SPIRIT

CR900 Recumbent Bike
OWNER'S MANUAL

Please carefully read this entire manual before operating your new Recumbent bike.

TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS

WARNING - Read all instructions before using this exercise equipment.

WARNING - Heart rate monitoring systems may be inaccurate. Over exercising may result in serious injury or death. If you feel faint stop exercising immediately.

- Do not operate bike on deeply padded, plush or shag carpet. Damage to both carpet and bike may result.
- Keep children away from the bike. There are obvious pinch points and other caution areas that can cause harm.
- Keep 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.
- This exercise equipment can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the exercise equipment in a safe way and understand the hazards involved. Children shall not play with the exercise equipment. Cleaning and user maintenance shall not be made by children without supervision.
- Children should be supervised to ensure that they do not play with the exercise equipment.
- Notes on the correct posture and the fact the pedal crank training equipment of class B and C are not suitable for therapeutic purposes.
- Be aware that the generator is producing AC power while the bike is being used. Do not service the bike while the generator is spinning; serious electric shock could occur.
- "WARNING! Heart rate monitoring systems may be inaccurate. Over exercising may result in serious injury or death. If you feel faint stop exercising immediately".
- **WARNING:** Injuries to health may result from incorrect or excessive training.
- This exercise equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the exercise equipment by a person responsible for their safety.
- Before beginning this or any exercise program, consult a physician. This is especially important for persons over the age of 35 or persons with pre-existing health conditions.
- Close supervision is necessary when this exercise equipment is used by, on, or near children, invalids, or disabled persons.

SAVE THESE INSTRUCTIONS - THINK SAFETY!

IMPORTANT ELECTRICAL INSTRUCTIONS

WARNING!

NEVER expose this 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.

Important Operation Instructions

- **NEVER** operate this bike without reading and completely understanding the results of any operational change you request from the computer.
- **All users** should have medical clearance before starting any rigorous exercise program. This is especially important for persons with a history of heart disease or other high risk factors.
- **The user** should adjust the seat to a position that is comfortable during exercise.
- Understand that changes in resistance do not occur immediately. Set your desired resistance 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 bike; 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 handle bar while making control changes.
- Do not use excessive pressure on console control keys. They are precision set to function properly with little finger pressure. If you feel the buttons are not functioning properly with normal pressure contact your dealer.

ASSEMBLY INSTRUCTIONS

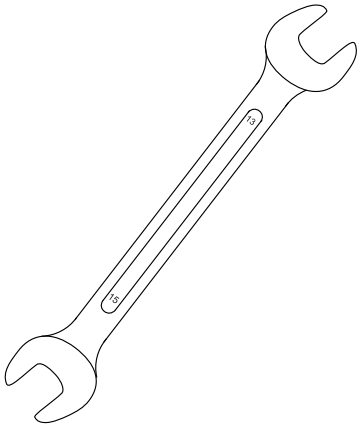
Max. user's weight.: 170 kg

UNPACKING

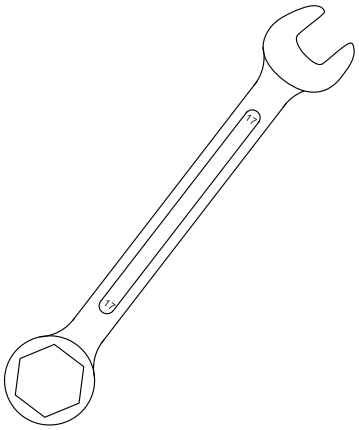
1. Cut the straps, then lift the box over the unit and unpack.

2. Locate the hardware package. The hardware is separated into four steps. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) are the item number from the assembly drawing for reference.

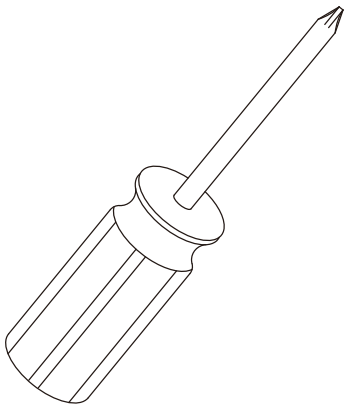
ASSEMBLY TOOLS



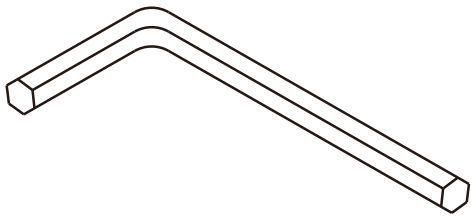
#126. 13/15mm Wrench (1 pc)



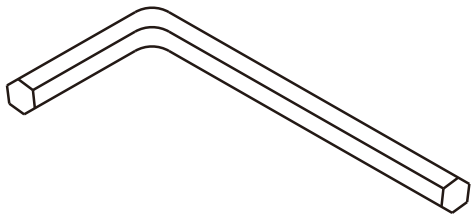
#125. 17 mm Wrench (2 pc)



#122. Phillips Head Screw driver (1 pc)

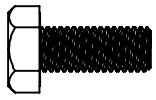


#124. 6mm L Allen Wrench (1 pc)



#123. 5mm L Allen Wrench (1 pc)

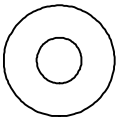
STEP 1



#145 - M10 ×30mm Hex Head Bolt (2pcs)

#92 - M6 × 12 mm Socket Head Cap Bolt (6pcs)

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



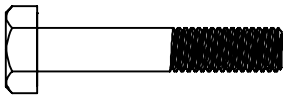
#106 - Ø3/8" × Ø25 × 2.0T Flat Washer (4pcs)

#108 - Ø1/4" × 13 × 1.0T Flat Washer (6pcs)

#111 - Ø1/4" Split Washer (6pcs)

#117 - 3.5 ×12mm Sheet Metal Screw (5pcs)

#138 - Ø10 × 1.5T Split Washer (4pcs)



#139 - M10 × 55mm Hex Head Bolt (2pcs)

STEP 2

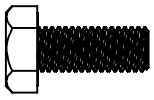
#94 - M8 × 25m/m Socket Head Cap Bolt (2pcs)

#97 - M5 ×12mm Phillips Head Screw (8pcs)

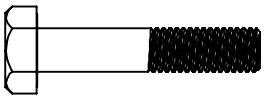
#105 - Ø5/16" × Ø18 × 1.5T Flat Washer (2pcs)

