



# MATRIX H-PS-LED Performance LED Hybrid Cycle Instruction Manual

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**MATRIX H-PS-LED Performance LED Hybrid Cycle**



## **IMPORTANT PRECAUTIONS**

### **SAVE THESE INSTRUCTIONS**

- When using Matrix Cycles, basic precautions should always be followed, including the following: Read all instructions before using this equipment. It is the responsibility of the owner to ensure that all users of this equipment are adequately informed of all warnings and precautions.
- This equipment is for indoor use only. This training equipment is a Class S product designed for use in a commercial environment such as a fitness facility.

### **DANGER!**

#### **TO REDUCE THE RISK OF ELECTRICAL SHOCK:**

- Always unplug the equipment from the electrical outlet before cleaning, performing maintenance and putting on or taking off parts.

### **WARNING!**

#### **TO REDUCE THE RISK OF BURNS, FIRE, ELECTRICAL SHOCK OR INJURY TO PERSONS:**

- Use this exercise cycle for its intended purpose as described in this manual.
- Never operate the exercise cycle if it is not working properly, or if it has been damaged. Contact Customer Tech Support or the authorized dealers for examination and repair.
- Do not use the exercise cycle without proper footwear. NEVER operate the exercise cycle with bare feet.
- Do not wear any clothing that might catch on any moving parts of this exercise cycle.
- Keep hands and feet clear at all times from moving parts to avoid injury. Never turn the pedal cranks by hand.
- Do not dismount the exercise cycle until the pedals are at a complete STOP.

- Do not attempt to ride the exercise cycle in a standing position.
- Do not insert any object, hands or feet into any openings, or expose hands, arms or feet to the drive mechanism or other potentially moving part of the exercise cycle.
- Do not use any equipment that is damaged or has worn or broken parts. Use only replacement parts supplied by Customer Tech Support or the authorized dealers.
- Do not operate where aerosol (spray) products are being used or when oxygen is being administered.
- Close supervision is necessary when used near children.
- This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the equipment by a person responsible for their safety.
- Ensure that adjustment levers (seat and handlebar fore-and-aft) are properly secured and do not interfere with range of motion during exercise.
- Incorrect or excessive exercise may result in serious injury or death. If you experience any kind of pain, including but not limited to chest pains, nausea, dizziness, or shortness of breath, stop exercising immediately and consult your physician before continuing.
- Do not jump on the unit.
- At no time should more than one person be on unit while in operation.
- This unit should not be used by persons weighing more than specified in the OWNER'S MANUAL SPECIFICATIONS SECTION. Failure to comply will void the warranty.
- Keep power cord away from heated surfaces. Do not carry this unit by its supply cord or use the cord as a handle.
- Do not use other attachments that are not recommended by the manufacturer. Attachments may cause injury.
- Use the unit only as described in the unit guide and owner's manual.
- Disconnect all power before servicing or moving the equipment. To clean, wipe surfaces down with soap and slightly damp cloth only; never use solvents. (See MAINTENANCE)
- At NO time should pets or children under the age of 14 be closer to the unit than 10 feet.
- At NO time should children under the age of 14 use the unit.
- Children over the age of 14 should not use the unit without adult supervision.
- Never operate the unit if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or immersed in water. Return the unit to a service center for examination and repair.
- To avoid the risk of electric shock, this piece of equipment must only be connected to a circuit with non-looped (isolated) ground.
- To disconnect, turn all controls to the off position, then remove plug from outlet.
- Do not remove the console covers unless instructed by Customer Tech Support. Service should only be done by an authorized service technician.
- Heart rate monitoring systems may be inaccurate.

## **CAUTION!**

**CONSULT A PHYSICIAN BEFORE USING THIS EQUIPMENT. READ OWNER'S MANUAL BEFORE USE.**

- It is essential that this equipment is used only indoors, in a climate controlled room.
- If this equipment has been exposed to colder temperatures or high moisture climates, it is strongly recommended that the equipment is warmed up to room temperature and allowed time to return to lower humidity levels before first time use.

## **POWER REQUIREMENTS**

### **DEDICATED CIRCUIT AND ELECTRICAL INFO**

A “Dedicated Circuit” means that each outlet you plug into should not have anything else running on that same circuit. The easiest way to verify this is to locate the main circuit breaker box, and turn off the breaker(s) one at a time. Once a breaker has been turned off, the only thing that should not have power to it are the units in question. No lamps, vending machines, fans, sound systems, or any other item should lose power when you perform this test.

Non-looped (isolated) neutral/grounding means that each circuit must have an individual neutral/ground connection coming from it, and terminating at an approved earth ground. You cannot “jumper” a single neutral/ground from one circuit to the next.

### **ELECTRICAL REQUIREMENTS**

For your safety and to ensure good unit performance, the ground on this circuit must be non-looped (isolated). Please refer to NEC article 210-21 and 210-23. Any alterations to the standard power cord provided could void all warranties of this product.

Units with LED and Premium LED consoles are designed to be self powered and do not require an external power supply source to operate. Without an external power supply, the console’s start-up time may be delayed. Add-on TV’s and other console accessories will increase the time needed for start-up. An external power supply will ensure power is provided to the console at all times and is recommended when add-on accessories are used. For units with an integrated TV (Touch), the TV power requirements are included in the unit. An RG6 quad shield coaxial cable with ‘F Type’ compression fittings on each end will need to be connected to the cardio unit and the video source. Additional power requirements are not needed for the add-on digital TV.

