



Strong. Smart. Beautiful.

# R1X BIKE SERVICE MANUAL



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### 1.1 SERIAL NUMBER LOCATION

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## CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

### 2.1 LEGAL DISCLAIMER

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### 2.2 BEFORE GETTING STARTED

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The Matrix R1x Bike is intended for commercial use. To ensure your safety and protect the equipment, read all instructions before operating the bike.

#### CHOOSING A SITE

The site should be well lit and well ventilated. Locate the Matrix R1x Bike on a structurally solid and flat surface. The bike should have a clearance of 20" on one side and behind the unit, and 12" on the other side from the wall or other equipment. This zone is to allow easy access to the bike and gives the user an easy exit path from the machine. If the site has a heavy plush carpet, to protect the carpeting and machinery, you should place a rigid plastic base under the unit.

Please do not place the Matrix R1x Bike in an area of high humidity, such as the vicinity of a steam room, indoor pool, or sauna. Exposure to intensive water vapor or chlorine could adversely affect the electronics, as well as other parts of the machine.

### 2.3 READ AND SAVE THESE INSTRUCTIONS

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To ensure your safety and protect the equipment, read all instructions before operating the MATRIX R1x Bike.

To ensure proper use and safety on the Matrix R1x Bike, make sure that all users read this manual. Remind the users that before undertaking any fitness program, they should obtain complete physical examinations from their physicians. If, at any time while exercising, the user experiences dizziness, pain, or shortness of breath, nausea or feels faint, he or she must stop immediately.

\* This bike is only to be used for its intended purpose described in this manual. Do not use attachments that have not been recommended by Matrix.

\* Never drop or insert objects into any opening. Keep hands away from moving parts. If the item cannot be reached, contact a Matrix authorized dealer for assistance.

\* Never operate the unit if it is damaged, not working properly, when it has been dropped, or has been dropped in water.

\* Keep hands and feet clear at all times from moving parts to avoid injury.

\* Do not use this product outdoors, near swimming pools or in areas of high humidity.

\* Do not operate where aerosol (spray) products are being used or when oxygen is being administered.

\* Do not use this product in bare feet. Do not wear shoes with heels, leather soles, cleats, or spikes while exercising.

\* Do not remove the side covers. Service should only be done by an authorized service technician.

\* Close supervision is necessary when used near children, invalids, or disabled people.

\* When the bike is in use, young children and pets should be kept at least 3 meters / 10 feet away.

\* Assemble and operate the Matrix R1x Bike on a solid, level surface.

\* Never face backward while using the Matrix R1x Bike.

\* Use the stationary handlebars when mounting or dismounting the bike.

\* Do not wear clothing that might catch on any moving parts of this bike.

**CAUTION!** If you experience chest pains, nausea, dizziness, or shortness of breath, stop exercising immediately and consult your physician before continuing.

**CAUTION!** Any changes of modifications to this equipment could void the product warranty.

## CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

### 2.4 ELECTRICAL REQUIREMENTS

#### SELF POWERED FEATURES:

On the Matrix R1x Bike, the users pedaling generates the power to initialize and display information on the console. A minimum of 30 RPMs are required to start and maintain enough power to keep the console functional. If the minimum RPM is not maintained, the console will begin to shut down. The bike is able to extend the time to show a display on the console if the bike is equipped with an optional battery (Figure A). The bike saves its battery charge by moving into a shutdown mode whenever PEDAL FASTER appears on the display.

#### SYMPTOMS OF A LOW BATTERY

If the bike has not been used for an extended period of time, the battery may require recharging. Symptoms of a low battery include:

- 1) A "LOW BATTERY" message will appear on the display.
- 2) Backlighting on the LCD display will be disabled.
- 3) No one has used the bike for an extended period of time.

If the battery must be recharged, use the optional power adaptor to charge the unit. The charger should be connected to the bike for a minimum of eight hours to ensure a thorough charge. If "LOW BATTERY" still appears on the display after full charging, the battery could be expired and should be replaced.

#### REPLACING THE BATTERY

The unit's battery is built to last for a long time. However, if you feel the battery may need replacing, it is located behind a plate on the back side of the console (Figure B).

**CAUTION:** The battery stored inside the console contains hazardous materials to the environment. Proper disposal of the battery is required by law.



FIGURE A

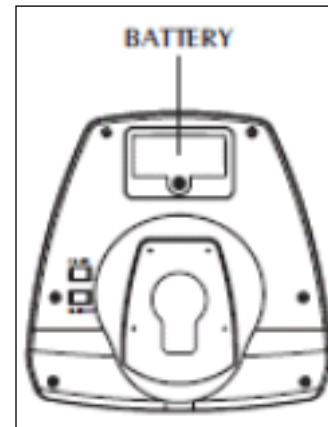


FIGURE B



## CHAPTER 3: PREVENTATIVE MAINTENANCE

### 3.1 RECOMMENDED CLEANING TIPS

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Preventative maintenance and daily cleaning will prolong the life and look of your MATRIX R1x Bike

Please read and follow these tips.

- Position the equipment away from direct sunlight. The intense UV light can cause discoloration on plastics.
- Locate your equipment in an area with cool temperatures and low humidity.
- Clean with a soft 100% cotton cloth.
- Clean with soap and water or other non-ammonia based all purpose cleaners.
- Wipe pedals, console, heart rate grips, and handlebars clean after each use.
- Do not pour liquids directly onto your equipment. This can cause damage to the equipment and in some cases electrocution.
- Adjust leveling feet when equipment wobbles or rocks.
- Maintain a clean area around the equipment, free from dust and dirt.

### 3.2 CHECK FOR DAMAGED PARTS

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DO NOT use any equipment that is damaged or has worn or broken parts. Use only replacement parts supplied by Matrix Fitness Systems.

**MAINTAIN LABELS AND NAMEPLATES.** Do not remove labels for any reason. They contain important information. If unreadable or missing, contact Matrix Fitness Systems for a replacement at 866-693-4863 or [www.matrixfitness.com](http://www.matrixfitness.com).

**MAINTAIN ALL EQUIPMENT.** Preventative maintenance is the key to smoothly operating equipment. Equipment needs to be inspected at regular intervals. Defective components must be kept out of use until they are repaired. Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so. Matrix Fitness Systems will provide service and maintenance training at our corporate facility upon request or in the field if proper arrangements are made.

## CHAPTER 3: PREVENTATIVE MAINTENANCE

### 3.3 CARE AND MAINTENANCE INSTRUCTIONS

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In order to maximize life span, and minimize down time, all MATRIX equipment requires regular cleaning, and maintenance items performed on a scheduled basis. This section contains detailed instructions on how to perform these items and the frequency of which they should be done. Some basic tools and supplies will be necessary to perform these tasks which include (but may not be limited to):

- \* Metric Allen wrenches
- \* #2 Phillips head screwdriver
- \* Adjustable wrench
- \* Torque wrench (capability to read foot lbs and inch lbs)
- \* Lint free cleaning cloths
- \* Teflon based spray lubricant such as "Super Lube" or other Matrix approved products.
- \* Mild water soluble detergent such as "Simple Green" or other Matrix approved products
- \* Vacuum cleaner with an extendable hose and crevasse tool attachment.

You may periodically see addendums to this document, as the Matrix Technical Support Team identifies items that require specific attention, the latest version will always be available on the Matrix web site at [www.matrixfitness.com](http://www.matrixfitness.com).

#### DAILY MAINTENANCE ITEMS

- 1) Look and listen for loose fasteners, unusual noises, and any other indications that the equipment may be in need of service.
- 2) Clean the bike before and after each use, including:
  - a. Use a damp, soft cloth with water or mild liquid detergent to clean all exposed surfaces. DO NOT use ammonia, chlorine, or any acid based cleaners.
  - b. Keep the console display free of fingerprints and salt build up caused by sweat.
  - c. Frequently vacuum the floor beneath the unit to prevent the accumulation of dust and dirt which can affect the smooth operation of the unit.
  - d. Clean the grooves on the foot pedals.

#### MONTHLY MAINTENANCE ITEMS

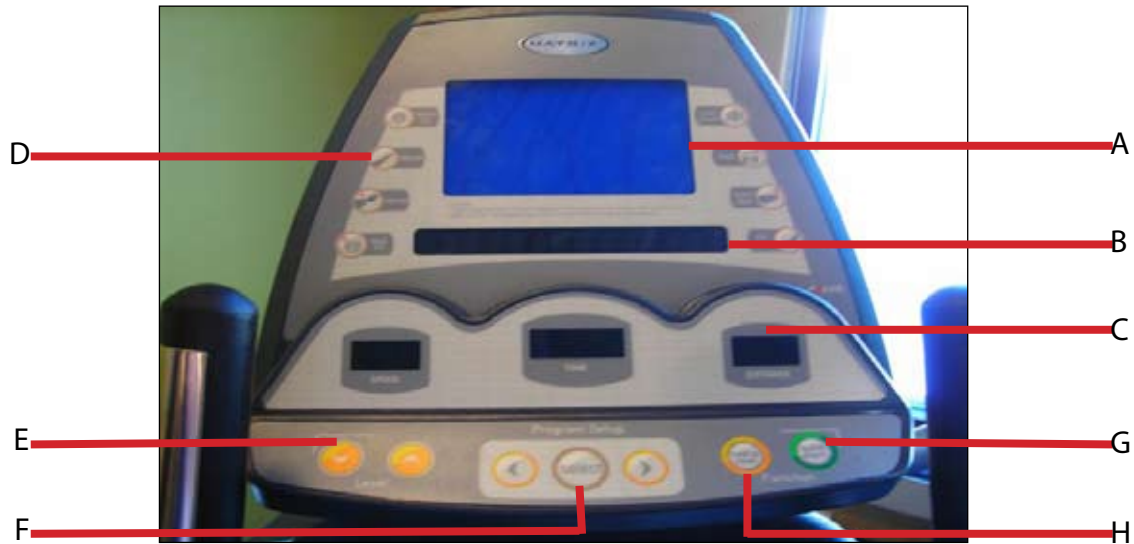
- 1) Inspect the console, seat, pedals, and shrouds for damage.
- 2) Tighten the pedals onto their respective cranks using a 15 mm wrench.
- 3) Adjust leveling feet if the equipment rocks or wobbles.

#### QUARTERLY MAINTENANCE ITEMS

- 1) Remove the front shrouds and check belts for damage, alignment, and proper tension.

## CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

### 4.1 CONSOLE DESCRIPTION



**A. WORKOUT PROFILE WINDOW:**

During a workout, this window displays shapes, made of triangle columns of light, which represent the levels of intensity in a workout in progress. The height of the furthest column is proportional to the current level of the intensity.

**B. INSTRUCTION CENTER:**

This window displays step by step instructions for setting up a workout.

**C. INFORMATIONAL DISPLAY:**

During a workout, three sets of numbers, including Speed, Time, and Distance, display statistics about the progress of the workout.

**D. PROGRAM PLUS KEYS:**

Press any program key to select one of the workouts. The program keys with a symbol of plus '+' include additional workout options. Press these keys repeatedly for similar workout options.

**E. LEVEL ARROW KEYS:**

During a workout, pressing the UP or DOWN ARROW can adjust intensity levels.

**F. RIGHT / LEFT ARROW KEYS:**

A pair of RIGHT and LEFT ARROWS keys are located on the side of SELECT. Use the arrows when setting up a workout to change workout parameters displayed on the LCD console, such as length of workout, weight, age, heart rate, and intensity level. In addition, the pair of RIGHT and LEFT ARROW keys are corresponding to the arrows in the LCD display.

**G. QUICK START:**

Press QUICK START to begin your workout immediately, without having to select a workout program.

**H. HOLD TO RESET:**

If you need to reset the console during your workout, you can do so by holding down the HOLD TO RESET key for 3 seconds, or until the display resets.

## CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

### 4.2 WORKOUT OVERVIEW

PROGRAM NAME	DESCRIPTION	DEFAULT TIME	PROMPT INPUT
QUICK START	Quick Start is the fastest way to begin exercising and bypasses the setup prompts. After pressing the QUICK START key, a constant level workout begins.	N/A	N/A
WARM UP	Warm up is a low intensity phase that brings the heart rate into the lower end of the target zone and increases respiration and blood flow to working muscles.	N/A	Time
COOL DOWN	Cool Down is a low intensity phase that allows the body to begin removing lactic fluid, and other exercise by-products, which build up in muscles and contribute to soreness.	N/A	Time
MANUAL	Manual is a constant intensity level unless it is manually changed.	20 MIN	Time, Weight
HILL INTERVAL	Hill Intervals is an efficient workout by alternating work intervals and recovery intervals.	20 MIN	Level, Time, Weight
RANDOM HILL	Random Hill is an interval training workout that occurs in no regular pattern or progression.	20 MIN	Time, Weight
CONSTANT WATTS	Constant Watts is designed to maintain your watts expenditure at a constant level by controlling pedaling resistance and prompting you to pedal at a specified RPM. Watts level may vary above and below your target watts level during this program.	20 MIN	Watts, Time, Weight
RANDOM	Random is a workout of constantly changing intensity levels that occur in no regular pattern or progression.	20 MIN	Level, Time, Weight
TIME GOAL	Time Goal sets exercise duration as the workout goal. Once the objective is met, the workout automatically goes into a cool down phase and ends afterward.	20 MIN	Time, Weight
DISTANCE GOAL	Distance Goal is designed to build endurance to a certain distance. Once the objective is met, the workout automatically goes into a cool down phase and ends afterward.	N/A	Distance, Weight
CALORIES GOAL	Calories Goal is designed to burn a certain number of selected calories. Once the objective is met, the workout automatically goes into a cool down phase and ends afterward.	N/A	Calories, Weight
TARGET HR	Target HR is a higher intensity workout for maintaining a heart rate to achieve maximum exercise results. The user must wear a heart rate chest strap or keep hands on the contact heart rate grips continuously. The program adjusts the intensity level, based on the actual heart rate, to maintain the rate at 80% of the theoretical maximum.	20 MIN	Age, HR, Time, Weight
WEIGHT LOSS	Weight Loss is a low intensity workout for burning the body's fat reserves. The user must wear a heart rate chest strap, or keep hands on the contact heart rate grips continuously. The program adjusts the intensity level, based on the actual heart rate to maintain the rate at 65% of the theoretical maximum.	20 MIN	Age, HR, Time, Weight
FIT TEST	Fit Test measures cardiovascular fitness and can be used to monitor improvements in your endurance.	12 MIN	Gender, Age, Level, Weight

### 4.2 WORKOUT OVERVIEW - CONTINUED

#### WORKOUT TIPS

1. Matrix Fitness strongly recommends seeing your physician for a complete physical examination before beginning any fitness program. Know your physician's recommended heart rate target zone. If at any time while exercising, you experience faintness, dizziness, pain, or shortness of breath, you must stop immediately.
2. It is highly recommended that you always incorporate the warm up and cool down period into your workout. Warm up brings the heart rate into the lower end of the target zone and increases respiration and blood flow to working muscles. Cool down takes time for a user's heart rate to return to resting state after vigorous exercise and reduces the amount of lactic acid in muscle tissue.

#### PAUSE OPTION

On the Matrix R1x Bike, the users pedaling generates the power to initialize and display information on the console. A minimum of 30 RPMs are required to start and maintain enough power to keep the console functional. If the minimum RPM is not maintained, the console will begin to shut down. The bike is able to extend the time to show a display on the console if the bike is equipped with an optional battery. The bike saves its battery charge by moving into a shutdown mode whenever PEDAL FASTER appears on the display.

#### SYMPTOMS OF A LOW BATTERY

If the bike has not been used for an extended period of time, the battery may require recharging. Symptoms of a low battery include:

- 1) A "LOW BATTERY" message will appear on the display.
- 2) Backlighting on the LCD display will be disabled.
- 3) No one has used the bike for an extended period of time.

If the battery must be recharged, use the optional power adaptor to charge the unit. The charger should be connected to the bike for a minimum of eight hours to ensure a thorough charge. If "LOW BATTERY" still appears on the display after full charging, the battery could be expired and should be replaced.

### 4.3 WORKOUT SETUP STEPS

1. Begin to pedal the bike.
2. Use the PROGRAM PLUS keys to enter the program, or use the RIGHT / LEFT ARROW keys to scroll to the desired program. The program name is displayed in the PROMPT AREA.
3. Use the RIGHT / LEFT ARROW keys to scroll to desired parameter values displayed in the PROMPT AREA.
4. Press the SELECT key to confirm each selection. Follow the steps to set up each workout.

#### QUICK START

Press the QUICK START key and the Workout Profile Window will display "3, 2, 1, GO!" The workout begins at the default intensity level, and the workout time counts up from 0 to the maximum workout time.

#### WARM UP

- 1) Press the WARM UP key to enter the program.
- 2) Select Time using the RIGHT / LEFT ARROW keys, and the press SELECT.
- 3) Press START to begin a warm up.

#### COOL DOWN

- 1) Press the COOL DOWN key to enter the program.
- 2) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Press START to begin a cool down.

#### MANUAL

- 1) Press the MANUAL key to enter the program.
- 2) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Press START to begin the workout.

#### HILL INTERVAL

- 1) Repeatedly press the INTERVAL+ key to select Hill Interval and the press SELECT.
- 2) Select Level using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.

### 4.3 WORKOUT SETUP STEPS - CONTINUED

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#### RANDOM HILL

- 1) Repeatedly press the INTERVAL+ key to select Random Hill and then press SELECT.
- 2) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Press START to begin the workout.

#### CONSTANT WATTS

- 1) Repeatedly press the MULTI FX- key to select Constant Watts and then press SELECT.
- 2) Select Watts using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 5) Press START to begin the workout.

#### RANDOM

- 1) Repeatedly press the MULTI FX+ key to select Random, and then press SELECT.
- 2) Select Level using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 5) Press START to begin the workout.

#### TIME GOAL

- 1) Repeatedly press the GOAL+ key to select Time Goal, and then press SELECT.
- 2) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Press START to begin the workout.

#### DISTANCE GOAL

- 1) Repeatedly press the GOAL+ key to select Distance Goal, and then press SELECT.
- 2) Select Calories using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Press START to begin the workout.

#### CALORIES GOAL

- 1) Repeatedly press the GOAL+ key to select Calories Goal, and then press SELECT.
- 2) Select Calories using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Press START to begin the workout.

#### TARGET HR / WEIGHT LOSS

- 1) Repeatedly press the HEART RATE + key to select Target HR or Weight Loss, and then press SELECT.
- 2) Select Age using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select HR using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Select Time using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 5) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 6) Press START to begin the workout.

#### FIT TEST

- 1) Select Gender using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 2) Select Age using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 3) Select Level using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 4) Select Weight using the RIGHT / LEFT ARROW keys, and then press SELECT.
- 5) Press START to begin the workout.

THE TABLES ON PAGE 11 LIST FIT TEST RESULTS.

## CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

### 4.3 WORKOUT SETUP STEPS - CONTINUED

#### FIT TEST'S RESULT FOR MALE

Male	Estimated VO2 Max (ml/kg/min) Per Age Category					
Age-Rating	Very Poor	Poor	Fair	Good	Excellent	Superior
15-19	<35.0	35.0-38.3	38.4-45.1	45.2-50.9	51.0-55.9	>55.9
20-29	<33.0	33.0-36.4	36.5-42.4	42.5-46.4	46.5-52.4	>52.4
30-39	<31.5	31.5-35.4	35.5-40.9	41.0-44.9	45.0-49.4	>49.4
40-49	<30.2	30.2-33.5	33.6-38.9	39.0-43.7	43.8-48.0	>48.0
50-59	<26.1	26.1-30.9	31.0-35.7	35.8-40.9	41.0-45.3	>45.3
60+	<20.5	20.5-26.0	26.1-32.2	32.3-36.4	36.5-44.2	>44.2

#### FIT TEST'S RESULT FOR FEMALE

Female	Estimated VO2 Max (ml/kg/min) Per Age Category					
Age-Rating	Very Poor	Poor	Fair	Good	Excellent	Superior
15-19	<25.0	25.0-30.9	31.0-34.9	35.0-38.9	39.0-41.9	>41.9
20-29	<23.6	23.6-28.9	29.0-32.9	33.0-36.9	37.0-41.0	>41.0
30-39	<22.8	22.8-26.9	27.0-31.4	31.5-35.6	35.7-40.0	>40.0
40-49	<21.0	21.0-24.4	24.5-28.9	29.0-32.8	32.9-36.9	>36.9
50-59	<20.2	20.2-22.7	22.8-26.9	27.0-31.4	31.5-35.7	>35.7
60+	<17.5	17.5-20.1	20.2-24.4	24.5-30.2	30.3-31.4	>31.4

### 4.4 USING FITNESS NETWORKING

The two RJ45 networking ports are equipped in the Matrix R1x Bike. These ports allow the bike to be connected to a fitness entertainment system and / or a fitness network such as Fitlinxx®.

#### C-SAFE / CARDIO PORT

The ports are located on the back of the console. The C-SAFE port enables the bike to upload user workout statistics to a fitness network database. The CARDIO port is compatible to entertainment protocol such as Cardio Theater® or Broadcast Vision™.

### 5.1 USING MANAGER MODE

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The Manager's Custom Mode allows the club owner to customize the bike for the club.

- 1) To enter Manager Mode, press and hold down the LEVEL ARROW keys. Continue to hold down these two keys until the display reads Manager Mode
- 2) To scroll through the list of options in Manager Mode, use the LEFT / RIGHT ARROW keys, or LEVEL ARROW keys. Each of the custom settings will show on the display.
- 3) To select a custom setting, press the SELECT key when the desired setting is shown.
- 4) To change the value of the setting, use the LEFT / RIGHT ARROW keys or the LEVEL ARROW keys.
- 5) To confirm and save the value of the setting, press the QUICK START key. Setting saved will appear on the display. To exit the setting without saving, press the HOLD TO RESET key, or wait 5 seconds, the system will resume normal function.



