

SPIRIT



CS800+ Stepper OWNER'S MANUAL

Please carefully read this entire manual before operating your new stepper.

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IMPORTANT SAFETY INSTRUCTIONS

WARNING - Read all instructions before using this exercise equipment.

DANGER - To reduce the risk of electric shock disconnect your stepper from the electrical outlet prior to cleaning and/or service work.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons, install the stepper on a flat level surface with access to a 230-volt grounded outlet with only the stepper plugged into the circuit.

DO NOT USE AN EXTENSION CORD UNLESS IT IS 1m m² OR BETTER, WITH ONLY ONE OUTLET ON THE END. The Stepper should be the only appliance in the circuit in which it is connected. **DO NOT ATTEMPT TO DISABLE THE GROUNDED PLUG BY USING IMPROPER ADAPTERS, OR IN ANY WAY MODIFY THE CORD SET.** A serious shock or fire hazard may result along with computer malfunctions.

DO NOT USE AN EXTENSION CORD UNLESS IT IS A 14AWG OR BETTER, WITH ONLY ONE OUTLET ON THE END:

- Do not operate stepper on deeply padded, plush or shag carpet. Damage to both carpet and stepper may result.
- Keep children away from the stepper. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the stepper if it has a damaged cord or plug. If the stepper is not working properly, call your dealer.
- Keep the cord away from heated surfaces.
- Do not operate where aerosol spray products are being used or where oxygen is being administered. Sparks from the motor may ignite a highly gaseous environment.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position and then remove the plug from the outlet.
- Please make sure that power-supply cord and adapter placed in dry area and kept away from heat.
- Do not attempt to use your stepper 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 stepper. Quality athletic shoes are recommended to avoid leg fatigue.
- Children should be supervised to ensure that they do not play with the exercise equipment.
- **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.

- The appliance is only to be used with the power supply unit provided with the appliance.
- This appliance 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.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision

- **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** – The equipment shall be installed on a stable base and properly leveled.

SAVE THESE INSTRUCTIONS - THINK SAFETY!

IMPORTANT ELECTRICAL INSTRUCTIONS

WARNING!

NEVER remove any cover without first disconnecting AC power. If voltage varies by ten percent (10%) or more, the performance of your stepper may be affected. **Such conditions are not covered under your warranty.** If you suspect the voltage is low, contact your local power company or a licensed electrician for proper testing.

NEVER expose this stepper to rain or moisture. This product is **NOT** designed for use outdoors, near a pool or spa, or in any other high humidity environment. The operating temperature specification is 40 to 120 degrees Fahrenheit, and humidity is 95% non-condensing (no water drops forming on surfaces).

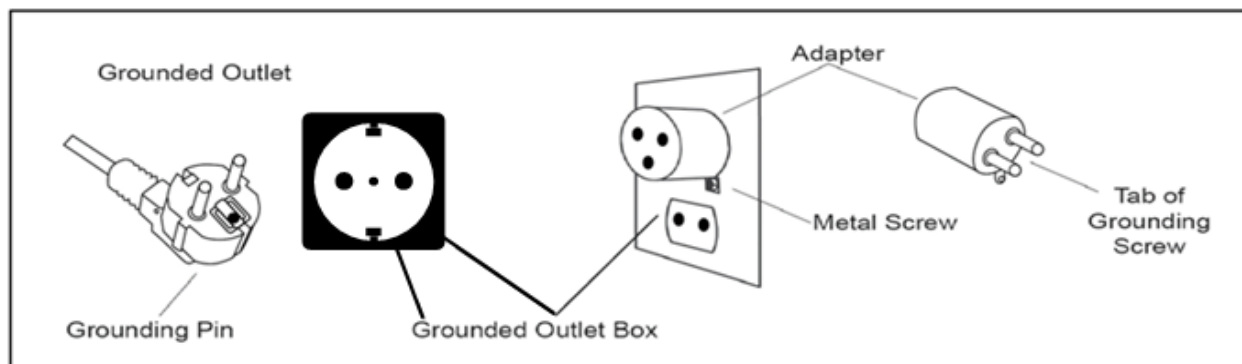
Circuit Breakers: Some circuit breakers used in homes are not rated for high inrush currents that can occur when a stepper is first turned on or even during use. If your stepper is tripping the house circuit breaker (even though it is the proper current rating) but the circuit breaker on the stepper itself does not trip, you will need to replace the home breaker with a high inrush type. This is not a warranty defect. This is a condition we as a manufacture have no ability to control. This part is available through most electrical supply stores. Examples: Grainger part # 1D237, or available online at www.squared.com part #QO120HM. The electrical outlet used should have a dedicated 5 amp circuit breaker.

Grounding Instructions

This product must be grounded. If the stepper's electrical system should malfunction or breakdown grounding provides a path of least resistance for electric current, reducing the risk of electric shock. This product is equipped with a cord having an equipment-grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

This product is for use on a nominal 230-volt circuit, and has a grounding plug that looks like the plug illustrated below. A temporary adapter that looks like the adapter illustrated below may be used to connect this plug to a 2-pole receptacle as shown below if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet, (shown below) can be installed by a qualified electrician. The green colored rigid ear-lug, or the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.



IMPORTANT OPERATION INSTRUCTIONS

- **NEVER** operate this Stepper 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.
- **NEVER** use your Stepper during an electrical storm. Surges may occur in your household power supply that could damage Stepper components. Unplug the Stepper during an electrical storm as a precaution.
- Use caution while participating in other activities while using your Stepper; 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.
- The breaking system of the equipment is speed independent.

GETTING ON / OFF YOUR STEPPER

IMPORTANT

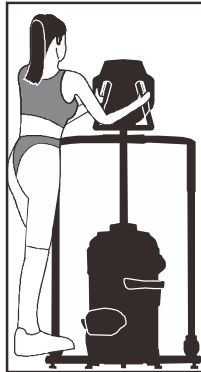
The stepper comes with two Dual Action Handles and a Stationary Handlebar.

Always hold the Stationary Handlebar when getting on and off the stepper.

First time users should familiarize themselves with using the stepper by using the Stationary Handlebar first and then progressing to the Dual Action Handles.

Once you have familiarized yourself with using the stepper, you can progress to using the Dual Action Handles to provide a total body workout. Hands can be positioned on the Dual Action Handles at the most appropriate position for your height and arm length.

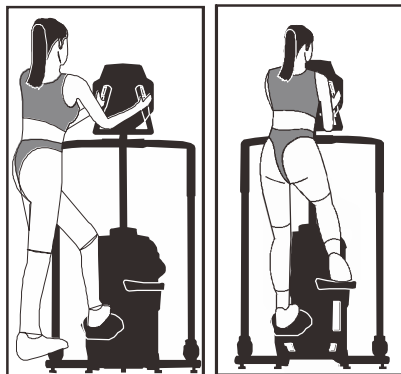
Caution should always be taken when getting on and off any exercise machine. Please follow the safety steps below.



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

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

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



Important

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

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

It is recommended that you keep at least one hand on the Stationary Handlebar at all times, especially when getting on or off. If you are performing a walking action with your arms, or doing upper body strength training exercises, ensure you are well balanced.

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

Correct Position



Your body should be in an upright position so that your back is straight. Keep your head up to minimize neck and upper back strain.

