

**MATRIX** | PREMIUM SERIES  
TREADMILLS

# TABLE OF CONTENTS

		PAGES
<b>CHAPTER 1: IMPORTANT SAFETY INSTRUCTIONS</b>		
1.1	Before Getting Started .....	02
1.2	Proper Usage .....	02
1.3	Read and Save These Instructions .....	02
1.4	Electrical Requirements .....	03
1.5	Grounding Instructions .....	03
<b>CHAPTER 2: PREVENTATIVE MAINTENANCE</b>		
2.1	Recommended Cleaning Tips .....	03
2.2	Deck and Belt Replacement .....	03
2.3	Check for Damaged Parts .....	03
2.4	Adjusting the Belt .....	04
<b>CHAPTER 3: SERIAL NUMBER LOCATION</b>		
3.1	T5x, T7x, T7xe Treadmill .....	04
<b>CHAPTER 4: T5x, T7x, T7xe OVERLAY AND WORKOUT DESCRIPTION</b>		
4.1	T5x, T7x, T7xe Console Description .....	05
4.2	Manual Workout Operation.....	08
4.3	Operating Level Based Programs .....	08
4.4	Heart Rate Control .....	08
4.5	Fit Test .....	09
<b>CHAPTER 5: T5x, T7x, T7xe TREADMILL SPECIFICATIONS, PARTS &amp; ASSEMBLY GUIDES</b>		
5.1	Model Specifications .....	11
5.2	Fasteners and Assembly Tools .....	12
5.3	Assembly Steps .....	13
5.4	Optional Leveling Assembly Techniques .....	17

## CHAPTER 1: IMPORTANT SAFETY INSTRUCTIONS

### 1.1 BEFORE GETTING STARTED

It is the sole responsibility of the purchaser of Matrix Fitness Systems products to instruct all individuals, whether they are the end user or supervising personnel, on proper usage of the equipment.

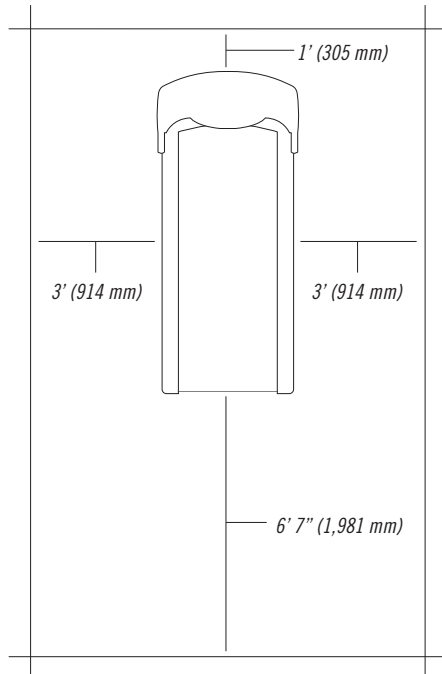
It is recommended that all users of Matrix Fitness Systems exercise equipment be informed of the following information prior to its use.

### 1.2 PROPER USAGE

- 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 equipment.

### 1.3 BEFORE GETTING STARTED

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



Please leave a 78.75" (2000 mm) x 39.50" (1000 mm) landing zone behind the treadmill. This zone is to allow easy access to the treadmill and gives the user an easy exit path from the machine. In case of an emergency, place both hands on the side arm rests to hold yourself up and place your feet onto the side rails.

When using an electrical product, basic precautions should always be followed including the following:

**DANGER:** To reduce the risk of electric shock: Always unplug this equipment from the electrical outlet immediately after using and before cleaning.

**WARNING:** To reduce the risk of burns, fire, electrical shock or injury to persons that may be associated with using this product:

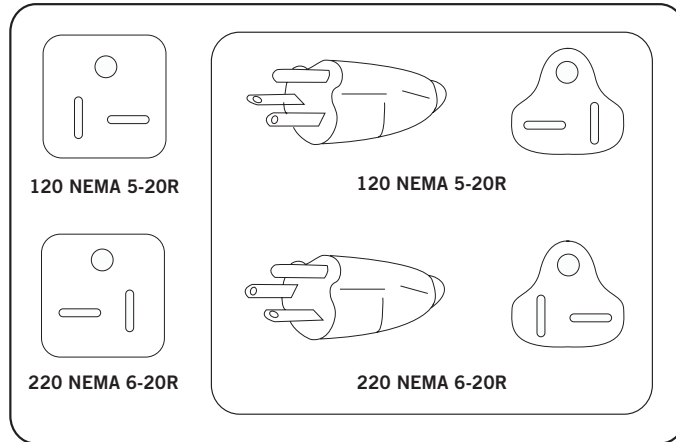
- An appliance should never be left unattended when plugged in. Unplug from outlet when not in use and before putting on or taking off parts
- This product must be used for its intended purpose described in this owner's manual. Do not use other attachments that are not recommended by the manufacturer. 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
- Never operate the treadmill with the air opening blocked. Keep the air opening clean, free of lint and hair
- Never operate product if it has a damaged cord or plug, if it is working improperly, if it has been damaged, or immersed in water. Return the unit to a service center for examination and repair
- Do not carry this unit by its supply cord or use the cord as a handle
- Keep any power cord away from heated surfaces
- Close supervision is necessary when treadmill 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
- To disconnect, turn all controls to the off position, then remove the plug from outlet
- Connect this treadmill to a properly grounded outlet only
- This appliance 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 appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
- The treadmill must be installed on a stable base and properly leveled.