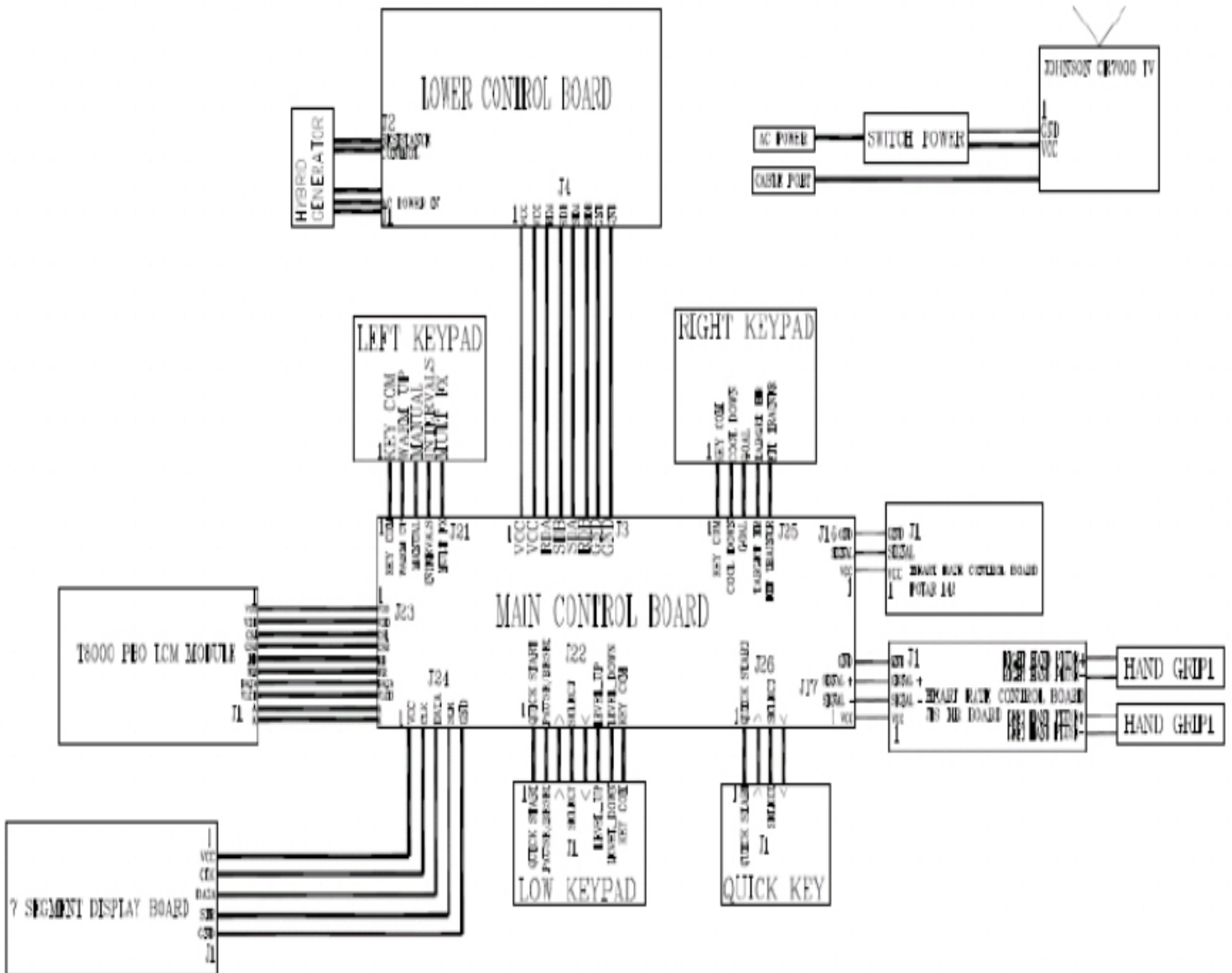
## CHAPTER 5: MANAGER MODE

### 5.2 MANAGER MODE OVERVIEW

CUSTOM SETTINGS	DEFAULT	MINIMUM	MAXIMUM	UNIT	DESCRIPTION
MAXIMUM TIME	99	20	99	MINUTE	Maximum workout duration.
DEFAULT TIME	20	5	99 (LIMITED TO MAX TIME SETTING)	MINUTE	Default start time in all programs.
DEFAULT LEVEL	1	1	10	LEVEL	Default start level in all programs.
MAXIMUM LEVEL	20	1	20	N/A	Maximum allowable resistance level.
DEFAULT WEIGHT	150 LB. / 68 KG	75 LB. / 34 KG	400 LB. / 182 KG	POUND / KILOGRAM	Default weight used in calorie calculations and HR programs.
DEFAULT AGE	30	10	99	AGE	Default age used in HR programs.
ACCUMULATED DISTANCE	N/A	0	65,000 MILES / 104,000 KM	MILE / KILOMETER	Total distance on treadmill, not editable. TO RESET: Press and hold INCLINE DOWN and SPEED DOWN for 3-5 seconds.
ACCUMULATED TIME	N/A	0	65,000 HOURS	HOURL	Total time on treadmill, not editable. TO RESET: Press and hold INCLINE DOWN and SPEED DOWN for 3-5 seconds.
PAUSE TIME	30 SEC	30 SEC	180 SEC	SECOND	This is the maximum time during which a workout can remain in pause mode. Restrictions exist for the machine not equipped with a battery.
MODEL	CB	N/A	N/A	N/A	CB - Upright bike, RB - Recumbent Bike, EL - Elliptical Trainer, SI - Stepper
LANGUAGE	ENGLISH	N/A	N/A	N/A	The native language prompts in the display.
SOFTWARE VERSION	N/A	N/A	N/A	N/A	Software version is not editable.
UNITS	METRIC	METRIC	ENGLISH	N/A	The measurement unit prompts for weight, distance, and speed.
ERROR LOG	N/A	N/A	N/A	N/A	Error log is not editable. Hold the RIGHT and LEFT ARROW keys simultaneously to erase error log.
METS	OFF	ON	OFF	N/A	If this option is on, the METS prompt becomes an individual display in PROMPT AREA. If this option is off, there will be an alternate prompt in RPM and METS at the lower right corner of the WORKOUT PROFILE WINDOW.
RESET ALL	N/A	N/A	N/A	N/A	This function will clear all custom settings stored on the unit and returns them to factory settings. Hold the RIGHT and LEFT ARROW keys simultaneously to reset.

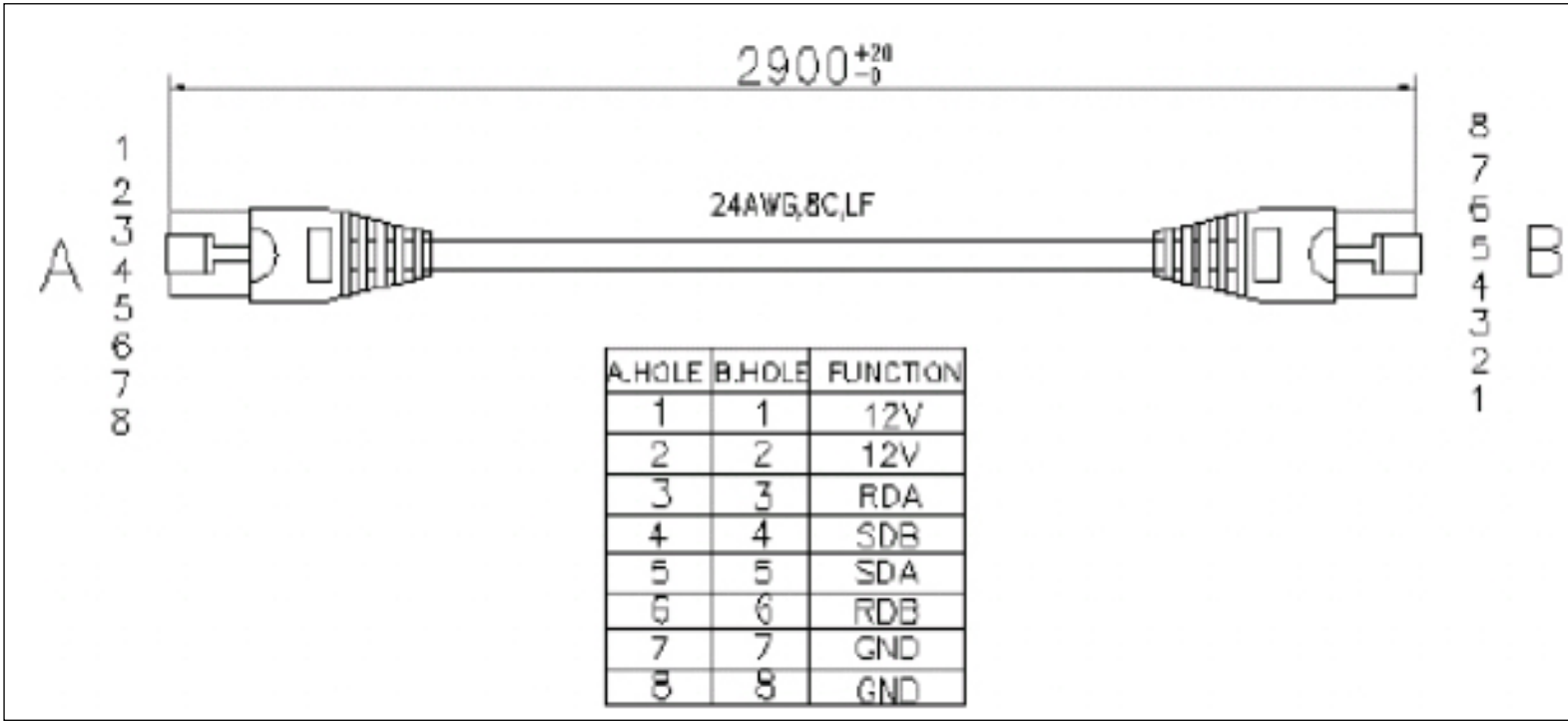
## 6.1 ELECTRICAL DIAGRAMS

## ELECTRICAL BLOCK DIAGRAM



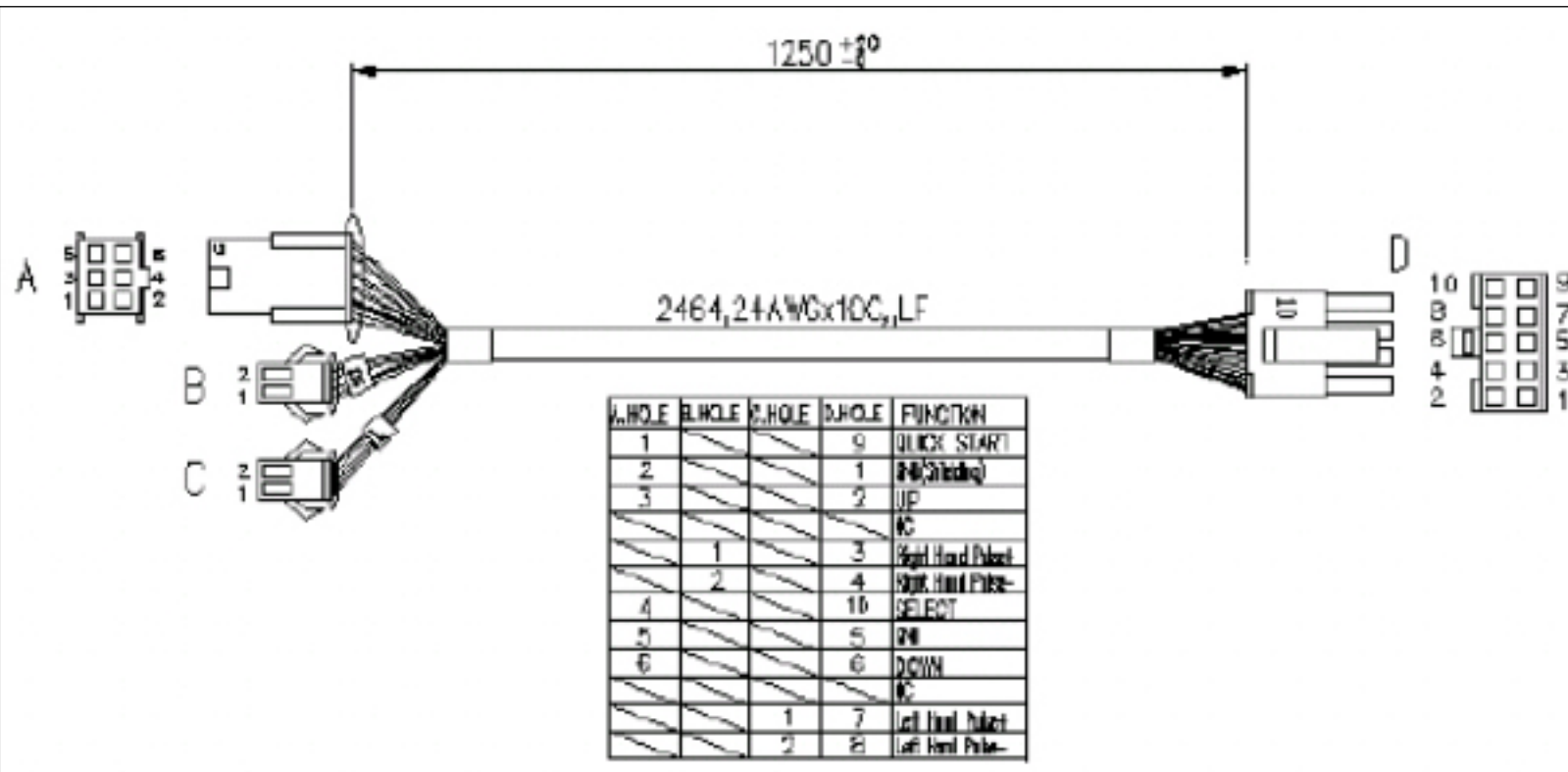


P01 - CONSOLE CABLE



6.1 ELECTRICAL DIAGRAMS

P02 - HAND GRIP WIRE



P03 - GENERATOR WIRE



6.2 TROUBLESHOOTING - CONSOLE POWER ISSUES

NO DISPLAY ON THE CONSOLE OR THE DISPLAY IS DIM

POSSIBLE CAUSES:

- 1) The console is damaged or the console cable is not connected properly.
- 2) Poor connection to the terminals on the lower board.
- 3) The lower board is damaged.
- 4) The ECB is damaged.

SOLUTION

- 1) Check the console cable connections at the console and lower board.
- 2) Unplug the console cable at the console. Use a multi-meter to check if the voltage between the 1 (VCC) and 7 (Ground) pins of the console cable is greater than 12 (Figure A).
  - a. If voltage is greater than 12, replace the console.
- 3) Unplug the ECB wiring harness from the lower board and pedal the machine. Use a multi-meter to check to see if the voltage from the ECB is variable (voltage should vary depending on the RPM used).
  - a. If the voltage is variable, replace the lower board.
  - b. If the voltage is not variable, replace the ECB.
  - c. If the issue is still not resolved after replacing the ECB and lower board, replace the console cable.

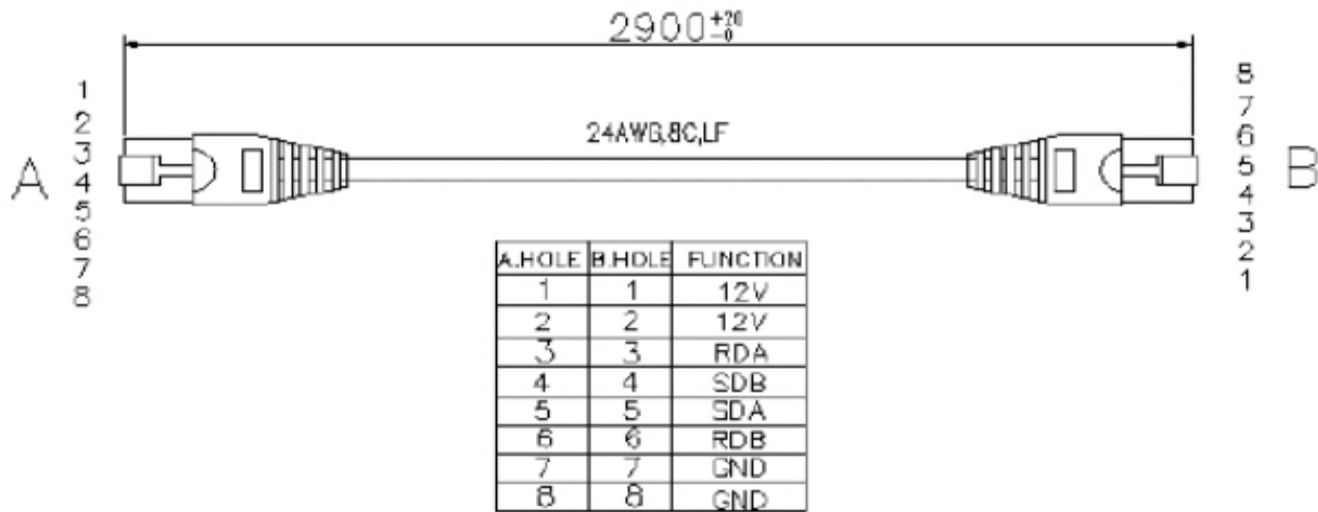


FIGURE A

### 6.3 TROUBLESHOOTING - KEYPAD ISSUES

#### ALL OR SOME OF THE FUNCTION KEYS DO NOT RESPOND

##### POSSIBLE CAUSES:

- 1) The keypad connecting ribbon cable has not been properly fit to the console connector.
- 2) The keypad is damaged.
- 3) The console control board is damaged.