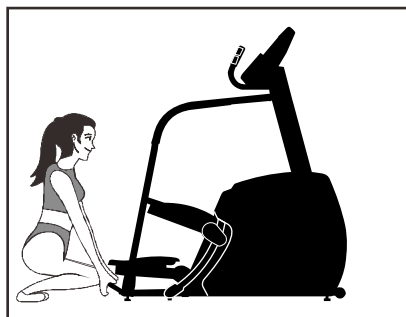
Always try and use the stepper in a rhythmical and smooth motion. If you find yourself feeling uncomfortable, or experience a surging type feeling, there is probably too much tension.



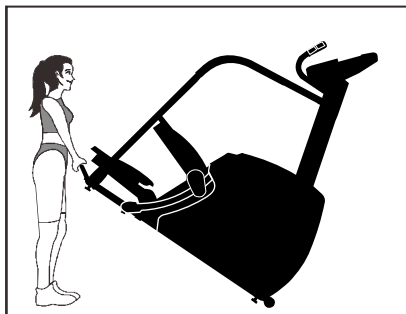
When going in reverse, bend your knees slightly more. More emphasis is on the buttocks and hamstrings in the motion.

MOVING YOUR STEPPER

The stepper can be easily moved from room to room.



1. Move to the rear of the machine and ensure swing arms are even (one foot pedal at top of Stepper Disk and other at bottom). Squatting down then grasp handle of rear Stabilizer.



2. Lifting up to transport the machine.

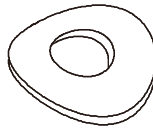
ASSEMBLY PACK CHECKLIST

1

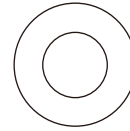
HARDWARE STEP 1



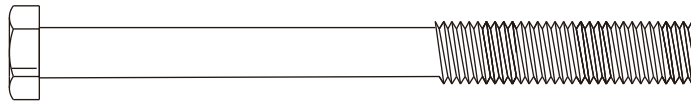
108. 3/8" × 2T
Split Washer (6 pcs)



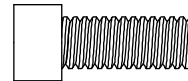
#106. 3/8" × 23 × 2.0T
Curved Washer (2 pcs)



#100. 3/8" × 19 × 1.5T
Flat Washer (4 pcs)



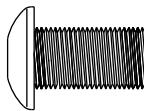
#78. 3/8" × 3-3/4"
Hex Head Bolt (2 pcs)



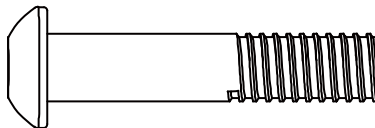
#81. 3/8" × 3/4" Socket
Head Cap Bolt (4 pcs)

2

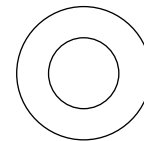
HARDWARE STEP 2



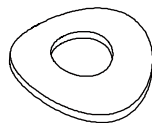
#75. 3/8" × 3/4" Button
Head Socket Bolt
(6 pcs)



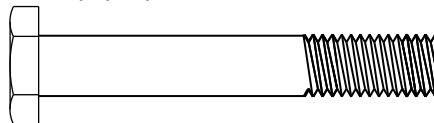
#76. 3/8" × 2" Button
Head Socket Bolt
(2 pcs)



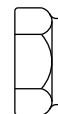
#100. 3/8" × 19 × 1.5T
Flat Washer (4 pcs)



#106. 3/8" × 23 × 2.0T
Curved Washer (8 pcs)



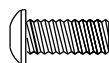
#77. 3/8" × 2-1/4"
Hex Head Bolt (4 pcs)



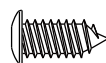
#93. 3/8" × 7T
Nyloc Nut (4 pcs)

3

HARDWARE STEP 3

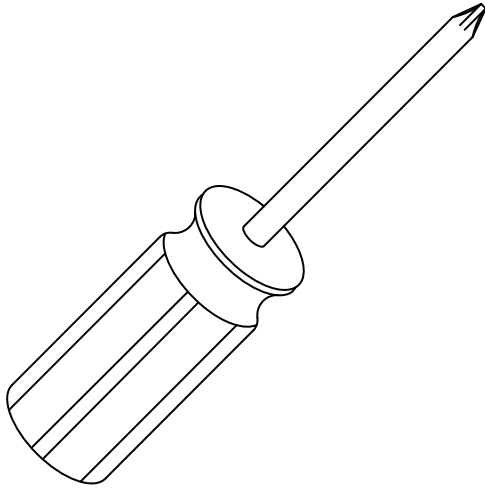


#83. M5 × 10mm
Phillips Head Screw
(10 pcs)

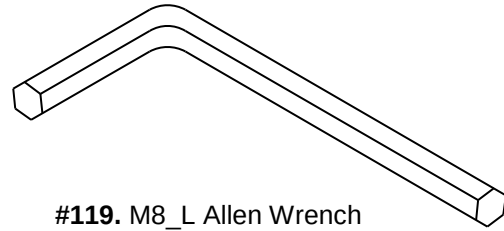


#85. 4mm × 15mm
Sheet Metal Screw
(3 pcs)

