



Strong. Smart. Beautiful.

E3X-01 ELLIPTICAL TRAINER SERVICE MANUAL

CHAPTER 1: SERIAL NUMBER LOCATION

CHAPTER 1: SERIAL NUMBER LOCATION	1
CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS	
2.1	Read and Save These Instructions..... 2
2.2	Electrical Requirements 2
CHAPTER 3: PREVENTATIVE MAINTENANCE	
3.1	Recommended Cleaning Tips 3
3.2	Check for Damaged Parts 3
3.3	Care and Maintenance Instructions 4
CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION	
4.1	Console Description 5
4.2	Workout Setup Steps - Manual 6
4.3	Workout Setup Steps - Fat Burn 6
4.4	Workout Setup Steps - Training Workout..... 6
4.5	Workout Setup Steps - Cooper Fitness Test..... 7
4.6	Workout Setup Steps - Target Heart Rate 7
4.7	Workout Setup Steps - Constant Watts 8
CHAPTER 5: MANAGER MODE	
5.1	Manager Mode Overview 9
5.2	Manager Mode Information 10
CHAPTER 6: ENGINEERING / SERVICE MODE	
6.1	Engineering / Service Mode Overview 11
CHAPTER 7: TROUBLESHOOTING	
7.1	Electrical Diagrams 12
7.2	Troubleshooting - Keypad Issues..... 15
7.3	Troubleshooting - Resistance Issues..... 16
7.4	Troubleshooting - Pedals Slipping 17
7.5	Troubleshooting - Noise Issues..... 17
7.6	Troubleshooting - Console Issues..... 18
7.7	Troubleshooting - No RPM Reading 19
7.8	Troubleshooting - Heart Rate Issues 20
CHAPTER 8: PART REPLACEMENT GUIDE	
8.1	Front Disk Replacement 21
8.2	Front Shroud Removal..... 23
8.3	Lower Control Board (LCB) Replacement 24
8.4	Generator Replacement..... 25
8.5	Generator Belt Replacement 26
8.6	Drive Belt Replacement 27
8.7	Pulley Axle Set Replacement..... 28

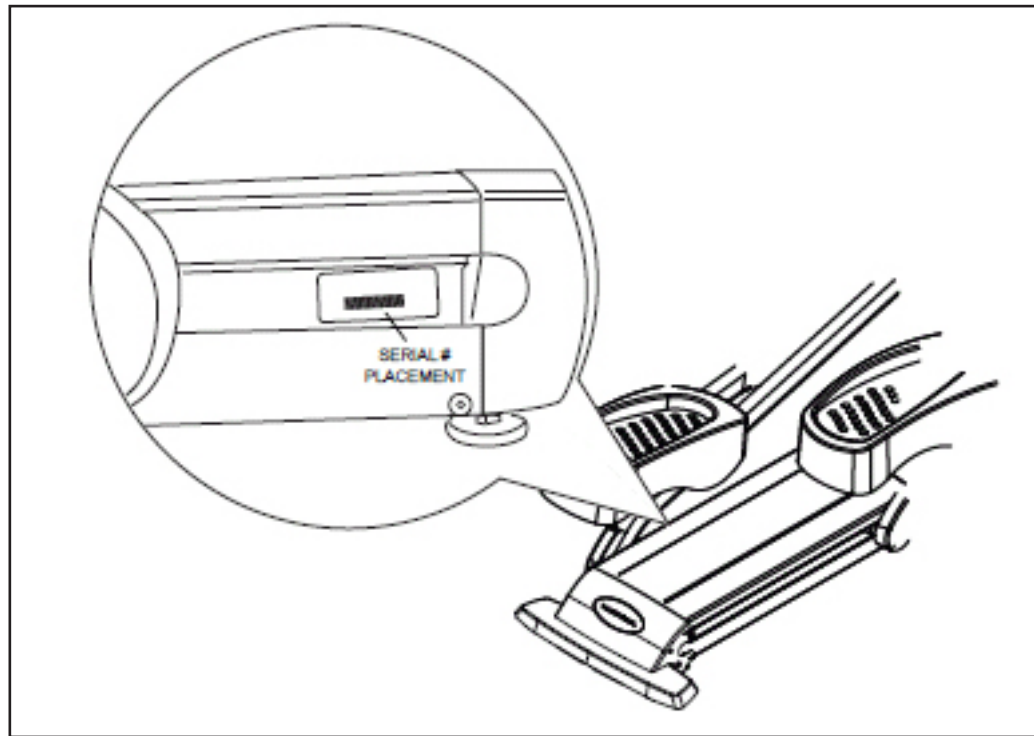
TABLE OF CONTENTS

8.8	Drive Axle Set Replacement	29
8.9	Console Replacement	30
8.10	Console - Overlays & Keypads Replacement.....	31
8.11	Handlebar Assembly Replacement.....	34
8.12	Heart Rate Grips Replacement.....	35
8.13	Cup Holder Replacement.....	36
8.14	Dual Action Handlebar Replacement.....	37
8.15	Console Mast Replacement.....	38
8.16	Foot Pedals Replacement.....	39
8.17	Pedal Arm Replacement	40
8.18	Crank Arm Replacement.....	42
8.19	Roller Replacement.....	45
8.20	Roller Track Replacement.....	48
8.21	Testing the Elliptical Trainer	51

CHAPTER 9: EXPLODED DIAGRAMS

9.1	Elliptical Trainer Specifications	52
9.2	Fasteners & Assembly Tools.....	53
9.3	Elliptical Trainer Assembly Steps	54
9.4	Leveling the Elliptical Trainer	60
9.5	TV Bracket Installation	61

1.1 SERIAL NUMBER LOCATION



CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.1 READ AND SAVE THESE INSTRUCTIONS

This Elliptical Trainer is intended for commercial use. To ensure your safety and protect the equipment, read all instructions before operating the MATRIX Elliptical Trainer.

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 product must be used for its intended purpose described in this service manual. Do not use other attachments that are not recommend by the manufacturer. Attachments may cause injury.***
- ***To prevent electrical shock, never drop or insert any object into any opening.***
- ***Do not remove the console covers. Service should only be done by an authorized service technician.***
- ***Close supervision is necessary when the Elliptical Trainer is used by or near children or disable persons.***
- ***Do not use outdoors.***
- ***Do not operate where aerosol (spray) products are being used or when oxygen is being administered.***
- ***Do not use the equipment in any way other than designed or intended by the manufacturer. It is imperative that all Matrix Fitness Systems equipment is used properly to avoid injury.***
- ***Keep hands and feet clear of moving parts at all times to avoid injury.***
- ***Unsupervised children must be kept away from this equipment.***
- ***Do not wear loose clothing while on the equipment.***

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

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

2.2 ELECTRICAL REQUIREMENTS

The Matrix E3x-01 Elliptical Trainer is designed to be self powered and does not require an external power supply source to operate.

The battery in the console needs to be charged for 3-4 hours when first installed. Until the battery is fully charged, the 30 second pause feature may not function fully. The charging does not need to be continuous for 3-4 hours, but over combined workouts equaling 3-4 hours.

CHAPTER 3: PREVENTATIVE MAINTENANCE

3.1 RECOMMENDED CLEANING TIPS

Preventative maintenance and daily cleaning will prolong the life and look of your MATRIX Elliptical Trainer.

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 foot pads, handles, 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.
- Check pedal motion and stability.
- Adjust leveling feet when equipment wobbles or rocks.
- Maintain a clean area around equipment, free from dust and dirt.

3.2 CHECK FOR DAMAGED PARTS

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. 1-866-693-4863, www.matrixfitness.com

MAINTAIN ALL EQUIPMENT Preventative maintenance is the key to smooth operating equipment. Equipment needs to be inspected at regular intervals. Defective components must be replaced immediately. Improperly working equipment must be kept out of use until it is 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 INSTRUCTION

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, the frequency of which they should be done, and a check list to sign off each time service is completed for a specific machine. 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
- * Mild, water soluble, detergent – such as “Simple Green”, or other Matrix approved product
- * Teflon based spray lubricant such as “Super Lube”, or other Matrix approved product
- * 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, 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 elliptical trainer 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.

MONTHLY MAINTENANCE ITEMS

- 1) Inspect the console, handrails, link arms, pedal arms, and pedals for damage.
- 2) Check the link / pedal arms for loose joints, tighten hardware as needed.
- 3) Check pedal motion and stability.
- 4) Adjust leveling feet if the equipment rocks or wobbles.
- 5) Remove the rear shroud, and clean the rollers / tracks to prevent flat spots caused by dust / dirt.

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



PROGRAM KEYS: Simple program selection buttons make Matrix Elliptical Trainers easy to use. The Elliptical Trainer features eight programs.

START / QUICK START: One touch Quick Start and Start any time during preference selection.

UP / DOWN LEVEL: Easy information and level selection.

SELECT / SELECT SCREEN / RESET: This multi-function button enters information when setting up programming options, toggles information displayed and if held down for 5 seconds, resets the Elliptical Trainer to Start-up Mode.

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.2 WORKOUT SETUP STEPS - MANUAL

GO - Press to immediately begin a workout. Workout, resistance level, and time will automatically go to default settings. Pressing GO will not prompt user for age, weight, or level settings.

1) Start pedaling and press the GO key to begin your workout. 2) The display will read 3, 2, 1, Begin and then the program will start.

MANUAL - Manual allows the user to input more information while defining their own workout. Calorie expenditure will be more accurate when inputting information in Manual than by pressing GO.

1) Start pedaling, press the MANUAL key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

4.3 WORKOUT SETUP STEPS - FAT BURN

FAT BURN - Fat burn is a level based program that is designed to help users burn fat through various resistance level changes.

1) Start pedaling and press the FAT BURN key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

4.4 WORKOUT SETUP STEPS - LEVEL BASED

ROLLING HILLS - The Rolling Hills program is a level based program that automatically adjusts the resistance level to simulate real terrain.

1) Start pedaling and press the ROLLING HILLS key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

INTERVAL TRAINING - The Interval Training program is a level based program that automatically adjusts the resistance of the machine from low to high intensity settings at regular intervals.

1) Start pedaling and press the INTERVAL TRAINING key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

RANDOM - Random is a level based workout that randomly adjusts the resistance of the machine.

1) Start pedaling and press the key next to RANDOM key.
2) Select Level by using the UP or DOWN LEVEL keys and press SELECT.
3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.5 WORKOUT SETUP STEPS - COOPER FITNESS TEST

FITNESS TEST -The Cooper Fitness Test measures cardiovascular fitness and proves an estimated sub-maximal VO2 result. It is based on power output according to ACSM standards and was developed by the Cooper Institute© (www.cooperinstitute.org). User RPMs must remain between 60-80 RPM during the test. The test will end when the user can no longer maintain this speed. Use of a heart rate strap is optional but provides more data.

The test starts at a low intensity level and gradually increases in intensity (difficulty) every 2 minutes. As it increases, the user must maintain 60-80 RPM to advance to the next level. The test could take upwards of 30+ minutes for very fit individuals. Once the test ends a recovery period (cool down) will begin and the user's results are calculated and displayed. Results are based on the number of stages completed.

- 1) Start pedaling and press the FITNESS TEST key.
- 2) Select Age by using the UP or DOWN LEVEL keys and press SELECT.
- 3) Select Gender by using the UP or DOWN LEVEL keys and press SELECT.
- 4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
- 5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.
- 6) Once the workout is complete, the display will read the results of the Fitness Test.

PERCENTILE VALUES FOR MAXIMAL AEROBIC POWER

AGE

PERCENTILE	20-29	30-39	40-49	50-59	60+
MEN					
90	51.4	50.4	48.2	45.3	42.5
80	48.2	46.8	44.1	41.0	38.1
70	46.8	44.6	41.8	38.5	35.3
60	44.2	42.4	39.9	36.7	33.6
50	42.5	41.0	38.1	35.2	31.8
40	41.0	38.9	36.7	33.8	30.2
30	39.5	37.4	35.1	32.3	28.7
20	37.1	35.4	33.0	30.2	26.5
10	34.5	32.5	30.9	28.0	23.1
WOMEN					
90	44.2	41.0	39.5	35.2	31.2
80	41.0	38.6	36.3	32.3	29.4
70	38.1	36.7	33.8	30.9	27.2
60	36.7	34.6	32.3	29.4	25.8
50	35.2	33.8	30.9	28.2	24.5
40	33.8	32.3	29.5	26.9	23.8
30	32.3	30.5	28.3	25.5	22.8
20	30.6	28.7	26.5	24.3	20.8
10	28.4	26.5	25.1	22.3	

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.6 WORKOUT SETUP STEPS - TARGET HEART RATE

TARGET HEART RATE - The Matrix Elliptical Trainer comes with standard digital contact heart rate sensors and are POLAR telemetry compatible. The heart rate control workout mode allows the user to program their desired heart rate zone, and the Elliptical Trainer will automatically adjust the level based upon the user's heart rate. The heart rate zone is calculated using the following equation: $(220 - \text{Age}) \times 8\% = \text{target heart rate zone}$. The user must wear a POLAR telemetric strap or continually hold onto the contact heart rate grips for this workout.