##### SOLUTION:

- 1) Remove the back of the console and check to see if the keypad connecting ribbon cable is connected properly to the console control board. Reconnect the cable and test the keypad for function (Figures A, B, & C).
  - a. If the keypad still does not respond, replace the affected keypad.
  - b. If the keypad does not resolve the issues, replace the console.



FIGURE A



FIGURE B



FIGURE C



### 6.4 TROUBLESHOOTING - RESISTANCE ISSUES

#### NO RESISTANCE CHANGE OR ALWAYS HIGH RESISTANCE

##### POSSIBLE CAUSES:

- 1) The console is damaged or the console cable is not connected properly.
- 2) The console cable is damaged.
- 3) The ECB is damaged.
- 4) The lower board is damaged.

##### SOLUTION:

- 1) Check the console cable connections at the console and lower board.
- 2) Unplug the ECB wiring harness from the lower board and pedal the machine. Using a multi-meter, check the ohm readout from the ECB wiring harness (Figure A).
  - a. If the ohm reading is between 10 and 15, replace the lower board.
  - b. If the ohm reading is not between 10 and 15, replace the ECB.
  - c. If the issue is not resolved by the lower board or ECB, replace the console.
  - d. If the issue is not resolved by the lower board, ECB, or console, replace the console cable.



FIGURE A

#### SLIPPING WHILE PEDALING

##### POSSIBLE CAUSES

- 1) Belt tension is not enough.
- 2) The one way bearing is damaged.

##### SOLUTION:

- 1) Check the drive belt tension. Tighten if needed.
- 2) If the belt tension is correct and the belt is still slipping, the one way bearing is damaged. Replace the drive assembly (Figure A).

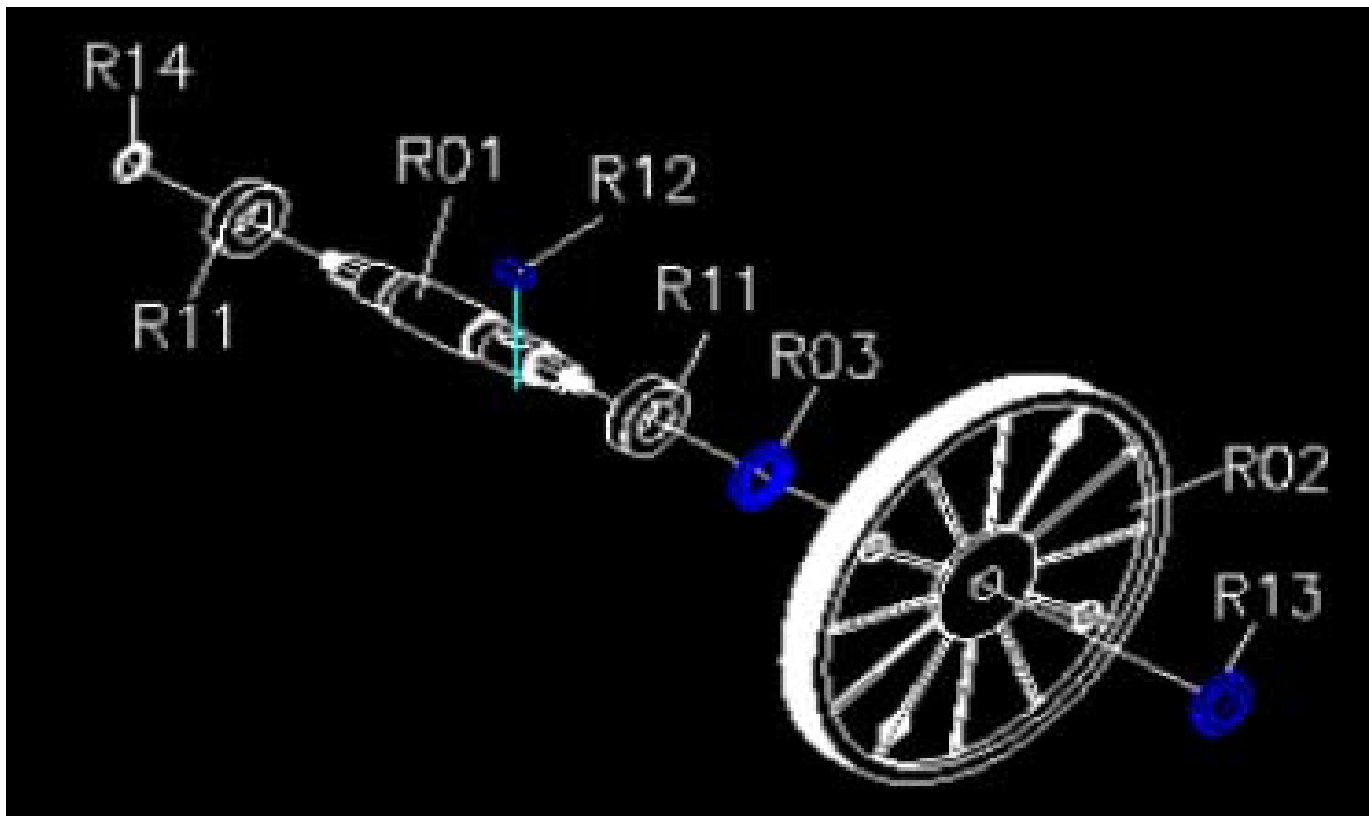


FIGURE A

#### KNOCKING OR CREAKING NOISES

##### POSSIBLE CAUSES:

- 1) The pedal is connected to the crank arm too loosely.
- 2) Belt tension is too loose, or the belt is dirty.
- 3) The crank is damaged.
- 4) The drive axle is damaged.

##### SOLUTION:

- 1) Clean and tighten the belts.
- 2) Tighten the connections between the pedal and crank arm.
- 3) Replace the crank.
- 4) Replace the drive axle.

### 6.7 TROUBLESHOOTING - SEAT LOOSE OR WOBBLY

#### SEAT WOBBLY OR LOOSE

##### POSSIBLE CAUSES:

- 1) The seat rollers are loose or mispositioned.
- 2) The seat rollers have developed flat spots.

##### SOLUTION:

- 1) Tighten the seat tension by adjusting the rollers.
  - a. Loosen the nylok nuts putting tension on the roller brackets (Figure A).
  - b. Starting at the front set of brackets, use a screwdriver to leverage the roller bracket tightly so the chamfered roller is pushed toward the bottom of the running track, and the flat roller is pushed towards the top of the running track (Figure B).
  - c. While holding pressure with the screwdriver, fully tighten the nylok nut to hold the roller bracket in place (Figure C).
  - d. Once the front roller brackets are tight, repeat procedure with the rear roller brackets.
  - e. Once the roller brackets are tightened, test the seat movement for smooth travel. NOTE: If the seat sticks or is hard to move, the pressure on the roller brackets may need to be loosened. If the seat is still wobbly or loose, the pressure on the roller brackets may need to be further tightened.
- 2) If seat is still wobbly or loose once the roller brackets are tightened, replace the roller brackets.



FIGURE A



FIGURE B



FIGURE C

#### HEART RATE DOES NOT WORK

##### POSSIBLE CAUSES:

- 1) Not good contact between the user and HR grips or HR strap.
- 2) The HR strap is at a low battery status.
- 3) The HR strap is damaged.
- 4) The HR grips are damaged.
- 5) The HR board in the console is damaged.

##### SOLUTION:

- 1) Re-center the HR strap on user's chest as shown in Figure A.
- 2) Replace the battery in the HR Strap.
- 3) Wet the user's hand, then reestablish contact with the HR grip.
- 4) Replace the HR strap.
- 5) Replace the HR grips.
- 6) Replace the console.

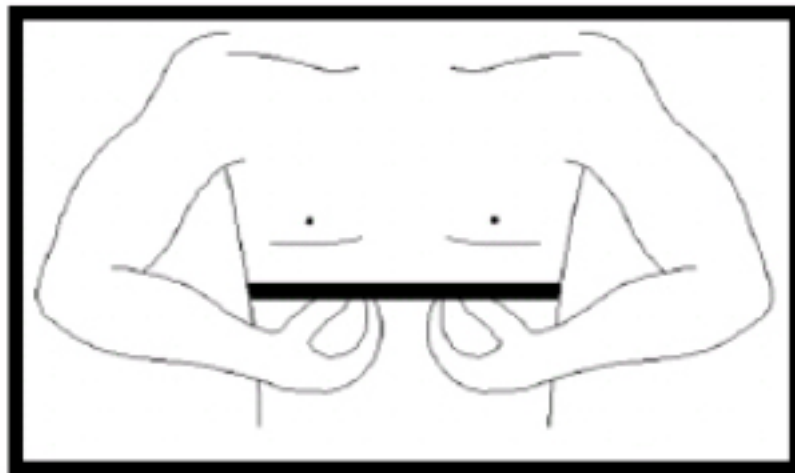


FIGURE A

## CHAPTER 7: PART REPLACEMENT GUIDE

### 7.1 CONSOLE REPLACEMENT

---

- 1) Remove the 4 screws holding the console to the frame (Figure A & B).
- 2) Disconnect the console cable, HR, and level wire connections from the defective console and remove the console (Figure C).
- 3) Reinstall the wire connections to the new console.
- 4) Carefully push the wires into the console and mast until they are clear of the console / mast connection and attach the new console to the mast using the 4 screws.
- 5) Test the bike for function as outlined in Section 7.24.



FIGURE A



FIGURE B



FIGURE C

### 7.2 HANDLEBAR REPLACEMENT

---

- 1) Remove the 4 screws holding the handlebar to the frame (Figure A).
- 2) Remove the handlebar (Figure B).
- 3) Reverse Steps 1-2 to install a new handlebar.



FIGURE A



FIGURE B

### 7.3 CUP HOLDER REPLACEMENT

---

- 1) Remove the 2 screws holding the cup holder to the HR handlebar (Figure A).
- 2) Remove the cup holder (Figure B).
- 3) Reverse Steps 1-2 to install a new cup holder. NOTE: Be careful when installing the 2 screws to clear the wiring inside of the handlebar to prevent damage.



FIGURE A



FIGURE B



## CHAPTER 7: PART REPLACEMENT GUIDE

### 7.4 CONSOLE KEYPAD / OVERLAY REPLACEMENT

- 1) Remove the console as outlined in Section 7.1.
- 2) Remove the 6 screws holding the console back to the front (Figure A). NOTE: If just replacing an overlay, only complete Steps 4, 8, & 9.
- 3) Remove the wire connections holding the console back to the front (Figures B & C)
- 4) Using a razor blade, carefully peel up one corner of the overlay and then remove the whole overlay (Figure D). Remove any access adhesive from the plastic.
- 5) Disconnect the appropriate ribbon cable for the keypad that you are replacing (Figures E - G).
- 6) Again using a razor blade, carefully peel up one corner of the defective keypad and then remove it from the console.
- 7) Remove the backing from the new keypad (Figure H). Install the new keypad by sliding the ribbon cable through the slot in the console and plug it in to the appropriate console housing. Be careful to seat the ribbon cable correctly.
- 8) Remove the backing from the new overlay. Install the new overlay into the console housing over the keypad. Be careful to avoid air bubbles and misalignment.
- 9) Test the bike for function as outlined in Section 7.24.