#112 - Ø5/16" × 1.5T Split Washer (2pcs)

STEP 3



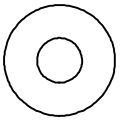
#85 - M10 ×25mm Hex Head Bolt (6pcs)



#86 - M10 ×50mm Hex Head Bolt (6pcs)

#92 - M6 × 12 mm Socket Head Cap Bolt (2pcs)

#101 - M10 × 8T Nyloc Nut (4pcs)



#106 - Ø3/8" × Ø25 × 2.0T Flat Washer (16pcs)

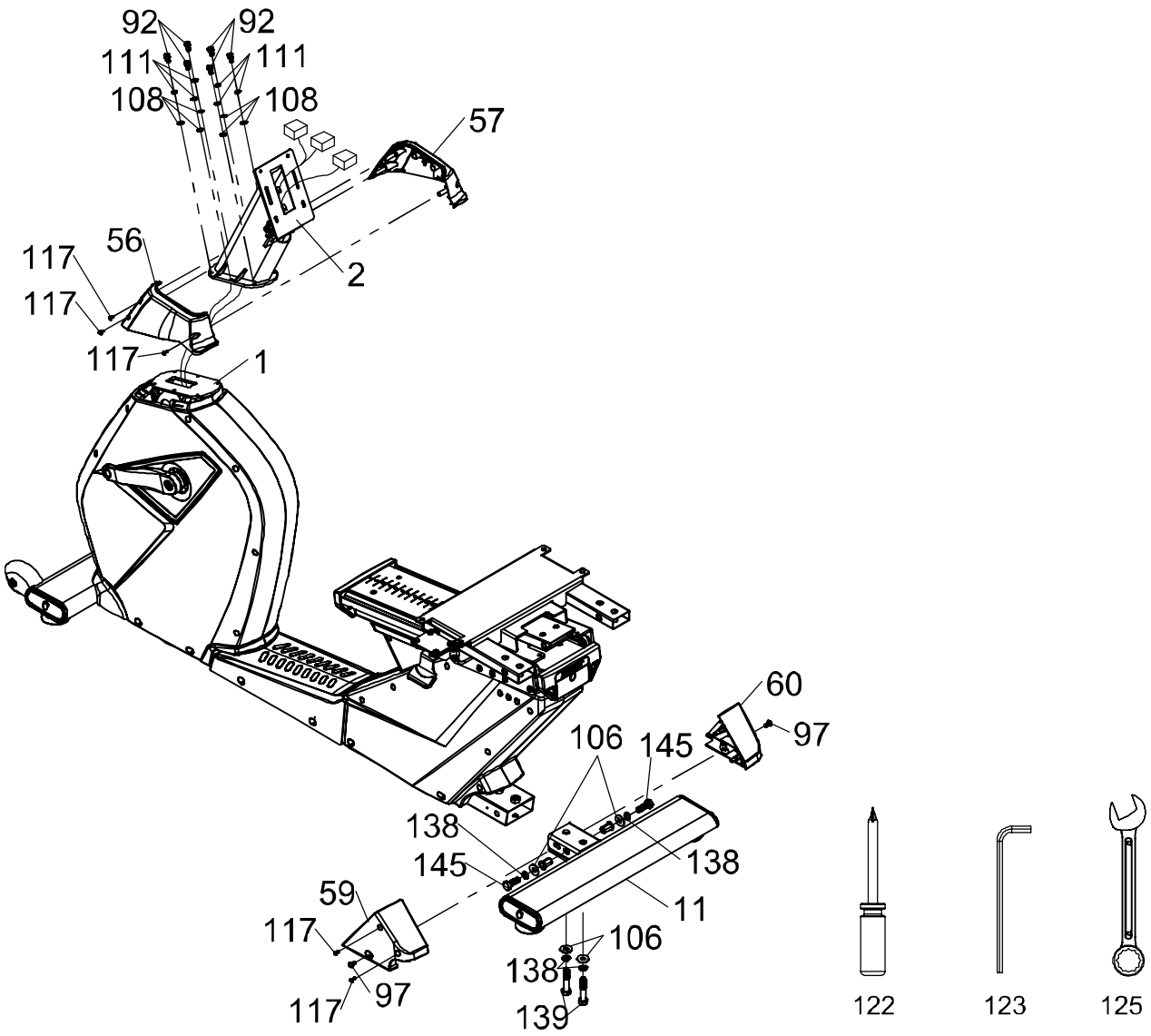
#108 - Ø1/4" × 13 × 1.0T Flat Washer (2pcs)

#111 - Ø1/4" Split Washer (2pcs)

#116 – 4 ×12mm Sheet Metal Screw (6pcs)

