Owner's Manual

Model No.
161167355

- Assembly

- Operation

- Adjustments

- Parts

- Warranty

CAUTION:
Read and understand this manual before operating unit

SPIRIT FITNESS

A Heritage of Quality | The Spirit of Innovation

Retain For Future Reference

Table of Contents

*ATTENTION-THIS BIKE IS INTENDED FOR **RESIDENTIAL USE ONLY** AND IS WARRANTED FOR THAT APPLICATION. ANY OTHER APPLICATION **VOIDS** THIS WARRANTY IN ITS ENTIRETY.*

CONGRATULATIONS ON YOUR NEW BIKE AND WELCOME TO THE DYACO CANADA INC. FAMILY!

Thank you for your purchase of this quality stationary bike trainer from Dyaco Canada Inc. Your new bike was manufactured by one of the leading fitness manufacturers in the world and is backed by one of the most comprehensive warranties available. Through your dealer, Dyaco Canada Inc. will do all we can to make your ownership experience as pleasant as possible for many years to come. The local dealership where you purchased this bike is your administrator for all Dyaco Canada Inc. warranty and service needs. Their responsibility is to provide you with the technical knowledge and service personnel to make your experience more informed and any difficulties easier to remedy.

Please take a moment at this time to record the name of the dealer, their telephone number, and the date of purchase below to make any future, needed contact easy. We appreciate your support and we will always remember that you are the reason that we are in business. Please complete and mail your registration card today and enjoy your new bike.

Yours in Health,

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.

Ver. A

Important Safety Instructions

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

■ Do not operate the bike on deeply padded, plush or shag carpet. Damage to both the carpet and bike may result.

■ Keep children away from the bike. There are obvious pinch points and other areas of caution that can cause harm.

■ Keep hands away from all moving parts.

■ Never drop or insert any object into any openings.

■ Do not use outdoors.

■ Do not attempt to use your bike for any purpose other than for the purpose it is intended.

■ The hand pulse sensors are not medical devices. Various factors, including the user's movement, may affect the accuracy of heart rate readings. The pulse sensors are intended only as exercise aids in determining heart rate trends in general.

■ Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on your bike. Quality athletic shoes are recommended to avoid leg fatigue.

■ User weight should not exceed 325 lbs (148 kg).

SAVE THESE INSTRUCTIONS - THINK SAFETY!

Important Operation Instructions

WARNING!

- **NEVER** expose this fitness bike to rain or moisture. This product is NOT designed for use outdoors, near a pool or spa, or in any other high humidity environment. The operating temperature specification is 40 to 120 degrees Fahrenheit, and humidity is 95% non-condensing (no water drops forming on surfaces).
- **NEVER** operate this fitness bike 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 level 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 fitness bike; such as watching television, reading, etc. These distractions may cause you to lose balance which may result in serious injury.
- 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 Dyaco Canada Inc. dealer.

Assembly Video

To assist you in assembling your new Spirit Fitness bike, we have posted an assembly video at the following link:
http://www.spiritfitness.com/customerservice/video/fitnessbikevideos.html
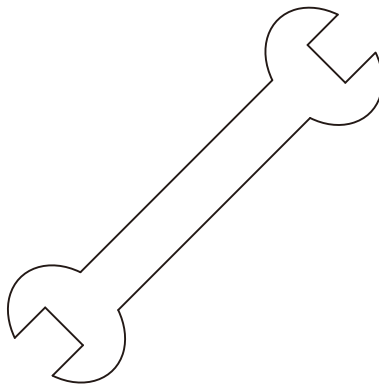
Pre-Assembly

1. Using a razor knife (Box Cutter), cut the banding straps that wrap around the carton. Reach under the bottom edge of the carton and pull it away from the cardboard underneath, separating the staples that join the two together. Lift the box over the unit and unpack.
2. Carefully remove all parts from carton and inspect for any damage or missing parts. If damaged parts are found, or parts are missing, contact your dealer immediately.
3. Locate the hardware package. The hardware is separated into four steps. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) are the item number from the assembly drawing for reference.
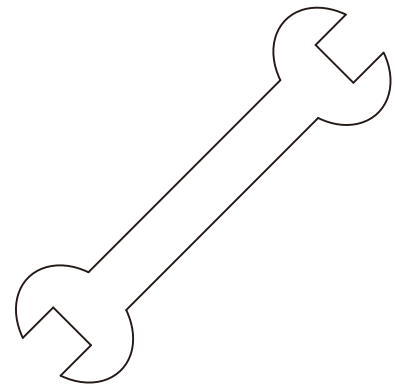
Assembly Tools
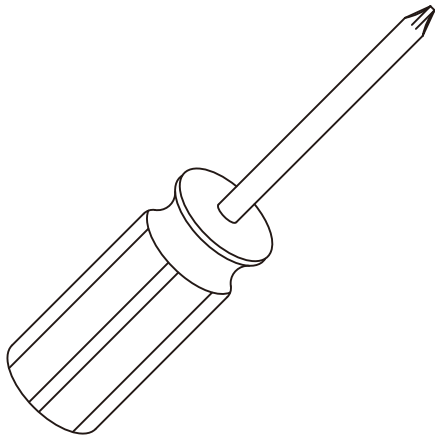
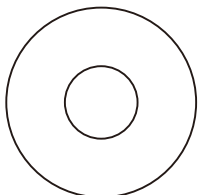**#93.** Phillips Head Screwdriver   **#100.** 12/14mm Wrench   **#92.** 13/15mm Wrench
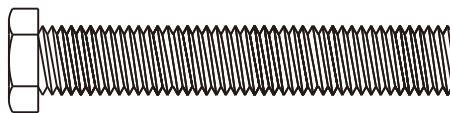
STEP 1: REAR STABILIZER ASSEMBLY