FIGURE A

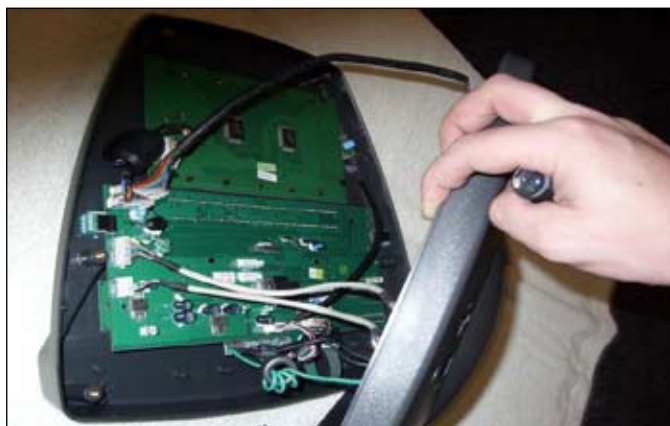


FIGURE B



FIGURE C



FIGURE D



FIGURE E



FIGURE F

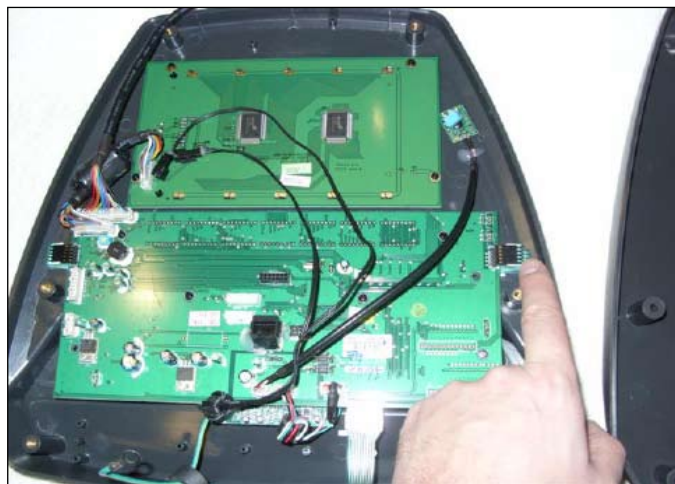


FIGURE G

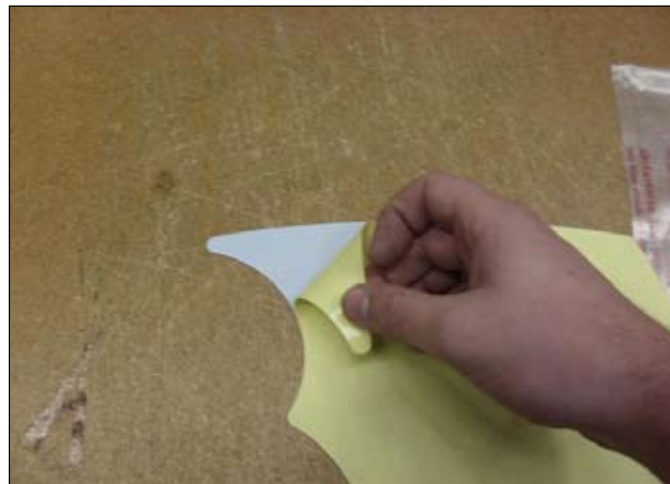


FIGURE H

### 7.5 CONSOLE MAST REMOVAL

---

- 1) Remove the console as outlined in Section 7.1.
- 2) Remove the handlebar as outlined in Section as outlined in Section 7.2.
- 3) Remove the 4 screws holding the console mast to the frame (Figure A).
- 4) Pull the wires out the bottom of the console mast and remove the mast (Figure B).
- 5) When installing a new console mast, be sure to pull the console wires up through the new mast prior to installing the 4 screws into the frame.
- 6) Test the bike for function as outlined in Section 7.24.



FIGURE A



FIGURE B

### 7.6 ENTERTAINMENT PORT REPLACEMENT

---

- 1) Remove the 4 screws holding the entertainment port to the frame (Figure A).
- 2) Lean the E-port away from the frame and disconnect the coax and power wires (Figure B).
- 3) Reverse Steps 1-2 to install a new E-port.

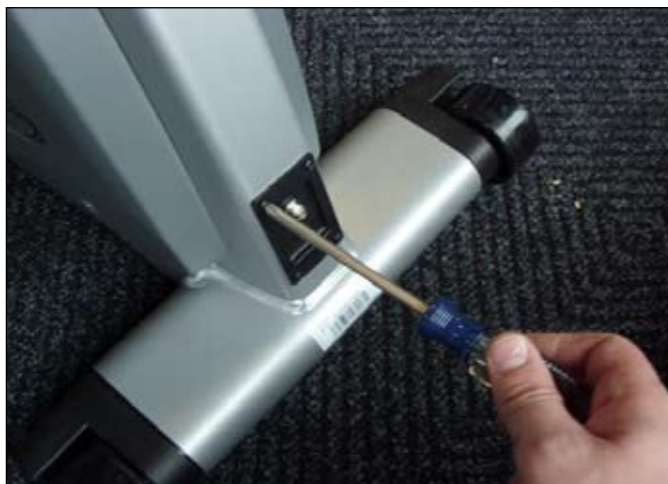


FIGURE A

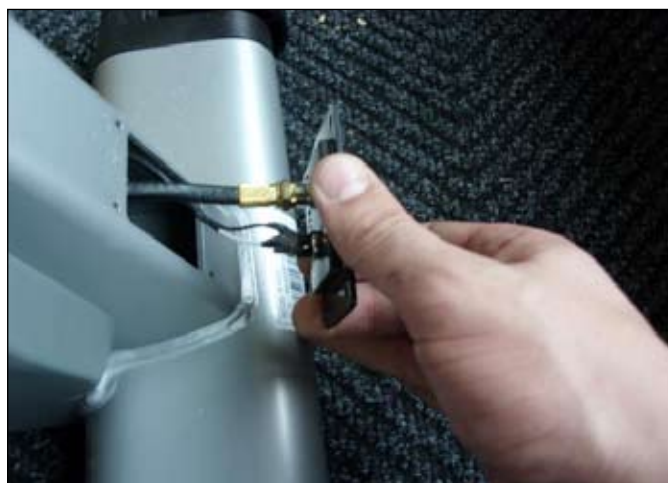


FIGURE B



### 7.7 SEAT PAD REPLACEMENT

---

- 1) Remove the 4 screws holding the seat pad to the frame (Figure A).
- 2) Remove the seat pad (Figure B).
- 3) Reverse Steps 1-2 to install a new seat pad.



FIGURE A



FIGURE B

## CHAPTER 7: PART REPLACEMENT GUIDE

### 7.8 BACK PAD REPLACEMENT

- 1) Using the tips of your fingers, pull off the back cover of the back pad. The back cover is held on by plastic snap clips, and if pressure is applied, the cover will pop off (Figures A & B).
- 2) Remove the 4 screws holding the back pad to the seat frame (Figure C) and remove the back pad (Figure D).
- 3) Reverse Steps 1-2 to install a new back pad.



FIGURE A



FIGURE B



FIGURE C



FIGURE D

### 7.9 SEAT ADJUSTMENT HANDLE REPLACEMENT

---

- 1) Remove the 2 screws holding the seat adjustment handle to the seat frame (Figure A).
- 2) Remove the seat adjustment handle (Figure B).
- 3) Reverse Steps 1-2 to install a new seat adjustment handle.



FIGURE A



FIGURE B

## CHAPTER 7: PART REPLACEMENT GUIDE

### 7.10 UPPER SEAT FRAME REPLACEMENT

---

- 1) Remove the seat pad as outlined in Section 7.7.
- 2) Remove the 4 screws holding the upper seat frame to the lower seat frame (Figure A).
- 3) Disconnect the HR handlebar wire (Figure B).
- 4) Remove the upper seat frame (Figure C shown with back pad and HR handlebar also removed).
- 5) Reverse Steps 1-4 to install a new upper seat frame. NOTE: The HR handlebar wire must be hooked up prior to installing the screws from the upper seat frame to the lower seat frame.



FIGURE A



FIGURE B



FIGURE C



### 7.11 LOWER SEAT FRAME REPLACEMENT

---

- 1) Remove the upper seat frame as outlined in Section 7.10.
- 2) Remove the 2 screws holding the seat positioning plate to the lower seat frame, remove the positioning plate (Figure A).
- 3) Remove the 2 screws holding the end cap onto the back of the seat rail and remove the cap (Figures B & C).
- 4) Remove the screw holding the back roller stop onto the seat rail, and remove the back roller stop (Figures D & E).
- 5) Press the seat adjustment handle and roll the lower seat frame off of the back of the seat rail (Figure F).
- 6) Reverse steps 1-5 to install a new lower seat frame. NOTE: The HR handlebar wire must be hooked up prior to installing the screws from the upper seat frame to the lower seat frame.
- 7) If the seat is loose or wobbly after installation, see the seat tightening procedure outlined in Section 6.7.



FIGURE A



FIGURE B



FIGURE C



FIGURE D



FIGURE E



FIGURE F

### 7.12 HR HANDLEBAR REPLACEMENT

- 1) Remove the seat pad as outlined in Section 7.7.
- 2) Unplug the HR handlebar wire (Figure A).
- 3) Remove the 3 screws holding the HR handlebar to the upper seat frame (Figure B).
- 4) Remove the 4 screws holding the upper seat frame to the lower seat frame (Figure C).
- 5) Remove the HR handlebar (Figure D).
- 6) Reverse steps 1-5 to install a new HR handlebar. NOTE: The HR handlebar wire must be hooked up prior to installing the screws from the upper seat frame to the lower seat frame.
- 7) Test the bike for function as outlined in Section 7.24.



FIGURE A



FIGURE B



FIGURE C



FIGURE D

## CHAPTER 7: PART REPLACEMENT GUIDE

### 7.13 HR GRIPS / LEVEL BUTTON REPLACEMENT

- 1) Using a flat screwdriver, pry the bottom silver metal HR plate away from the plastic of the HR grip (Figure A).
- 2) Remove the 3 screws holding the HR grip together (Figure B).
- 3) Disconnect the HR grip wire and level button wire and remove the two halves of the HR grip (Figures C & D).
- 4) Reverse Steps 1-3 to install new HR grips.
- 5) Test the bike for function as outlined in Section 7.24.



FIGURE A



FIGURE B



FIGURE C



FIGURE D



### 7.14 REAR SHROUD REMOVAL

- 1) Remove the 7 screws holding on the left rear shroud (Figure A).
- 2) Remove the 4 screws holding on the right rear shroud (Figure B).
- 3) Figure C shows the bike with both rear shrouds removed.



FIGURE A

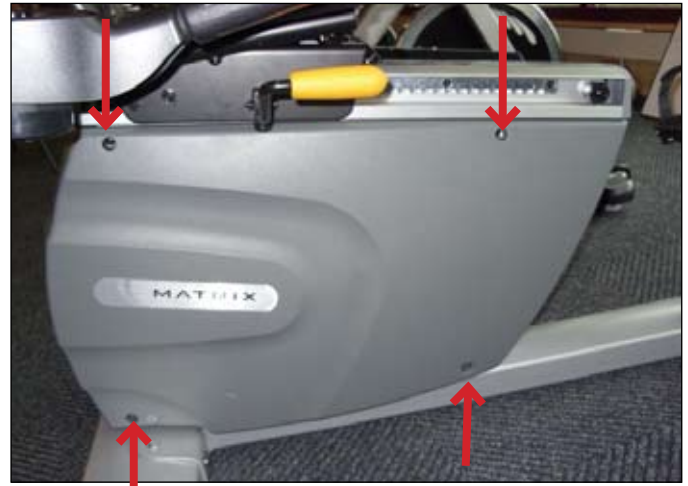


FIGURE B

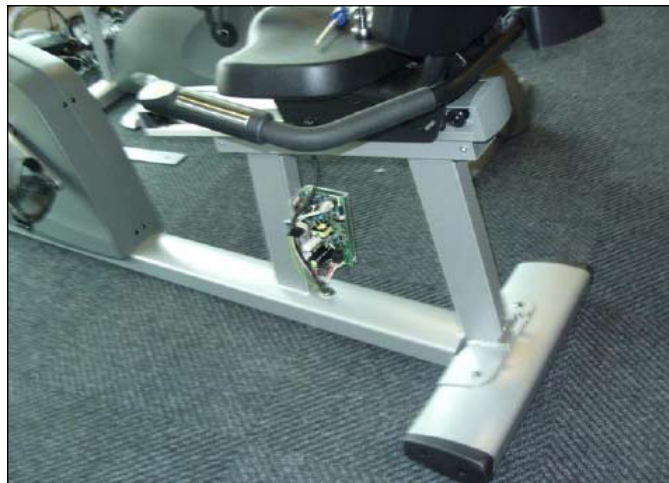


FIGURE C

### 7.15 LOWER BOARD REPLACEMENT

---

- 1) Remove the rear shrouds as outlined in Section 7.14.
- 2) Disconnect the 3 wire connections to the lower board (Figure A).
- 3) Remove the 2 screws holding the lower board to the frame (Figure B), and remove the lower board.
- 4) Reverse Steps 1-3 to install a new lower board.
- 5) Test the bike for function as outlined in Section 7.24.