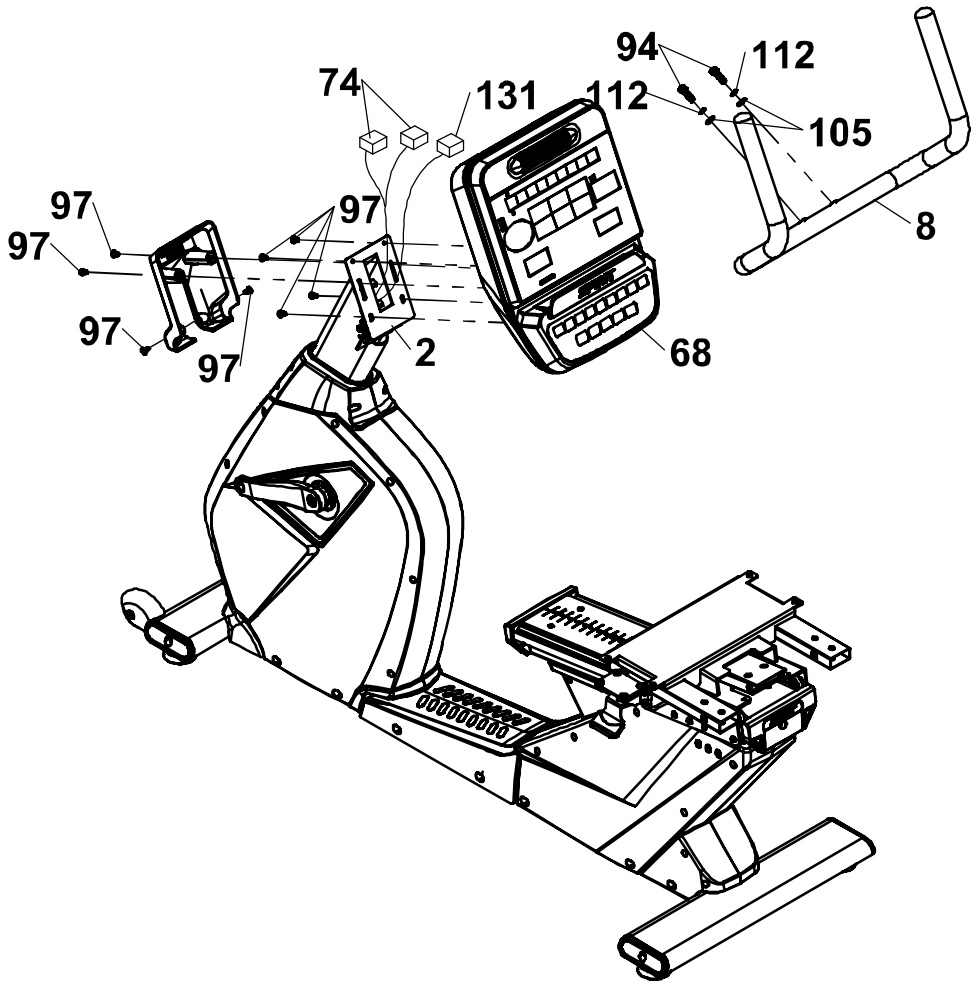
STEP 4

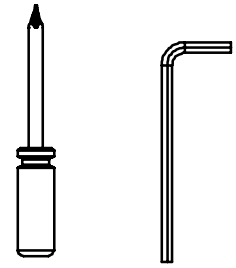
#90 - M8 × 20mm Button Head Socket Bolt (4pcs)



STEP 1

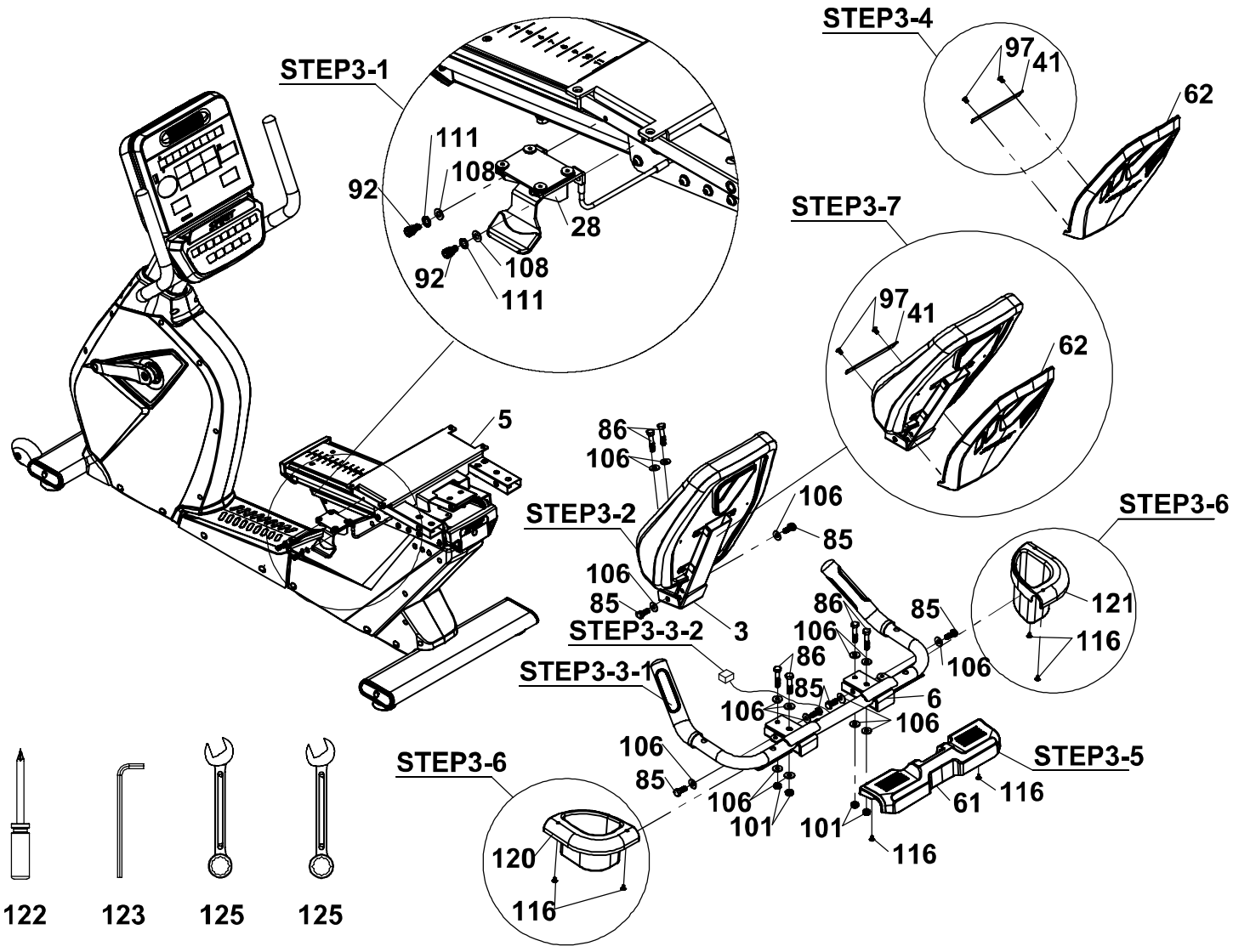
1. Install REAR STABILIZER (11) onto MAIN FRAME (1) with 2 short BOLTS (145), 2 long BOLTS (139), 4 SPLIT WASHERS (138), and 4 WASHERS (106).
2. Attach left and right STABILIZER COVERS (59 & 60) to MAIN FRAME (1) with 2 SCREWS (97). Join together with 2 SELF TAPPING SCREWS (117).
3. Run the WIRING HARNESS through the CONSOLE MAST (2) and out the top.
4. Attach CONSOLE MAST (2) to MAIN FRAME (1) using 6 BOLTS (92), 6 SPLIT WASHERS (111), and 6 WASHERS (108).
5. Place left and right CONSOLE MAST COVERS (56 & 57) around base of CONSOLE MAST (2). Join covers together with 3 SELF TAPPING SCREWS (117).