1. Install the Rear Stabilizer (5) onto the Main Frame (1) with the 4pcs of 3/8" x 2-1/4" Hex Head Bolts (50) and 4pcs of 3/8" x 25 x 2T Flat Washers (71) by using the 12/14mm Wrench (100).
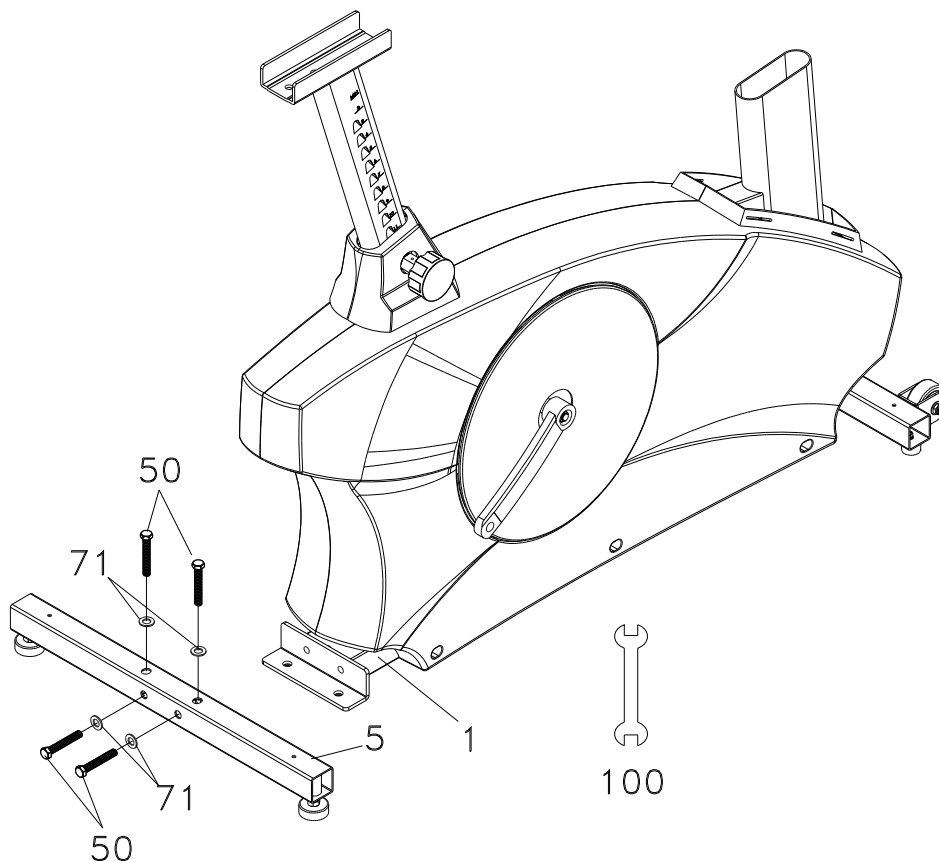
HARDWARE

#71. 3/8" × 25 × 2T
Flat Washer (4 pcs)

#50. 3/8" × 2-1/4"
Hex Head Bolt (4 pcs)

STEP 2: FRONT CONSOLE MAST ASSEMBLY

1. Unravel the Computer Cable (29) and snake it through the Console Mast Cover (38) and the Console Mast (2) until the cable connector comes out the top opening of the console mast. Slide the plastic cover (38) onto the console mast, ensuring the correct orientation of the cover.
2. Install the Console Mast (2) onto the Main Frame (1) with the 7pcs of 5/16" x 5/8" Hex Head bolts (51), 6pcs of 5/16" x 19 x 1.5T Flat Washers (72) on the side bolts and 1pc of 5/16" x 19 x 1.5T Curved Washer (99) on the front bolts by using the 12/14mm Wrench (100).

HARDWARE
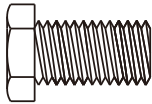
#51. 5/16" × 5/8"
Hex Head Bolt (7 pcs)
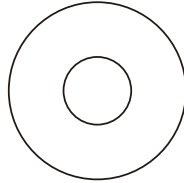
#72. 5/16" × 18 × 1.5T
Flat Washer (6 pcs)

#99. 5/16" × 19 × 1.5T
Curved Washer (1 pc)
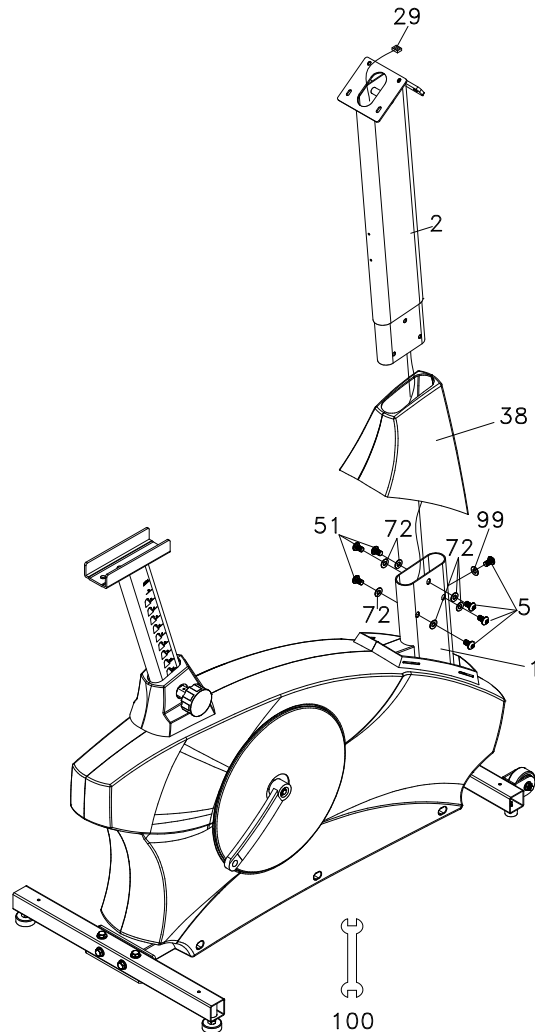
STEP 3: HANDLE BAR ASSEMBLY

1. Run the two hand pulse wires (26) into the hole in the handle bar mounting plate and out through the hole in the console plate. Remove the black plastic cover from the handlebars by cutting the plastic tie.