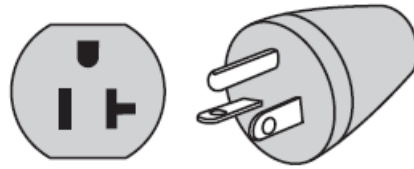
**NOTE:** All units with Virtual Active™ must be powered.

### **110 V UNITS**

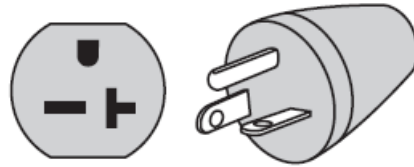
110 V units require the use of a 100-125 V, 60 Hz and a 15 A “Dedicated Circuit”, with a non-looped (isolated) neutral/ground for power. This outlet should be a NEMA 5-15R and have the same configuration as the plug. No adapter should be used with this product. These cycles can be daisy-chained together with up to 4 units per 15 A dedicated circuit. Matrix daisy-chain cord adapters are sold separately.

### **220 V UNITS**

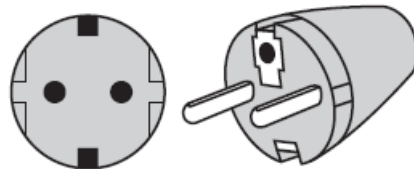
220 V units require the use of a 216-250 V, 50 Hz and a 15 A “Dedicated Circuit”, with a non-looped (isolated) neutral/ ground for power. This outlet should be a NEMA 6-15R and have the same configuration as the plug. No adapter should be used with this product. These cycles can be daisy-chained together with up to 4 units per dedicated 15 A circuit. Matrix daisy-chain cord adapters are sold separately.



**110 NEMA 5-20P  
PLUG (N.A.)**



**220 NEMA 6-20P  
PLUG (N.A.)**



**EURO PLUG  
(EUROPE)**

North American and European power cord plugs shown. Depending on your country, the plug type may vary.

### **GROUNDING INSTRUCTIONS**

The unit must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. The unit is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. If the user does not follow these grounding instructions, the user could void the Matrix limited warranty.

### **ADDITIONAL ELECTRICAL INFO**

In addition to the dedicated circuit requirement, the proper gauge wire must be used from the circuit breaker box, to each outlet that will have the maximum number of units running off of it. If the distance from the circuit breaker box to each outlet, is 100 ft (30.5 m) or less, then 12 gauge wire should be used. For distances greater than 100 ft (30.5 m) from the circuit breaker box to the outlet, a 10 gauge wire should be used.

### **ENERGY SAVING / LOW-POWER MODE**

All units are configured with the ability to enter into an energy saving / low-power mode when the unit has not been in use for a specified period of time. Additional time may be required to fully reactivate this unit once it has entered the low-power mode. This energy saving feature may be enabled or disabled from within the 'Manager Mode' or 'Engineering Mode.'

### **ADD-ON DIGITAL TV**

Additional power requirements are not needed for the add-on digital TV. An RG6 coaxial cable with 'F Type' compression fittings will need to be connected between the video source and each add-on digital TV unit.

### **FCC REGULATIONS (USA ONLY)**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

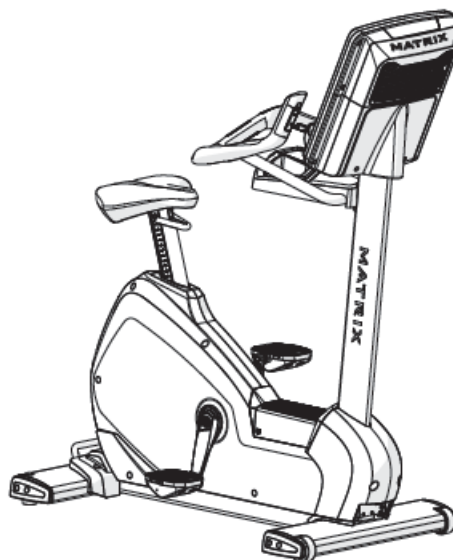
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC RF Radiation Exposure Statement:**

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

### UPRIGHT CYCLES

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### RECUMBENT CYCLES

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### UNPACKING

Unpack the equipment where you will be using it. Place the carton on a level flat surface. It is recommended that you place a protective covering on your floor. Never open box when it is on its side.

### IMPORTANT NOTES

During each assembly step, ensure that ALL nuts and bolts are in place and partially threaded.

Several parts have been pre-lubricated to aid in assembly and usage. Please do not wipe this off. If you have difficulty, a light application of lithium grease is recommended.

### WARNING!

There are several areas during the assembly process that special attention must be paid. It is very important to follow the assembly instructions correctly and to make sure all parts are firmly tightened. If the assembly instructions are not followed correctly, the equipment could have parts that are not tightened and will seem loose and may cause irritating noises. To prevent damage to the equipment, the assembly instructions must be reviewed and corrective actions should be taken.

### NEED HELP?

If you have questions or if there are any missing parts, contact Customer Tech Support. Contact information is located on the information card.