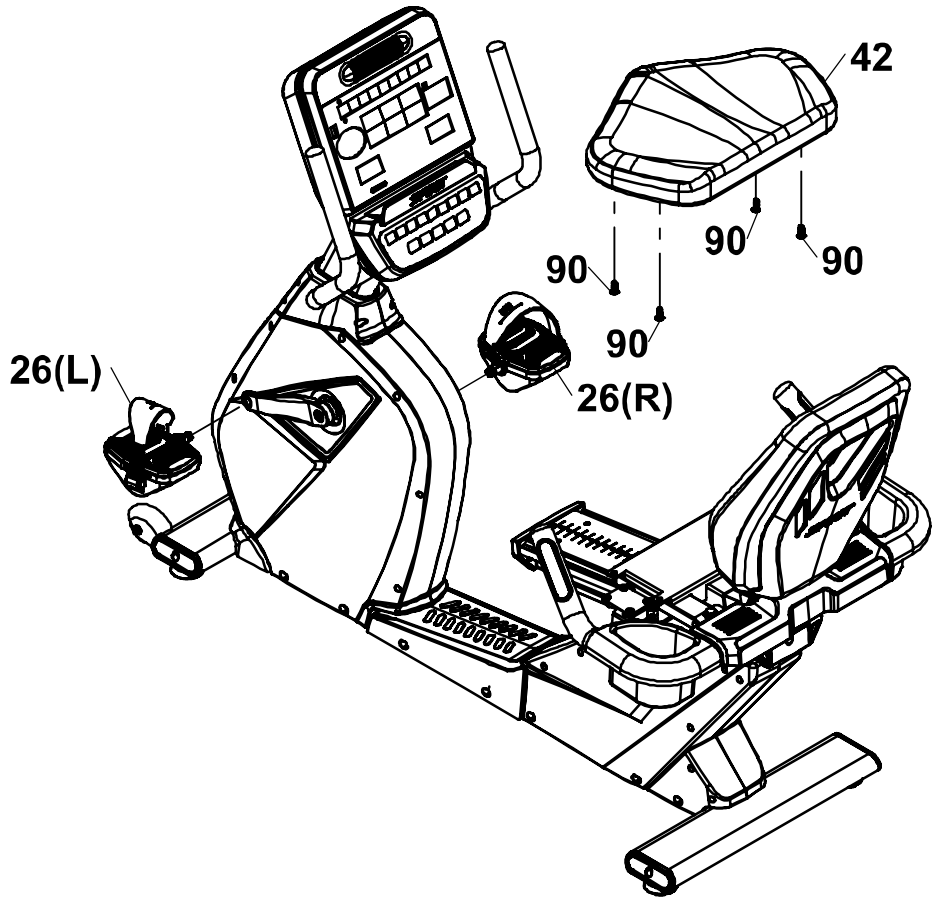
STEP 2

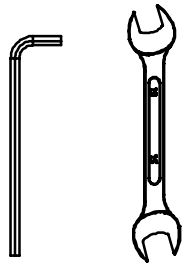
1. Attach FRONT HANDLE BAR (8) to CONSOLE MAST (2) with 2 BOLTS (94), 2 SPLIT WASHERS (112) and 2 WASHERS (105).
2. Connect WIRING HARNESS CABLES (74, 131) to CONSOLE (68).
3. Attach CONSOLE (68) to CONSOLE MAST (2) with 4 SCREWS (97). Ensure all cables do not become pinched.
4. Attach CONSOLE BRACKET COVER (64) to CONSOLE MAST (2) using 4 SCREWS (97).



STEP 3

1. Install SEAT RELEASE LEVER (28) onto SEAT CARRIAGE FRAME (5) with 2 BOLTS (92), 2 LOCK WASHERS (111), and 2 WASHERS (108).
2. Install SEAT BACK FRAME (3) onto SEAT CARRIAGE FRAME (5) with 2 short BOLTS (85), 2 long BOLTS (86), and 4 WASHERS (106).
3. Attach REAR HANDLE BAR (6) to SEAT CARRIAGE FRAME (5) using 4 long BOLTS (86), 4 shot BOLTS (85), 12 WASHERS (106), and 4 NUTS (101). And connect the WIRING HARNESS CABLES between REAR HANDLE BAR (6) and SEAT CARRIAGE FRAME (5).
4. Loosen 2 SCREWS (97) to remove SEAT COVER RETAINING BRACKET (41) from SEAT BACK FRAME (3).
5. Attach REAR HANDLE BAR COVER (61) to REAR HANDLE BAR (6) using 2 SELF TAPPING SCREWS (116).
6. Attach CUP HOLDERS (120 & 121) to REAR HANDLE BAR (6) using 4 SELF TAPPING SCREWS (116).
7. Attach SEAT BACK COVER (62) to SEAT BACK FRAME (3). Install SEAT COVER RETAINING BRACKET (41) using 2 SCREWS (97).