**CAUTION:** If you experience chest pain, nausea, dizziness or shortness of breath, STOP exercising immediately and consult a physician before continuing.

## SAVE THESE INSTRUCTIONS

## 1.4 ELECTRICAL REQUIREMENTS

For your safety and to ensure good treadmill performance, the ground on this circuit must be non-looped. Please refer to NEC article 210-21 and 210-23. Your Treadmill is provided with a power cord with a plug listed below and requires the listed outlet. Any alterations of this power cord could void all warranties of this product.



**NOTE:** North American plugs shown.

## 1.5 GROUNDING INSTRUCTIONS

The treadmill 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 treadmill 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.

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

### 120V UNITS

The Matrix T5x, T7x and T7xe 120 treadmill is for use on a nominal 120-volt circuit and has a non-looped grounding plug. Make sure that the 110-volt treadmill is connected to an outlet, NEMA 5-20R, having the same configuration as the plug. No adapter should be used with this product.

### 220V UNITS

The Matrix T5x, T7x and T7xe 220 treadmill is for use on a nominal 220-volt circuit and has a non-looped grounding plug. Make sure that the 220-volt treadmill is connected to an outlet, NEMA 6-20R, having the same configuration as the plug. No adapter should be used with this product.

## 2.1 RECOMMENDED CLEANING TIPS

1. Use a soft, clean cotton cloth. DO NOT use paper towels to clean surfaces on the treadmill. Paper towels are abrasive and can damage surfaces.
2. Use a mild soap and damp cloth. DO NOT use ammonia based cleaner. This will cause discoloring of the aluminum and plastics it comes into contact with.
3. Do not pour water or cleaning solutions on any surface. This could cause electrocution.
4. Wipe the console and side rails after every use.
5. Brush away any wax deposits from the deck and belt area. This is a common occurrence until the wax is worked into the belt material.
6. Be sure to remove any obstructions from the path of the elevation wheels including power cords.
7. Monthly, unplug the treadmill and remove the motor cover. Check for debris and clean with a dry cloth or small vacuum nozzle. a **WARNING:** Do not plug the treadmill in until the motor cover has been reinstalled.

**CAUTION:** Be sure to have proper assistance to install and move the unit in order to avoid injury or damage to the treadmill.

## 2.2 DECK AND BELT REPLACEMENT

One of the most common wear and tear items on a treadmill is the deck and belt combination. If these two items are not properly maintained they can cause damage to other components. This product has been provided with the most advanced maintenance free lubricating system on the market. The Matrix Ultimate Deck™ does not require any maintenance, other than cleaning and belt tightening, for up to 25,000 miles.

**WARNING:** Do not run the treadmill while cleaning the belt and deck. This can cause serious injury and can damage the machine.

Maintain the belt and deck by wiping the sides of the belt and deck with a clean cloth. The user can also wipe under the belt 2 inches on both sides removing any dust or debris.

The deck can be flipped and reinstalled or replaced by an authorized service technician. Please contact Matrix Fitness Systems for more information.