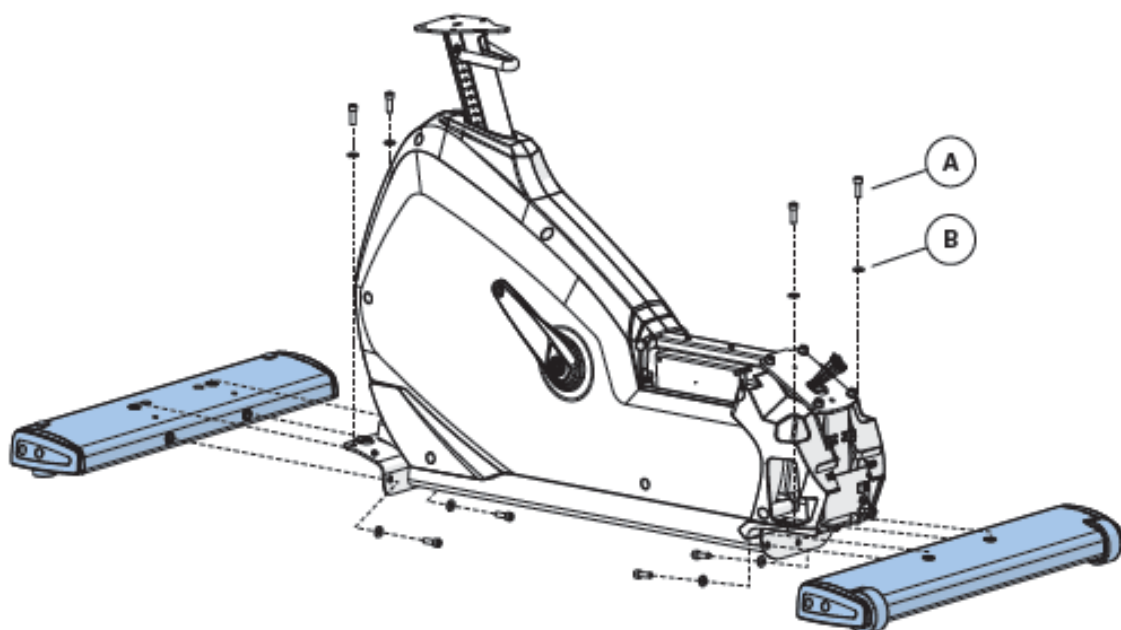
## HYBRID CYCLES

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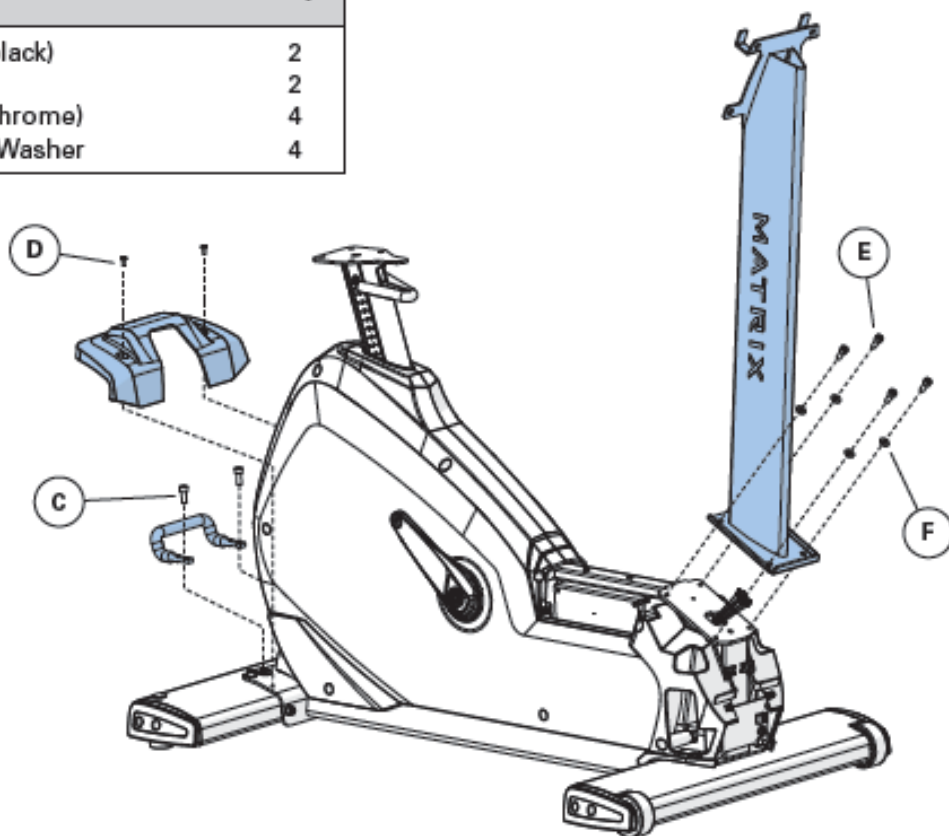


## UPRIGHT CYCLE ASSEMBLY

| 1 | Hardware    | Qty |
|---|-------------|-----|
| A | Bolt        | 8   |
| B | Flat Washer | 8   |



| 2 | Hardware      | Qty |
|---|---------------|-----|
| C | Bolt (black)  | 2   |
| D | Screw         | 2   |
| E | Bolt (chrome) | 4   |
| F | Tooth Washer  | 4   |