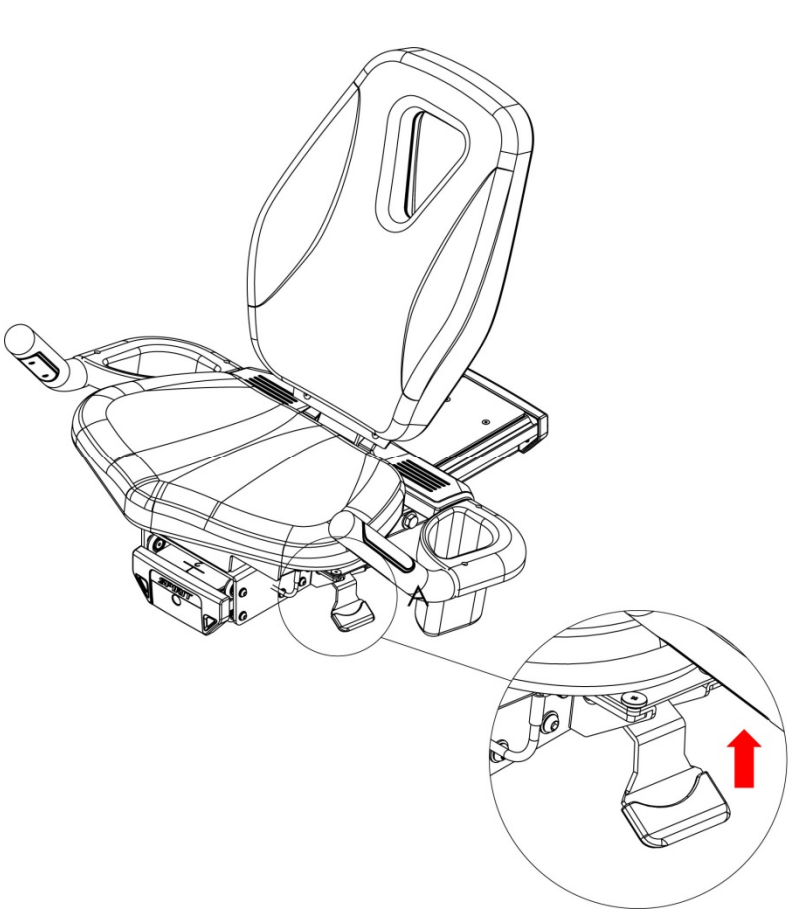
123 126

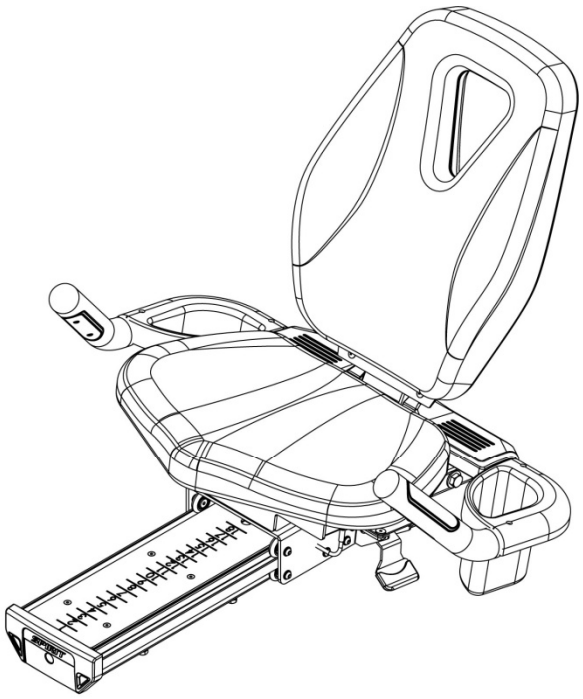
STEP 4

1. Install the PEDALS (26L & 26R) onto the CRANK ARMS (22 & 23). The left pedal has a reverse thread and will be screwed in counterclockwise. Tighten to 300 in-lbs. (34 N•m) of torque.
2. Attach BOTTOM SEAT CUSHION (42) to SEAT CARRIAGE FRAME (5) with 4 BOLTS (90).

Seat Adjustments

Use the Left Release Lever and foot strength to control the position of the Seat.





CONSOLE OPERATION

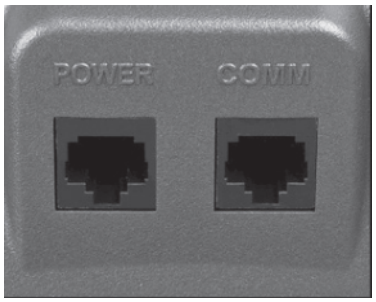
POWER

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

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

C-SAFE FEATURE

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



QUICK START

This is the quickest way to start a workout. After the console powers up you just press the Start key to begin. This will initiate the Quick Start mode. In Quick Start the Time will count up from zero, all workout data will start to accrue and the workload may be adjusted manually by pressing the Up and Down buttons. The dot matrix display will show just the bottom row lit. As you increase the workload more rows will light indicating a harder workout. The fitness bike will get harder to pedal as the rows increase. The dot matrix has 24 columns of lights and each column represents 1 minute. At the end of the 24th column (or 24 minutes of work) the display will wrap around and start at the first column again. There are 40 levels of resistance – displayed as 10 rows of lights – available for plenty of variety. The first 10 levels are very easy workloads, and the changes between levels are set to a good progression for de-conditioned users. Levels 10-20 are more challenging but the increases from one level to the next remain small. Levels 20-30 start getting tough as the levels jump more dramatically. Levels 30-40 are extremely hard and are good for short interval peaks and elite athletic training.

BASIC INFORMATION

The Dot Matrix, or Profile Window, will display the workout Profile. The Message Window displays pertinent exercise data. There is an RPM Window for pedal speed and a Level window indicating machine resistance. A Heart Rate data window and bar graph show how hard you are working and a lap counter provides distance information. The Message Window will initially be displaying Watts, Time Elapsed, Calories and Distance information. On the left of the Message Window is a button labeled Scan. When the Scan button is pressed the next set of information will appear: METs, Time Remaining, Calories/Hour and Speed.

Pressing the Scan button, the Scan mode is activated and the Message Window will show each set of data for four seconds then switch to the next set of data in a continuous loop. Pressing the Scan button again will bring you back to the beginning.

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

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

The Stop key actually has several functions. Pressing the Stop key once during a program will Pause the program for 5 minutes (when you stop pedaling without AC power the display will turn off but the memory will be saved for 5 minutes just like the pause mode). If you need to get a drink, answer the phone, or any of the many things that could interrupt your workout, this is a great feature. To resume your workout during Pause just press the Start key or start pedaling. If the Stop key is pressed twice during a workout, the program will end and the console will return to the start-up screen. If the Stop key is held down for 3 seconds, the console will perform a complete Reset. During data entry for a program the Stop key performs a Previous Screen function. This allows you to go back one step in the programming each time you press the Stop key.

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

NUMBER KEY PAD

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

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

PROGRAMMING THE CONSOLE

Each of the programs can be customized with your personal information and changed to suit your needs. Some of the information asked for is necessary to ensure the readouts are correct. You will be asked for your Age and Weight. Entering your Age ensures that the Heart Rate bar graph shows the correct number. Your Age is also necessary during the Heart Rate control program to ensure the correct settings are in the program for your Age. Otherwise the work settings could be too high or low for you; entering your Weight aides in calculating a more correct Calorie reading. Although we cannot provide an exact calorie count we do want to be as close as possible.

CALORIE NOTE: Calorie readings on every piece of exercise equipment, whether it is in a gym or at home, are not accurate and tend to vary widely. They are meant only as a guide to monitor your progress from workout to workout. The only way to measure your calorie burn accurately is in a clinical setting connected to a 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 & CHANGING SETTINGS

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

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.