FIGURE A

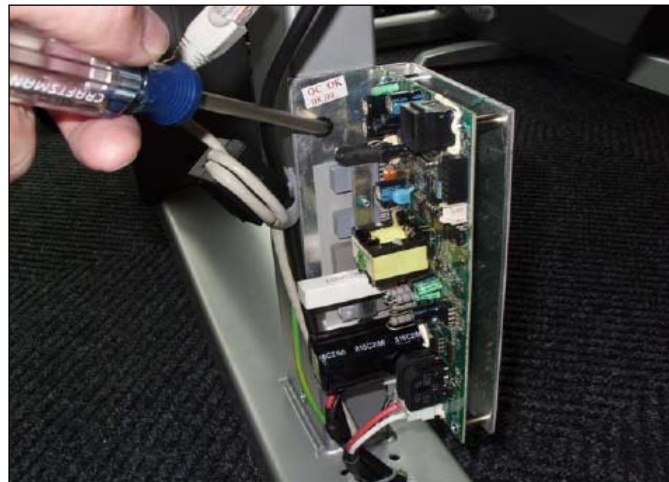


FIGURE B

### 7.16 PEDAL REPLACEMENT

---

- 1) Use a 15 mm wrench to remove the pedal (Figure A). NOTE: For the right side pedal, the threads are normal. For the left side pedal, the threads are reversed (the pedal turns off clockwise).
- 2) Remove the pedal (Figure B).
- 3) Reverse Steps 1-2 to install a new pedal.



FIGURE A



FIGURE B

### 7.17 CRANK REMOVAL

---

- 1) Use a flat screwdriver to rotate the crank cover counter clockwise, and remove it (Figures A & B).
- 2) Remove the nut and washer holding the crank to the crank assembly (Figure C).
- 3) Using a crank puller, remove the crank (Figure D & E).



FIGURE A



FIGURE B



FIGURE C



FIGURE D



FIGURE E



### 7.18 FRONT SHROUD REMOVAL

- 1) Remove both of the cranks as outlined in Section 7.17.
- 2) Remove the 3 screws holding on the left front shroud (Figure A).
- 3) Remove the 4 screws holding on the right front shroud (Figure B).
- 4) Figure C shows the bike with both front shrouds removed.



FIGURE A



FIGURE B



FIGURE C

## CHAPTER 7: PART REPLACEMENT GUIDE

### 7.19 DRIVE BELT REPLACEMENT

- 1) Remove the front shrouds as outlined in Section 7.18.
- 2) Remove the idler tension screw (Figure A).
- 3) Unhook the spring from the idler and remove the spring and 9 hole plate.
- 4) Rotate the idler so that the tension on the belt is loosened (Figure B).
- 5) Remove the belt (Figure C).
- 6) Reverse Steps 1-5 to install a new drive belt.
- 7) Test the bike for function as outlined in Section 7.24.



FIGURE A



FIGURE B



FIGURE C

### 7.20 ECB (ELECTRONIC BRAKE) REPLACEMENT

---

- 1) Remove the front shrouds as outlined in Section 7.18.
- 2) Remove the 4 screws holding the ECB and the ECB mounting bracket to the frame (Figure A).
- 3) Remove the ECB and the ECB mounting bracket from the bike frame (Figure B).
- 4) Disconnect the ECB wire harness (Figure C).
- 5) Remove the idler assembly from the ECB (Figure D).
- 6) Remove the 6 screws going through the ECB mounting bracket into the ECB on both sides (Figures E & F).
- 7) Once the screws are removed, lift the ECB away from the ECB mounting bracket.
- 8) Reverse Steps 1-7 to install a new ECB.
- 9) Test the bike for function as outlined in Section 7.24.

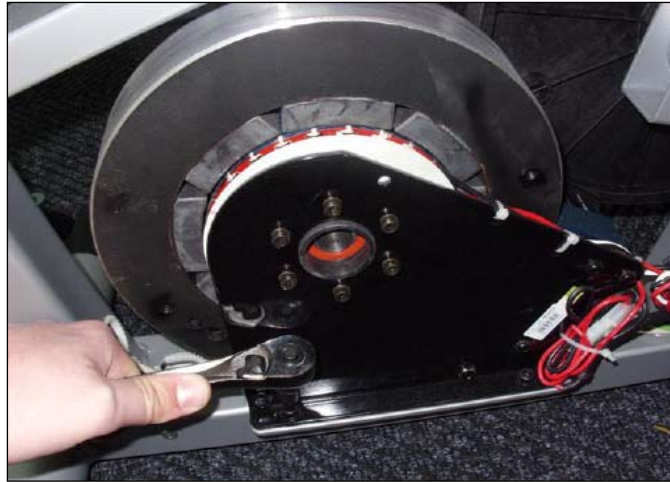


FIGURE A



FIGURE B

## CHAPTER 7: PART REPLACEMENT GUIDE

### 7.20 ECB (ELECTRONIC BRAKE) REPLACEMENT - CONTINUED

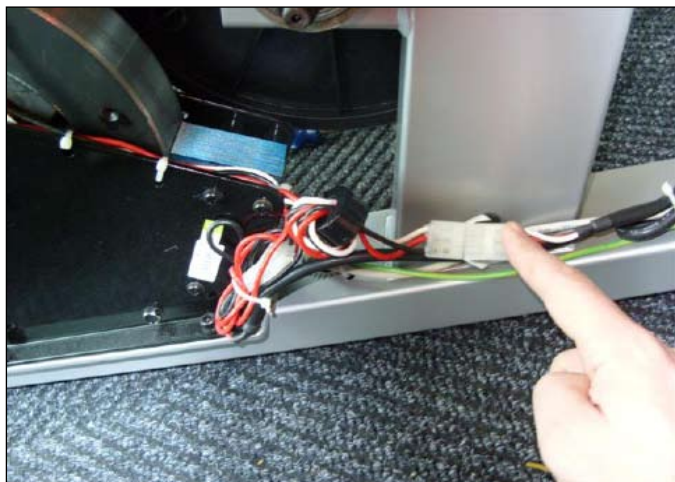


FIGURE C



FIGURE D

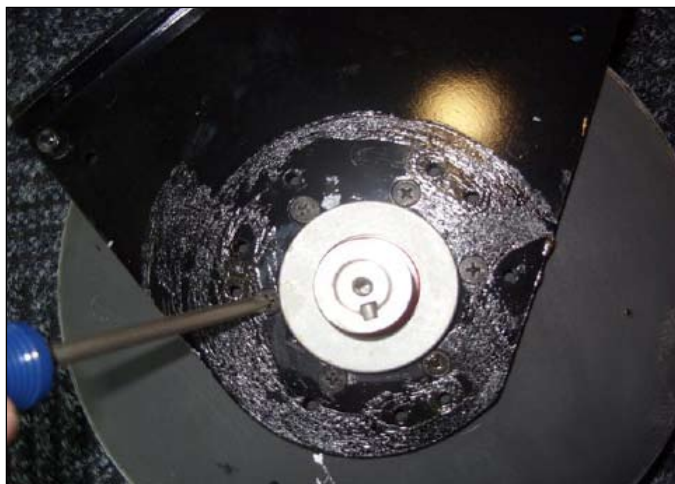


FIGURE E



FIGURE F



### 7.21 DRIVE AXLE SET REPLACEMENT

- 1) Remove the front shrouds as outlined in Section 7.18.
- 2) Remove the idler tension screw (Figure A).
- 3) Unhook the spring from the idler and remove the spring and 9 hole plate.
- 4) Rotate the idler so that the tension on the belt is loosened (Figure B).
- 5) Remove the belt (Figure C).
- 6) Remove the clip holding the drive axle set into the frame with a snap ring pliers (Figure D).
- 7) Use a hammer to push the drive axle set to the right side of the frame and off the unit (Figures E & F). NOTE: A piece of wood or other material should be used between the hammer and drive axle to prevent damage to the drive axle threads.
- 8) Reverse Steps 1-7 to install a new drive axle set.
- 9) Test the bike as outlined in Section 7.24.



FIGURE A



FIGURE B

### 7.21 DRIVE AXLE SET REPLACEMENT - CONTINUED



FIGURE C



FIGURE D



FIGURE E

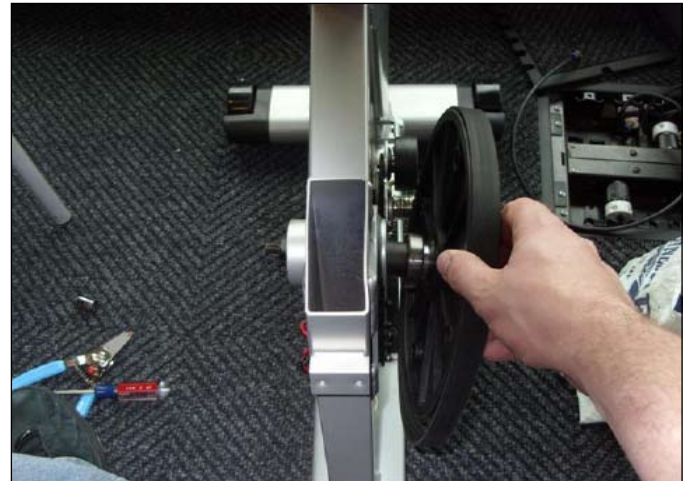


FIGURE F

### 7.22 - REAR STABILIZER END CAP REPLACEMENT

---

- 1) Remove the 2 screws holding the end cap to the stabilizer (Figure A).
- 2) Remove the end cap (Figure B).
- 3) Reverse Steps 1-2 to install a new end cap.



FIGURE A



FIGURE B

### 7.23 FRONT ROLLER REPLACEMENT

---

- 1) Remove the screw holding the front roller to the front stabilizer (Figure A).
- 2) Remove the front roller (Figure B).
- 3) Reverse Steps 1-2 to install a new front roller.



FIGURE A



FIGURE B



### 7.24 TESTING THE BIKE

---

ONCE THE UNIT OR REPLACEMENT PART IS FULLY INSTALLED AND ASSEMBLED AND PROPERLY PLACED ON THE FLOOR, USE THE FOLLOWING INSTRUCTIONS TO TEST THE MACHINE:

- 1) Without hitting start or entering any program modes, sit on the bike and hold the handlebars while pedaling to simulate exercising. While moving, listen for any odd noises or squeaks.
- 2) After stopping movement, press the QUICK START button and begin pedaling.
- 3) Grasp the hand grips to check for proper heart rate response.
- 4) Press the level up and down buttons both on the hand grips and on the console to make sure resistance is fully functional.
- 5) If everything functions properly, stop pedaling and the unit will reset to normal operation within 30 seconds.

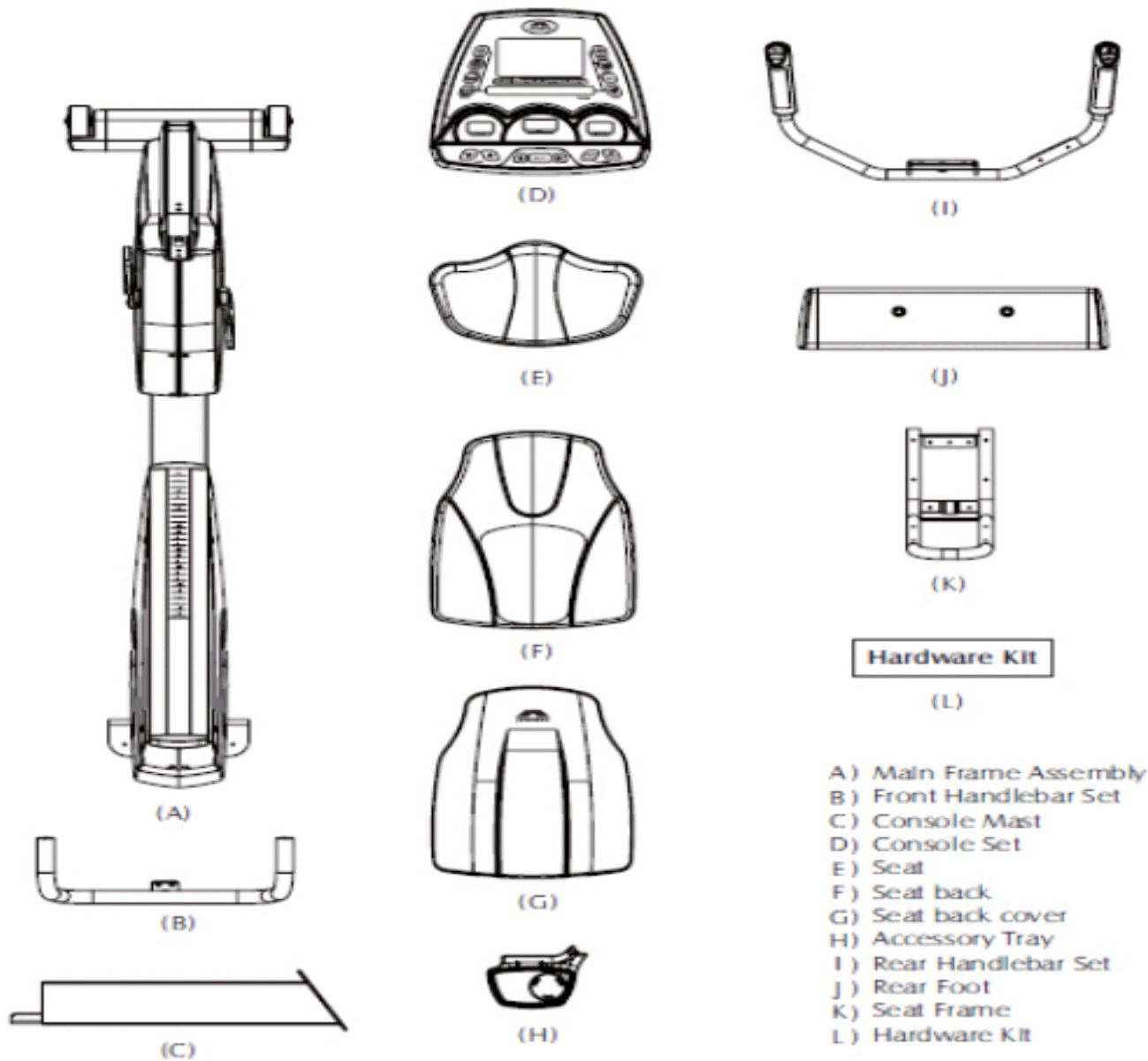
## CHAPTER 8: BIKE SPECIFICATIONS AND ASSEMBLY GUIDE