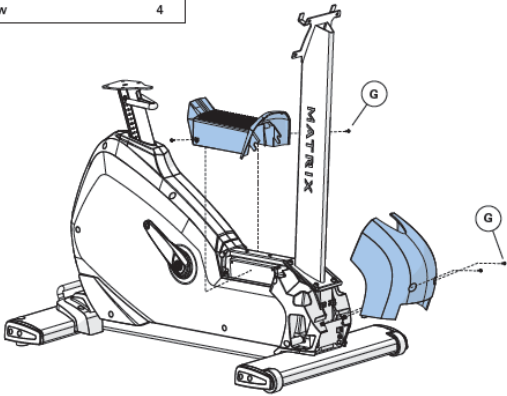
TOOLS REQUIRED:

- 4 mm Allen Wrench
- 6 mm Allen Wrench
- 8 mm Allen Wrench
- Flat Wrench (15mm/17mm 325L)
- Phillips Screwdriver

**PARTS INCLUDED:**

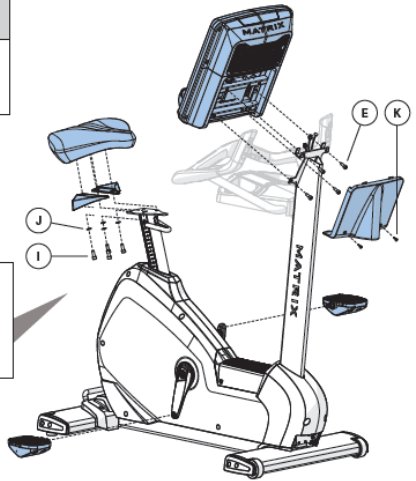
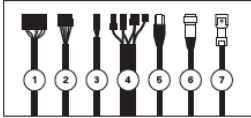
- 1 Main Frame
- 1 Rear Stabilizer Tube
- 1 Front Stabilizer Tube
- 1 Rear Frame Handle
- 1 Rear Frame Cover
- 1 Console Mast
- 1 Console Handlebars
- 2 Handlebar Covers
- 1 Seat Frame
- 1 Water Bottle Pocket
- 1 Seat Base
- 1 Seat Back
- 1 Hardware Kit
- 1 Power Cord (packaged with console)

| 3 | Hardware | Qty |
|---|----------|-----|
| G | Screw    | 4   |

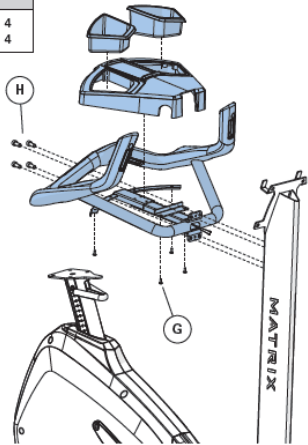


| 5 | Hardware      | Qty |
|---|---------------|-----|
| I | Bolt          | 4   |
| J | Spring Washer | 4   |
| E | Bolt (chrome) | 4   |
| K | Screw         | 2   |

- 1 LCB Communication
- 2 Extension Power Wire
- 3 TV Power
- 4 Console Connect Wires
- 5 Ethernet
- 6 Coax
- 7 Ground Wire



| 4 | Hardware | Qty |
|---|----------|-----|
| G | Screw    | 4   |
| H | Bolt     | 4   |