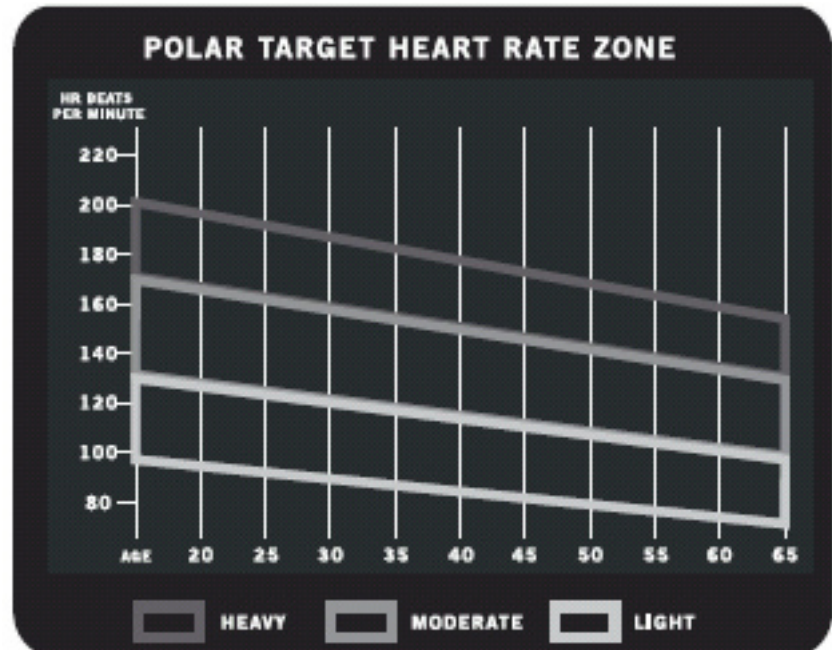
Locate the metal sensors on the handlebars of the Elliptical Trainer. Notice that there are two separate pieces of metal on each grip. You must be making contact with both pieces of each grip to get an accurate heart rate reading. You can grab these sensors in any program to view your current heart rate.

- 1) Start pedaling and press the HEART RATE key.
- 2) Select Age by using the UP or DOWN LEVEL keys and press SELECT.
- 3) Select Target HR Percentage by using the UP or DOWN LEVEL keys and press SELECT.
- 4) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
- 5) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
- 6) The display will read Starting 3 Starting 2, Starting 1 and then the program will begin.

4.7 WORKOUT SETUP STEPS - CONSTANT WATTS

CONSTANT WATTS - Constant Watts is a unique program that allows you to vary your cadence or RPM and the Elliptical Trainer's resistance level will adjust accordingly to your selected goal. The quicker you pedal, the less resistance for the goal selected.

- 1) Start pedaling and press the CONSTANT WATTS key.
- 2) Select Watts by using the UP or DOWN LEVEL keys and press SELECT.
- 3) Select Time by using the UP or DOWN LEVEL keys and press SELECT.
- 4) Select Weight by using the UP or DOWN LEVEL keys and press SELECT.
- 5) The display will read Starting 3, Starting 2, Starting 1, and then the program will begin.



5.1 MANAGER MODE OVERVIEW

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

- 1) To enter Manager Mode, press and hold down the UP and DOWN LEVEL keys. Continue to hold down these two keys until the display reads Manager Mode and hit SELECT (Figure A).
- 2) To scroll through the list of options in Manager Mode, use the UP and DOWN LEVEL 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 UP and DOWN LEVEL keys.
- 5) To confirm and save the value of the setting, press the START key.
- 6) Press the START key twice to return to normal operation.

CHAPTER 5: MANAGER MODE

5.2 MANAGER MODE INFORMATION

CUSTOM SETTING	DEFAULT	MINIMUM	MAXIMUM	DESCRIPTION
Maximum Time	95 min	10 min	95 min	Sets the total run time of any program.
Default Time	20 min	10 min	Maximum Time Setting	Workout time when GO is pressed or when no time is selected during program set up.
Default Level	1	1	20	Starting resistance when GO is pressed or when no resistance is selected during program set up.
Default Weight	150 lbs / 75 kg	80 lbs / 36 kg	400 lbs / 181 kg	Weight used for program calorie expenditure calculations.
Speed / Distance Mode	Mile	Mile	Kilometer	Displays distance in miles or kilometers.
Machine	Bike (BI)	Elliptical (EL)	Bike (BI)	This should be set for Elliptical (EL) at all times.
Cardio	On	Off	On	This turns the cardio port on or off.
Accumulated Distance	N/A	0	65,000 Miles	Total distance for all programs.
Accumulated Time	N/A	0	65,000 hours	Total time for all programs displayed in hours.
Language	English	English	English	Sets the language for the console. Select between English, German, Dutch, Italian, French, Spanish, and Portuguese.
Software Version	N/A	N/A	N/A	Current version of console software.

6.1 ENGINEERING / SERVICE MODE OVERVIEW

To enter Engineering or Service Mode, hold the UP and DOWN LEVEL keys for 3 seconds until Manager Mode appears on the middle LED display. Press the UP or DOWN LEVEL key to scroll between the different Engineering and Service Modes.

ENGINEERING MODE

This mode is for factory settings only.

SERVICE MODE

SERVICE 1: Display Test.

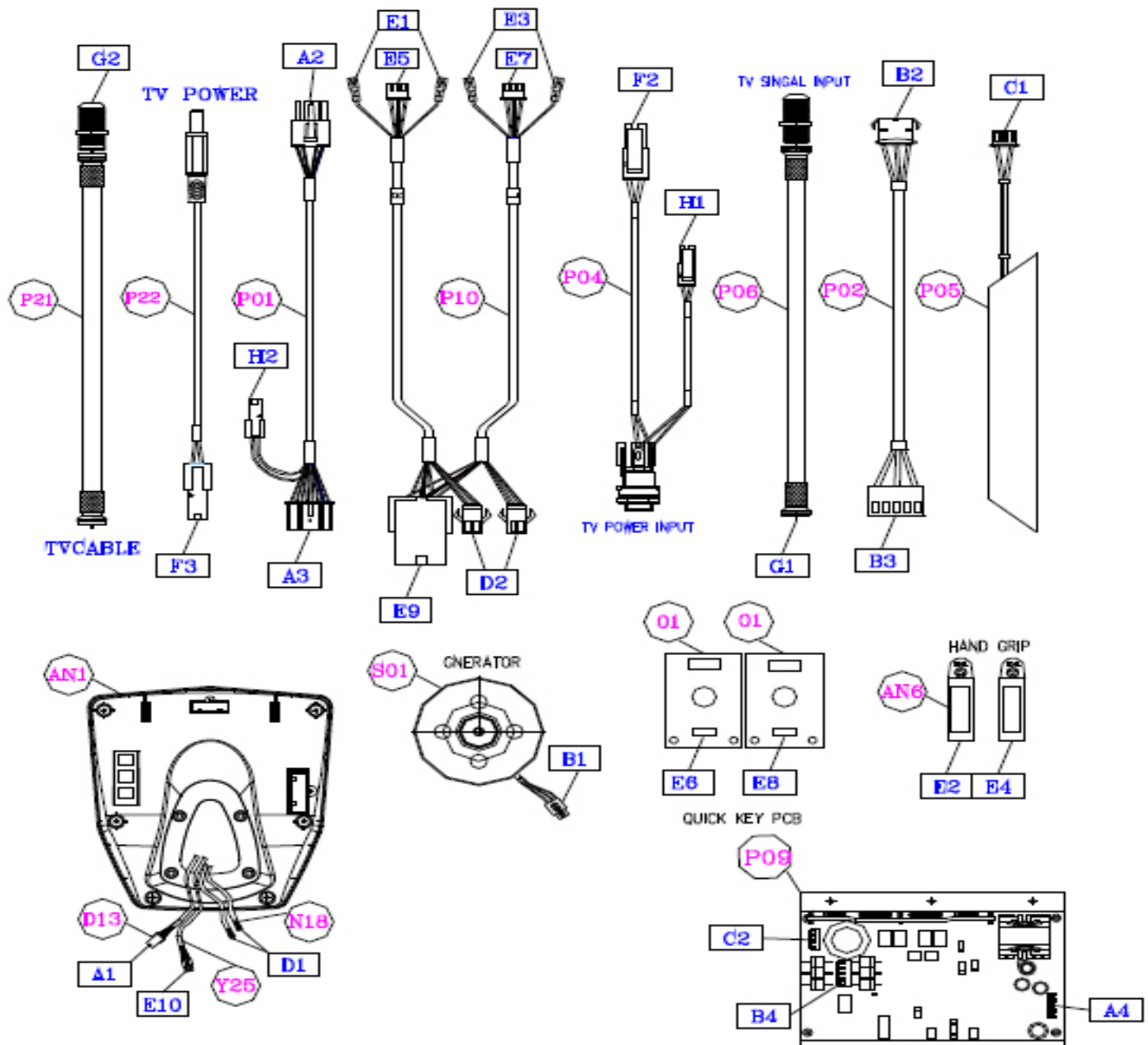
SERVICE 2: RPM Reading.

SERVICE 3: Accumulated Distance and Time.

SERVICE 4: Heart Rate Test.

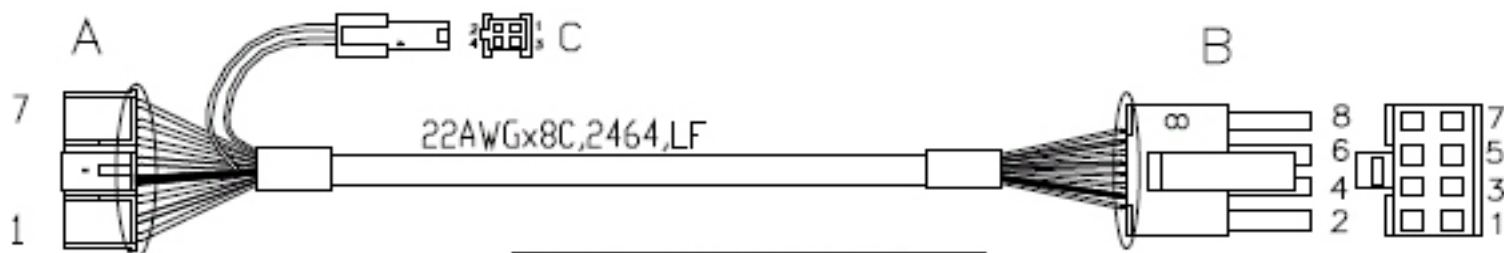
CHAPTER 7: TROUBLESHOOTING

7.1 ELECTRICAL DIAGRAMS

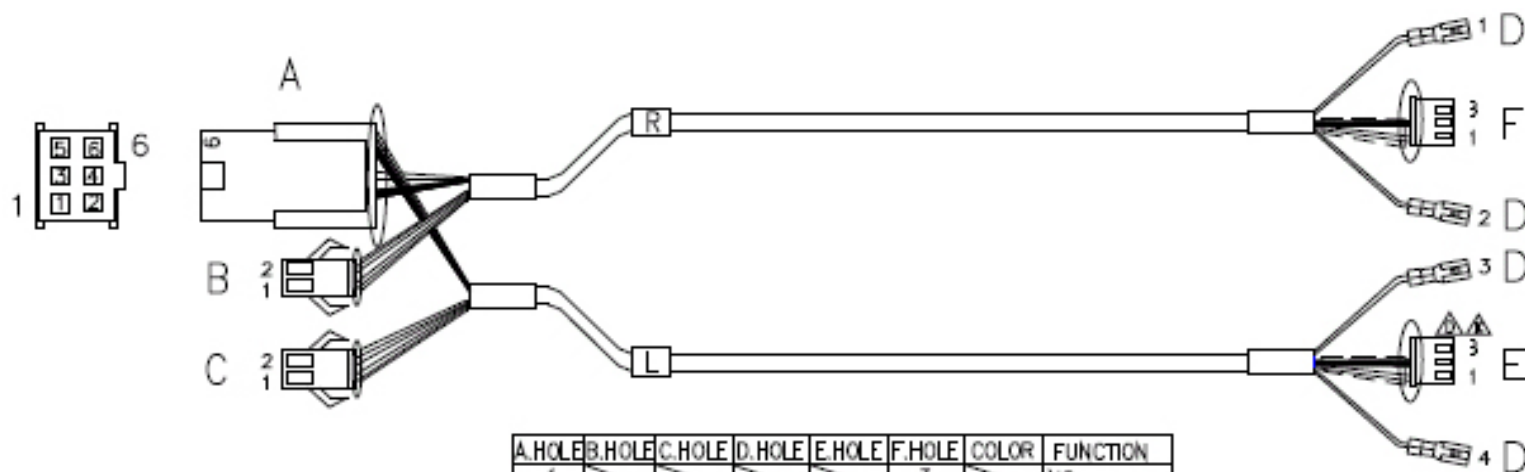


CHAPTER 7: TROUBLESHOOTING

7.1 ELECTRICAL DIAGRAMS



A,HOLE	B,HOLE	C,HOLE	FUNCTION
1	1		T+
2	2		T-
3	3		14V
4	4	2	GND+(Shielding)
5	5		RPM
6	6		D/A
7	7		+5.5V
	8	3	+12v(TV)
		1,4	NC