2. Install the Handle Bar (3) onto the Console Mast (2) with the 2pcs of Hex Head Bolts (51), 2pcs of Flat Washers (72), and 2pcs of Split Washers (103), being careful not to pinch the hand pulse wires. Tighten using the Wrench (100). Snap the black plastic handlebar cover over the joint.

HARDWARE
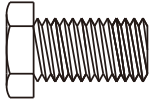
#51. 5/16" × 5/8"
Hex Head Bolt (2 pcs)
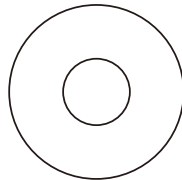
#72. 5/16" × 18 × 1.5T
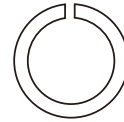Flat Washer (2 pcs)

#103. 5/16" × 1.5T
Split Washer (2 pcs)
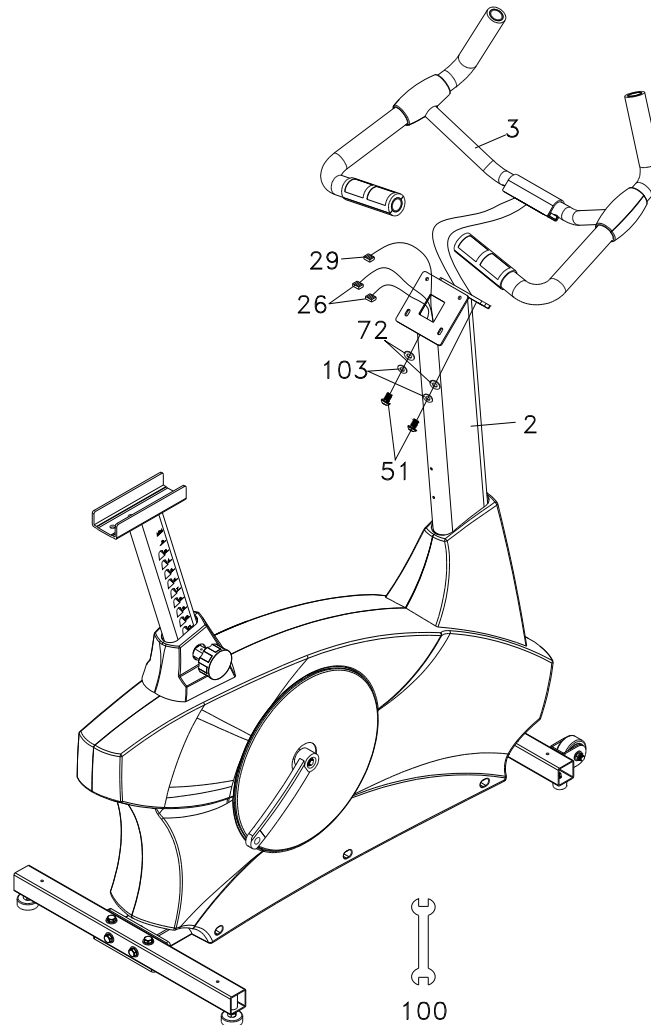
STEP 4: CONSOLE AND PLASTIC PARTS ASSEMBLY

1. Insert the Computer Cable (29) and Hand pulse Wires (26) into the connectors in the back of the Console (34).
2. Install the Console (34) onto the Console Mast (2) with the 4pcs of M5 x 12mm Phillips Head Screw (58) by using the Phillips Head Screw Driver (93).
3. Install the Front Stabilizer Cover (40) and the Rear Stabilizer Cover (41) onto the Main Frame (1) with the 4pcs of M5 x 12mm Phillips Head Screws (58) by using the Phillips Head Screw Driver (93).
4. Install the Pedals (45L, 46R) onto the Cranks by using 13/15mm Wrench (92). Remember that the left pedal has a reverse thread and will be screwed into the crank in the opposite rotation from normal threads. There is an "L" stamped into the end of the threaded post of the left pedal and an "R" in the right. Make sure to tighten the pedals as much as you possibly can. It may be necessary to re-tighten the pedals if you feel a thumping during pedaling the bike. A noise or feeling such as a thumping or clicking is usually caused by the pedals being too loose.
5. Install the Seat mount slide (7) (post at the front) onto the track on top of the seat bracket (6) by sliding a Flat Washer (71) onto the seat adjustment knob (86), then slide it through the slots of each and attach a flange nut (8) to the end. Install the seat (19) onto the seat post by securely tightening the nut on each the side, below the seat.
6. Install the Drink Bottle Holder (116) onto the Console Mast (2) with the 2pcs of Phillips Head Screws (58).Tighten using the Phillips Head Screw Driver (93).

HARDWARE

#58. M5 x 12mm
Phillips Head Screw (10 pcs)