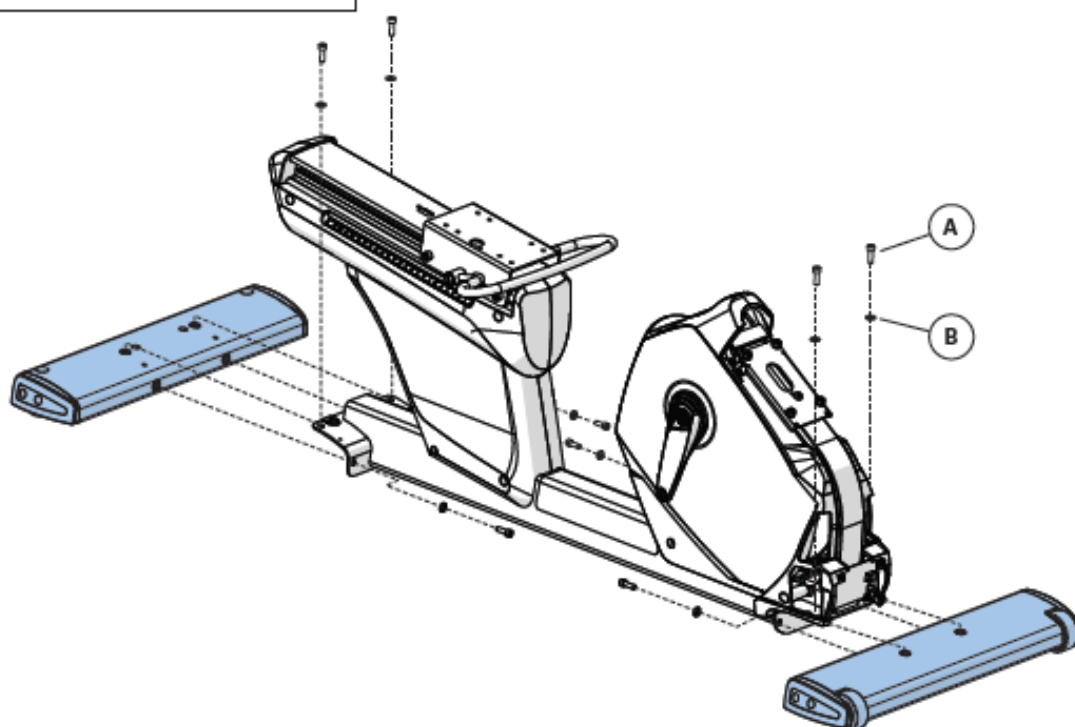


### ASSEMBLY COMPLETE

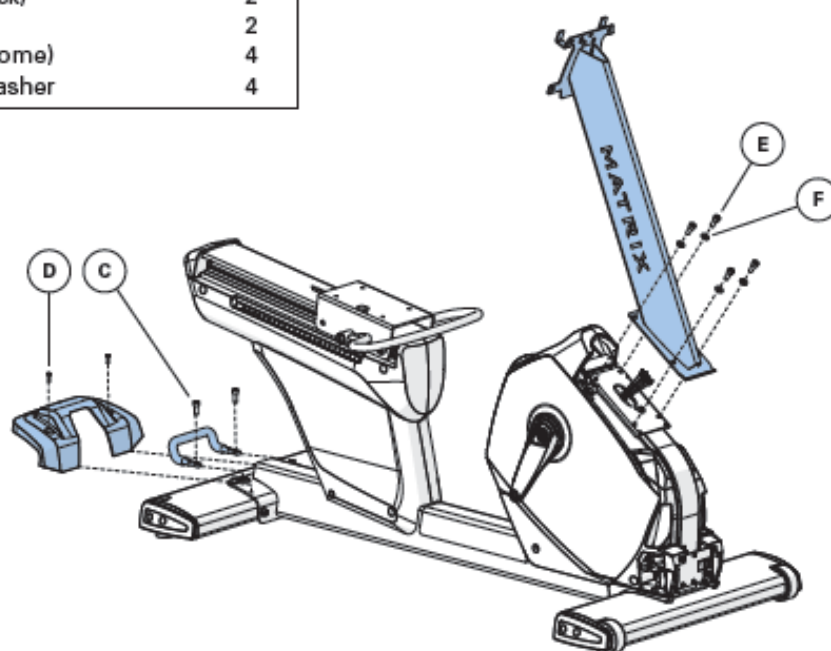


### RECUMBENT CYCLE ASSEMBLY

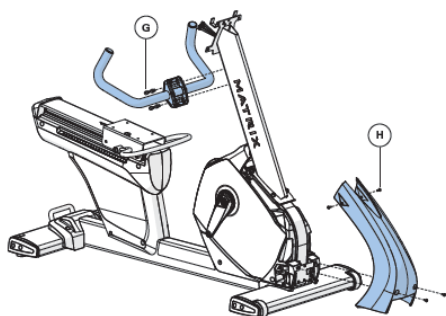
| 1 | Hardware    | Qty |
|---|-------------|-----|
| A | Bolt        | 8   |
| B | Flat Washer | 8   |



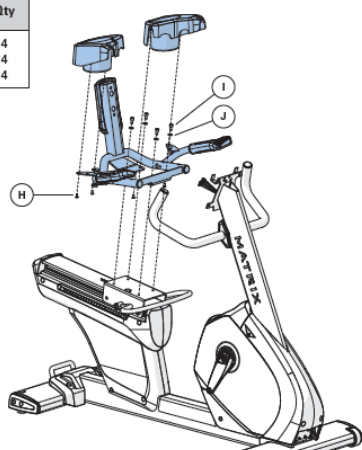
| 2 | Hardware      | Qty |
|---|---------------|-----|
| C | Bolt (black)  | 2   |
| D | Screw         | 2   |
| E | Bolt (chrome) | 4   |
| F | Tooth Washer  | 4   |



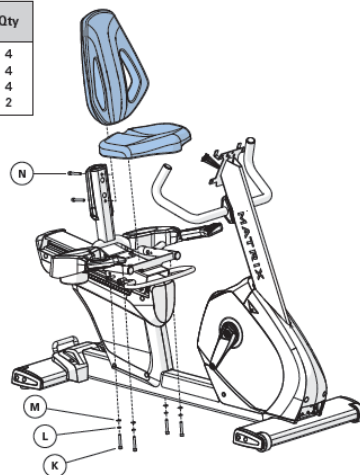
| 3 | Hardware | Qty |
|---|----------|-----|
| G | Bolt     | 4   |
| H | Screw    | 4   |



| 4 | Hardware      | Qty |
|---|---------------|-----|
| H | Screw         | 4   |
| I | Bolt          | 4   |
| J | Spring Washer | 4   |

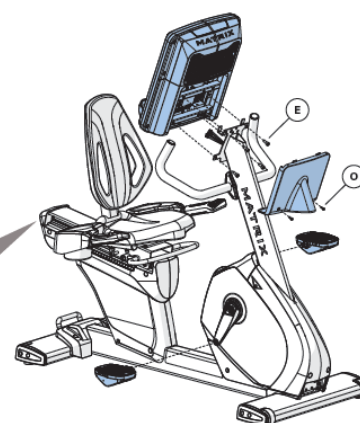
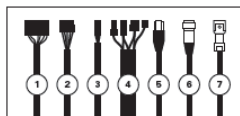


| 5 | Hardware      | Qty |
|---|---------------|-----|
| K | Bolt          | 4   |
| L | Spring Washer | 4   |
| M | Wavy Washer   | 4   |
| N | Bolt          | 2   |



| 6 | Hardware      | Qty |
|---|---------------|-----|
| E | Bolt (chrome) | 4   |
| O | Bolt          | 2   |