ASSEMBLY TOOLS



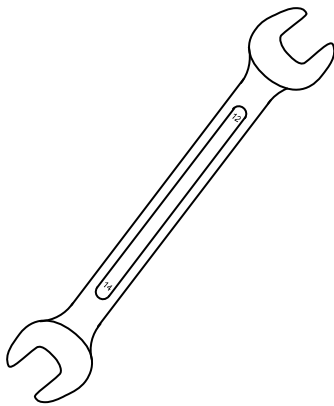
#118. Phillips Head Screw Driver



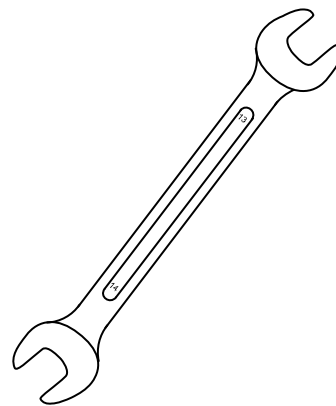
#119. M8_L Allen Wrench



#120. M6_L Allen Wrench



#117. 12/14mm Wrench



#116. 13/14mm Wrench

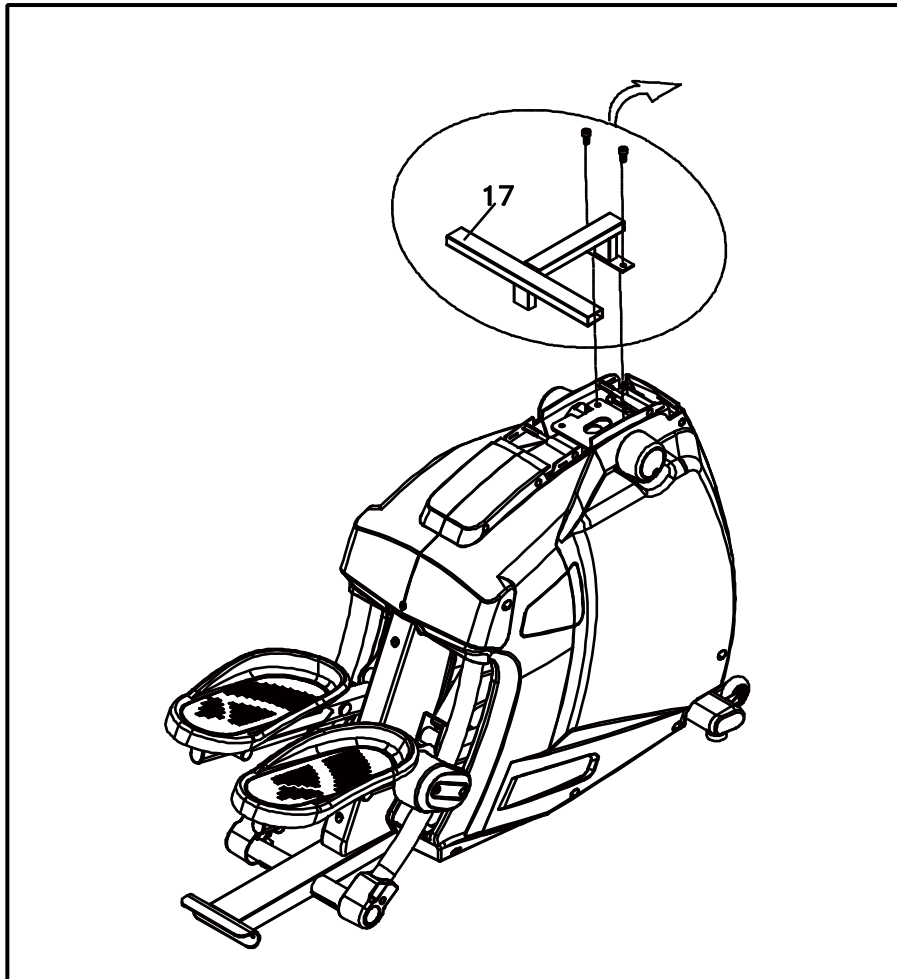
ASSEMBLY INSTRUCTIONS

PRE-ASSEMBLY

1. Using a razor knife (Box Cutter) cut the outside, bottom, edge of box along the dotted Line. Lift Box over the unit and unpack.
2. Carefully remove all parts from carton and inspect for any damage or missing parts. If damaged parts are found, or parts are missing, contact your dealer immediately.
3. Locate the hardware package. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) are the item number from the assembly drawing for reference.

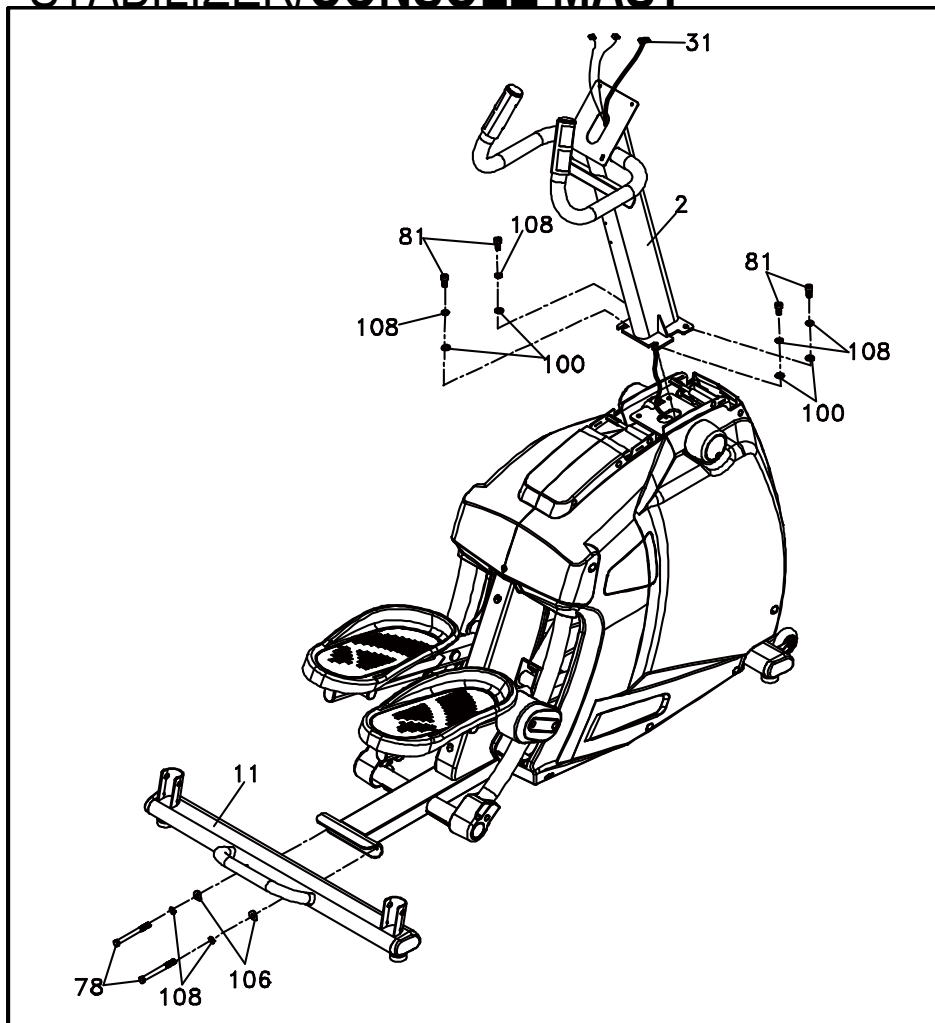
REMOVE SHIPPING

STABILIZER



1. Use L Allen Wrench (No.119) to remove two 3/8"x3/4" Socket Head
2. Cap Bolts that hold the protective Side Back (No.17) onto the mounting plate on the Main Frame. Discard the bolts and set the Side Back (17) aside.

