Nut	1
70	1/4" _Nyloc Nut	4
71	5/16" × 7T _Nyloc Nut	4
72	3/8" -UNF26 × 4T _Nut	2
73	3/8" -UNF26 × 9T _Nut	2
74	3/8" × 7T _Nut	8
76	3/8" × 19 × 1.5T _Flat Washer	10
78	5/16" × 35 × 1.5T _Flat Washer	4
79	5/16" × 23 × 1.5T _Flat Washer	5
80	5/16" × 20 × 1.5T _Flat Washer	5
81	Ø25.5 × 33.5 × 1.5T _Nylon Wave Washer	2
82	M8 × 170m/m _J Bolt	1
83	Ø17 _Wave Washer	10



NO.	DESCRIPTION	O'TY
84	3/8" × 23 × 1.5T_Curved Washer	6
85	5 × 16m/m_Tapping Screw	7
86	4 × 15m/m_Sheet Metal Screw	1
87	Ø3.5 × 12m/m_Sheet Metal Screw	8
88	4 × 19m/m_Sheet Metal Screw	7
89	5 × 16m/m_Tapping Screw	16
90	Spacer Bushing	1
92	Ø25 × Ø25 × 15T_Rubber Foot Pad	2
93	Steel Cable	1
94	1/4" × 19m/m_Flat Washer	17
95	M8 × 20m/m_Carriage Bolt	1
96	3/8" × 2T_Split Washer	2
98~1	Drink Bottle	1
98~2	Drink Bottle Holder	1
98~3	M5 × 12m/m_Phillips Head Screw	2
99	Ø17 × Ø23.5 × 1T_Flat Washer	1
100	5 × 19m/m_Tapping Screw	4
102	Ø30 × 19m/m_Mast Bushing	2
103	3/8" × 3/4_Hex Head Bolt	2
104	5/16" × 1-1/4" _Hex Head Bolt	2
105	M5 × 15m/m_Phillips Head Screw	14
106	13.14m/m_Wrench	1
107	Short Phillips Head Screw Driver	1
108	Phillips Head Screw Driver	1
109	12m/m_Wrench	1
113	6005_Bearing	2
114	6203_Bearing	2
115	Rod End Bearing	2
116	6003_Bearing	16
117	Ø13.5 × 38.5mm_Latch Spring	2
118	Ø10_C Ring	2
125	Ø10 × Ø1 × 44L_Pedal Tension Spring	2
133	M5 × 10m/m_Phillips Head Screw	8
134	Ø25_Wave Washer	2
135	M8 × 9T_Nyloc Nut	1
136	Oval End Cap	2
138	3/8" × 11T_Nyloc Nut	2
139	Pedal Foam (L)	1
140	Pedal Foam (R)	1
141	400m/m_Audio Cable	1
146	Axle Of Locking Pin	2
147	Ø19 × Ø14 × Ø10 × (5+4)T_Bushing	4
148	45 × 16 × 1.5T_Flat Washer	4
149	M8 × 6.3T_Nut	4
150	Axle Stopper	1
151	M5 × 5m/m_Slotted Set Screw	2
152	Adaptor Power Cord	1



**WARRANTY, SAFETY AND ASSEMBLY INFORMATION**  
**ESP0023- EL455**

**IMPORTANT**

Please read and retain this manual as it will assist with identification for parts and service.

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BOYLES FITNESS warrants their **Elliptical** s to be free from defects in material and workmanship under normal use and service conditions.

The various components of the **Elliptical** are warranted against defects and workmanship for the time periods specified as follows:

**ESP0023 – EL455**  
**LIMITED WARRANTY**

<b>Lifetime</b>	<b>Frame &amp; Brake</b>
<b>5 years</b>	<b>Parts</b>

All warranty coverage extends only to the original retail purchaser from the date of purchase. BOYLES FITNESS' obligation under this Warranty is limited to replacing or repairing, at BOYLES' option, the product or parts therein. Any enquiries relating to warranties or spare parts must be directed to **Service 07 3272 7010**.

For efficient processing of your enquiry please have relevant date of purchase, retailer name you purchased the item from and the brand on the product. This warranty does not extend to any damage to a product caused by abuse, improper or abnormal usage (as detailed in this instruction manual), or repairs not provided by BOYLES. Nor does this warranty extend to products used for commercial or rental purposes. This warranty does not cover ordinary wear, tear and weathering, failure to follow directions, improper installation, improper maintenance or acts of God (such as damage caused by storms, lightning and by snow or ice). No other Warranty beyond that specifically set forth above is authorised by BOYLES.

Our sales and service centre has been set up to provide assembly assistance, replacement parts and accessories, and to efficiently handle all warranty related matters.

**Phone 07 3272 7010**

**Hours 9:00am – 4:00pm Mon-Fri (excluding public holidays)**

**Email: [spares@boylesfitness.com.au](mailto:spares@boylesfitness.com.au)**

**Website [www.bfe.net.au](http://www.bfe.net.au)**

## BFE Warranty Policy – November 1<sup>st</sup> 2013

1. When purchased from an authorised BFE distributor the BFE warranty shall guarantee that all framework and components of your product are free from faulty manufacture. All faulty framework and components will be repaired or replaced as set out in this policy. All warranties in this policy apply to **INDOOR HOME/DOMESTIC USE ONLY**.
2. These warranties do not apply to products used in commercial use applications.
3. Warranty **DOES NOT** cover normal wear & tear and excludes faults due to misuse, abuse, incorrect assembly or lack of general maintenance.
4. Warranty is applicable to products sold and placed within Australia only.
5. **IMPORTANT**. Most of BFE products are pretested and we have inspectors checking all products prior to shipment. The number one reason for a fault is due to **INCORRECT ASSEMBLY**. If you do have problems please go back to the start and double check your assembly and pay special attention to all **WIRING** connections. If you have accidentally cut or damaged the wiring please let us know and we will be happy to send you a new set at no-charge.