- 1 LCB Communication
- 2 Extension Power Wire
- 3 TV Power
- 4 Console Connect Wires
- 5 Ethernet
- 6 Coax
- 7 Ground Wire



**ASSEMBLY COMPLETE**

## TOOLS REQUIRED:

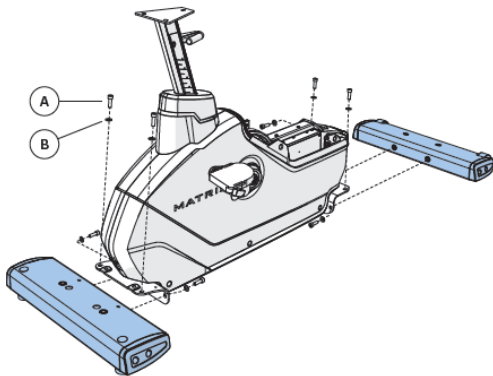
- 4 mm Allen Wrench
- 6 mm Allen Wrench
- Flat Wrench (13/15 mm)
- Phillips Screwdriver

## PARTS INCLUDED:

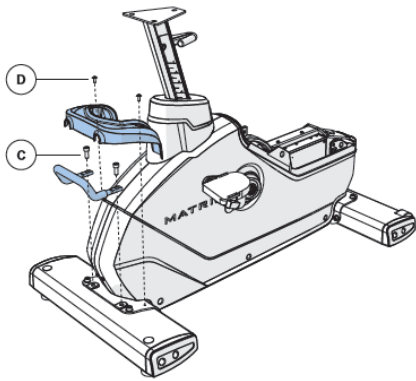
- 1 Main Frame
- 1 Rear Stabilizer Tube
- 1 Front Stabilizer Tube
- 1 Rear Frame Handle
- 1 Rear Frame Cover
- 1 Console Mast
- 1 Water Bottle Holder
- 1 Seat Base
- 1 Arm Rest Handlebars
- 1 Front Shroud Cover (pre-installed)
- 1 Rear Shroud Cover (pre-installed)
- 1 Hardware Kit
- 1 Power Cord (packaged with console) Console sold separately

Hardware

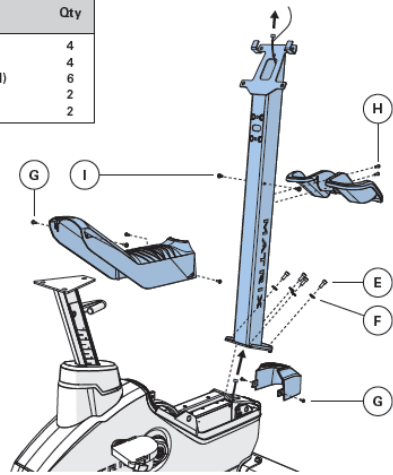
| 1 | Hardware    | Qty |
|---|-------------|-----|
| A | Bolt        | 8   |
| B | Flat Washer | 8   |



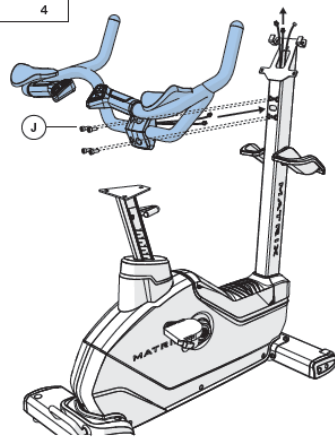
| 2 | Hardware | Qty |
|---|----------|-----|
| C | Bolt     | 2   |
| D | Screw    | 2   |



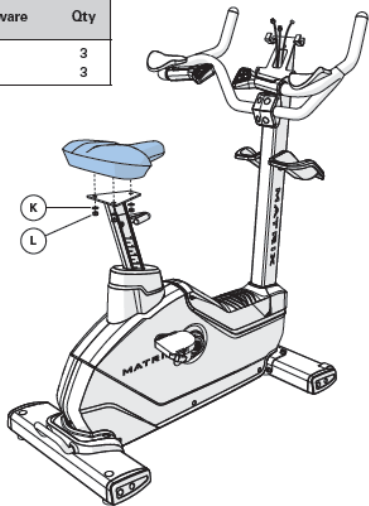
| 3 | Hardware              | Qty |
|---|-----------------------|-----|
| E | Bolt                  | 4   |
| F | Tooth Washer          | 4   |
| G | Screw (pre-installed) | 6   |
| H | Screw                 | 2   |
| I | Bolt                  | 2   |



| 4 | Hardware | Qty |
|---|----------|-----|
| J | Bolt     | 4   |

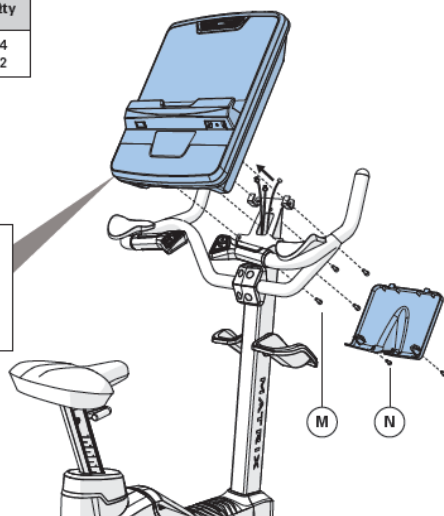
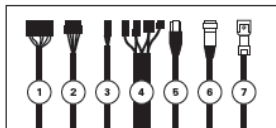


| 5 | Pre-installed Hardware | Qty |
|---|------------------------|-----|
| K | Flat Washer            | 3   |
| L | Nylon Nut              | 3   |



| 6 | Hardware             | Qty |
|---|----------------------|-----|
| M | Bolt (pre-installed) | 4   |
| N | Bolt                 | 2   |