1 STABILIZER/CONSOLE MAST

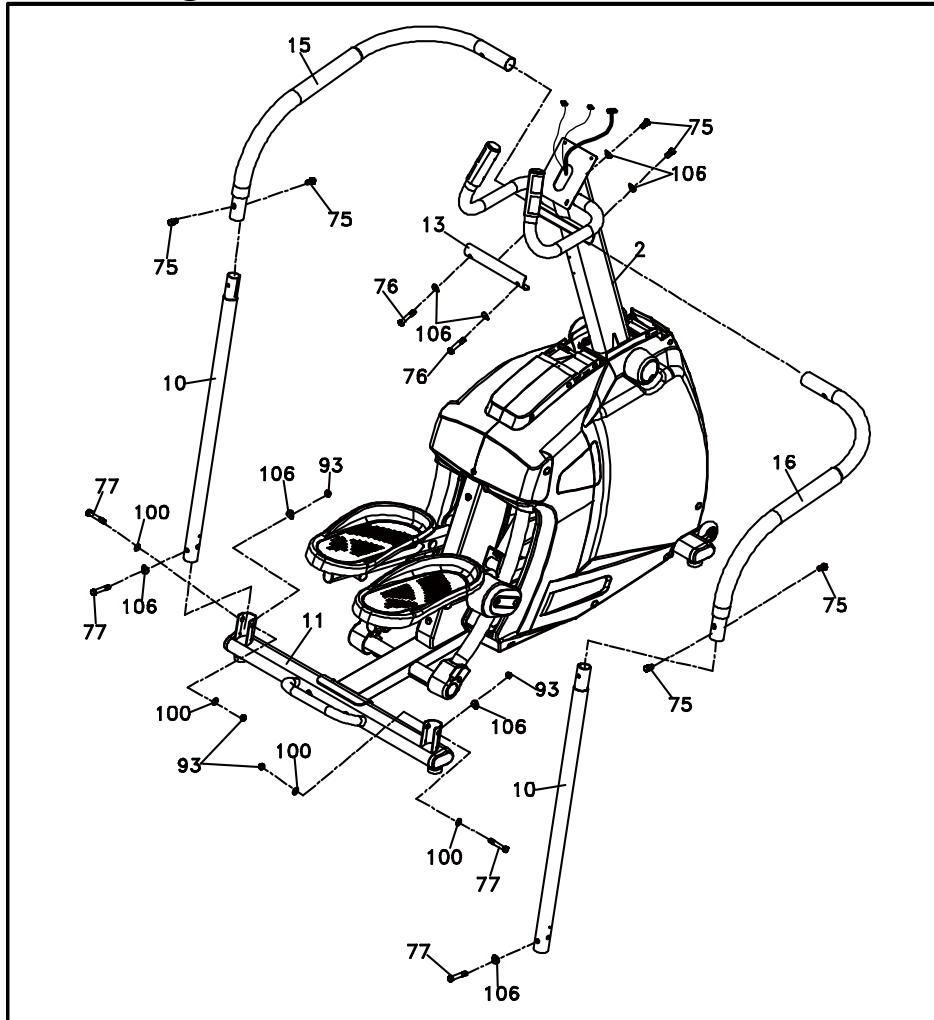


HARDWARE STEP 1

108. 3/8" Split Washer
(6 pcs)
#106. 3/8" Curved Washer
(2 pcs)
#100. 3/8" Flat Washer
(4 pcs)
#78. 3/8" × 3-3/4"
Hex Head Bolt (2 pcs)
#81. 3/8"X3/4" Socket
Head Cap Bolt (4 pcs)

1. Attach Rear Stabilizer with Handle (11) to mounting plate on the main frame and secure with two Hex Head Bolts (78), two Spring Washers (108) and Curved Washers (106) by using Wrench (116).
2. Pull the tie on the Console Mast (2) to have Computer Cable (31) and Handpulse Cables (35) go through the mast from bottom and out of the mast on top. Secure the Console Mast (2) on the mounting plate on the Main Frame with four Socket Head Cap Bolts (81), four Spring Washers (108) and four Flat Washers (100) by using L Allen Wrench (119).

2 HANDGRIP



HARDWARE STEP 2

#75. 3/8"×3/4" Button Head Socket Bolt (6 pcs)
 #76. 3/8" ×2" Button Head Socket Bolt (2 pcs)
 #100. 3/8" ×19 ×1.5T Flat Washer (4 pcs)
 #106. 3/8"×23×2.0T Curved Washer (8 pcs)
 #77. 3/8" × 2-1/4" Hex Head Bolt (4pcs)
 #93. 3/8" ×7T Nyloc Nut (4 pcs)

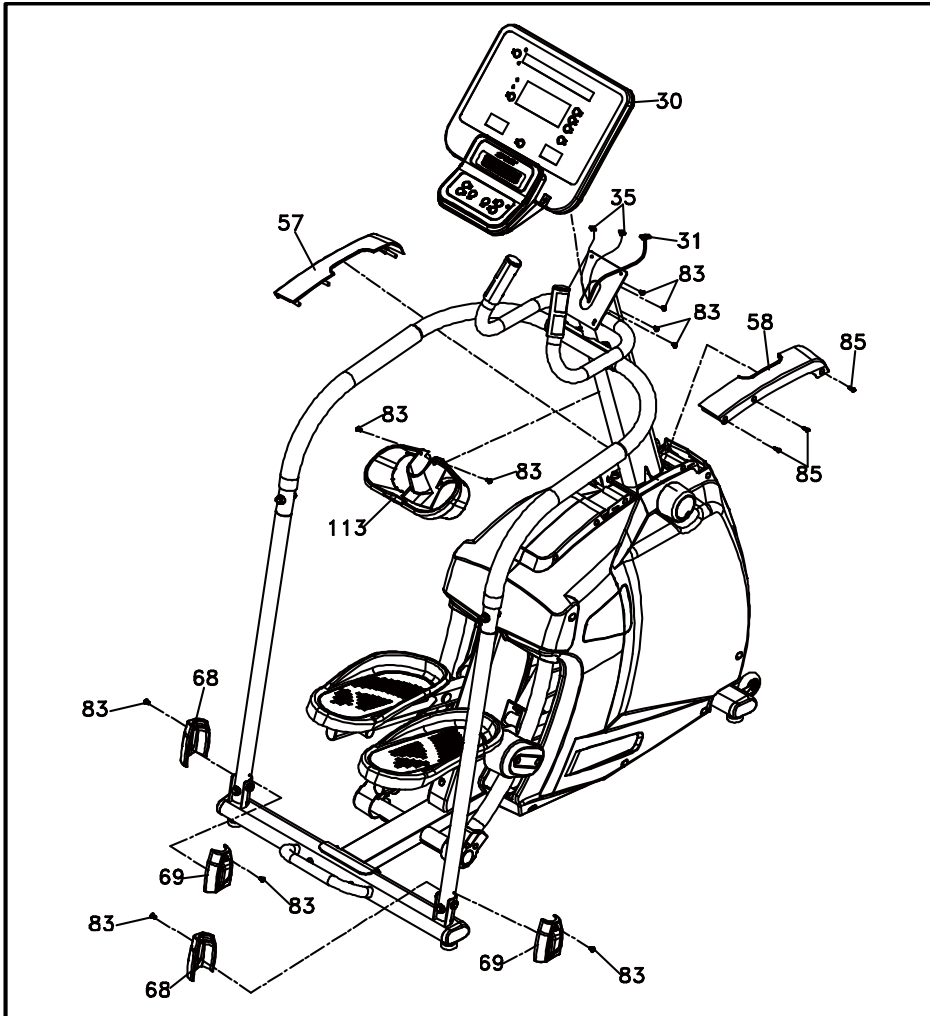
1. Place Upper Left Handlebar (15) (with orientation of 90-degree bend at front) onto Connecting Plate welded to the Console Mast (2) and secure it with a Hex Head Bolt (75) and a Curved Washer (106) to the Connecting plate (do not tighten completely). Then insert one of Handlebar Connecting Tube (10) to connect with Upper Left Handlebar (15) at the 107-degree-bending end and temporarily with two Button Head Socket Bolts (75) with L Allen Wrench-M6 (120). Then attach the bottom end of Handlebar Connecting Tube (10) to the U-shape mounting at left side of Rear Stabilizer with Handle (11). Use two Hex Head Bolts (77) together with two Flat Washers (100), two Curved Washers (106) and two Nyloc Nuts (No.93) to tighten by using Wrench (116) and Wrench (117). Tighten and secure all other bolts.
2. Repeat process for Upper Right Handlebar (16) and the other Handlebar Connecting Tube (10).
3. Attach Handlebar Connecting Plate (13) to Upper Handlebars (15 & 16). Secure with two Button Head Socket Bolts (76) and two Curved Washers (106) by using Wrench (116). Tighten all hardware listed in this step.