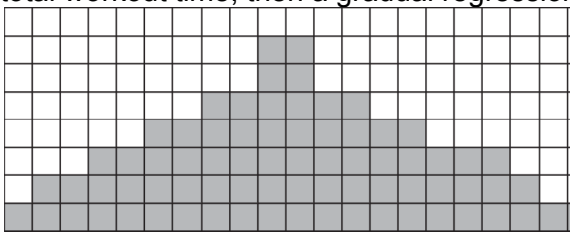
1. Press the Manual key then press the Enter key.
2. The Message Window will ask you to enter your workout time. Adjust the time and press enter.
3. The Message Window will ask you to enter your Age. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to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

PRESET PROGRAMS

The fitness bike has four different programs that have been designed for a variety of workouts. These four programs have factory preset work level profiles for achieving different goals.

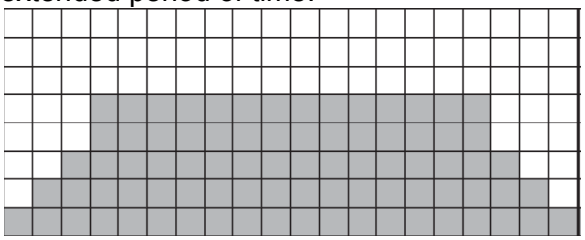
HILL

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



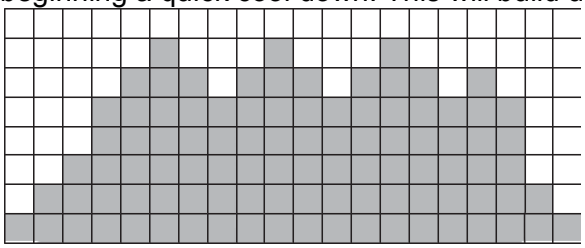
FATBURN

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



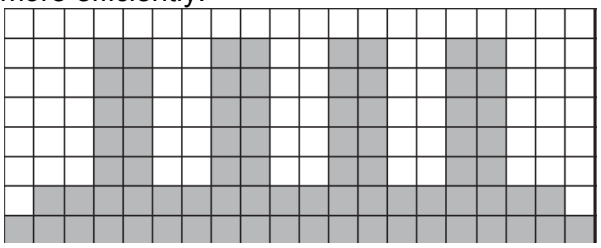
CARDIO

This program presents a quick progression up to near maximum resistance level (default or user input level). It has slight fluctuations up and down to allow your heart rate to elevate, and then recover repeatedly, before beginning a quick cool down. This will build up your heart muscle and increase blood flow and lung capacity.



INTERVAL

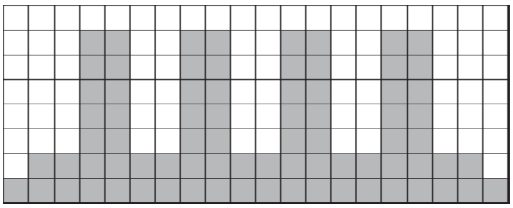
This program takes you through high levels of intensity followed by recovery periods of low intensity. This program utilizes and develops your “Fast Twitch” muscle fibers which are used when performing tasks that are intense and short in duration. These deplete your oxygen level and spike your heart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



PROGRAMMING PRESET PROGRAMS

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

HIIT PROGRAM



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

1. Press the HIIT key then Enter. The Message Window will ask you to enter your Age. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
2. You are now asked to enter your Weight. You may adjust the Weight number using the Up and Down keys or the numeric key pad then press enter to continue.
3. Next you are asked for the number of intervals you want to do. The default is 10 and the range available is 3 to 15. One interval equals 1 Sprint and 1 Rest segment.
4. Now you are asked to adjust the Sprint Level. This is the resistance level you will experience during the Sprint segments of the program. Adjust the level and then press Enter.
5. Now you are asked to adjust the Rest Level. This is the resistance level you will experience during the Rest segments of the program. Adjust the level and then press Enter.
6. Next is entering the Interval time. The Message window shows: Sprint :30 | Rest :30. The Sprint time will be blinking. You may use the + - keys to adjust the Sprint time from 20 to 60 seconds then press Enter. The time for the Rest period will blink and you can adjust the time using the +- keys and press Enter.

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

FIT TEST PROGRAM

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

FITNESS TEST PROGRAMMING

1. Press the Fit Test button and press Enter.
2. The message window will display Gender Male. The word Male will be blinking. Use the Up and Down arrows if you need to change to Female, then press Enter. The choice of Gender determines which workload chart will be used for the test.
3. The Message Window will ask you to enter your Age. You may adjust the age setting, using the Up and Down keys then press the Enter key to accept the new number and proceed on to the next screen.
4. You are now asked to enter your Weight. You may adjust the weight number using the Up and Down keys then press Enter to continue.
5. Now press Start to begin the test or Enter to modify your settings.

BEFORE THE TEST

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

DURING THE TEST

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

AFTER THE TEST

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

WHAT YOUR SCORE MEANS

VO2max Chart for males and very fit females

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

VO2max Chart for females and de-conditioned males

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

HEART RATE PROGRAM OPERATION

Heart rate information is read via pulse grips or wireless chest strap. To start the HR program, follow the instructions below or just press the HR key then the Enter button and follow the directions in the Message Window.

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

CONSTANT WATT PROGRAM

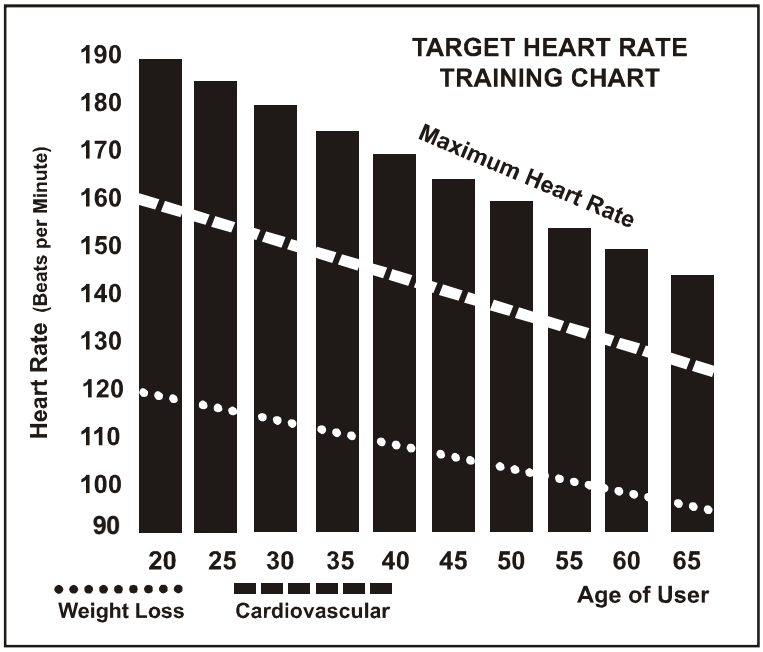
The Watts program maintains a constant work load. The resistance Level adjusts when the speed is changed. To start the Constant Watt program, follow the instructions below or just press the Watt key then the Enter button and follow the directions in the Message Window.