34

29

26

19

8

7

116

2

58

45

6

58

71

86

58

58

40

16R

1

58

41

46

58

5

92   93   100
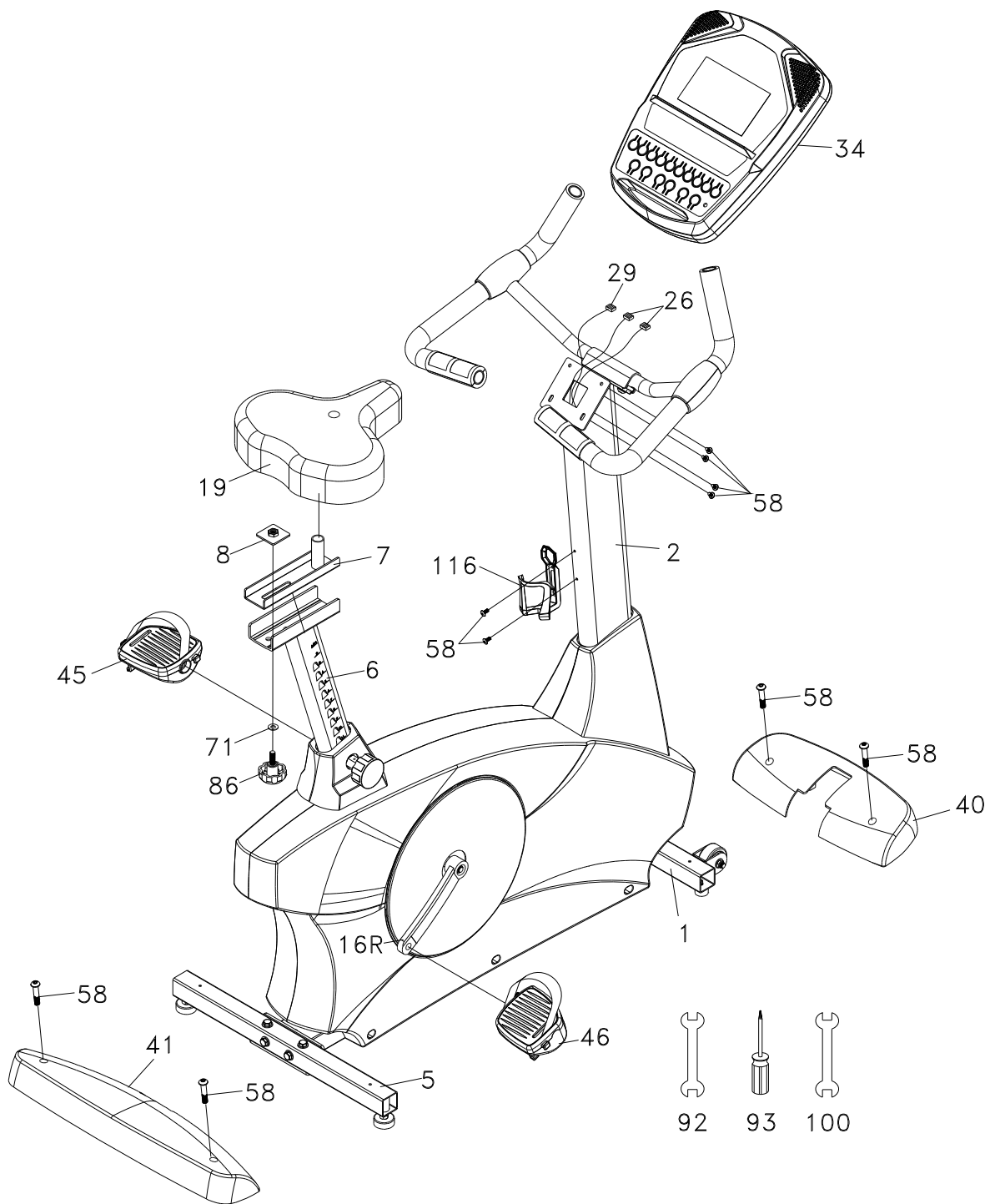
Features

TRANSPORTATION

The bike is equipped with two transport wheels, which are engaged when rear of 161167355 is lifted.

SEAT ADJUSTABILITY

When adjusting the seat to a higher position, just pull up on the seat. The design features a ratcheting mechanism that will lock into place. If you need to lower the seat, pull horizontally on the right side of the frame until the post locks into one of the grooves.

CONSOLE

The console will display RPM, Calories burned, Time (elapsed or countdown), Distance travelled, Pulse, Resistance Level, Program Name, Speed, Watts, and number of Laps completed. There is also a resistance level profile graph that lets you see how hard you have worked and how challenging the upcoming segments will be.

HEART RATE BAR GRAPH

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

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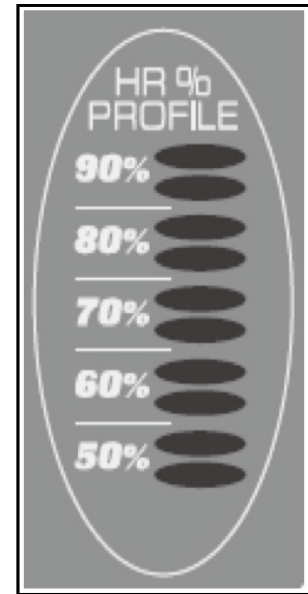
MUSCLE ACTIVATION FIGURE

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

- The upper body LED's will light any time your hands aren't in contact with the pulse grip sensors.
- The lower body lights will activate in three degrees of engagement: Green represents minimal muscle involvement, Amber represents medium involvement, and Red represents full or heavy activation.
  - 0-4.5% Elevation: even muscle distribution, all four muscle groups will be Amber
  - 5-15% Elevation: Quads are Amber and Glutes, Hamstrings, and Calves are Red
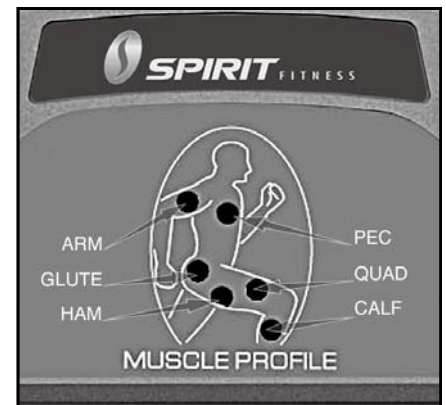
Operation of Your Console

Integrated Speakers for MP3 Player

Muscle Activation Profile

Large LCD with scrolling feedback and scrolling message center

Heart Rate % Profile

Swivel Fan to keep you cool

Ten innovative programs offer a variety of work-outs

Convenient cargo compartment for keys, phone, or MP3 player

Easy-Touch Control Buttons

Power on

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

When initially powered on the console will perform an internal self-test. During this time all the lights will turn on. When the lights go off, the **Message Center** will show the software version (i.e.: VER 1.0). The distance window shows the distance in miles and the time window shows the total hours of use.

The dot matrix display will be scrolling through the different profiles of the programs and the message window will be scrolling the start up message. You may now begin to use the console.

DOT MATRIX CENTER DISPLAY (Manual Operation)

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

The speed and incline profiles will display half of the program at one time (9 columns). They will both scroll right to left. The Lap track will move in counterclockwise direction.