A,HOLE	B,HOLE	C,HOLE	D,HOLE	E,HOLE	F,HOLE	COLOR	FUNCTION
1					3		NC
2					2		GN(Shielding)
3					1		UP
	1		1			Red	Right Hand Pulse
	2		2			Green	Right Hand Pulse-
4				3			NC
5				2			GN(Shielding)
6				1			DOWN
		1	3			Blue	Left Hand Pulse
		2	4			Black	Left Hand Pulse-

ALL OR SOME OF THE FUNCTION KEYS DO NOT RESPOND

POSSIBLE CAUSES:

- 1) The keypad connection ribbon cable has not been plugged in correctly.
- 2) The keypad is damaged.
- 3) The console is damaged.

SOLUTION:

- 1) Check the connections of the keypad at the Upper Control Board.
 - a. Remove the console from the console mast.
 - b. Remove the 6 screws holding the back of the console to the front (Figure A).
 - c. Inspect the keypad ribbon cable connection at the UCB (Figure B).
 - d. Even if the keypad ribbon cable appears to be connected correctly, unplug and re-seat the cable, then retest.
- 2) Replace the affected keypad.
- 3) Replace the console.



FIGURE A

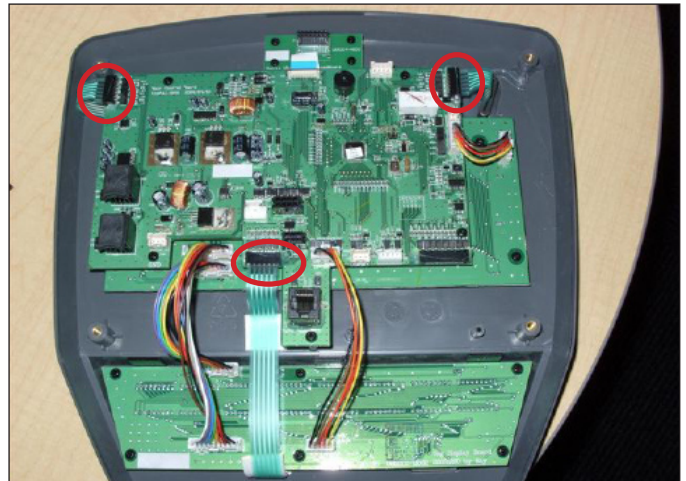


FIGURE B

HIGH OR NO RESISTANCE

POSSIBLE CAUSES:

- 1) The console cable is damaged or not properly plugged in.
- 2) The Upper Control Board is damaged.
- 3) The Generator is damaged.
- 4) The Lower Control Board is damaged.

SOLUTION:

- 1) Check the console cable connections at the UCB and LCB.
- 2) Check if the generator is outputting variable power:
 - a. Insert the probes from a multi-meter into the black and red wires on the generator wire harness connector (Figure A).
 - b. When pedaling, the output voltage from the generator should vary depending on the RPM. The generator should output 120 VAC at 94 RPM.
- 3) If the generator does not have variable power, replace the generator.
- 4) If the generator does have variable power, replace the LCB.
- 5) If both the generator and LCB have been replaced and the issue is still present, replace the console.



FIGURE A

7.4 TROUBLESHOOTING - PEDALS SLIPPING

PEDALS SLIPPING

POSSIBLE CAUSES:

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

SOLUTION:

- 1) Remove the covers and check the belt tension.
 - a. The drive belt should be tightened to 170 ft / lbs.
 - b. The Generator belt should be tightened to 85 ft / lbs.
- 2) If the belts are tensioned correctly, the one way bearing is damaged, replace the drive assembly.

7.5 TROUBLESHOOTING - NOISE ISSUES

KNOCKING OR CREAKING NOISE

POSSIBLE CAUSES:

- 1) The pedal is on the pedal arm too loosely.
- 2) The drive axle is worn out.
- 3) The belt tension is not enough, or the belts are too dirty.

SOLUTION:

- 1) Retighten the pedal onto the pedal arm.
- 2) Replace the drive axle as needed.
- 3) Remove the covers and check the belt tension.
 - a. The drive belt should be tightened to 170 ft / lbs.
 - b. The Generator belt should be tightened to 85 ft / lbs.
- 4) Clean the belts. If they are worn or will not clean, replace the belts.

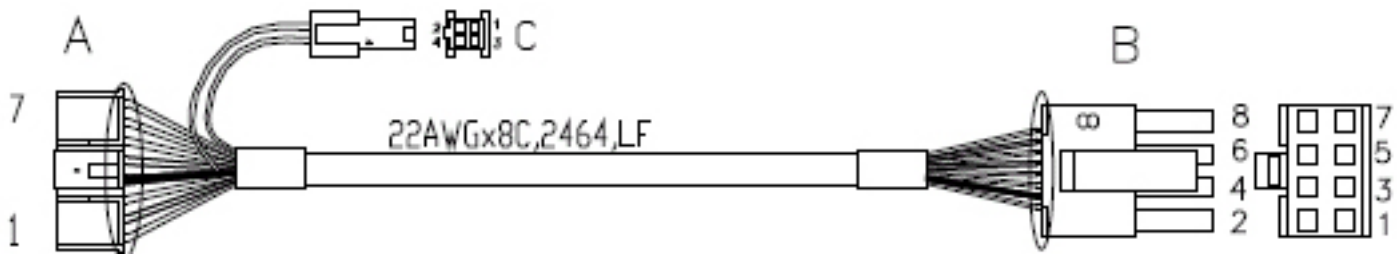
NO DISPLAY ON THE CONSOLE OR THE CONSOLE IS DIM

POSSIBLE CAUSES:

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

SOLUTION:

- 1) Unplug the console cable at the console and use a multi-meter to check if the voltage between pin 7 (Vcc) and pin 4 (Ground) of the console cable is greater than 5.5 Volts DC. If it is, replace the console.



- 2) If no voltage is present in Step 1, check the console cable connection at the lower control board. Also check for any pinches or cuts in the console cable.
- 3) Check if the generator is outputting variable power:
 - a. Insert the probes from a multi-meter into the black and red wires on the generator wire harness connector (Figure A).
 - b. When pedaling, the output voltage from the generator should vary depending on the RPM. The generator should output 120 VAC at 94 RPM.
 - c. If the generator is not outputting variable power, replace the generator.
 - d. If the generator is outputting variable power, replace the lower control board.

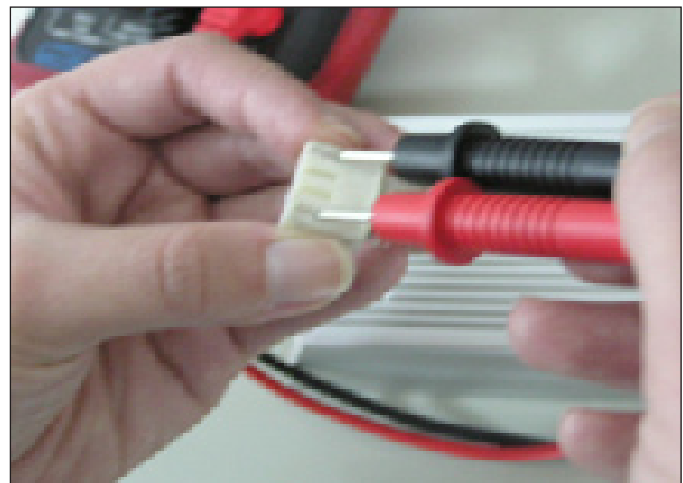


FIGURE A

7.7 TROUBLESHOOTING - NO RPM READING

NO RPM IS DISPLAYED DURING EXERCISE

POSSIBLE CAUSES:

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

SOLUTION:

- 1) Remove the console and check to see if the console cable is connected properly.
- 2) Check to see if the console cable is pinched or cut, replace as needed.
- 3) Replace the console.
- 4) Replace the lower control board.

HEART RATE FUNCTION DOES NOT WORK OR IS READING INCORRECTLY

POSSIBLE CAUSES:

- 1) The chest strap being used is not making good contact with the user's chest.
- 2) The chest strap is at a low battery status.
- 3) The chest strap is damaged.
- 4) The HR grips are damaged.
- 5) The HR board is damaged.
- 6) The UCB is damaged.

SOLUTION:

- 1) Re-center the chest strap below the user's pectoral muscle (Figure A) and check again.
- 2) Replace the battery in the chest strap.
- 3) Replace the chest strap.
- 4) If there is no HR present, replace the HR grips.
- 5) If there is a HR present but it is much higher than normal, replace the HR board.
- 6) If replacing the HR grips and board does not resolve the issues, replace the console.

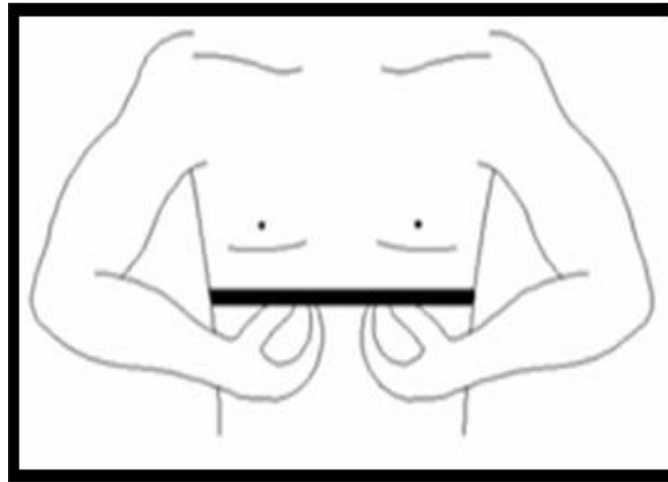


FIGURE A

CHAPTER 8: PART REPLACEMENT GUIDE

8.1 FRONT DISK REPLACEMENT

- 1) Remove the crank arm plastic cap at the front disk (Figure A).
- 2) Detach the crank from the crank arm (Figures B & C).
- 3) Locate the center cap in the center of the front disk (Figure D).



FIGURE A



FIGURE B



FIGURE C



FIGURE D

CHAPTER 8: PART REPLACEMENT GUIDE

8.1 FRONT DISK REPLACEMENT – CONTINUED

- 4) Turn the center cap counter clockwise with the palm of your hand and remove the cap and spring (Figure E).
- 5) Remove the 24mm locking nut and washer by turning them counter clockwise (Figure F).



FIGURE E



FIGURE F

- 7) Thread the Matrix disk removal tool into the center hub (Figure G).
- 8) Turn the center bolt of the removal tool clockwise until the main disk can be removed (Figures H and I). Repeat if necessary for the opposite side disk.