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

HEART RATE TRAINING

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. After calculating your Maximum Heart Rate you can decide upon which goal you would like to pursue.

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

With all Heart Rate Control 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.

”WARNING” Heart rate monitoring system may be inaccurate. Over exercise may result in injury or death. If you feel faint stop exercising immediately.

RATE OF PERCEIVED EXERTION

Heart rate is important but listening to your body also has a lot of advantages. There are more variables involved in how hard you should workout than just heart rate. Your stress level, physical health, emotional health, temperature, humidity, the time of day, the last time you ate and what you ate, all contribute to the intensity at which you should workout. If you listen to your body, it will tell you all of these things.

The rate of perceived exertion (RPE), also 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:

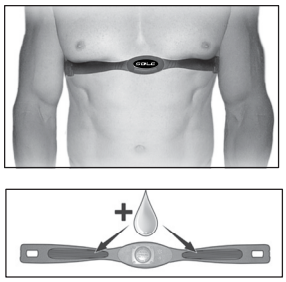
Rating Perception of Effort

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 HEART RATE TRANSMITTER (Optional)

How to wear your wireless chest strap transmitter:



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

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

ERRATIC OPERATION

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

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

1. Microwave ovens, TV's, small exercise equipments, 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.

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:
    1) 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.
    2) The crank arm nut and/or the pedals need to be retightened.
3. 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.

WARNING

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

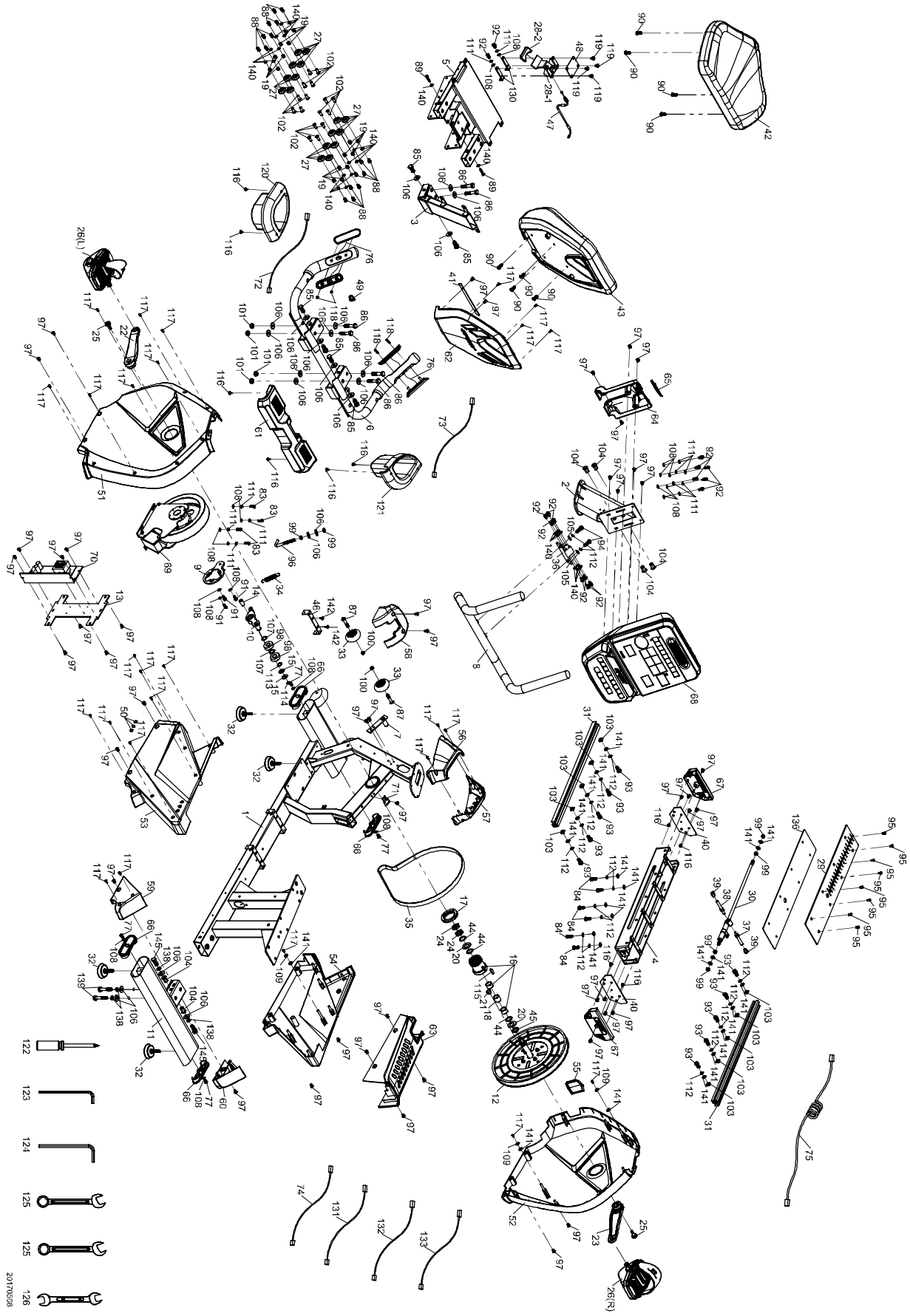
1) Replace defective components immediately and/or keep the equipment out of use until repair.
2) The components which are most susceptible to wear: Belt、PU wheel、Bearing、Idler、Shaft、Pedal