3

HANDGRIP/COVERS

HARDWARE STEP 3

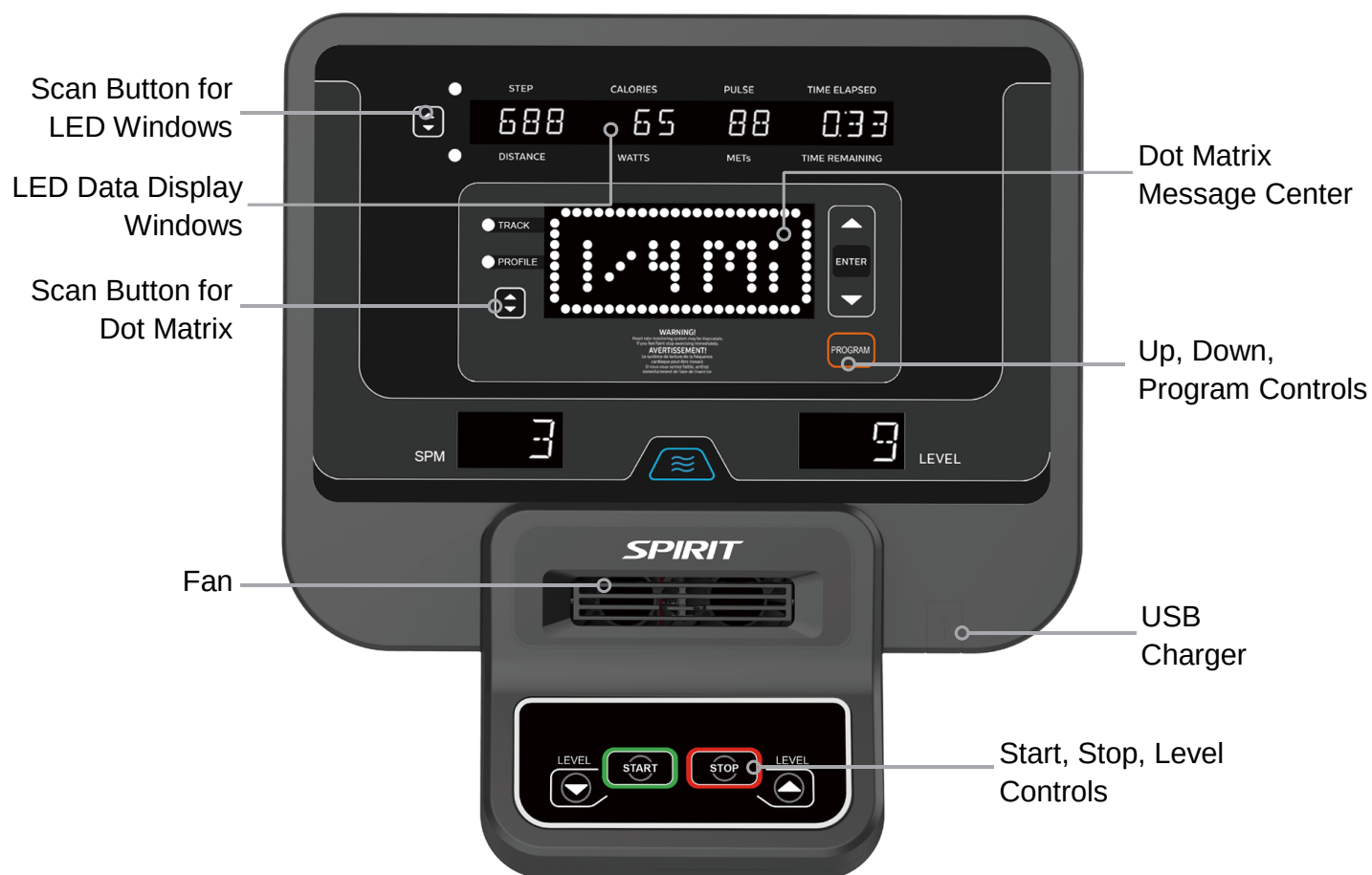
#83. M5 × 10mm
Phillips Head Screw
(10 pcs)
#85. 4MM × 15MM
Sheet Metal Screw
(3 pcs)



1. Match Left Console Mast Cover (57) with Right Console Mast Cover (58) on top of left and right Chain Covers and around the Console Mast (2) and secure with three Sheet Metal Screws (85) by using the Phillips Head Screw Driver (118).
2. Match Left and Right Handlebar Caps (68,69) together on the U-shape mounting at left side of Rear Stabilizer with Handle (11) and use the Phillips Head Screw Driver (118) to tighten two Phillips Head Screws (83) and secure. Match Left and Right Handlebar Caps (68, 69) together on U-shape mounting at right side of Rear Stabilizer with Handle (No.11) and repeat the process above.
3. Take off the tie from the Computer Cable (31) and plug it into the Console Assembly (30) together with the two Handpulse Assembly Cables (35). Place the Console (30) on the mounting plat of the Console Mast (2) and secure with four Phillips Head Screws (83) by using the Phillips Head Screw Driver (118).
4. Secure the Water Bottle Holder (113) on the Console Mast (2) with two Phillips Head Screws (83) by using the Phillips Head Screw Driver (118).

OPERATION OF YOUR FITNESS STEPPER

Operation Of Your Console



POWER

When the AC power cord is connected to the Stepper, the console will automatically power up. 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 Dot Matrix Message Center will show the software version (i.e.: VER 1.0). The LED Data Display Window shows the total hours of use and total steps. The odometer will remain displayed for only a few seconds then the console will go to the start up display. The Dot Matrix Message Center display will be scrolling through the different profiles of the programs and will be scrolling the start up message. You may now begin to use the console.

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 Level Up and Down buttons. The Dot Matrix Message Center will show just the bottom row lit. As you increase the workload more rows will light indicating a harder workout. The Stepper will get harder to pedal as the rows increase. The Dot Matrix Message Center 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 20 levels of resistance available for plenty of variety. The first 5 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 difficult and are good for short interval peaks and elite athletic training.

Basic Information

The Dot Matrix Message Center, or Profile Window, will display the workout Profile. The LED Data Display Window displays pertinent exercise data. There is a Strides Per Minute window for pedal speed and a Level window indicating machine resistance.

The LED Data Display Window will initially be displaying Steps, Calories, Pulse and Time Elapsed information. When the Up/Down Scan key is pressed the next set of information will appear: Vertical Distance, Watts, METs and Time Remaining. Pressing the Up/Down Scan button, the Scan mode is activated and the LED Data Display Window will show each set of data for four seconds then switch to the next set of data in a continuous loop. Pressing the Up/Down Scan button again will bring you back to the beginning.

The Stop key 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 key is pressed twice during a workout, the program will end and the console will return to the start-up screen. If the Stop key button is held down for 3 seconds, the console will perform a complete Reset. During data entry for a program the Stop key performs a Previous Screen function. This allows you to go back one step in the programming each time you press the Stop key button.

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

1/4 MILE / 0.4 KM TRACK

The 1/4-mile track (0.4 km) will be displayed around the dot matrix window. The flashing dot indicates your progress. In the center of the track there is a lap counter for reference.