FIGURE G



FIGURE H

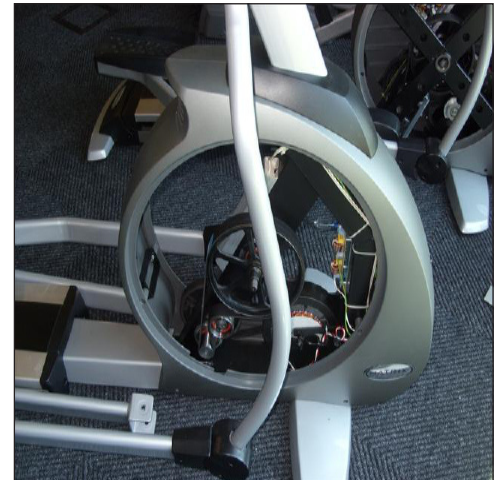


FIGURE I

- 9) Reverse Steps 1-8 to re-install the disk. **NOTE:** When reinstalling the 24mm nut, it should be tightened to 196 N-m Torque.

8.2 FRONT SHROUD REPLACEMENT

- 1) Remove the front disks as outlined in Section 8.1.
- 2) Remove the screws that hold the front shrouds in place and to each other on each side (Figure A). **NOTE:** You will need to lift the console mast boot to remove some of the screws.



FIGURE A

- 3) Remove the front shrouds for frame access (Figure B).



FIGURE B

- 4) Reverse Steps 1-3 to install a new shroud.

CHAPTER 8: PART REPLACEMENT GUIDE

8.3 LOWER CONTROL BOARD REPLACEMENT

- 1) Turn off the power and disconnect the cord from the machine.
- 2) Remove the right side front disk from the machine as outlined in Section 8.1.
- 3) Remove the right side front shroud as outlined in Section 8.2.
- 4) Disconnect all wires from the LCB (Figure A).



FIGURE A

- 5) Remove the 2 screws holding the LCB to the frame and remove the LCB. (Figure B).



FIGURE B

- 6) Reverse Steps 1-5 to install a new LCB.
- 7) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.4 GENERATOR REPLACEMENT

- 1) Turn off power and disconnect the cord from the machine.
- 2) Remove the front disks as outlined in Section 8.1.
- 3) Remove the front shrouds as outlined in Section 8.2.
- 4) Unplug the Generator wire harness from the lower control board (Figure A).
- 5) Remove the screw holding the Generator axle in place on the right side of the frame (Figure B).
- 6) Loosen the large nut on the tension eye bolt on both sides of the frame (Figure C).



FIGURE A

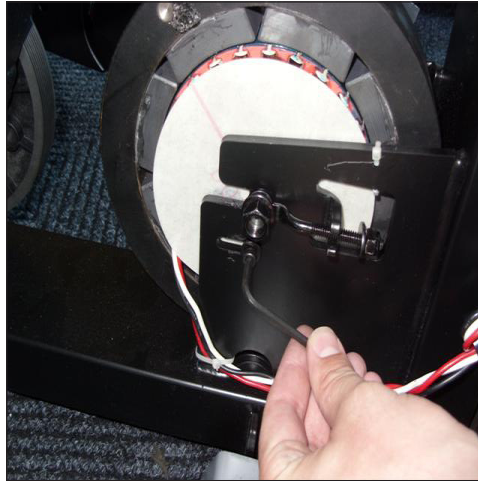


FIGURE B

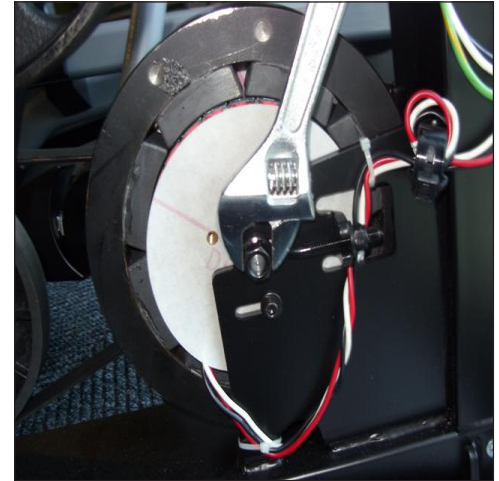


FIGURE C

- 7) Remove the tension eye bolt nut from the Generator bracket on both sides of the frame (Figure D).
- 8) Once the tension eye bolts have been removed, slide the Generator towards the back of the unit and off of the Generator bracket (Figure E).

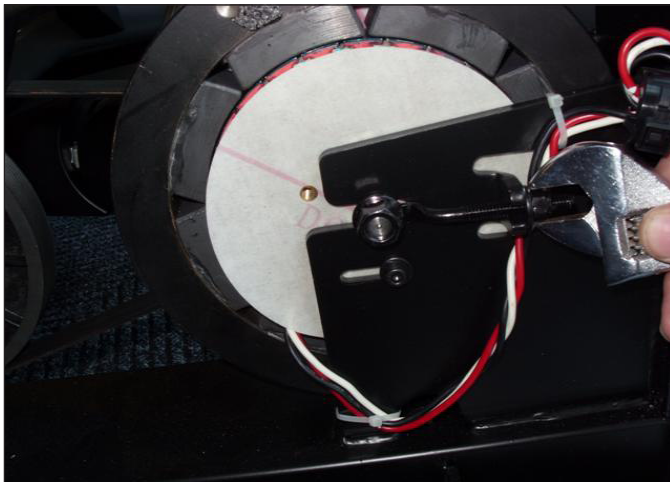


FIGURE D



FIGURE E

- 9) Reverse Steps 1-8 to install a new Generator. **NOTE:** Be sure to re-tension the Generator belt to 85 ft / lbs using the tension eye bolts.
- 10) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.5 GENERATOR BELT REPLACEMENT

- 1) Turn off the power and disconnect the cord from the machine.
- 2) Remove the left side front disk from the machine as outlined in Section 8.1.
- 3) Remove the left side shroud from the machine as outlined in Section 8.2.
- 4) Remove the screw holding the Generator axle in place on the right side of the frame (Figure A).
- 5) Loosen the large nut on the tension eye bolt on both sides of the frame (Figure B).
- 6) Remove the tension eye bolt nut from the Generator bracket on both sides of the frame (Figure C).

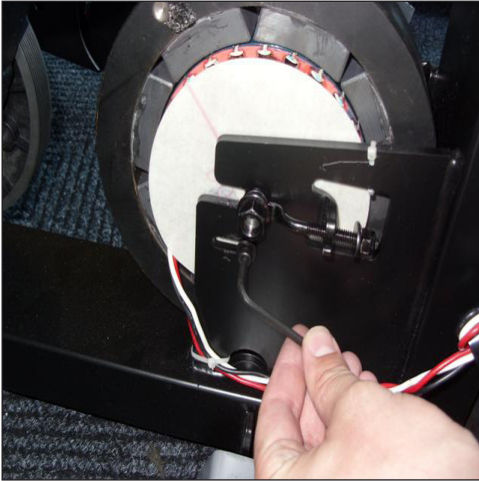


FIGURE A

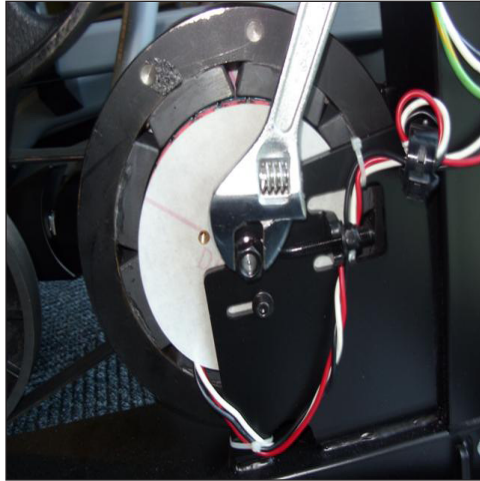


FIGURE B

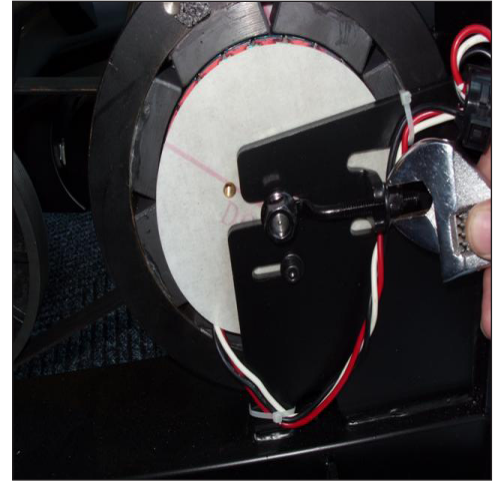


FIGURE C

- 7) Once the tension eye bolts have been removed, slide the Generator towards the back of the unit and off of the Generator bracket (Figure D), this will allow you to remove the Generator belt from the Generator and pulley axle set (Figure E).



FIGURE D



FIGURE E

- 8) Reverse Steps 1-7 to install a new Generator belt. **NOTE:** Be sure to tighten the new Generator belt to 85 ft / lbs using the Generator eye bolts.
- 8) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.6 DRIVE BELT REPLACEMENT

- 1) Turn off the power and disconnect the cord from the machine.
- 2) Remove the right side front disk from the machine as outlined in Section 8.1.
- 3) Loosen the belt tension screw on the left side of the tension pulley and rotate the pulley counter clockwise until there is enough slack in the belt to remove it (Figures A & B).



FIGURE A



FIGURE B

- 4) Walk the new drive belt into position on the drive assembly.
- 5) Once the drive belt is in place, reapply tension by rotating the tension pulley clockwise until there is 170 ft / lbs of tension on the belt. Tighten the belt tension screw to hold the tension pulley in place (Figure C).

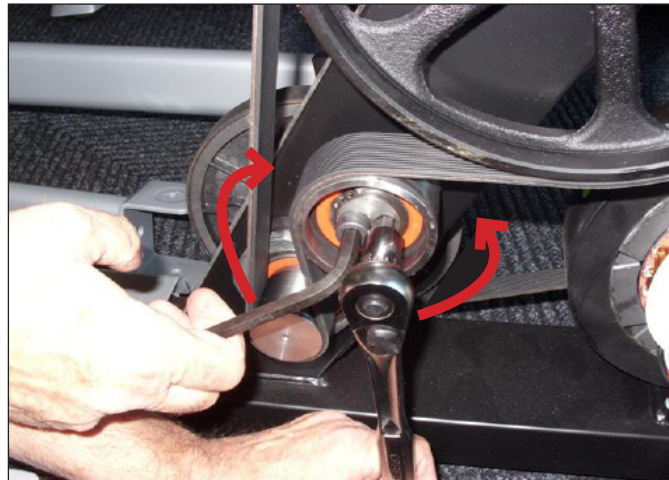


FIGURE C

- 6) Reinstall the front shroud and disk.
- 7) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.7 PULLEY AXLE SET REPLACEMENT

- 1) Turn off the power and disconnect the cord from the machine.
- 2) Remove both front disks from the machine as outlined in Section 8.1.
- 3) Remove both front shrouds from the machine as outlined in Section 8.2.
- 4) Remove the Generator belt as outlined in Section 8.5.
- 5) Remove the drive belt as outlined in Section 8.6.
- 6) Remove the 75 mm nut holding the pulley axle in place using the large socket available from Matrix (Figure A).



FIGURE A

- 7) Use a hammer or mallet to remove the pulley axle from the left side (Figure B) and clean any debris from the frame (Figure C).

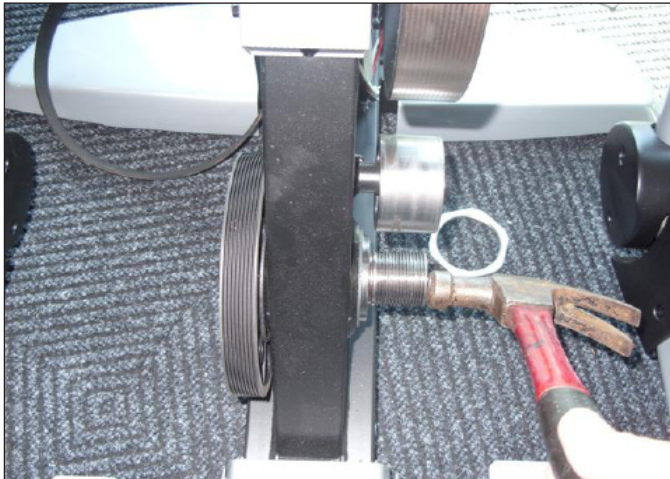


FIGURE B



FIGURE C

- 8) Reverse Steps 1-7 to install a new pulley axle set, making sure to tighten the 75mm nut to 100 N-m torque. Re-tension the belts as outlined in Sections 8.5 and 8.6.
- 9) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.8 DRIVE AXLE SET REPLACEMENT

- 1) Turn off the power and disconnect the cord from the machine.
- 2) Remove both front disks from the machine as outlined in Section 8.1.
- 3) Remove both front shrouds from the machine as outlined in Section 8.2.
- 4) Remove the Generator belt as outlined in Section 8.5.
- 5) Remove the drive belt as outlined in Section 8.6.
- 6) Release any bent tabs on the lock washer around the 75 mm nut holding the drive axle set to the frame (Figure A).
- 7) Remove the 75 mm nut holding the drive axle set to the frame using the large socket available from Matrix (Figure B).