1/4 MILE TRACK

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

PULSE GRIP FEATURE

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

CALORIE DISPLAY

Displays the cumulative calories burned at any given time during your workout, except in the Calorie program, the calories count down.
Note: This is only a rough guide used for comparison of different exercise sessions, which cannot be used for medical purposes.

SPEAKERS

The console has built-in Speakers. You may plug an Audio Source (CD player, MP3, Computer, etc.) into the Jack on the right side of console. There is no volume control on the console. The volume must be controlled on the Audio Source.

QUICK START

This is the quickest way to start a workout. After the console powers up you just press the **Start** key to begin, this will initiate the Quick Start mode. In Quick Start the Time will count up from zero and the workload may be adjusted manually by pressing the Level Up or Down buttons on the console

The dot matrix display will have only the bottom row lit at first. As you increase the work load more rows will light indicating a harder workout. The fitness bike will get harder to pedal as the rows increase.

There are 20 levels of resistance available for plenty of variety. The first five levels are very easy workloads and the changes between levels are set to a good progression for de-conditioned users. Levels 6-10 are more challenging, but the increases in resistance from one level to the next remain small. Levels 11-15 start getting tough as the levels jump more dramatically. Levels 16-20 are extremely hard and are good for short interval peaks and elite athletic training.

BASIC INFORMATION

The **Message Center** will initially be displaying the program name. When in scan mode, the **Speed** will be displayed for four seconds, then move on to **Watts** (indication of workload). If 100 watts is displayed, you are doing enough work to keep a 100-watt light bulb lit. The data changes to **Laps** completed, Segment time, Max level. Pressing the **Enter** button again will bring you back to the beginning.

The **Stop** button actually has several functions. Pressing the **Stop** key once during a program will **Pause** the program for 5 minutes. If you need to get a drink, answer the phone or any of the many things that could interrupt your workout, this is a great feature. To resume your workout during **Pause**, just press the **Start** key. If the **Stop** button is pressed twice during a workout the program will end and the console will display our workout summary. If the **Stop** key 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 to change programming data.

PROGRAM KEYS

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

The fitness bike 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 (see Using Heart Rate Transmitter section) will start the Heart Icon blinking (this may take a few seconds).The Pulse Display Window will display your heart rate, or Pulse in beats per minute.

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

PROGRAMMING THE CONSOLE

Each of the programs can be customized with your personal information and changed to suit your needs. Some of the information asked for is necessary to ensure the readouts are correct. You will be asked for your Age and Weight. Entering your Age is necessary during the Heart Rate programs to ensure the correct settings are in the program for your Age. Otherwise the work settings could be too high or low for you. Entering your Weight aides in calculating a more correct Calorie reading. Although we cannot provide an exact calorie count, we do want to be as close as possible.
CALORIE NOTE: Calorie readings on every piece of exercise equipment, whether it is in a gym or at home, are not accurate and tend to vary widely. They are meant only as a guide to monitor your progress from workout to workout. The only way to measure your calorie burn accurately is in a clinical setting connected to a host of machines. This is because every person is different and burns calories at a different rate. Some good news is that you will continue to burn calories at an accelerated rate for at least an hour after you have finished exercising!

ENTERING A PROGRAM AND CHANGING SETTINGS

When you enter a program, by pressing a program key, then **Enter** key, you have the option of entering your own personal settings. If you want to workout without entering new settings, then just press the **Start** key. This will bypass the programming of data and take you directly to the start of your workout. If you want to change the personal settings then just follow the instructions in the **Message Center**. If you start a program without changing the settings, the default or saved settings will be used.

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

PROGRAMMABLE FEATURES

MANUAL

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

1. Press the Manual key, then press the **Enter** key.
2. The **Message Center** will ask you to enter your **Age**. You may enter your age, using the Up and Down keys, then press the **Enter** key to accept the new value and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the **Weight** value using the Up 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 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.
6. Once the program starts you will be at level one. This is the easiest level and it is a good idea to stay at level one for a while to warm up.
   If you want to increase the work load at any time, press the Up key on the console; pressing the Down key on the console will decrease the work-load.
7. During the Manual program you will be able to scroll through the data in the **Message Center** by pressing the **Enter** key.
8. When the program ends you may press **Start** to begin the same program again or **Stop** to exit the program or you can save the program you just completed as a custom user program by pressing a User key and following the instructions in the **Message Center**.

PRESET PROGRAMS

The bike 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

RESISTANCE

Resistance: 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.
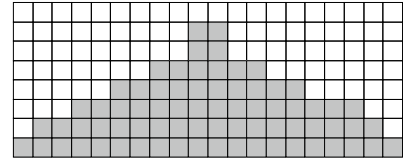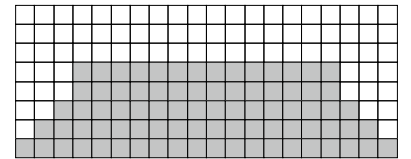
FAT BURN

RESISTANCE

Resistance: 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

RESISTANCE

Resistance: 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
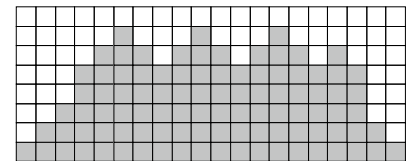
STRENGTH

RESISTANCE

Resistance: 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 gluts. A brief cool down follows.
.
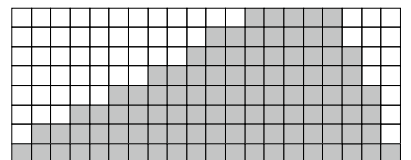
INTERVAL

RESISTANCE

Resistance: 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.
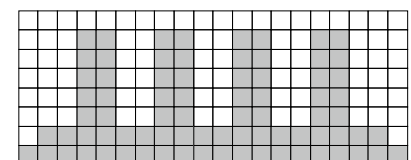
PROGRAMMING PRESET PROGRAMS