HEART RATE WINDOW

The Pulse (Heart Rate) window will display your current heart rate in beats per minute during the workout. You must use both left and right stainless steel sensors to pick up your pulse. Pulse values are displayed anytime the computer is receiving a Grip Pulse signal. You may use the Grip Pulse feature while in Heart Rate Control. The STEPPER will also pick up wireless heart rate transmitters that are Polar compatible, including coded transmissions.

TO TURN STEPPER OFF

The display will automatically turn off (go to sleep) after 30 minutes of inactivity. This function is called sleep mode. In sleep mode, the Stepper will power down most everything except for a minimum of circuitry for detecting button presses and the safety button so it will start up again if these are activated. There is only a tiny amount of current used in sleep mode (about the same as your TV when it is turned off) and it is perfectly fine to leave the main power switch on in sleep mode. Of course you may also remove the safety button or turn off the main power switch to power down the Stepper.

PROGRAMMABLE FEATURES

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. 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 the Program button to choose a program, then the Enter key to select it) 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 button. 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 Dot Matrix Message Center. 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.

1. Using the Program button select Manual then press the Enter button.
2. The Dot Matrix Message Center will ask you to enter your Age. You may enter your Age, using the Up and Down buttons or the numeric button pad, then press the Enter button 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 buttons, or the numeric button pad, then press Enter to continue.
4. The next setting is Time. You may adjust the Time and press Enter to continue.
5. Now you are finished editing the settings and can begin your workout by pressing the Start button. You can also go back and modify your settings by pressing the Enter button.

NOTE: At any time during the editing of data you can press the Stop button to go back one level, or screen.

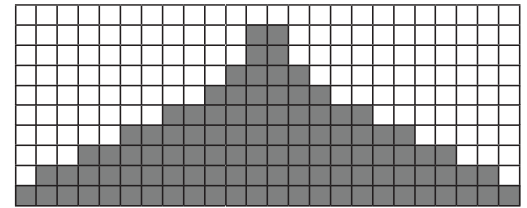
6. The program automatically starts you at level one. This is the easiest level and it is a good idea to stay at level one for a while to warm up. If you want to increase the work load at any time press the Up button; the Down button will decrease the workload.
7. During the Manual program you will be able to scroll through the data in the LED Data Display Window by pressing the adjacent Up/Down Scan button. You may also switch between the profile display and a quarter mile track by pressing the Up/Down Scan button adjacent to the LED Data Display Window.
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 program by pressing the Program button and selecting Custom, then following the instructions in the Dot Matrix Message Center.

PRESET PROGRAMS

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

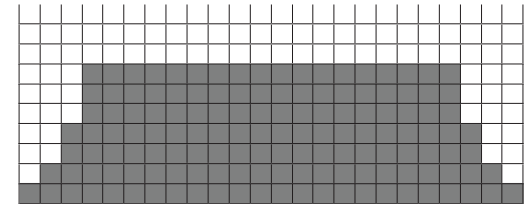
HILL

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.



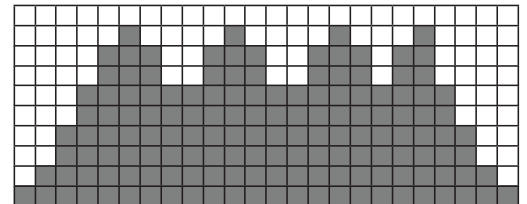
FATBURN

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.



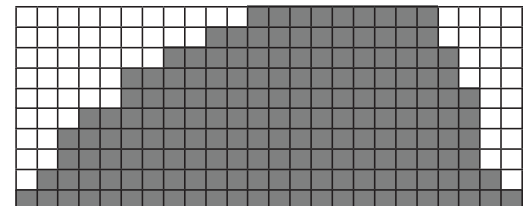
CARDIO

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.



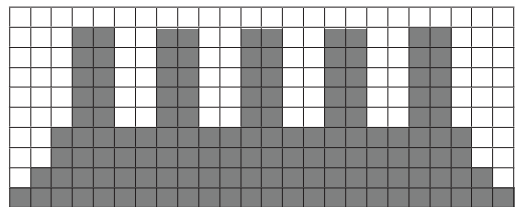
STRENGTH

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



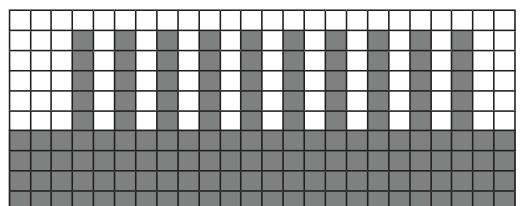
INTERVAL

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



HIIT

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.



PROGRAMMING PRESET PROGRAMS

1. Using the Program button select your desired program then press the Enter button.
2. The Dot Matrix Message Center will ask you to enter your Age. You may adjust the age setting, using the Up and Down buttons, then press the Enter button 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 buttons, 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 button. You can also go back and modify your settings by pressing the Stop button 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 button. 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 Dot Matrix 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 LED Data Display Window by pressing the Up/Down button next to the LED Data Display Window.
9. When the program ends the LED Data Display Window will show a summary of your workout. The summary will be displayed for a short time then the console will return to the start-up display.

CUSTOM USER-DEFINED PROGRAMS

The Custom Program allows you to build and save a custom program. 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. The Custom Program allows you to further personalize it by adding your facility name.

1. Press the Custom button. The Dot Matrix Message Center will show a welcome message; if you had previously saved a program the message will contain the name you gave it. Then press the Enter button to begin programming.
2. When you press Enter, the Dot Matrix Message Center will show "Name – A", if there is no name saved. If the name "Custom Workout" had been previously saved the Message Window will show "Name – Custom Workout" and the C in Custom will be blinking. If there is a name saved you can change it or you may press the Stop button to keep the name and continue to the next step. If you want to enter a name use the Up and/or the Down button 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 button to save the name and continue to the next step.
3. The Dot Matrix Message Center will ask you to enter your Age. You may enter your Age, using the Up and Down buttons then press the Enter button 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 buttons then press enter to continue.
5. Next is Time. You may adjust the Time and press Enter to continue.
6. Now you are asked to adjust the Max Level. This is the peak exertion level you will experience during the program. Adjust the level and then press Enter.
7. Now the first column will be blinking and you are asked to adjust the level for the first segment of the workout. When you finish adjusting the first segment, or if you don't want to change, then press Enter to continue to the next segment.
8. The next segment will show the same level as the previously adjusted segment. Repeat the same process as the last segment then press Enter. Continue this process until all twenty segments have been set.
9. The Dot Matrix Message Center will then tell you to press Enter to save the program. After saving the program the Dot Matrix 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.
10. If you want to increase or decrease the workload at any time during the program press the Up or Down button. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
11. During the User 1 or User 2 program you will be able to scroll through the data in the Dot Matrix Message Center by pressing the adjacent Up/Down buttons, switch between the profile display and a quarter mile track by pressing the Up/Down buttons adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate Auto-Pilot mode. See Heart Rate section for details of this feature).

HIIT PROGRAM

1. Using the Program button choose the HIIT program then press Enter.
2. The Dot Matrix 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 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 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.
5. 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.
6. 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.
7. Next is entering the Interval time. The LED Data Display Window shows: Sprint Time:30 and Rest Time:30. The Sprint Time will be blinking. You may use the Up and Down 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 up and down keys and press Enter.
8. The LED Data Display 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.
9. The Dot Matrix Message Center in the HIIT program is a speed indication display, not a power or resistance display. During the Sprint the Dot Matrix Message Center 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.
10. At the end of the last Sprint there is a 2-minute cool-down period. You can bypass this by pressing the Stop key and the workout summary will be displayed.