FIGURE A



FIGURE B

- 8) Remove the drive axle set from the right side and clean any debris from the frame (Figure C).



FIGURE C

- 9) Reverse steps 1-8 to install a new drive axle set, making sure to tighten the 75mm nut to 100 N-m torque and re-bend the lock washer tabs to secure the nut. Be sure to re-tension the belts as outlined in Sections 8.5 and 8.6.
- 10) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.9 CONSOLE REPLACEMENT

- 1) Remove the 4 screws that hold the console to the top of the console mast (Figure A).



FIGURE A

- 2) Disconnect the data cable, heart rate, and ground wires and remove the console (Figure B).



FIGURE B

- 3) Reconnect 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 console to the mast using the 4 screws removed in Step 2.
- 5) Test the Elliptical Trainer for function as outlined in Section 8.21.

8.10 CONSOLE OVERLAYS & KEYPADS REPLACEMENT

- 1) Remove the console as outlined in Section 8.1.
- 2) Remove the back cover of the console (Figure A).
- 3) Unplug and remove the faulty overlay (Figure B).



FIGURE A



FIGURE B

- 4) Clean the console area with alcohol to remove any left over adhesive (Figure C).
- 5) Remove the protective film over the display window of the overlay (Figure D).



FIGURE C



FIGURE D

CHAPTER 8: PART REPLACEMENT GUIDE

8.10 CONSOLE KEYPAD & OVERLAY REPLACEMENT - CONTINUED

- 6) Peel part of the protective film from the back of the overlay (Figure E).
- 7) Push the overlay ribbon cable through the hole in the console and plug it in (Figure F).



FIGURE E

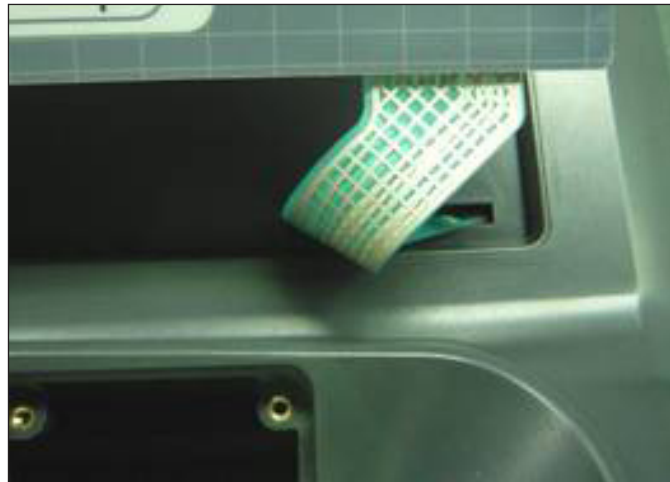


FIGURE F

- 8) Match the overlay to the cutout on the console (Figure G).



FIGURE G

CHAPTER 8: PART REPLACEMENT GUIDE

8.10 CONSOLE KEYPAD / OVERLAY REPLACEMENT - CONTINUED

9) Press down on the corners of the overlay to keep it in place, then remove the protective film (Figure H & I).



FIGURE H



FIGURE I

10) Once the overlay is in the correct position, press down on the overlay with a cloth to adhere it to the console plastic (Figure J).



FIGURE J

- 11) Use the same procedure to replace any additional faulty overlays. **NOTE:** Overlays can not be reused.
- 12) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.11 HANDLEBAR ASSEMBLY REPLACEMENT

- 1) Remove the two screws holding the plastic handlebar cover in place and remove the cover (Figures A & B).



FIGURE A



FIGURE B

- 2) Remove the 4 bolts that hold the handlebar to the console mast being careful to support the handlebar (Figures C and D).



FIGURE C



FIGURE D

- 3) Carefully remove the wires from inside the console mast until the connectors on the ends come free and disconnect.
- 4) To install a new handlebar assembly, connect the new handlebar and carefully push the heart rate wires into the console mast.
- 5) Attach the new handlebar assembly to the console mast using the 4 screws removed in Step 3.
- 6) Reattach the cover over the handlebar assembly.
- 7) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.12 HEART RATE GRIPS REPLACEMENT

- 1) Remove the 3 screws holding the HR grip together (Figure A).
- 2) Pull the 2 halves of the HR grip apart (Figure B).



FIGURE A



FIGURE B

- 3) Disconnect the black wire and remove the lower portion of the HR grip (Figure C).
- 4) Disconnect the red wire and level button and remove the upper portion of the HR grip (Figure D).



FIGURE C



FIGURE D

- 5) Reverse Steps 1-4 to install new HR grips.
- 6) Test the Elliptical Trainer for function as outlined in Section 8.21.

8.13 CUP HOLDER REPLACEMENT

- 1) Remove the 2 screws holding the cup holder onto the console mast (Figure A).



FIGURE A

- 2) Remove the cup holder (Figure B).



FIGURE B

- 3) Reverse Steps 1-2 to install a new cup holder.

CHAPTER 8: PART REPLACEMENT GUIDE

8.14 DUAL ACTION HANDLEBAR REPLACEMENT

- 1) Remove the plastic cover where the dual action handlebar meets the pedal arm (Figure A).
- 2) Remove the bolt and bushings where the dual action handlebar and the pedal arm meet (Figure B).



FIGURE A



FIGURE B

- 3) Remove the two bolts holding the dual action handlebar to the console mast pivot (Figure C).
- 4) Remove the pivot cap and handlebar (Figure D).



FIGURE C



FIGURE D

- 5) Reverse steps 1-4 to install a new dual action handlebar.
- 6) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.15 CONSOLE MAST REPLACEMENT

- 1) Remove the console as outlined in Section 8.9.
- 2) Remove the 2 screws on each side holding the dual action handlebars to the console mast pivot (Figures A & B).



FIGURE A



FIGURE B

- 3) Lift up the rubber boot at the bottom of the console mast (Figure C).
- 4) Remove the 4 screws holding the console mast onto the frame (Figure D).



FIGURE C



FIGURE D

- 5) Remove the console mast being careful to pull the console wires out of the bottom of the mast without damaging them.
- 6) Reverse Steps 1-5 to install a new console mast. **NOTE:** Be sure to pull the console wires up through the mast before installing the 4 screws removed in Step 4.
- 7) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.16 FOOT PEDALS REPLACEMENT

- 1) Pull up on the rubber pad on top of the plastic pedal to expose the pedal screws (Figure A).
- 2) Remove the 4 Phillips screws that hold the plastic foot pedal to the foot plate (Figure B).



FIGURE A



FIGURE B

- 3) Remove the plastic foot pedal (Figure C).



FIGURE C

- 4) Reverse Steps 1-3 to install a new foot pedal.
- 5) Test the Elliptical Trainer as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.17 PEDAL ARM REPLACEMENT

- 1) Remove the plastic cover where the dual action handlebar meets the pedal arm (Figure A).



FIGURE A

- 2) Remove the bolt and bushings where the dual action handlebar and the pedal arm meet (Figure B). **NOTE:** Be sure to move the bushings from the old pedal arm to the new one (Figure C).



FIGURE B



FIGURE C

CHAPTER 8: PART REPLACEMENT GUIDE

8.17 PEDAL ARM REPLACEMENT - CONTINUED

- 3) Remove the pedal as outlined in Section 8.16.
- 4) Remove the 3 bolts that hold on the mounting plate at the crank arm / pedal arm joint (Figure D). Note the plastic washer that mounts at the end of the shaft (Figure E).



FIGURE D



FIGURE E

- 5) Slide the pedal arm shaft out of the crank arm housing (Figure F) noting the order of the washers on the pedal arm shaft (Figure G).



FIGURE F



FIGURE G

- 6) Reverse Steps 1-5 to install a new pedal arm.
- 7) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.18 CRANK ARM REPLACEMENT

- 1) Remove the crank arm plastic cap at the front disk (Figure A).
- 2) Disconnect the crank arm from the crank assembly (Figure B).



FIGURE A

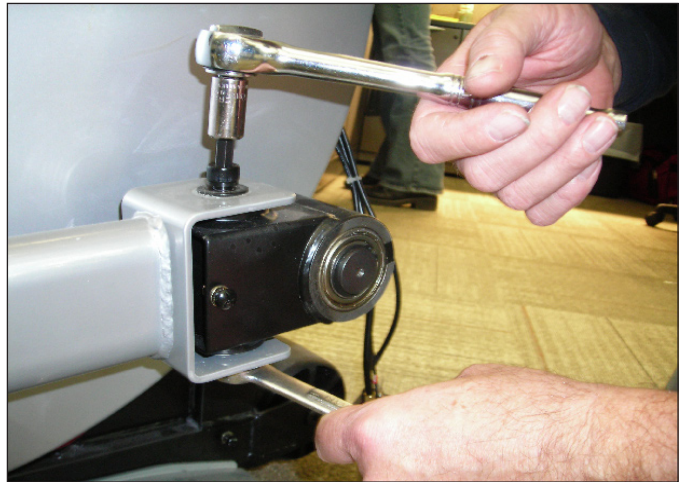


FIGURE B

- 3) Remove the 3 bolts that hold on the mounting plate at the crank arm / pedal arm joint (Figure C). Note the plastic washer that mounts at the end of the shaft (Figure D).



FIGURE C



FIGURE D

CHAPTER 8: PART REPLACEMENT GUIDE

8.17 CRANK ARM REPLACEMENT - CONTINUED

- 4) Slide the pedal arm shaft out of the crank arm housing (Figure E) noting the order of the washers on the pedal arm shaft (Figure F).



FIGURE E



FIGURE F

- 5) Remove the 2 screws on each side holding on the rear end cap and remove it (Figure G & H).



FIGURE G



FIGURE H

CHAPTER 8: PART REPLACEMENT GUIDE

8.18 CRANK ARM REPLACEMENT - CONTINUED

- 6) Remove the middle plastic cover from between the pedals by pulling it towards the rear of the unit (Figure I).



FIGURE I

- 7) Remove the 3 screws holding the top roller track in place (Figure J).

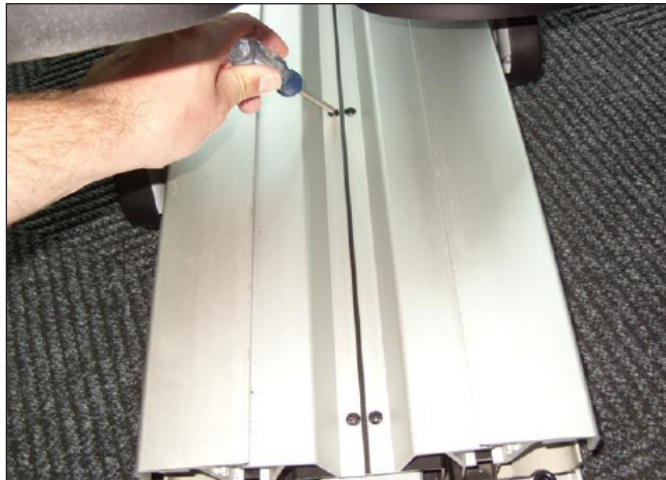


FIGURE J

- 8) Once the top track is removed, the crank arm can be removed from the unit.
9) Reverse Steps 1-8 to install a new crank arm.
10) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.19 ROLLER REPLACEMENT

- 1) Remove the 3 bolts that hold on the mounting plate at the crank arm / pedal arm joint (Figure A). Note the plastic washer that mounts at the end of the shaft (Figure B).