1. Select the desired program button then press the **Enter** key.
2. The **Message Center** will ask you to enter your **Age**. You may adjust the age setting, using the Level 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 value using the Level 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 Resistance Level. This is the peak exertion level you will experience during the program. Adjust the level and then press **Enter**.
6. Now you are finished editing the settings and can begin your workout by pressing the **Start** key. You can also go back and modify your settings by pressing the **Enter**.
7. If you want to increase or decrease the resistance at any time during the program, press the Level Up or Down keys on the console or the handlebars. This will change the resistance settings of the entire profile, although the profile picture on the screen will not change. The reason for this is so that you can see the entire profile at all times. If the profile picture is changed, it also would be distorted and not a true representation of the actual profile. When you make a change to the resistance, the **Message Center** will show the current column and program maximum levels of work.
8. During the program you will be able to scroll through the data in the message window by pressing the **Enter** key.
9. When the program ends the **Message Center** will show a summary of your workout. The summary will be displayed for a short time, then the console will return to the start-up display.
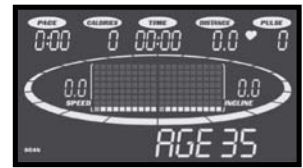
CUSTOMS USER DEFINED PROGRAMS

There are two customizable User programs that allow you to build and save your own workout.

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

1. Press the User.1 or User.2 key. The Message Center will show a welcome message. If you had previously saved a program the message will contain your name. Then press the Enter key to begin programming.
2. When you press Enter, the Message Center will show "Name - A", if there is no name saved.
    If the name "David" had been previously saved the Message Center 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/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 Center will ask you to enter your Age. You may enter your age, using the Level. Up/Down keys, then press the Enter key to accept the new value and proceed on to the next screen.
4. You are now asked to enter your Weight. You may adjust the weight value using the Up/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 Resistance Level of the program, press Enter when resistance has been selected.
7. Now the first column will be blinking and you are asked to adjust the resistance level for the first segment (SEGMENT > 1) of the workout by using the Level Up key. When you finish adjusting the first segment, or if you don't want to change, then press Enter to continue to the next segment.
8. The next segment will show the same workload resistance level as the previously adjusted segment. Repeat the same process as the last segment then press Enter. Continue this process until all twenty segments have been set.
9. The Message Center will then tell you to press Enter to save the program. After saving the program the Message Center 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.

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 x .6 = 108 beats per minute (60% of maximum)
180 X .8 = 144 beats per minute (80% of maximum)

So for a 40 year old the training zone would be 108 to 144 beats per minute.
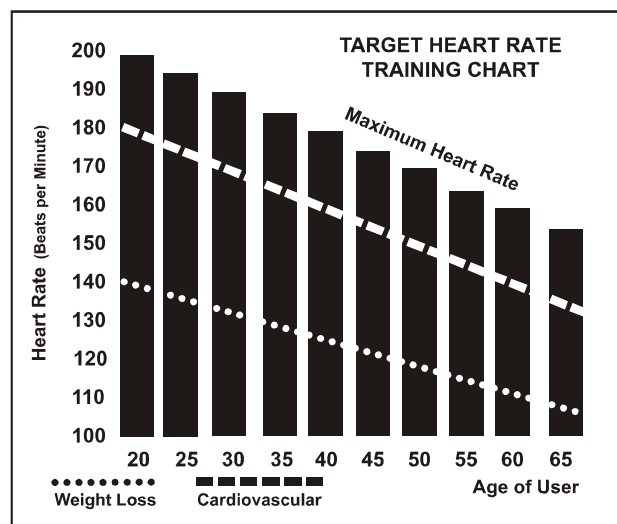
If you enter your age during programming the console will perform this calculation automatically. Entering your age is used for the Heart Rate control programs and also for the Heart rate bar graph. After calculating your Maximum Heart Rate you can decide upon which goal you would like to pursue.

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 below 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 Dyaco Canada Inc. Heart Rate Control bike 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.

Using a Heart Rate Transmitter

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

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

Erratic Operation:
Caution! **Do not use this bike 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, TVs, small appliances, etc.
(2) Fluorescent lights.
(3) Some household security systems.
(4) Perimeter fence for a pet.
(5) Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down. 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 your dealer.

HEART RATE PROGRAM OPERATION

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

Both programs operate the same, the only difference is that **HR1** is set to 60% and **HR2** is set to 80% of the maximum heart rate. They both are programmed the same way. To start a HR program follow the instructions below or just select the **HR1** or **HR2** program, then the Enter button and follow the directions in the **Message Center**.

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

1. Press the **HR 1-2** key once (60% of max heart rate default) or twice (80% of max heart rate default) key, then press the **Enter** key.
2. The **Message Center** will ask you to enter your **Age**. You may enter your age, using the **Level Up/Down** keys, then press the **Enter** key to accept the new value and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the weight value using the **Level Up/Down** keys, then press **Enter** to continue.
4. Next is **Time**. You may adjust the time using the **Level Up/Down** keys and press **Enter** to continue.
5. Now you are asked to adjust the Heart Rate Target. This is the heart rate level you will strive to maintain during the program. Adjust the level using the **Level Up/Down** keys, then press **Enter**.
   Note: The heart rate that appears is based on the % you accepted in Step 1. If you change this number it will either increase or decrease the % from Step 1.
6. Now you are finished editing the settings and can begin your workout by pressing the **Start** key. You can also go back and modify your settings by pressing the **Enter** key.
7. If you want to increase or decrease the workload at any time during the program press the **Level Up/Down** key on the console. This will allow you to change your target heart rate at any time during the program.
8. During the **HR 1** or **HR 2** programs you will be able to scroll through the data in the **Message Center** by pressing the **Enter** key.
9. When the program ends you may press **Start** to begin the same program again **Stop** to exit the program or you can save the program you just completed as a custom user program by pressing a **User** key and following the instructions in the **Message Center.**