- 1 LCB Communication
- 2 Extension Power Wire
- 3 TV Power
- 4 Console Connect Wires
- 5 Ethernet
- 6 Coax
- 7 Ground Wire



## ASSEMBLY COMPLETE

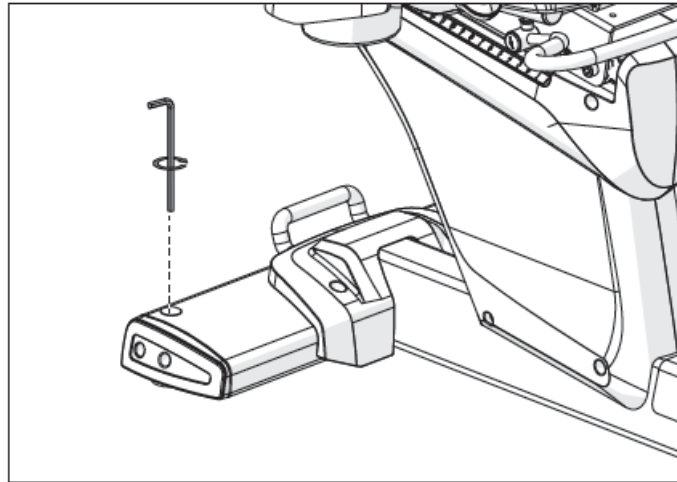
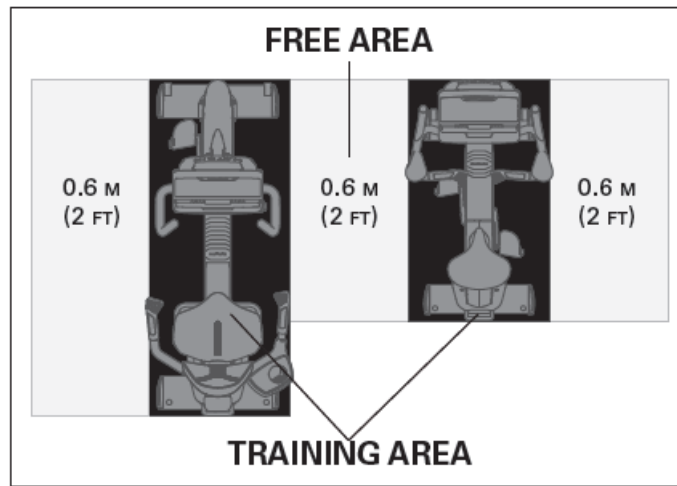


## BEFORE YOU BEGIN

### LOCATION OF THE UNIT

Place the equipment on a level and stable surface away from direct sunlight. The intense UV light can cause discoloration on the plastics. Locate your equipment in an area with cool temperatures and low humidity. Please leave a clear zone on both sides of the equipment that is at least 24" (600 mm). This zone must be clear of any obstruction and provide the user a clear exit path from the machine. Do not place the equipment in any area that will block any vent or air openings.

The equipment should not be located in a garage, covered patio, near water or outdoors.



### LEVELING THE EQUIPMENT

The equipment should be level for optimum use. Once you have placed the equipment where you intend to use it, raise or lower one or both of the adjustable levelers located on the bottom of the frame. Use 6mm hex key through the access hole (shown below). A carpenter's level is recommended.

**NOTE:** There are only two levelers on the equipment.

### WARNING!

Our equipment is heavy, use care and additional help if necessary when moving. Failure to follow these instructions could result in injury.

### POWER

If the equipment is powered by a power supply, the power must be plugged into the power jack, which is located in the front of the equipment near the stabilizer tube. Some equipment has a power switch, located next to the power jack. Make sure it is in the ON position. Unplug cord when not in use.

### WARNING!

Never operate equipment if it has a damaged cord or plug, if it is not working properly, if it has been damaged, or immersed in water. Contact Customer Tech Support for examination and repair.

## PROPER USAGE



**RECUMBENT:** To determine proper seat position, stand to the side of the equipment and adjust the seat by pulling up on the orange handle. Slide the seat fore and aft and adjust as needed until your knee bends slightly at the furthest pedal position. To avoid injury, never adjust the seat position when sitting on this equipment.

**UPRIGHT:** To determine proper seat position, stand to the side of the equipment and adjust the seat by pulling up on the orange handle. Slide the seat up until the seat is slightly lower than hip height. Continue to adjust as needed until your knee bends slightly at the furthest pedal position. To avoid injury, never adjust the seat position when sitting on this equipment.

### **BRAKE SYSTEM**

This exercise bicycle uses a speed-independent braking system. The user is able to adjust the resistance of the braking system independently of the RPM of the crank axle.