FIGURE A



FIGURE B

- 2) Slide the pedal arm shaft out of the crank arm housing (Figure C) noting the order of the washers on the pedal arm shaft (Figure D).



FIGURE C



FIGURE D

CHAPTER 8: PART REPLACEMENT GUIDE

8.19 ROLLER REPLACEMENT - CONTINUED

- 3) Remove the 2 screws on each side holding on the rear end cap and remove it (Figure E & F).



FIGURE E



FIGURE F

- 4) Remove the middle plastic cover from between the pedals by pulling it towards the rear of the unit (Figure G).



FIGURE G

CHAPTER 8: PART REPLACEMENT GUIDE

8.19 ROLLER REPLACEMENT - CONTINUED

- 5) Remove the 3 screws holding the top roller track in place (Figure H).
- 6) Remove the screw holding the roller to the crank arm (Figure I).



FIGURE H



FIGURE I

- 7) Remove the roller from the crank arm using the roller puller available from Matrix (Figure J).

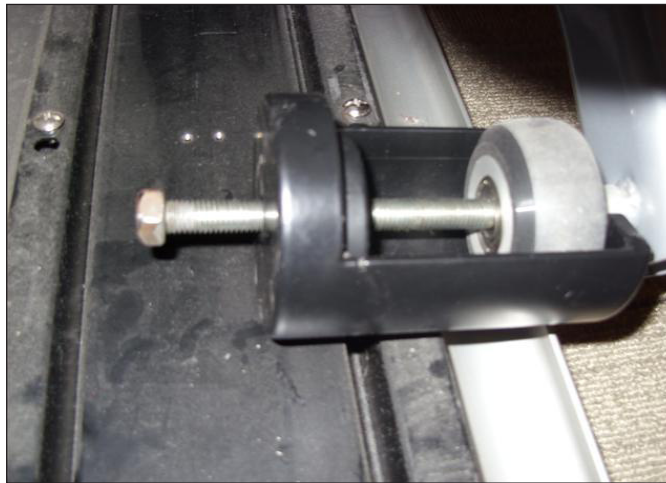


FIGURE J

- 8) Reverse Steps 1-7 to install a new roller.
- 9) Test the Elliptical Trainer for function as outlined in Section 8.21.

CHAPTER 8: PART REPLACEMENT GUIDE

8.20 ROLLER TRACK REPLACEMENT

1) Remove the 3 bolts that hold on the mounting plate at the crank arm / pedal arm joint (Figure A). Note the plastic washer that mounts at the end of the shaft (Figure B).



FIGURE A



FIGURE B

2) Slide the pedal arm shaft out of the crank arm housing (Figure C) noting the order of the washers on the pedal arm shaft (Figure D).



FIGURE C



FIGURE D

CHAPTER 8: PART REPLACEMENT GUIDE

8.20 ROLLER TRACK REPLACEMENT - CONTINUED

- 3) Remove the 2 screws on each side holding on the rear end cap and remove it (Figure E & F).



FIGURE E



FIGURE F

- 4) Remove the middle plastic cover from between the pedals by pulling it towards the rear of the unit (Figure G).



FIGURE G

CHAPTER 8: PART REPLACEMENT GUIDE

8.20 ROLLER TRACK REPLACEMENT - CONTINUED

- 5) Remove the 3 screws holding the top roller track in place (Figure H).

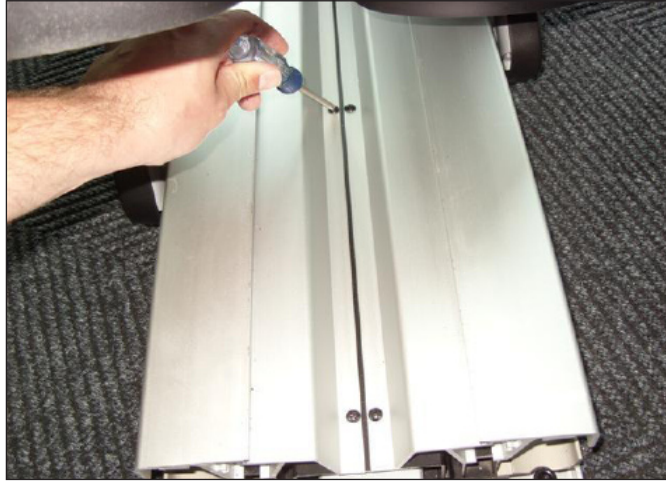


FIGURE H

- 6) Move the crank arm to the side off of the roller track.
7) Remove the 3 screws holding the bottom roller track to the frame (Figure I) and remove the roller track (Figure J).



FIGURE I



FIGURE J

- 8) Reverse Steps 1-7 to install a new roller.
9) Test the Elliptical Trainer for function as outlined in Section 8.21.

8.21 TESTING THE ELLIPTICAL TRAINER

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

- 1) Check that the console is set for elliptical (EL).
 - a. Press and hold both LEVEL keys until Manager Mode appears on the display.
 - b. Use the UP or DOWN LEVEL keys to scroll to Machine.
 - d. Press SELECT on Machine and make sure it is set for EL (Elliptical).
 - e. If Machine is not set for EL, change to EL using the UP or DOWN LEVEL key and press START to save.
 - f. Press the START key twice to return to normal function.
- 1) Without hitting start or entering any exercise modes, stand on the machine and hold the handlebars while initiating movement to simulate exercising. While moving listen for any odd noises or squeaks.
- 2) After stopping movement, press the START key and begin using the machine.
- 3) Grasp the hand grips to check for proper heart rate response.
- 4) Press the LEVEL UP and DOWN keys 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 after 30 seconds.

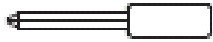

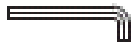











CHAPTER 9: ELLIPTICAL TRAINER SPECIFICATIONS AND ASSEMBLY GUIDE

9.1 ELLIPTICAL TRAINER SPECIFICATIONS

CONSOLE	
Display Type	Dot Matrix LED
Display Feedback	Time, Distance, Calories, Speed, Heart Rate, METs, Watts, RPM
Programs	Manual, Rolling, Intervals, Fat Burn, Random, Fitness Test, Target HR, Constant Watts
Resistance Levels	25
Multi-language Display	Yes
Coaxial Cable Connection	Yes
AC TV Power Connection	Yes
Monitor Mount	Yes
TECHNICAL DATA	
Power Requirements ⁰	Self Powered
Overall Dimensions (L x W x H)	75" x 29" x 71" / 190.5 x 73.7 x 180.3 cm
Maximum User Weight	400 lbs / 181.4 kg
Unit Weight	281 lbs / 127.5
Transport Wheel	Yes
USER DATA	
Stride Length	21
Contact Heart Rate Sensors	Yes
Telemetric Heart Rate Receiver	Yes
Cushioned Footpads	Yes
Distance Between Pedals	3.0"
Pedal Size	16" x 7"
Thumb Switch Controls	Yes

CHAPTER 9: ELLIPTICAL TRAINER SPECIFICATIONS AND ASSEMBLY GUIDE

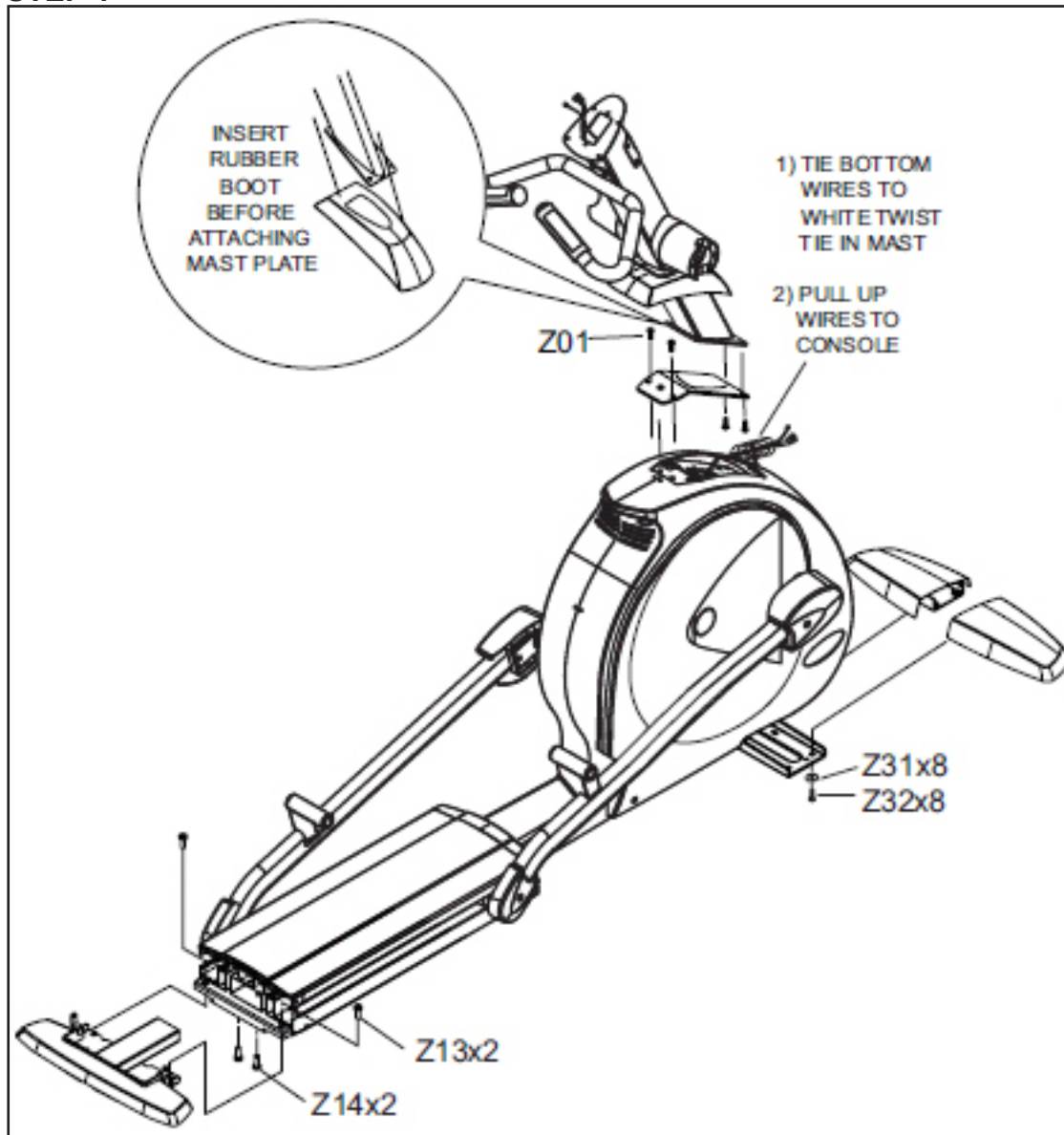
9.2 FASTENERS & ASSEMBLY TOOLS

QUANTITY	PART #	SKETCH	DESCRIPTION	PACKAGE COLOR
01			PHILLIPS SCREWDRIVER	
01			13 MM OPEN WRENCH	
01			4 MM ALLEN WRENCH	
01			5 MM ALLEN WRENCH	
01			6 MM ALLEN WRENCH	
02	E42		CONNECT PLATE	ORANGE
16	Z01		SOCKET HEAD SCREW (M8 X 15L).	8 IN BLUE / 6 IN ORANGE
02	Z02		WAVE WASHER (20.5X29X1.5T) (PLASTIC)	ORANGE
06	Z03		PAN HEAD MACHINE SCREW (M5X10L)	RED
04	Z04	SEE SKETCH OF Z01	SOCKET HEAD CAP SCREW (65MM)	GREEN
02	Z05	SEE SKETCH OF Z01	SOCKET HEAD CAP SCREW (M8X55L).	YELLOW
02	Z06		WASHER (8.2X16X1.0T).	YELLOW
02	Z07		NYLON NUT (M8X12.5P)	YELLOW
02	Z08	SEE SKETCH OF Z02	WAVE WASHER (20.7X29.1X0.3P). (METAL)	ORANGE
08	Z09		STAINLESS FLAT HEAD SOCKET SCREW (M5X12L)	ORANGE
02	Z12	SEE SKETCH OF Z01	SOCKET HEAD CAP SCREW (M8X25L)	BLUE
04	Z13	SEE SKETCH OF Z01	SOCKET HEAD CAP SCREW (M8X15L).	RED
	Z14	SEE SKETCH OF Z01	SOCKET HEAD CAP SCREW (M8X20L).	RED
04	Z30		BUSHING	YELLOW
08	Z31	SEE SKETCH OF Z01	SOCKET HEAD CAP SCREW (M8X20L).	PINK
08	Z32		LOCK WASHER (8.4X15.5X1.6T).	PINK