General Maintenance

1. Wipe down all areas in the sweat path with a damp cloth after each workout.
2. If a squeak, thump, clicking or rough feeling develops the main cause is most likely one of two reasons:
    I. The hardware was not sufficiently tightened during assembly. All bolts that were installed during assembly need to be tightened as much as possible. It may be necessary to use a larger wrench than the one provided if you cannot tighten the bolts sufficiently. I cannot stress this point enough; 90% of calls to the service department for noise issues can be traced to loose hardware.
    II. The crank arm nut needs to be retightened
    III. If squeaks or other noises persist, check that the unit is properly leveled. There are 2 leveling pads on the bottom of the rear stabilizer, 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 while pedaling. Keep holding the keys down for about 5 seconds and the message window will display "Engineering mode menu". Press enter to access the menu below:

   a. **Key Test** (will allow you to test all the keys to make sure they are functioning)
   b. **Security** (Allows the keypad to be locked to prevent unauthorized use)
   c. **Functions** (Press **Enter** to access settings and **Up** arrow to scroll)
       i. **Sleep Mode** (Turn on to have the console power down automatically after 20 minutes of inactivity)
       ii. **PWM Test** (Tests the brake resistance)
       iii. **Beep** (Turns off the speaker so no beeping sound is heard)
       iv. **Units** (Sets the display to readout in English or Metric display measurements)
       v. **ODO Reset** (Resets the odometer)
       vi. **Pause Mode** (Turn on allow 5 minutes of pause, turn off to have the console pause indefinitely)
   d. **LCD Test** (Tests all the display functions)

Exploded View Diagram

(OPTIONAL)