### 8.1 BIKE SPECIFICATIONS

CONSOLE	
Display Screen	Workout Profile Window - 7" blue backlit graphic LCD display Instruction Center - 14 character red LED alphanumeric display Informational Display - 3 numeric 7 segment display (3 sets)
Display Readout	Time, Distance, Calories, Speed, Level, Watts, METS, Heart Rate, Profile
Programs	Manual, Hill Interval, Random Hill, Time Goal, Distance Goal, Calories Goal, Constant Watts, Random, Target HR, Weight Loss, Fit Test, Warm Up, Cool Down.
On-the-fly Program Change	Yes
Telemetric Receiver	Yes
Contact HR Sensors	Yes
Program Quick Keys	Yes
One-Touch Quick Start	Yes
Pause Time	30 Seconds
Language Options	English, Italian, German, Spanish, French, Dutch, Portuguese, Japanese
TECHNICAL DATA	
Resistance Technology	JID™ Hybrid Generator
Resistance Levels	20
Crank Design	3 piece
Seat Adjustments	25 Positions
Dimensions (L x W x H)	66" x 27" x 50" / 167 x 68 x 128 cm
Product Weight	188 lbs / 65 kg
Shipping Weight	209 lbs / 95 kg
Max User Weight	400 lbs / 182 kg
Power Requirements	Self Powered
SPECIAL FEATURES	
Handlebar Design	Seat slide and front vertical ergo bend
Pedals	Extra large pedals with ratcheted strap adjustments
Quick Zip Pedal Straps	Yes
Seat Design	Comfort seat and stylish seat back
Remote Operation Keys	Yes
Integrated Reading Rack	Yes
ENTERTAINMENT SOLUTIONS	
FITCONNEXION Ready	Yes
Networking Capabilities	CSAFE Ready, Fitlinxx™ certified













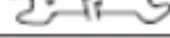




8.2 UNPACKING THE BIKE

The Matrix R1x Bike is carefully inspected before shipment, so it should arrive in good operating condition. Matrix Fitness ships the unit in the following pieces:



NOTE: If these parts are missing from the package, please contact Matrix Fitness at once.

### FASTENERS & ASSEMBLY TOOLS

PARTS NO.	DESCRIPTION	QUANTITY	SKETCH	COLOR OF BAG	ASSEMBLY STEP
Z01	Spring Washer	8		White	STEP 4
Z02	Arc Washer	8		White	
Z03	Socket Button Head Screw (with Nyloc)	8		White	
Z13	Button Head Screw (Phillips)	2		White	
Z04	Socket Low Head Screw (with Nyloc)	4		Yellow	STEP 1
Z05	Socket Flat Head Screw	3		Red	STEP 3
Z04	Socket Low Head Screw (with Nyloc)	4		Blue	STEP 6
Z04	Socket Low Head Screw (with Nyloc)	4		Orange	STEP 5
Z09	Socket Button Head Screw (with Nyloc)	4		Black	STEP 2
Z10	Spring Washer	4		Black	
Z11	Socket Head Screw	2		Black	
Z12	Spring Washer	2		Black	
Z31	Open Wrench (#15 / #17)	1		Purple	
Z32	#5 Allen Wrench	1		Purple	
Z33	#4 Allen Wrench	1		Purple	
Z34	Phillips Screwdriver	1		Purple	
Z35	#5 Allen Wrench	1		Purple	

### 8.4 ASSEMBLY INSTRUCTIONS

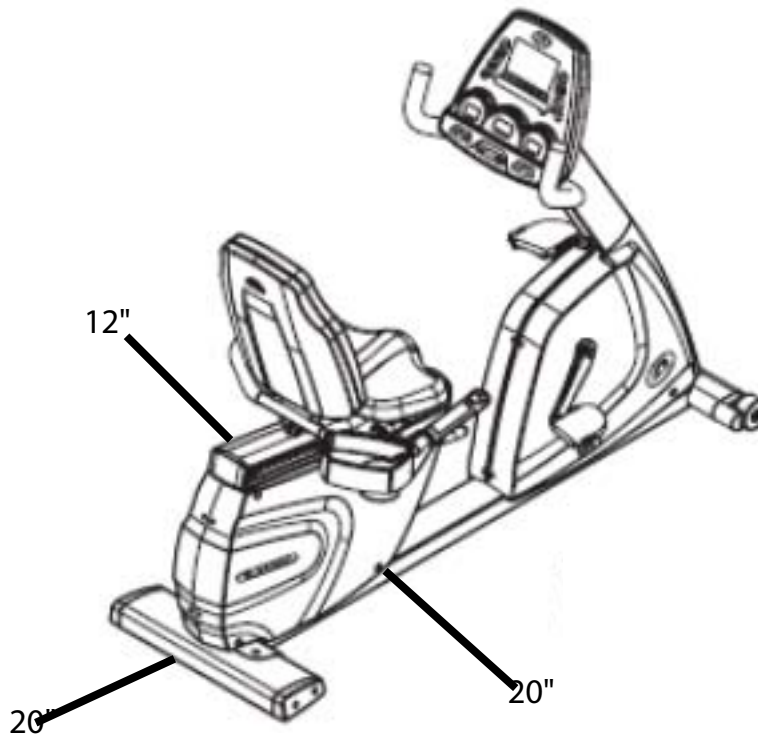
#### GETTING STARTED

Read the owner's manual before setting up the Matrix R1x Bike. Place the unit where it will be used before beginning the setup procedure.

#### MAKING A CHOICE OF SITE

The site should be well lit and well ventilated. Locate the Matrix R1x Bike on a structurally solid and flat surface. The bike should have a clearance of 20" on one side and behind the unit, and 12" on the other side from the wall or other equipment. This zone is to allow easy access to the bike and gives the user an easy exit path from the machine. If the site has a heavy plush carpet, to protect the carpeting and machinery, you should place a rigid plastic base under the unit.

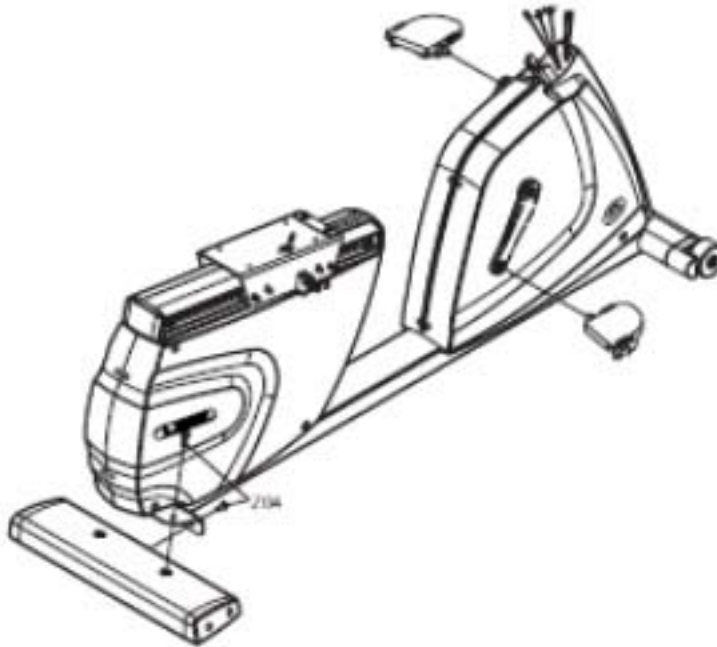
Please do not place the Matrix R1x Bike in an area of high humidity, such as the vicinity of a steam room, indoor pool, or sauna. Exposure to intensive water vapor or chlorine could adversely affect the electronics, as well as other parts of the machine.



### 8.4 ASSEMBLY INSTRUCTIONS

---

#### STEP 1



#### REAR FOOT

Install the rear foot in position at the rear of the bike with the mating holes in the frame bracket. Insert the four screws (Z04) through the frame bracket and rear foot. Using the #5 Allen Wrench (Z32) tighten the screws securely.

#### PEDALS

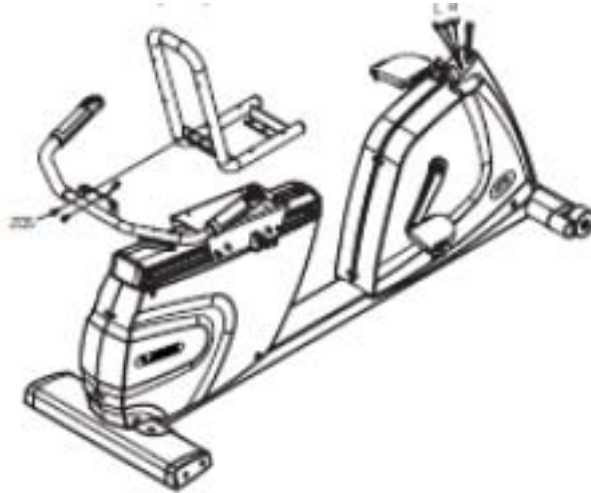
Install the pedals on the pedal cranks using the Open Wrench (Z31). The Matrix logo on the pedal strap must point upward.

NOTE: Be careful to align the threads correctly to avoid damage. A little grease on the threads should help the pedals to screw in easily and correctly. Turn the left pedal spindle counter clockwise when threading into the crank arm, and turn the right pedal spindle clockwise when threading into the crank arm.

### 8.4 ASSEMBLY INSTRUCTIONS - CONTINUED

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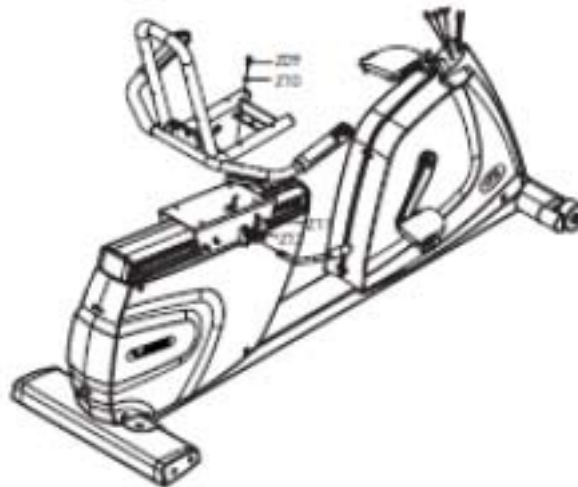
#### STEP 2



Pull the heart rate wire through the hole in the bottom of the seat frame, and make sure the wire gets through the tunnel of the plate. Mount the seat handlebars to the seat frame by using the three socket flat head screws (Z05).

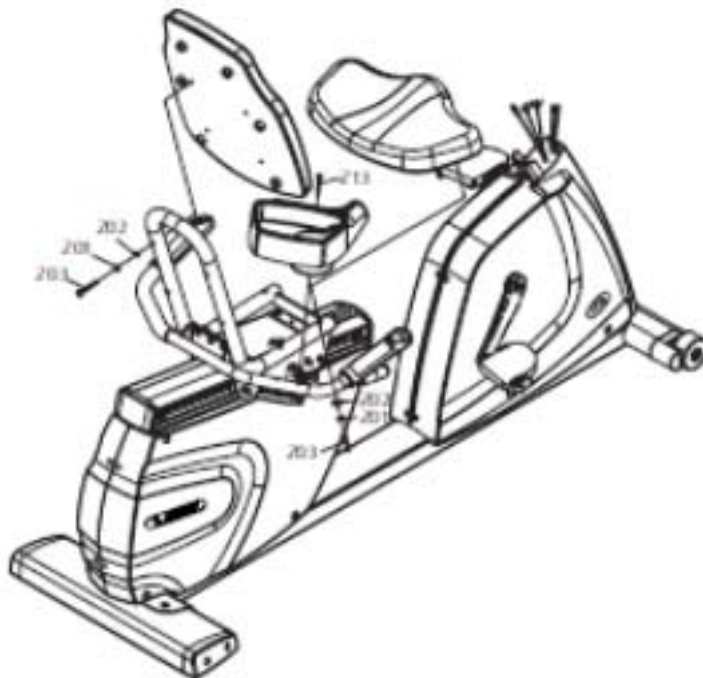
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#### STEP 3



- 1) Install the seat rail on the seat adjustment bracket using the four washers (Z10) and screws (Z09). Tighten them with the #5 Allen Wrench.
- 2) Connect the wire harness from the seat handlebar to the wire harness coming from the seat frame.
- 3) Slide the seat adjustment handle between the teeth of the seat adjustment bracket. Insert the two spring washers (Z12) and socket head screws (Z11), and tighten with the #4 Allen Wrench.