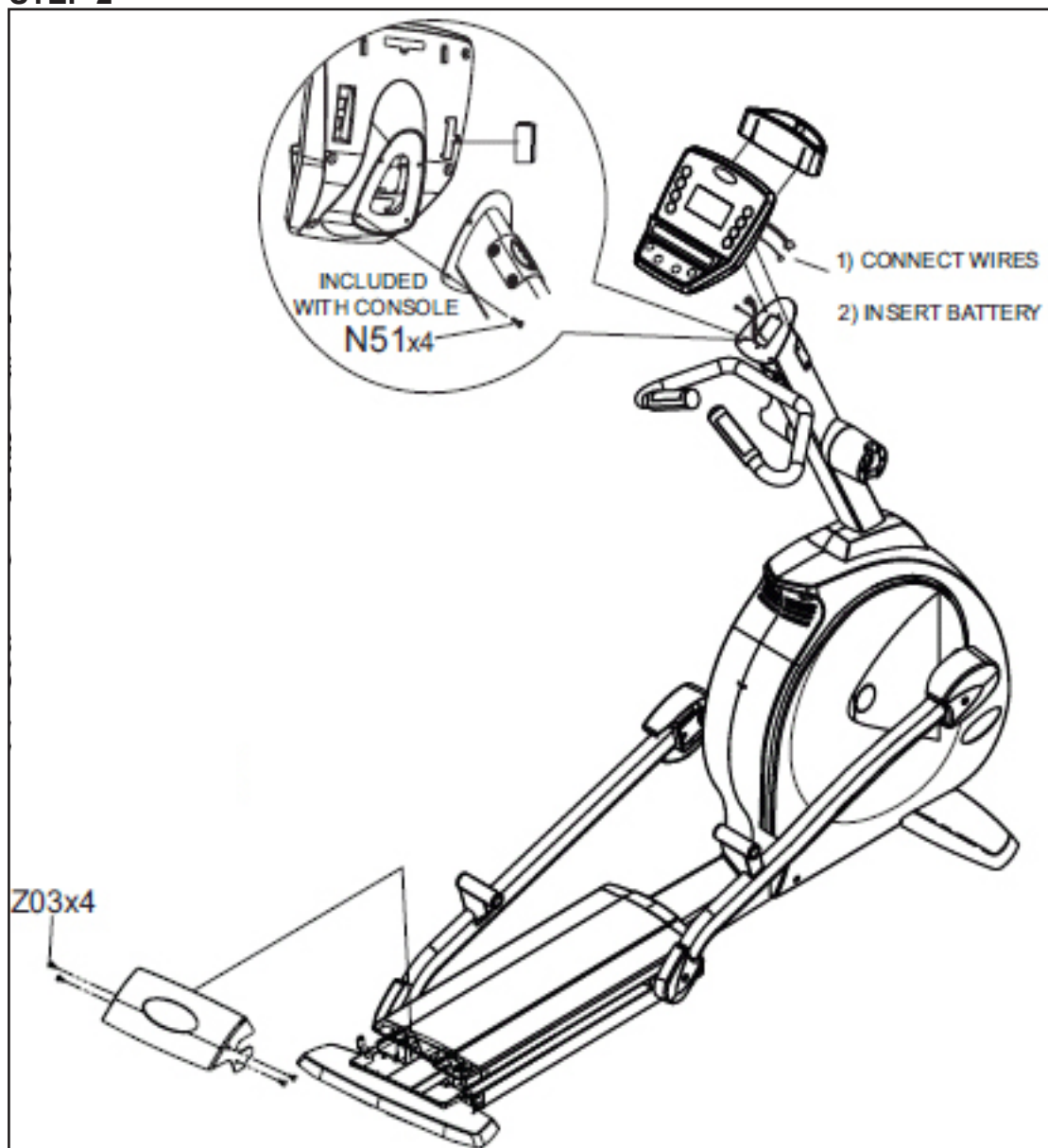
9.3 ELLIPTICAL TRAINER ASSEMBLY STEPS

AFTER THESE ASSEMBLY STEPS ARE COMPLETE, BE SURE TO SETUP AND TEST THE UNIT AS OUTLINED IN SECTION 8.21.