## USING THE HEART RATE FUNCTION



The heart rate function on this product is not a medical device. While heart rate grips can provide a relative estimation of your actual heart rate, they should not be relied on when accurate readings are necessary. Some people, including those in a cardiac rehab program, may benefit from using an alternate heart rate monitoring system like a chest or wrist strap. Various factors, including movement of the user, may affect the accuracy of your heart rate reading. The heart rate reading is intended only as an exercise aid in determining heart rate trends in general. Please consult your physician.

## PULSE GRIPS

Place the palm of your hands directly on the grip pulse handlebars. Both hands must grip the bars for your heart rate to register. It takes 5 consecutive heart beats (15-20 seconds) for your heart rate to register. When gripping the pulse handlebars, do not grip tightly. Holding the grips tightly may elevate your blood pressure. Keep a loose, cupping hold. You may experience an erratic readout if consistently holding the grip pulse handlebars. Make sure to clean the pulse sensors to ensure proper contact can be maintained.



## WARNING!

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

## MAINTENANCE

| MAINTENANCE SCHEDULE                                                                                                                                                                                                                                                                                                                      |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| ACTION                                                                                                                                                                                                                                                                                                                                    | FREQUENCY |
| Unplug the unit. Clean entire machine using water and a mild soap or other Matrix approved solution (cleaning agents should be alcohol and ammonia free).                                                                                                                                                                                 | DAILY     |
| Inspect the power cord. If the power cord is damaged, contact Customer Tech Support.                                                                                                                                                                                                                                                      | DAILY     |
| Make sure the power cord is not underneath the unit or in any other area where it can become pinched or cut during storage or use.                                                                                                                                                                                                        | DAILY     |
| Clean underneath the cycle, following these steps: <ul style="list-style-type: none"><li>• Turn off the cycle.</li><li>• Move the cycle to a remote location.</li><li>• Wipe or vacuum any dust particles or other objects that may have accumulated underneath the cycle.</li><li>• Return the cycle to its previous position.</li></ul> | WEEKLY    |
| Inspect all assembly bolts and pedals on the machine for proper tightness.                                                                                                                                                                                                                                                                | MONTHLY   |
| Clean any debris off of the seat guide rail.                                                                                                                                                                                                                                                                                              | MONTHLY   |

1. Any and all part removal or replacement must be performed by a qualified service technician.

2. DO NOT use any equipment that is damaged and or has worn or broken parts. Use only replacement parts supplied by your country's local MATRIX dealer.
3. **MAINTAIN LABELS AND NAMEPLATES:** Do not remove labels for any reason. They contain important information. If unreadable or missing, contact your MATRIX dealer for a replacement.
4. **MAINTAIN ALL EQUIPMENT:** Preventative maintenance is the key to smooth operating equipment as well as keeping your liability to a minimum. Equipment needs to be inspected at regular intervals.
5. Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so. MATRIX dealers will provide service and maintenance training at our corporate facility upon request.

## WARNING

To remove power from the unit, the power cord must be disconnected from the wall outlet.

## PRODUCT SPECIFICATIONS

|                                 | UPRIGHT                                      |                        |                          | RECUMBENT                                    |                        |                          | HYBRID                                       |                         |                          |
|---------------------------------|----------------------------------------------|------------------------|--------------------------|----------------------------------------------|------------------------|--------------------------|----------------------------------------------|-------------------------|--------------------------|
| CONSOLE                         | TOUCH                                        | PREMIUM LED            | LED / GROUP TRAINING LED | TOUCH                                        | PREMIUM LED            | LED / GROUP TRAINING LED | TOUCH                                        | PREMIUM LED             | LED / GROUP TRAINING LED |
| Max User Weight                 | 182 kg /<br>400 lbs                          |                        |                          | 182 kg /<br>400 lbs                          |                        |                          | 182 kg /<br>400 lbs                          |                         |                          |
| Product Weight                  | 84.6 kg /<br>186.5 lbs                       | 82.8 kg /<br>182.5 lbs | 82.1 kg /<br>181 lbs     | 94.4 kg /<br>208.1 lbs                       | 92.6 kg /<br>204.1 lbs | 91.9 kg /<br>202.6 lbs   | 96.3 kg /<br>212.3 lbs                       | 94.5 kg /<br>208.3 lbs  | 93.8 kg /<br>206.8 lbs   |
| Shipping Weight                 | 94.5 kg /<br>208.3 lbs                       | 92.7 kg /<br>204.4 lbs | 92 kg /<br>202.8 lbs     | 106.5 kg /<br>234.8 lbs                      | 104.7 kg /<br>30.8 lbs | 104 kg /<br>229.3 lbs    | 108.6 kg /<br>239.4 lbs                      | 106.8 kg /<br>235.5 lbs | 106.1 kg /<br>233.9 lbs  |
| Overall Dimensions (L x W x H)* | 136 x 65 x 155 cm /<br>53.5" x 25.6" x 61.0" |                        |                          | 150 x 65 x 143 cm /<br>59.1" x 25.6" x 56.3" |                        |                          | 147 x 65 x 159 cm /<br>57.9" x 25.6" x 62.6" |                         |                          |

\* Ensure a minimum clearance width of 0.6 meters (24") for access to and passage around MATRIX equipment. Please note, 0.91 meters (36") is the ADA recommended clearance width for individuals in wheelchairs.

## Documents / Resources

|                                                                                     |                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
|  | <a href="#">MATRIX H-PS-LED Performance LED Hybrid Cycle</a> [pdf] Instruction Manual<br>H-PS-LED, Performance LED Hybrid Cycle |
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