1030217AM0942
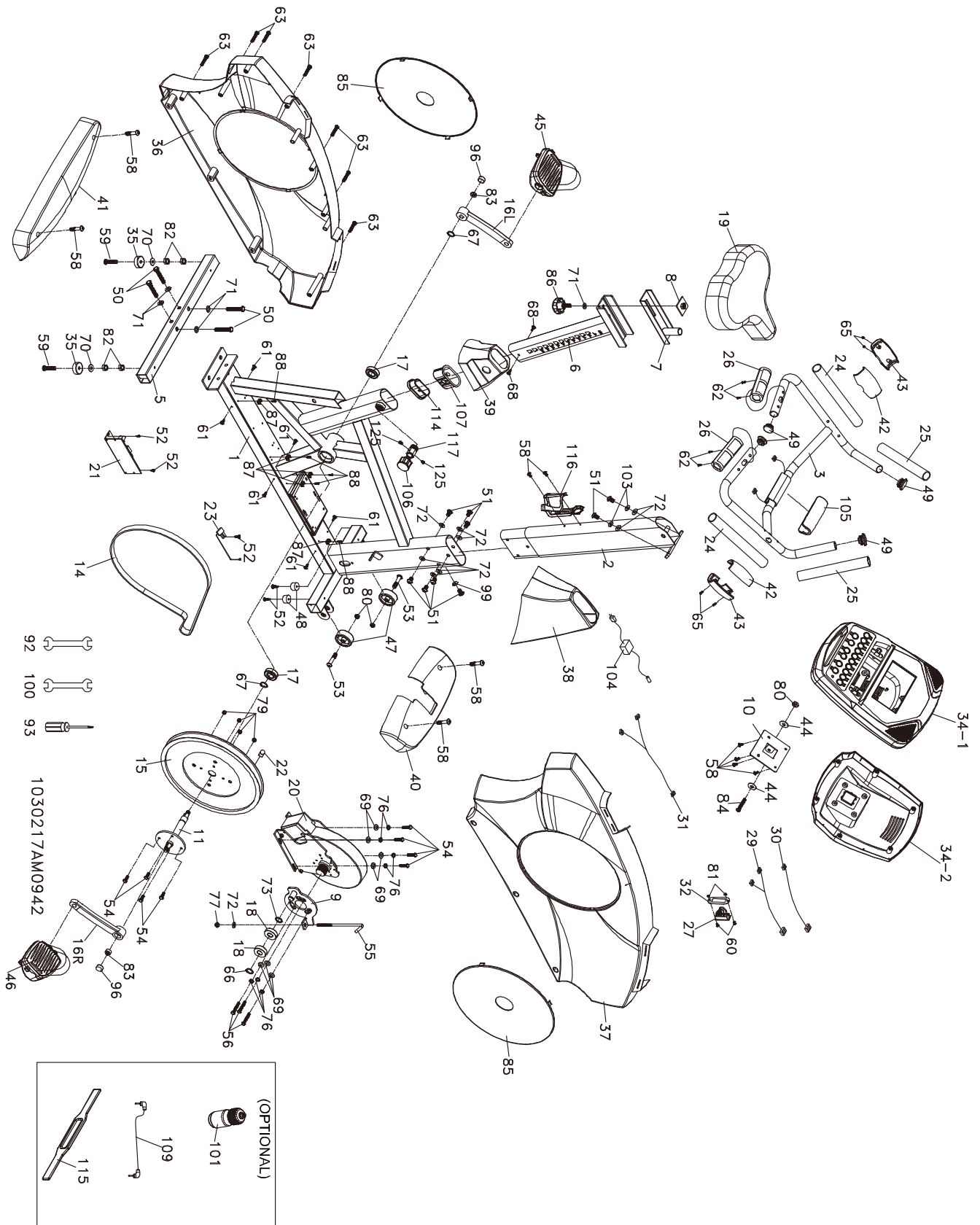
Parts List

KEY #	PART #	Part description	Qty
1	16735501	Main Frame	1
2	16735502	Console Mast	1
3	16735503	Handle Bar	1
5	16735505	Rear Stabilizer	1
6	16735506	Inner Slide	1
7	16735507	Sliding Seat Mount	1
8	16735508	Fix Plate	1
9	16735509	Idler Wheel Assembly	1
10	16735510	Console Holder Assembly	1
11	16735511	Crank Axle	1
14	16735514	Drive Belt	1
15	16735515	Drive Pulley	1
16L	16735516L	Crank (L)	1
16R	16735516R	Crank (R)	1
17	16735517	6004_Bearing	2
18	16735518	6203_Bearing	2
19	16735519	Seat	1
20	16735520	Induction Brake	1
21	16735521	Generator/Brake Controller	1
22	16735522	Magnet	1
23	16735523	300m/m_Sensor W/Cable	1
24	16735524	Ø1" × 285L × 5T_Handgrip Foam	2
25	16735525	Ø1" × 200L × 5T_Handgrip Foam	2
26	16735526	Handpulse W/Cable Assembly	2
27	16735527	AC Electronic Module	1
29	16735529	1700m/m_Computer Cable	1
30	16735530	200m/m_Wire Brake Coil Harness	1
31	16735531	950m/m_AC Power Cord	1
32	16735532	AC Switch Fixing Plate	1
34	16735534	Console Assembly	1
34~1	16735534~1	Console Top Cover	1
34~2	16735534~2	Console Bottom Cover	1
35	16735535	Rubber Foot	2
36	16735536	Chain Cover (L)	1
37	16735537	Chain Cover (R)	1
38	16735538	Console Mast Cover	1
39	16735539	Seat Post Cover	1
40	16735540	Front Stabilizer Cover	1
41	16735541	Rear Stabilizer Cover	1
42	16735542	Handgrip Side Cap (Top)	2
43	16735543	Handgrip Side Cap (Bottom)	2
44	16735544	Ø5/16" × Ø25 × 3T_Nylon Washer	2
45	16735545	Pedal (L)	1
46	16735546	Pedal (R)	1
47	16735547	Transportation Wheel	2
48	16735548	Rubber Foot Pad	2

KEY #	PART #	Part description	Qty
49	16735549	1"_Button Head Plug	4
50	16735550	3/8" × 2-1/4"_Hex Head Bolt	4
51	16735551	5/16" × 5/8"_Hex Head Bolt	9
52	16735552	5 × 19m/m_Tapping Screw	5
53	16735553	5/16" × 1-3/4"_Button Head Socket Bolt	2
54	16735554	1/4" × 3/4"_Hex Head Bolt	8
55	16735555	M8 × 170m/m_J Bolt	1
56	16735556	M6 × 15mm_Phillips Head Screw	3
58	16735558	M5 × 12m/m_Phillips Head Screw	10
59	16735559	3/8" × 2_Flat Head Socket Bolt	2
60	16735560	M4 ×12m/m_Phillips Head Screw	2
61	16735561	5 × 16m/m_Tapping Screw	6
62	16735562	Ø3 × 20m/m_Tapping Screw	4
63	16735563	Ø3.5 × 16m/m_Sheet Metal Screw	7
65	16735565	Ø3 × 10m/m_Tapping Screw	4
66	16735566	Ø17_C Ring	1
67	16735567	Ø20_C Ring	2
68	16735568	4 × 12m/m_Sheet Metal Screw	2
69	16735569	1/4" × 13mm × 1T_Flat Washer	7
70	16735570	3/8" × 19mm × 1.5T_Flat Washer	2
71	16735571	3/8" × 25mm × 2T_Flat Washer	5
72	16735572	5/16" × 18mm × 1.5T_Flat Washer	9
73	16735573	Ø17 × 23.5mm × 1T_Flat Washer	1
76	16735576	Ø1/4"_Split Washer	7
77	16735577	M8 × 7T_Nyloc Nut	1
79	16735579	1/4" × 8T_Nyloc Nut	4
80	16735580	5/16" × 6T_Nyloc Nut	3
81	16735581	M4 × 5T_Nyloc Nut	2
82	16735582	3/8" × 7T_Nut	4
83	16735583	M10 × 1.25m/m_Nut	2
84	16735584	5/16" × 2-1/2"_Hex Head Bolt	1
85	16735585	Round Disk	2
86	16735586	Brake Tension Knob	1
87	16735587	Wire Tie Mount	5
88	16735588	3.5 × 16m/m_Tapping Screw	5
92	16735592	13/15m/m_ Wrench	1
93	16735593	Phillips Head Screw Driver	1
96	16735596	Crank Arm End Cap	2
99	16735599	5/16" × 19 × 1.5T_Curved Washer	1
100	167355100	12/14m/m_Wrench	1
101	167355101	Drink Bottle (Optional)	1
103	167355103	5/16" × 1.5T_Split Washer	2
104	167355104	AC Transformer	1
105	167355105	Handle Bar Cover	1
106	167355106	Seat Up/Down Adjustment Knob	1
107	167355107	Center spatial wrap	1

KEY #	PART #	Part description	Qty
109	167355109	400m/m_Audio Cable (Optional)	1
114	167355114	Slide Spacer	1
115	167355115	Chest Strap (Optional)	1
116	167355116	Drink Bottle Holder	1
117	167355117	Knob Nut	1
125	167355125	M4 × 5L_Phillips Head Screw	2

Manufacturer's Limited Warranty

Dyaco Canada Inc. warrants all it's bike parts for a period of time listed below, from the date of retail sale, as determined by a sales receipt or in the absence of a sales receipt. Dyaco Canada Inc.'s responsibilities include providing new or remanufactured parts, at Dyaco Canada Inc.'s option, and technical support to our independent dealers and servicing organizations. In the absence of a dealer or service organization, these warranties will be administered by Dyaco Canada Inc. directly to a consumer. The warranty period applies to the following components:

<u>Home use</u>	
Labour	**1 Year**
Parts	**10 years**
Frame/Brake	**Lifetime**

This warranty is not transferable and is extended only to the original owner.
The warranty shall not apply to exercise units which are (1) used for commercial or other income producing purposes, or (2) subject to misuse, neglect, accident or unauthorized repair and alterations.

This warranty provided herein is lieu of all other express warranties, any implied warranties, including any implied warranties of merchantability of fitness for particular purpose, are limited in duration to the first 12 months from date of purchase. All other obligations or liabilities, including liability for consequential damages are hereby excluded.

REPAIR PARTS AND SERVICE

All of the parts for the Spirit cycle shown in figure can be ordered from Dyaco Canada Inc. 6050 DON MURIE STREET, NIAGARA FALLS, ONTARIO L2G 0B3. When ordering parts, the parts will be sent and billed at the current prices. Prices may be subject to change without notice. Check or money order must accompany all orders. Standard hardware items are available at your local hardware store.

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

Always include the following information when ordering parts
- Model number
- Name of each part
- Part number of each part