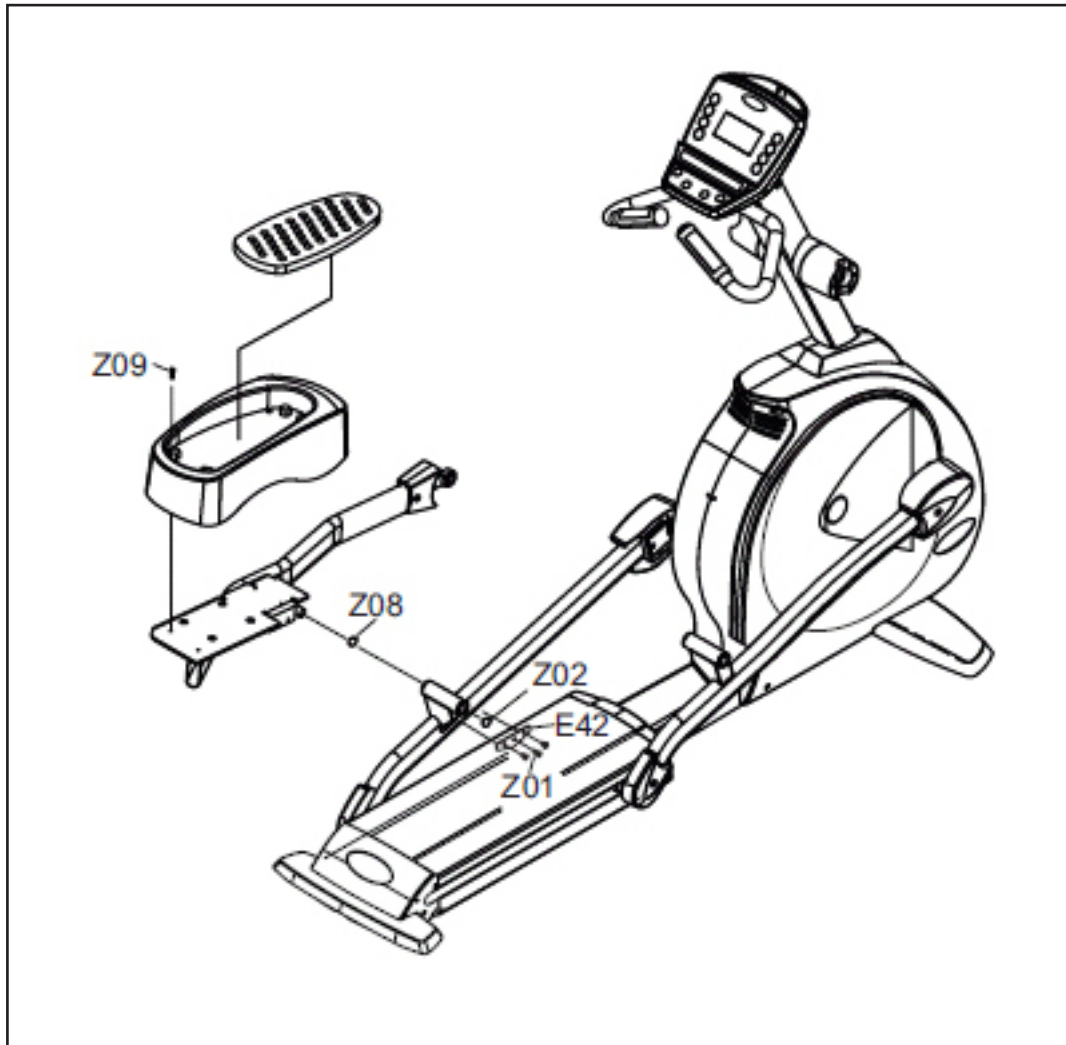
STEP 1



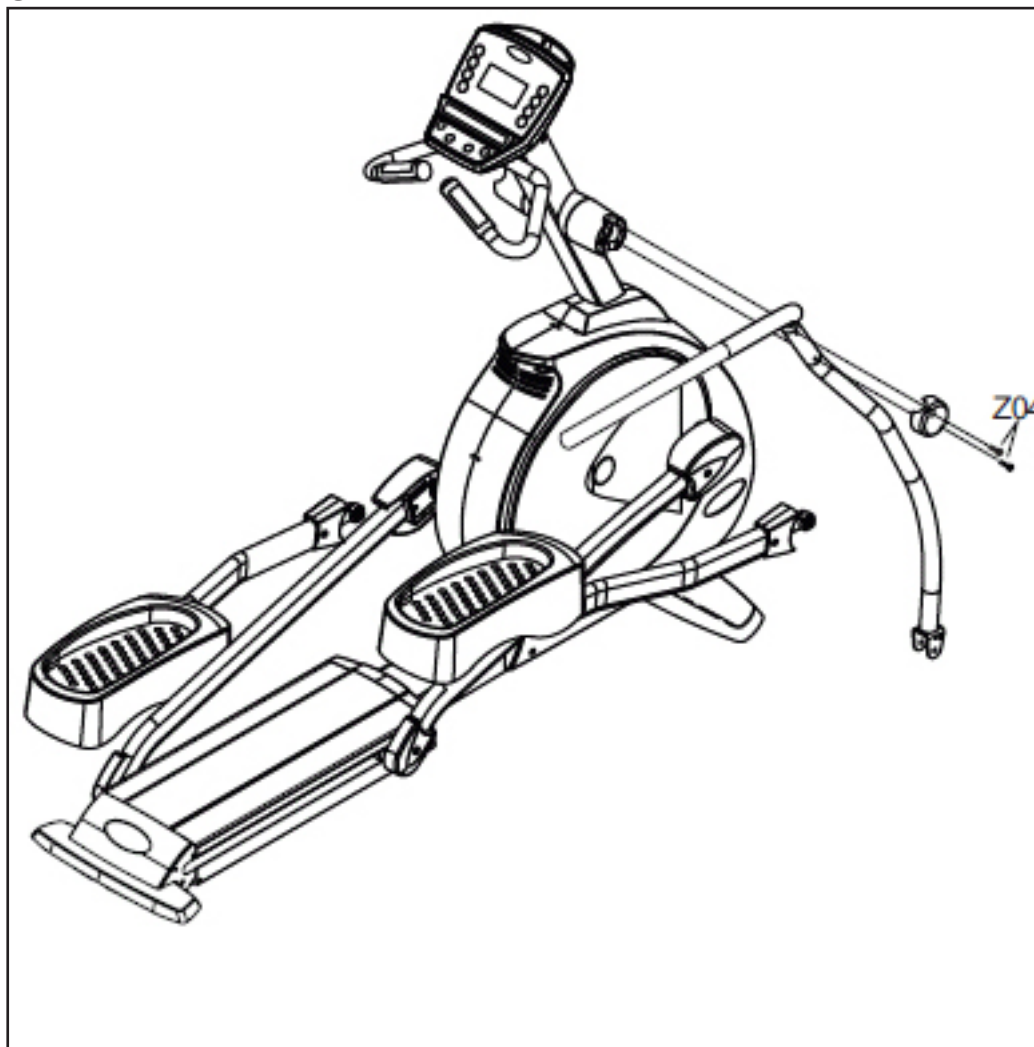
STEP 2



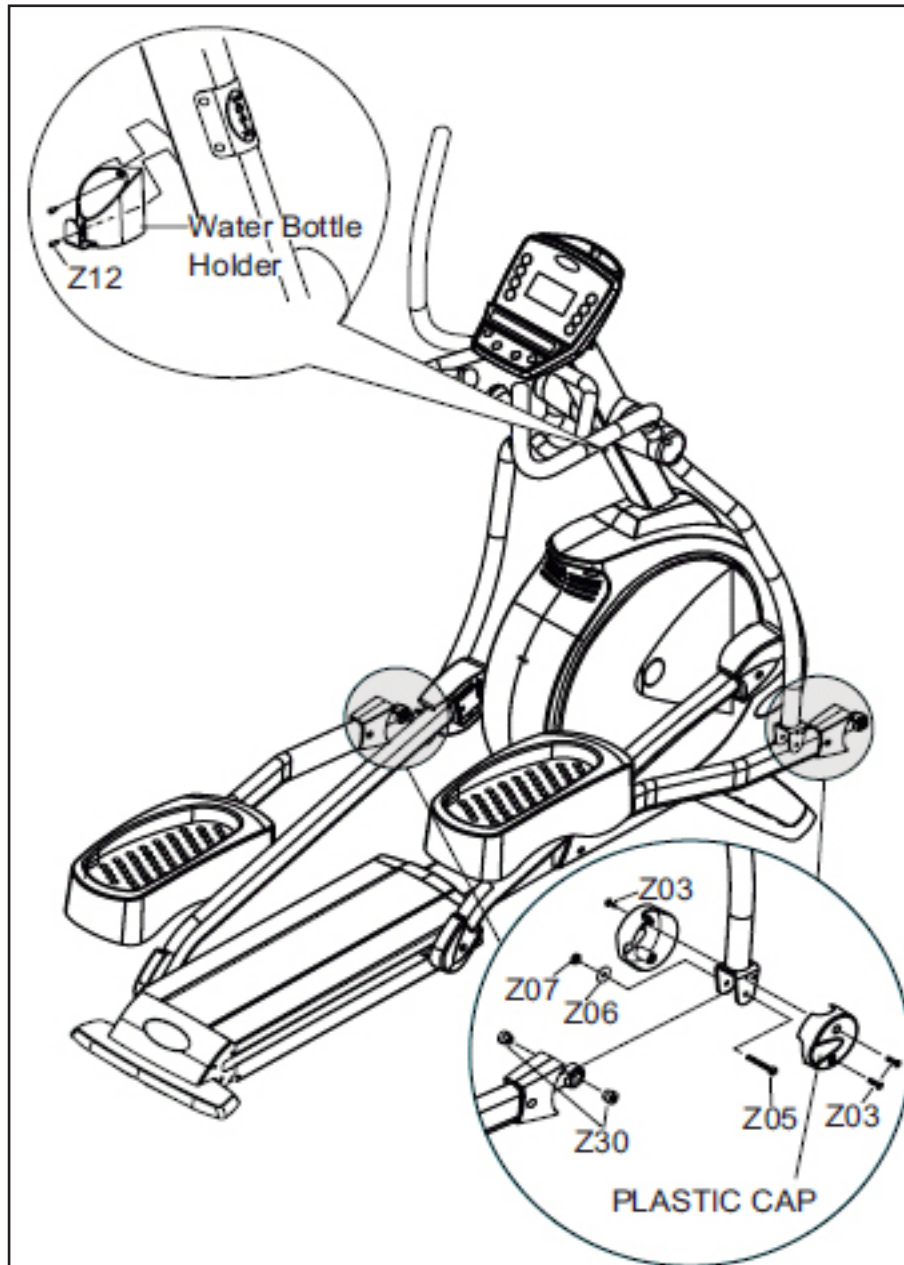
STEP 3



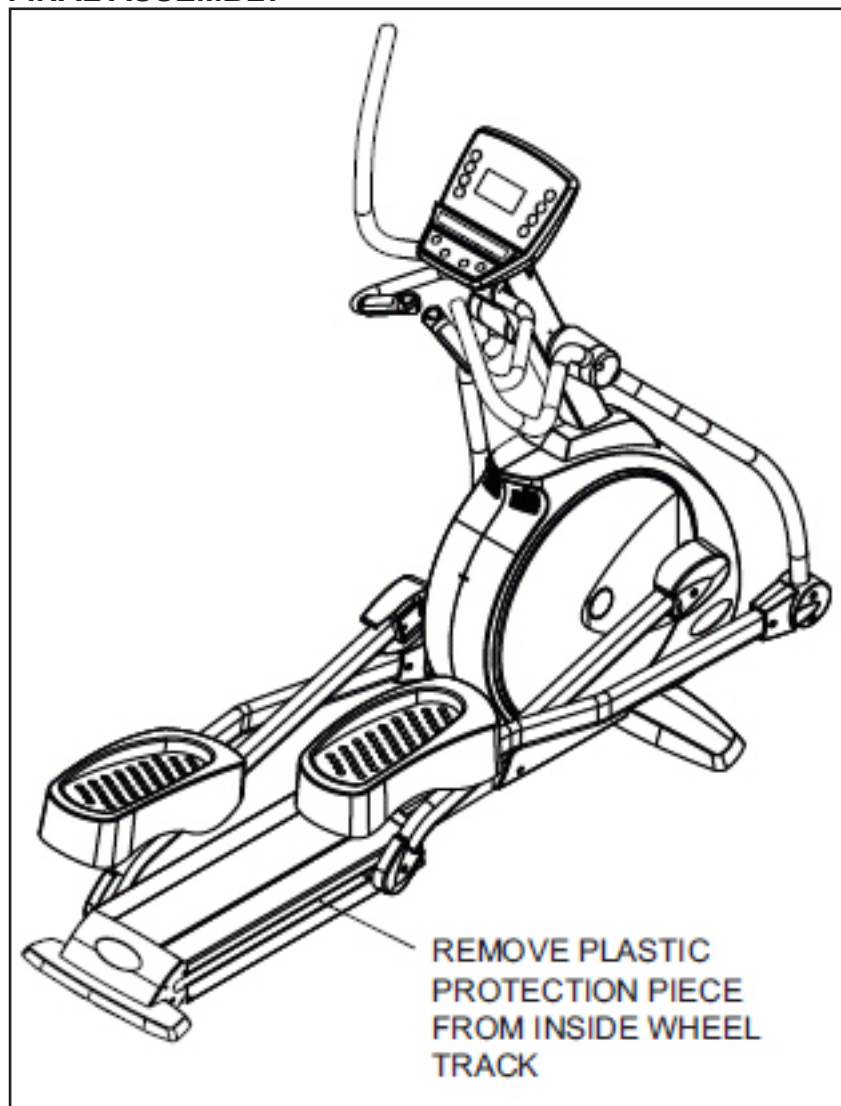
STEP 4



STEP 5



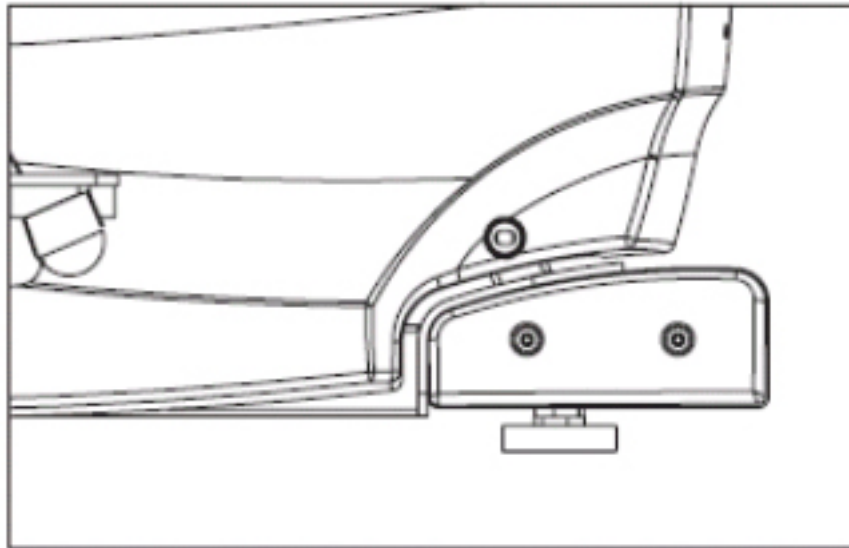
FINAL ASSEMBLY



9.4 LEVELING THE ELLIPTICAL TRAINER

STABILIZING THE ELLIPTICAL TRAINER

After positioning the Elliptical Trainer in its intended location, check its stability by attempting to shake it side to side. Shaking or wobbling indicates that your Elliptical Trainer 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 Elliptical Trainer is stable. Lock the adjustment by tightening the nut against the rear foot support.



9.5 TV BRACKET INSTALLATION

- 1) Remove the bracket, hardware, and TV from their boxes.
- 2) Pound the spring pin (found in the hardware bag) into the small hole in the TV bracket (Figure A). This is much easier to do before the bracket is installed on the Elliptical Trainer.
- 3) Remove the Matrix Logo plate from the front of the console mast (Figure B).



FIGURE A



FIGURE B

- 4) Pull the coax and TV power wires through the hole in the front of the console mast. **NOTE:** You may need to remove the console to get these wires fished through the hole in the front of the console mast.
- 5) Attach the coax and TV power wires to the wiring running inside of the TV bracket (Figure C). You will need to use the male to male coax connector shipped in the hardware bag (Figure D).



FIGURE C



FIGURE D

CHAPTER 9: ELLIPTICAL TRAINER SPECIFICATIONS AND ASSEMBLY GUIDE

9.5 TV BRACKET INSTALLATION - CONTINUED

- 6) Attach the TV bracket to the console mast using the 4 screws removed in Step 3 (Figure E).
- 7) Attach both of the long metal pieces (called rabbit ears) to the TV bracket using the long screw and nut found in the hardware bag (Figure F). The user's right side rabbit ear should be installed so that the spring pin lines up with a hole in the rabbit ear to limit the angle of adjustment of the TV (Figure G).



FIGURE E



FIGURE F



FIGURE G

- 8) Attach the TV to the rabbit ears using 4 screws from the hardware bag (Figure H).
- 9) Attach the TV controller bracket to the front of the console. The TV controller bracket will mount using the 2 bottom screws holding the console to the console mast (Figure I).



FIGURE H



FIGURE I

CHAPTER 9: ELLIPTICAL TRAINER SPECIFICATIONS AND ASSEMBLY GUIDE

9.5 TV BRACKET INSTALLATION - CONTINUED

- 10) Attach the TV controller to the TV controller bracket (Figure J).
- 11) Connect the TV power wire (Figure K), coax cable signal wire (Figure L), and controller wire (Figure M) to the back of the TV. **NOTE:** The controller wire will have a tag on both ends, one labeled controller, the other TV.
- 12) Connect the controller wire to the back of the TV controller (Figure N).



FIGURE J



FIGURE K



FIGURE L



FIGURE M



FIGURE N

9.5 TV BRACKET INSTALLATION - CONTINUED

- 13) Install the cover onto the back of the TV (Figure O). **NOTE:** There is an extra cover shipped with the TV.
- 13) Run a coax cable to the base of the Elliptical Trainer and plug it into the entertainment port (Figure P).



FIGURE O

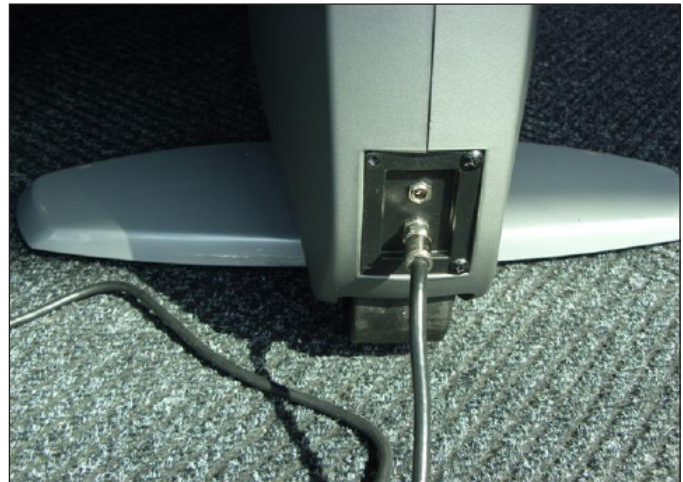


FIGURE P

- 14) Plug in the TV power adaptor to a wall plug and into the entertainment port at the base of the Elliptical Trainer (Figure Q).
- 15) Use the remote control sent with the TV to perform a channel search to program the TV (Figure R).



FIGURE Q



FIGURE R

- 16) To perform a channel search, hit MENU, the right arrow once, hit the down arrow to Auto CH Search, and then ENTER. The TV will automatically search for both Analog and Digital channels.



NOTES



Strong. Smart. Beautiful.

MATRIX FITNESS SYSTEMS CORP.

1610 LANDMARK DRIVE COTTAGE GROVE WI 53527 USA

TOLL FREE 866.693.4863 www.matrixfitness.com FAX 608.839.1717

REV. 02

KO