#### STEP 4



#### ACCESSORY

Secure the accessory rack to the seat handlebar with two button head screws (Z13). Be careful when inserting the screws to clear the wires inside the handlebar to prevent damage. Tighten with the Phillips screwdriver (Z34).

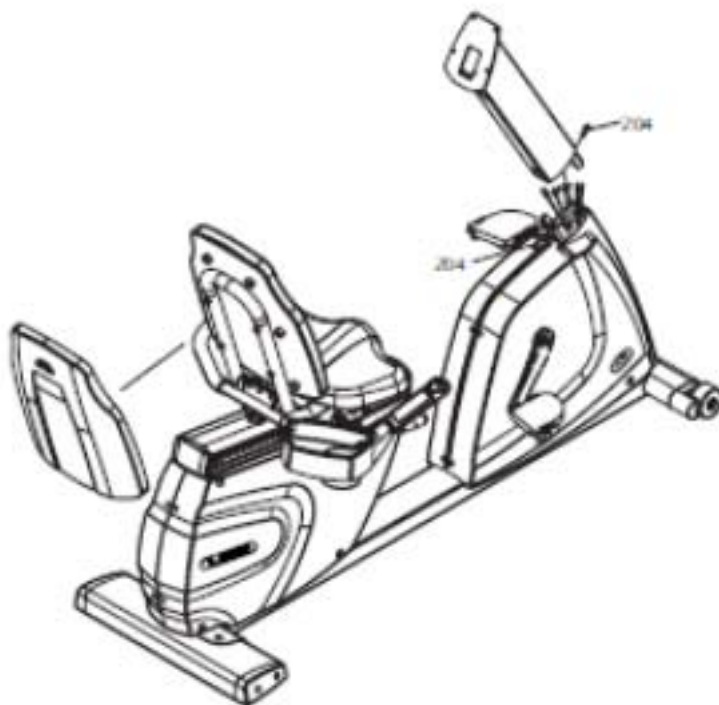
#### SEAT AND SEAT BACK

Mount the seat to the seat frame with four arc washers (Z02), spring washers (Z01), and socket button head screws (Z03). Tighten with the #5 Allen Wrench (Z32). Mount the seat back to the seat frame with four arc washers (Z02), spring washers (Z01) and socket button head screws (Z03). Tighten with the #5 Allen Wrench (Z32).



### 8.4 ASSEMBLY INSTRUCTIONS - CONTINUED

#### STEP 5



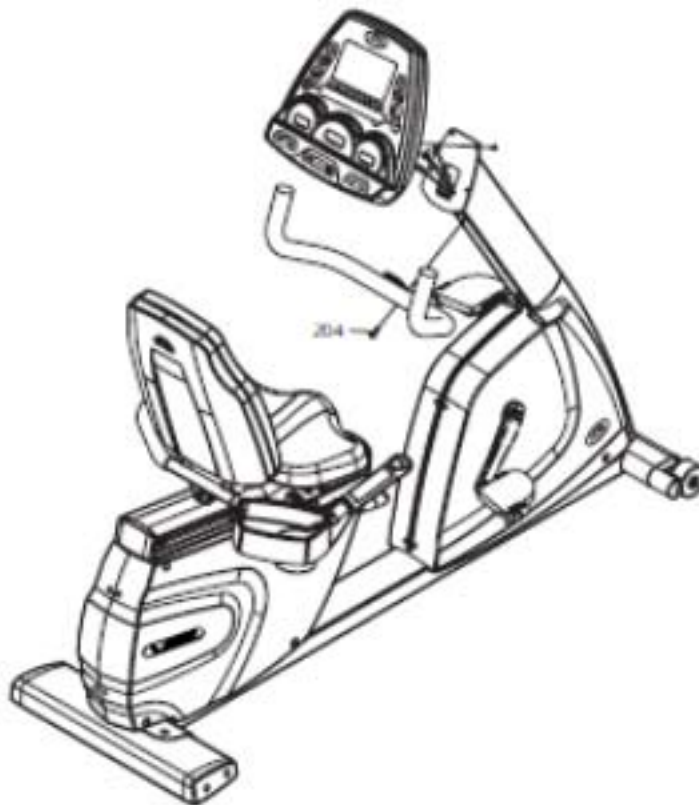
#### SEAT BACK COVER

Attach the seat back cover to the seat back.

#### CONSOLE MAST

Secure the upper console mast to the lower console mast using the four screws (Z04). Alternately tighten each screw using the #5 Allen Wrench. Check the console mast to make sure it is securely fastened.

#### STEP 6



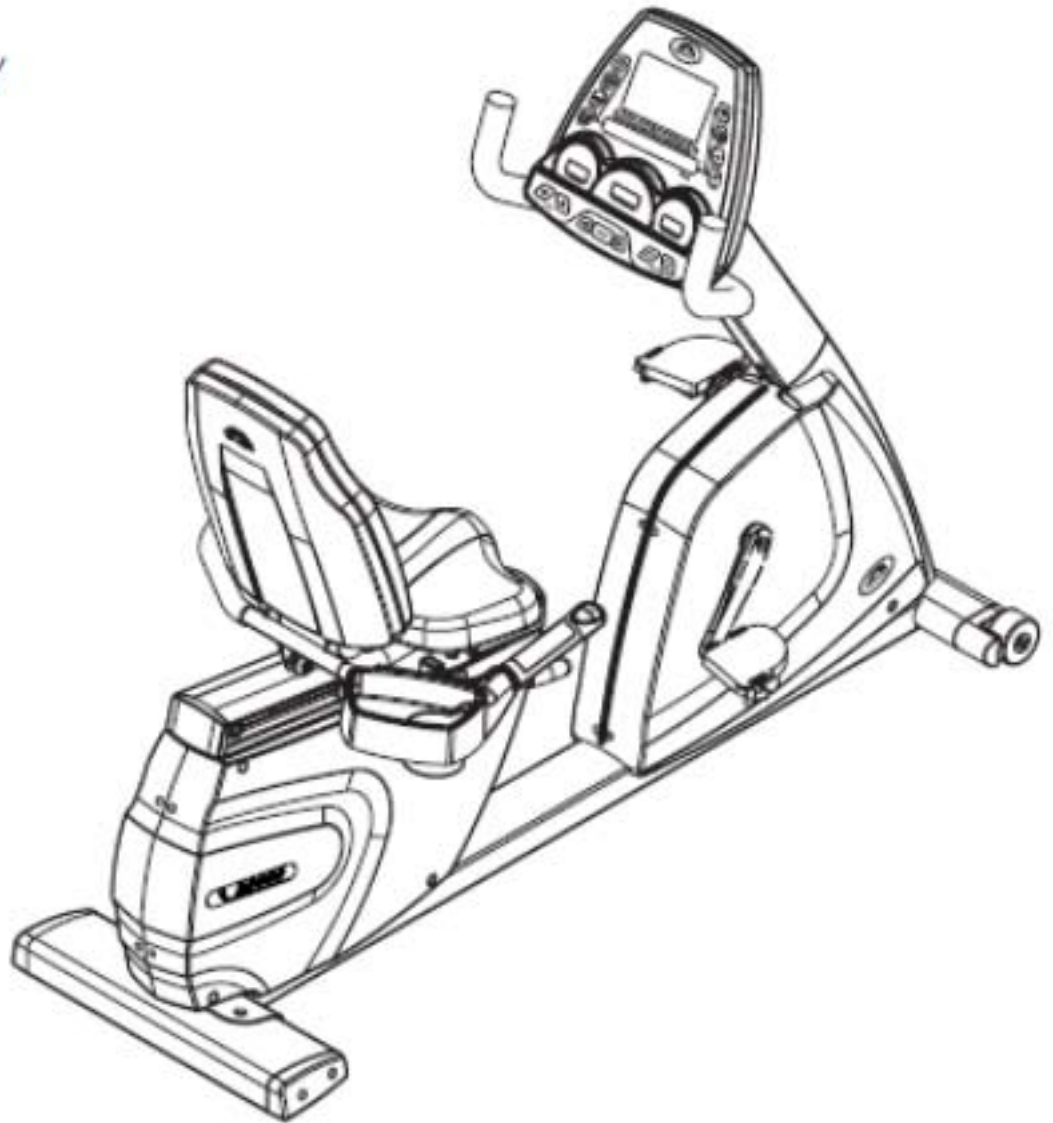
#### HANDLEBAR

Mount the upper handlebars to the console mast using four screws (Z04). Tighten with the #5 Allen Wrench (Z32).

#### CONSOLE

Remove the four mounting screws from the back of the console. Connect the wire harnesses and heart rate wires that come from the console mast into the plugs located in the back of the console. Attach the console to the mast with the four screws removed earlier in this step.

#### FINAL ASSEMBLY



### 8.5 ADJUSTING THE PEDAL STRAPS AND SEAT

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#### ADJUSTING THE PEDAL STRAPS

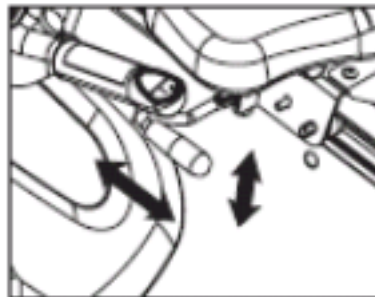
The pedal straps are designed to fit your individual foot size and should be adjusted tight enough to keep your foot from slipping. The pedals include spring loaded clips for easy adjustment. To tighten the strap, pull down the open end of the strap. To loosen the strap, push down on the top of the clip and pull the strap up. Release the clip to lock the strap in place.



#### ADJUSTING THE R1X SEAT

While seated on the Matrix R1x Bike, an optimum position will allow movement through the bottom of the stroke without locking the knees or shifting in the seat. The knees should have a slight bend at the point of fullest leg extension.

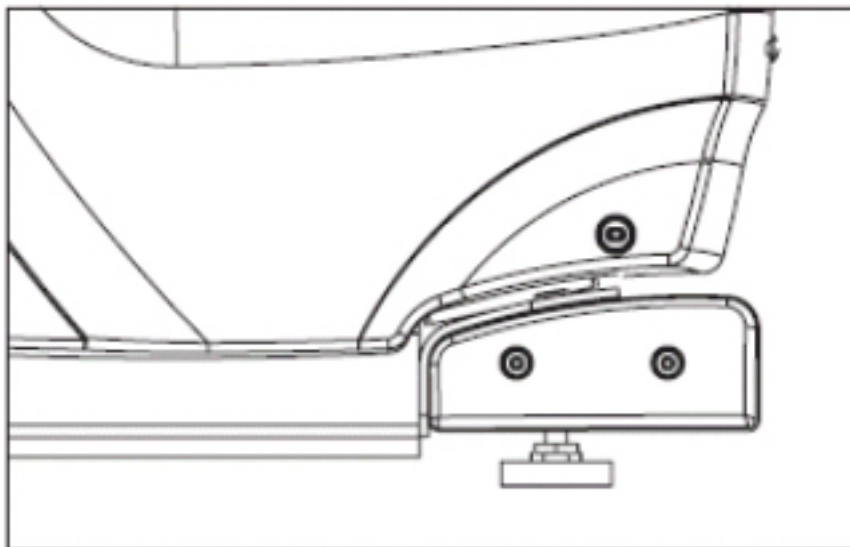
If the seat needs to be adjusted, lift the spring loaded seat lever on the right side of the seat to make adjustments. Slide the seat forward or backward to its desired location. Release the spring loaded seat lever and gently attempt to rock forward and backward to assure it is locked in place. Check the seat distance again and re-adjust it if necessary. If the seat is wobbly or loose, tighten the seat roller brackets using the procedure outlined in Section 6.7



### 8.6 LEVELING THE BIKE

#### STABILIZING THE MATRIX R1X BIKE

After positioning the bike in its intended location, check its stability by attempting to shake it side to side. Shaking or wobbling indicates that your bike needs to be leveled. Determine which leveler is not resting completely on the floor. Loosen the nut with one hand to allow the leveler to rotate. Rotate the left or right leveler, and repeat the adjustment as necessary until the bike is stable. Lock the adjustment by tightening the nut against the rear foot support.







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