If you have done this and are confident you have double checked your assembly and are still having problems please email our service department at [spares@boylesfitness.com.au](mailto:spares@boylesfitness.com.au) including your best contact details, proof of purchase, serial number and a brief explanation of what is wrong. Emailing is the quickest and most reliable way to get your service request processed. Once we have your details we will either call or email you back with the next steps. The quickest way, once we determine the problem and send you a replacement part, is that we can talk you through over the phone on how to fit it.

If it is deemed by our service tech that it is too difficult, we can arrange (where available) a service technician.

**NOTE.** If we arrange for a service technician (where applicable) and it is found that it is not a manufacturer's fault and found to be an assembly issue, normal wear and tear, transport damage or misuse then there will be a call out fee of \$140 depending on location. (Surcharge applies for non-metro areas)

**WARRANTY TERMS-** Warranty commences from the date of purchase from the retail store. Warranty only applies to the original purchaser and is NON transferable. Warranty is void if the serial number of the product has been removed or tampered with.

Warranty does not apply to defects, faults or failures due to:

- (a) Defects caused during assembly or failure to assemble to the assembly manual provided. Assembly errors include but are not limited to damaged wiring harness, stripped crank arms and or pedals and bolts used in the wrong locations.
- (b) Lack of general maintenance and or failure to service or maintain the equipment in accordance with the user manual specifications and recommendations. This includes a lack of lubrication. Only use factory supplied lubricant. **DO NOT USE WD40** or anything similar. You can purchase lubricant from your retailer or contact us directly at [sales@boylesfitness.com.au](mailto:sales@boylesfitness.com.au)
- (c) **Power Surges.** The computers, control boards and motors are very sensitive to power fluctuations. You must use a surge protector on all items that plug into your mains power otherwise your electronics will not be covered by this warranty. You can purchase these from numerous retailers or you can call us on 02 46 366 680 to get a price.
- (d) User negligence, abnormal or excessive use, misuse, abuse or transport damage.
- (e) Repairs, alterations or modifications by NON BFE authorised service technician.
- (f) Accident, fire, flood or malicious damage by third person.
- (g) Ordinary wear and tear.
- (h) Failure to keep the product in a clean, dry environment causing rust. You should wipe off any sweat and moisture after each training session.
- (i) Any products sold or placed in an application or the incorrect environment that is not recommended by BFE or as not stipulated in the owner's manual such as a commercial / rental environment will void the warranty set forth by BFE
- (j) BFE recommends the use of a protective rubber floor mat. This reduces the incidence of dust and lint collection around the motor, reduces noise & protects your floor. You can purchase this from your retailer or contact BFE directly on 02 46 366 680

BFE will have the option to repair or replace any product which requires attention under the warranty.  
**NOTE:** Lifetime refers to the warranty coverage of the units expected service life. NOT the lifetime of the purchaser.

**Servicing/Spare Parts-** As with any mechanical equipment general maintenance should be performed on a regular basis by an authorised retailer or service technician. This will ensure longevity of the product and ensure that it is kept working in optimum condition. Failure to properly maintain your equipment may lead to safety issues and may also void the warranty.

You should only use genuine BFE replacement parts otherwise the warranty will be void.

**Freight Costs:**

The cost of freighting the replacement part under warranty to the customer shall be free of charge. Your requirement is to return the faulty part via the pre-paid postal service which we will supply.

**Returned Goods:**

The unauthorised return of parts or product shall be refused and placed in the hands of the carrier at the cost of the shipper. Return authorisations can be obtained from BFE head office only.

**Additional Warranty**

If you would like to extend your labour warranty by 1 year (\$99), 2 years (\$199), 3 years (\$299) please contact our office by emailing [sales@boylesfitness.com.au](mailto:sales@boylesfitness.com.au) (Not available in all areas)

**Service Department hours: Monday to Friday between 9am and 4pm**  
**Service Phone Number: 07 3272 7010 Email: [spares@boylesfitness.com.au](mailto:spares@boylesfitness.com.au)**

**PLEASE NOTE:** that Authorised service technicians do not reside in all areas of this vast country. If you live beyond the reasonable service area of a metropolitan area, BFE may not be able to support the labour portion of the product warranty. Alternatively you can return (at your cost) your product to the closest BFE repair centre, where it will be fixed at no charge under the warranty period.

Metropolitan Area- defined as no more than 50km from G.P.O in all capital cities.

**Disclaimer:**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a 'Major failure' and for compensation for any other Reasonable foreseeable loss or damage.

You are also entitled to have goods repaired or replaced if the goods fail to be of an acceptable quality and the failure does not amount to a major failure.

BFE does not assume, nor authorise any representative or other person to make or assume for BFE, any warranties whatsoever, whether expressed or implied, in, in connection with the sale, service, or shipment of our products.

BFE reserve the right to make changes and improvements in our products and specifications without incurring any obligation to similarly alter products previously purchased.

This warranty operates in addition to other rights and remedies available to consumer's rights under the Australian Consumer Law.

**Service Department hours: Monday to Friday between 9am and 4pm**  
**Service Phone Number: 07 3272 7010 Email: [spares@boylesfitness.com.au](mailto:spares@boylesfitness.com.au)**