MAINTENANCE MODE MENU

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

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

EXPLODED VIEW DIAGRAM



PARTS LIST

NO.	DESCRIPTION	Q'TY
1	Main Frame	1
2	Console Mast	1
3	Seat Back Frame	1
4	Rail Assembly	1
5	Seat Back Bracket	1
6	Handlebar	1
7	Back-up Lever	1
8	Handle Bar	1
9	Idler Bracket	1
10	Idler Wheel Assembly (Upper)	1
11	Rear Stabilizer	1
12	Drive Pulley	1
13	Lower Controller Plate	1
14	Ø14 × 10 × 25L_Podwer metallurgy Sleeve	1
15	Ø10 × Ø25 × 0.8T_Nylon Washer	2
16	Bearing Bracket	1
17	Nut	1
18	Ø20 × Ø24 × 21.2L_Ring	1
19	Ø8 × Ø12 × 8L_Core	16
20	Plate	2
21	Ø15 × 7T_Magnet	1
22	Crank Arm(L)	1
23	Crank Arm(R)	1
24	M20 × P1.0 × 6T_Nut	2
25	M8 × P1.0 × 25L_Arbor Screw	2
26	Pedal	1
27	Ø32_PU Wheel	16
28~1	Release Lever	1
28~2	Nylon Handgrip	1
29	Iron Board	1
30	Shaft	1
31	Seat Front Read Adjusting	2
32	Adjustment Foot	4
33	Ø65_Transportation Wheel	2
34	Ø16 × 66L_Tension Spring, Idler Assembly	1
35	Drive Belt	1
36	Seat Stop Axle	1
37	Ø8.5 × 69.5L_Axle	1
38	Ø8.5 × 73.5L_Axle	1
39	Ø10 × 17.5L_Sleeve	2
40	Stopper Plate	2
41	Plate	1

NO.	DESCRIPTION	Q'TY
42	Seat	1
43	Seat Back	1
44	Ø28 × Ø20.3 × 1.5T_Back Plate	3
45	Ø28 × Ø20.6 × 5T_Axle Back Plate	1
46	Chain Cover Attaching Plate	1
47	Steel Cable	1
48	Handle Bar Back Plate	1
49	Ø7_HGP Wire Grommet	1
50	Block	3
51	Front Shroud (L)	1
52	Front Shroud (R)	1
53	Rear Shroud (L)	1
54	Rear Shroud (R)	1
55	Electronic Module	1
56	Console Mast Cover-L	1
57	Console Mast Cover-R	1
58	Front Stabilizer Cover	1
59	Rear Stabilizer Cover (L)	1
60	Rear Stabilizer Cover (R)	1
61	Handgrip Side Cap	1
62	Seat Back Cover	1
63	Beam Cover	1
64	Console Chin Cover	1
65	End Cap	1
66	Cap	4
67	Aluminum Axle End Cap	2
68	Console Assembly	1
69	Generator/Resistance	1
70	Generator/Brake Controller	1
71	1500m/m_Sensor W/Cable	1
72	630m/m_Handpulse Wire	1
73	760m/m_Handpulse Wire	1
74	2400m/m_Handpulse Wire	1
75	500m/m_Handpulse Wire	1
76	Handpulse W/Cable Assembly	2
77	M5 × 15m/m_Phillips Head Screw	4
83	1/4" × UNC20 × 3/4"_Hex Head Bolt	4
84	M8 × 20m/m_Hex Head Bolt	6
85	M10 × 25m/m_Hex Head Bolt	6
86	M10 × 50m/m_Hex Head Bolt	6
87	Button Head Socket Bolt	2
88	M6 × 15m/m_Button Head Socket Bolt	16
89	M6 × P1.0 × 30L_Button Head Socket Bolt	2
90	M8 × 20m/m_Button Head Socket Bolt	8

NO.	DESCRIPTION	Q'TY
91	M5 × 15m/m_Socket Head Cap Bolt	3
92	M6 × 12m/m_Socket Head Cap Bolt	16
93	M8 × 20m/m_Socket Head Cap Bolt	10
94	M8 × 25m/m_Socket Head Cap Bolt	2
95	M5 × P0.8 × 12L_Flat Head Countersink Bolt	8
96	M8 × 80m/m_J Bolt	1
97	M5 × 12m/m_Phillips Head Screw	47
98	6203_Bearing	2
99	M8 × 6.3T_Nut	6
100	5/16 × 6T_Nyloc Nut	2
101	M10 × 8T_Nyloc Nut	4
102	M6 × 19L_Nut	16
103	M8 × 1.25 × 6.5T_Square Nut	10
104	M10 × 1.5m/m_Hex Blind Nut	6
105	Ø8 × Ø18 × 1.5T_Flat Washer	2
106	Ø10 × Ø25 × 2.0T_Flat Washer	22
107	Ø17 × Ø23.5 × 1.0T_Flat Washer	2
108	Ø1/4" × 13 × 1.0T_Flat Washer	19
109	Ø3/16" × Ø15 × 1.5T_Flat Washer	3
111	Ø6_Split Washer	12
112	Ø8 × 1.5T_Split Washer	18
113	Ø17_C Ring	1
114	Ø10_C Ring	1
115	7 × 7 × 25m/m_Woodruff Key	1
116	Ø4 × 12m/m_Sheet Metal Screw	10
117	Ø3.5 × 12m/m_Sheet Metal Screw	26
118	3 × 20m/m_Tapping Screw	4
119	M6 × 10m/m_Thumb Head Socket Screw	4
120	Drink Bottle Holder (R)	1
121	Drink Bottle Holder (L)	1
122	Phillips Head Screw Driver	1
123	5 × 26 × 120L_L Allen Wrench	1
124	6 × 27 × 120L_L Allen Wrench	1
125	17m/m_Wrench	2
126	13/15m/m_Wrench	1
130	Handle Interface Board	2
131	Computer Cable	1
132	1200m/m_Generator Wire Harness	1
133	1000m/m_Wire Brake Coil Harness	1
136	Nylon Board	1
138	Ø10 × 1.5T_Split Washer	4
139	M10 × 55m/m_Hex Head Bolt	2

NO.	DESCRIPTION	Q'TY
140	Ø1/4" × 13 × 1.0T_Flat Washer	26
141	Ø5/16" × 16 × 1.5T_Flat Washer	23
142	M5 × 12m/m_Tapping Screw	2
145	M10 × 30m/m_Hex Head Bolt	2