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 85% is the zone to stay in for maximum benefit.

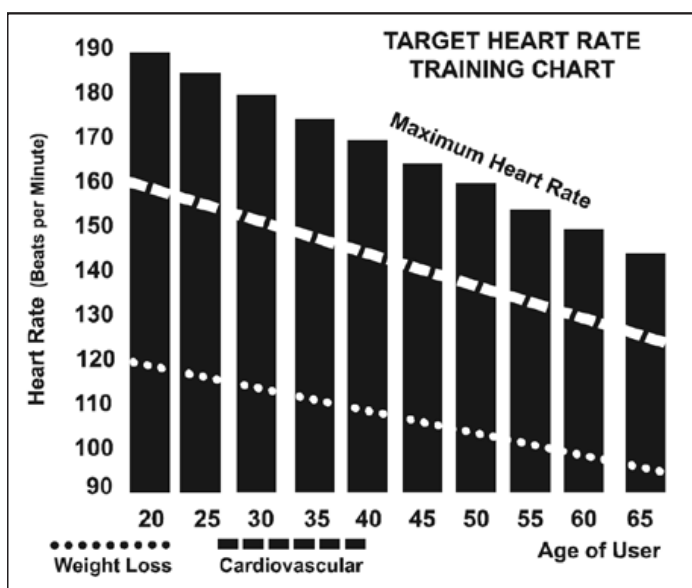
For someone who is 40 years old their target heart rate zone is calculated:

$$220 - 40 = 180 \text{ (maximum heart rate)}$$

$$180 \times .6 = 108 \text{ beats per minute (60\% of maximum)}$$

$$180 \times .85 = 153 \text{ beats per minute (80\% of maximum)}$$

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 85% 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 Spirit Fitness machines you may use the heart rate monitor feature without using the Heart Rate program. However, when using the heart rate monitor feature in conjunction with the Heart Rate programs, the machine will automatically adjust speed or incline to maintain the desired heart rate.

HEART RATE PROGRAM OPERATION

To start the HR program follow the instructions below.

1. Using the Program button choose the HR program (65% or 80%) then press the Enter key.
2. The Dot Matrix Message Center will ask you to enter your Age. You may enter your Age, using the Up/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/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 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 Level 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.

RATE OF PERCEIVED EXERTION

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

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

The scale is as follows:

Rating Perception of Effort

6 Minimal

7 Very, very light

8 Very, very light +

9 Very light

10 Very light +

11 Fairly light

12 Comfortable

13 Somewhat hard

14 Somewhat hard +

15 Hard

16 Hard +

17 Very hard

18 Very hard +

19 Very, very hard

20 Maximal

You can get an approximate heart rate level for each rating by simply adding a zero to each rating. For example a rating of 12 will result in an approximate heart rate of 120 beats per minute. Your RPE will vary depending upon 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 (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 stepper 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 for interference which may cause erratic heart rate:

1. Microwave ovens, TV's, small appliances, etc.
2. Fluorescent lights.
3. Some household security systems.
4. Electric 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.
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

Wipe down all areas in the sweat path with a damp cloth after each workout. If a squeak, thump, clicking or rough feeling develops the main cause is most likely one of two reasons:

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. It is important to note that 90% of calls to the service department for noise issues can be traced to loose hardware.
2. The crank arm nut needs to be retightened. 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.

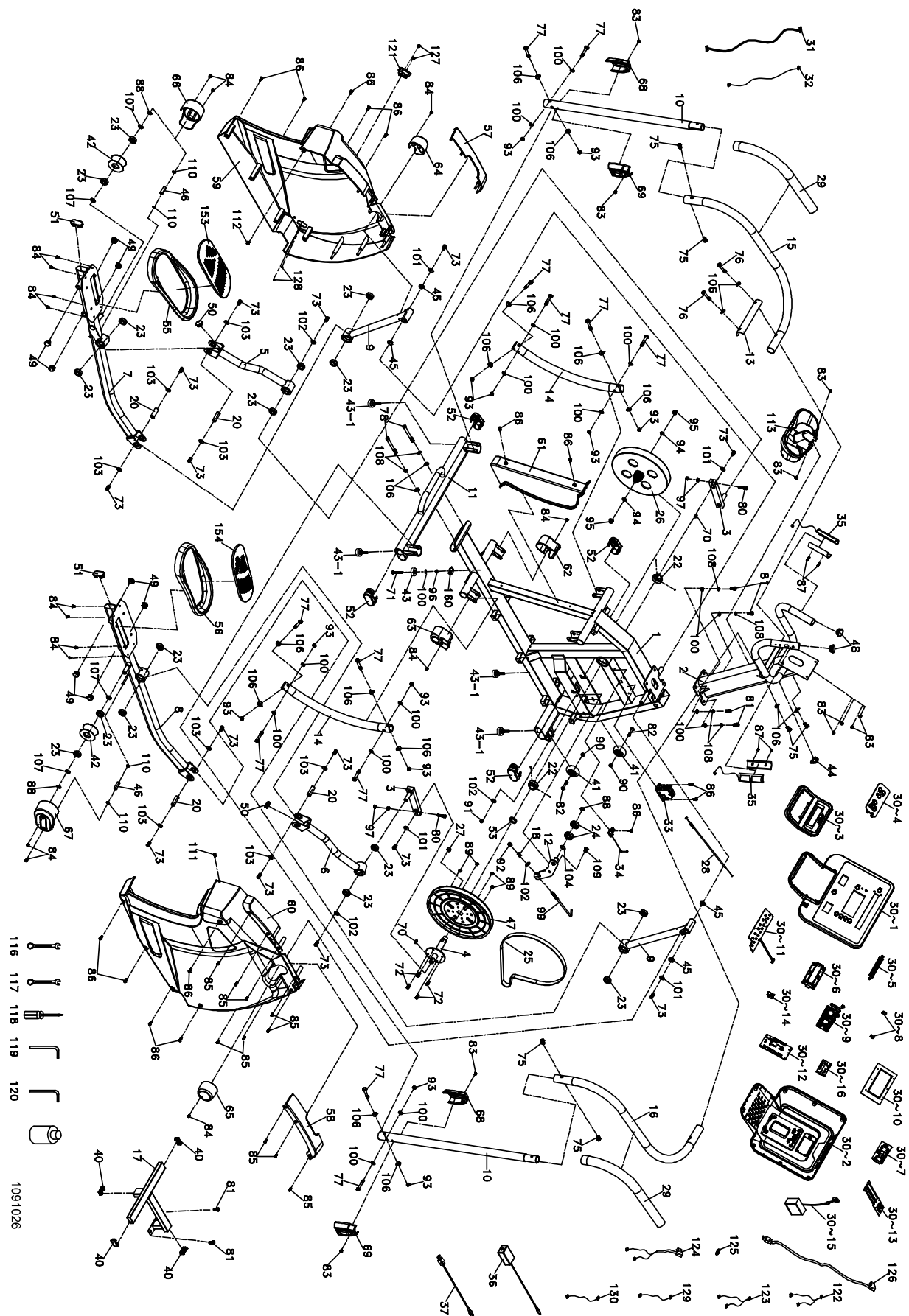
1. Replace defective components immediately and/or keep the equipment out of use until repair.
2. The components which are most susceptible to wear: Belt, Shaft, Bearing, Idler, Pedal.

ENGINEERING MODE

To enter the Maintenance Mode, pedal the Stepper 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. **Function**
 - Units - Sets the display to read out in Imperial (miles, pounds, feet, etc.) or Metric (kilometers, kilograms, meters, etc.) display measurements
 - Pause mode (have five minutes)
 - Odometer Reset (Resets the odometer)
 - Sleep mode
 - Beep sound (Control Beep)
 - CAB Protocol or CSAFE Protocol
4. **Service**
 - Motor test
 - Sensor test (Test the speed sensor function)
 - Csafe test
5. **Exit**

EXPLODED VIEW DIAGRAM



PARTS LIST

No.	Part Description	Q'ty
1	Main Frame	1
2	Console Mast	1
3	Crank Arm	2
4	Crank Axle	1
5	Linked Assembly(L)	1
6	Linked Assembly(R)	1
7	Connecting Arm (L)	1
8	Connecting Arm (R)	1
9	Swing Assembly	2
10	Handgrip Connecting Tube	2
11	Rear Stabilizer with handle	1
12	Idler Wheel Assembly	1
13	Handgrip Connecting Plate	1
14	Curved Rail Tube	2
15	Left Handgrip(Upper)	1
16	Right Handgrip(Upper)	1
17	Side Back	1
18	Rod End Sleeve	1
20	Rod End Shaft	4
22	6005-2RS/B10+2M5_Bearing	2
23	6003_Bearing	16
24	6203_Bearing	2
25	Drive Belt	1
26	Flywheel	1
27	Magnet	1
28	Steel Cable	1
29	Handgrip Foam	2
30	Console Assembly	1
30~1	Console Top Cover	1
30~2	Console Bottom Cover	1
30~3	Console Inner Cover	1
30~4	Console Key Board	1
30~5	Deflector Fan Grill	1
30~6	Wind Duct	1
30~7	End Cap	1
30~8	Fan Grill Anchor	2
30~9	500m/m_Fan Assembly	1
30~10	Console Display Board	1
30~11	Main Key Board	1
30~12	Interface Board	1
30~13	Bluetooth	1
30~14	USB charging module	1
30~15	W/Receiver, HR	1
30~16	CASFE Board	1
31	1200m/m_Computer Cable	1

No.	Part Description	Q'ty
32	100m/m_Power Cord	1
33	Gear Motor	1
34	200m/m_Reed Switch	1
35	850m/m_Handpulse Assembly	2
36	Power Adaptor	1
37	Transformer Power Cord (Optional)	1
40	20 × 40L_Square End Cap	4
41	Ø65_Transportation Wheel	2
42	Ø72_Slide Wheel , Urethane	2
43	Ø35 × 10_Rubber Foot	1
43-1	Rubber Foot Assembly	4
44	Bolt Access Cap	1
45	WFM-1719-12_Bushing	4
46	Ø15 × Ø8.6 × 38.5L_Sleeve	2
47	Ø330_Drive Pulley	1
48	Ø32(1.8T)_Button Head Plug	2
49	Ø25.4 × 2T_Round Cap	8
50	Ø32 × 1.8T_Round Cap	2
51	Ø30 × 60_Oval End Cap	2
52	Ø40 × Ø80_Oval End Cap	4
53	Spacer Bushing	1
55	Pedal (L)	1
56	Pedal (R)	1
57	Console Mast Cover (L)	1
58	Console Mast Cover (R)	1
59	Chain Cover (L)	1
60	Chain Cover (R)	1
61	Rear Shroud	1
62	Stabilizer Cover (L)	1
63	Stabilizer Cover (R)	1
64	Handle Bar Cover (L)	1
65	Handle Bar Cover (R)	1
66	Slide Wheel Cover (L)	1
67	Slide Wheel Cover (R)	1
68	Left Handgrip Cap	2
69	Right Handgrip Cap	2
70	Woodruff Key	2
71	3/8" × 2" _Flat Head Socket Bolt	1
72	1/4" × UNC20 × 3/4" _Hex Head Bolt	4
73	5/16" × UNC18 × 3/4" _Hex Head Bolt	14
75	3/8" × 3/4" _Button Head Socket Bolt	6
76	3/8" × UNC16 × 2" _Button Head Socket Bolt	2
77	3/8" × 2-1/4" _Hex Head Bolt	12
78	3/8" × 3-3/4" _Hex Head Bolt	2
80	M8 × 35m/m _Socket Head Cap Bolt	2
81	3/8" × 3/4" _Socket Head Cap Bolt	6
82	5/16" × UNC18 × 1-3/4" _Button Head Socket Bolt	2
83	M5 × 10m/m _Phillips Head Screw	10

No.	Part Description	Q'ty
84	M5 × 10m/m_Phillips Head Screw	16
85	Ø4 × 15L_Sheet Metal Screw	10
86	5 × 19m/m_Tapping Screw	15
87	3 × 20m/m_Tapping Screw	4
88	Ø17_C Ring	3
89	1/4" × 8T_Nyloc Nut	4
90	5/16" × 7T_Nyloc Nut	2
91	M8 × 7T_Nyloc Nut	1
92	M8 × 9T_Nyloc Nut	1
93	3/8" × 7T_Nyloc Nut	12
94	3/8" × UNF26 × 4T_Luck Nut	2
95	3/8" × UNF26 × 11T_Nut	2
96	3/8" × 7T_Luck Nut	1
97	M8 × 6.3T_Luck Nut	4
99	M8 × 170m/m_J Bolt	1
100	Ø3/8" × Ø19 × 1.5T_Flat Washer	17
101	Ø8.5 × Ø26 × 2.0T_Flat Washer	4
102	Ø5/16" × Ø23 × 1.5T_Flat Washer	4
103	Ø5/16" × Ø23 × 3T_Flat Washer	8
104	Ø17 × Ø23.5 × 1.0T_Flat Washer	1
106	Ø3/8" × 23 × 2.0T_Curved Washer	18
107	Ø17_Wave Washer	4
108	Ø10 × 2T_Spring Washer	6
109	M8 × 20m/m_Carriage Bolt	1
110	7 × 14 × 0.8T_E-Clip	4
111	5 × 16m/m_Tapping Screw	1
112	M5_Speed Nut Clip	1
113	Beverage Holder	1
116	13/14m/m_Wrench	1
117	12/14m/m_Wrench	1
118	Phillips Head Screw Driver	1
119	L Allen Wrench	1
120	L Allen Wrench-M6	1
121	AC Electronic Module	1
122	100m/m_Connecting Wire (White)	1
123	100m/m_Connecting Wire (Black)	1
124	Power Cord(Connection socket)	1
125	TV Adapter	1
126	Power Cord	1
127	M4 × 12m/m_Phillips Head Screw	2
128	M4 × 5T_Nyloc Nut	2
129	80m/m_Connecting Wire (White)	1
130	80m/m_Connecting Wire (Black)	1
153	Pedal Foam (L)	1
154	Pedal Foam (R)	1
160	Foot Pad Adjusting Plate	1