## 2.3 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 or an authorized service provider.

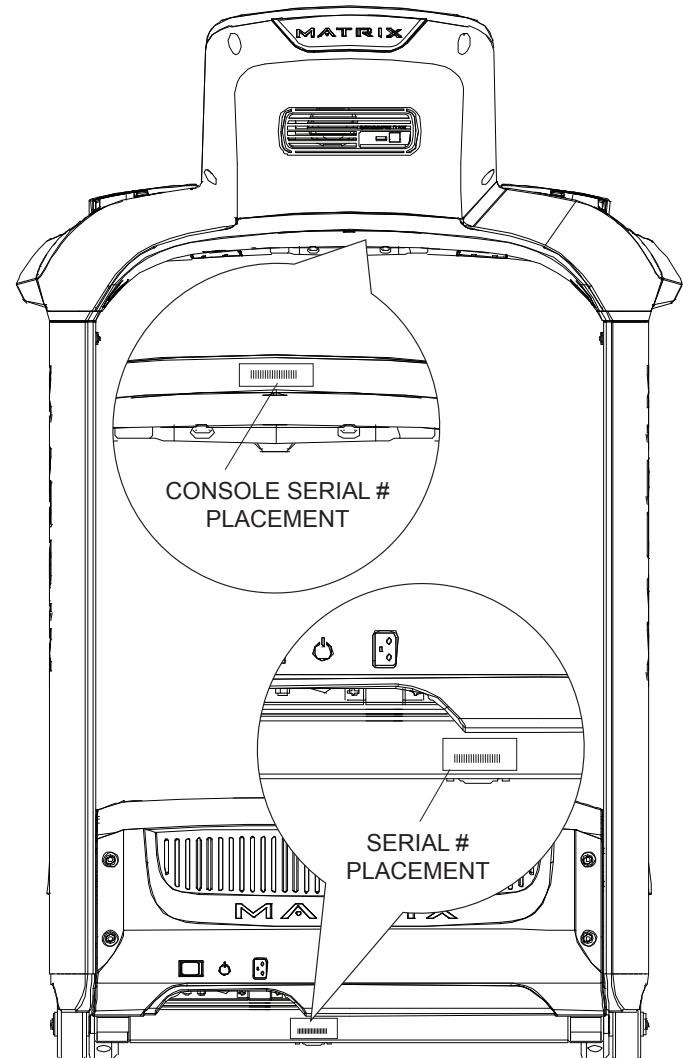
**MAINTAIN ALL EQUIPMENT** Preventative maintenance is the key to smooth operating equipment, as well as keeping the users liability to a minimum. Equipment needs to be inspected at regular intervals. Defective components must be replaced immediately. Improperly working equipment must be kept out of 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.

### 2.4 ADJUSTING THE BELT

After placing the treadmill in the position it will be used, the belt must be checked for proper tension and centering. The belt might need to be adjusted after the first two hours of use. Temperature, humidity, and use cause the belt to stretch at different rates. If the belt starts to slip when a user is on it, be sure to follow the directions below.

- STEP 1** Locate the two hex head bolts on the rear of the treadmill. The bolts are located at each end of the frame at the back of the treadmill. These bolts adjust the rear belt roller. Do not adjust until the treadmill is on. This will prevent over tightening of one side.
- STEP 2** The belt should have equal distance on either side between the frame. If the belt is touching one side, do not start the treadmill. Turn the bolts counter clockwise approximately one full turn on each side. Manually center the belt by pushing the belt from side to side. Tighten the bolts the same amount as when the user loosened them, approximately one full turn. Inspect the belt for damage.
- STEP 3** While the treadmill is running at 3 mph, observe the belt position. If it is moving to the right, tighten the right bolt by turning it clockwise  $\frac{1}{4}$  turn, and loosen the left bolt  $\frac{1}{4}$  turn. If it is moving to the left, tighten the left bolt by turning it clockwise  $\frac{1}{4}$  turn and loosen the right  $\frac{1}{4}$  turn. Repeat Step 3 until the belt remains centered for several minutes.
- STEP 4** Check the tension of the belt. The belt should be very snug. When a person walks or runs on the belt, it should not hesitate or slip. If this occurs, tighten the belt by turning both bolts clockwise  $\frac{1}{4}$  turn. Repeat if necessary.

### T5x, T7x, T7xe TREADMILL



## CHAPTER 4: T5x OVERLAY AND WORKOUT DESCRIPTION

### 4.1 T5x CONSOLE DESCRIPTION

The MATRIX treadmill is inspected before it is packaged. It is shipped in four pieces: the base, the upright console supports, the handlebar and the console. Carefully unpack the unit and dispose of the box material.



**WORKOUT KEYS:** Simple program view and selection buttons. Press Fitness Test button to cycle through available tests.

**QUICK START/GO:** One touch Start and Quick Start.

**ENTER:** To confirm each program setting.

**UP/DOWN INCLINE:** Easy information and incline selection.

**UP/DOWN SPEED:** Easy information and speed selection.

**UP/DOWN TIME:** Easy information and time adjustment.

**EMERGENCY STOP / IMMOBILIZATION:** To stop all functions and immobilize the unit. The emergency stop on this treadmill must be returned to its original position in order to allow normal operation of the unit.

**STOP:** Ends workout and shows workout summary data.

**PAUSE:** Pauses workout. Pause duration can be set in manager mode.

**NUMBER KEYPAD:** Workout data input for workout setup. Speed adjustment during workout.

**COOL DOWN:** Puts treadmill into Cool Down mode. Cool Down time is dependent on the length of the workout. Workouts 19 minutes and shorter will have a cool down length of 2 minutes. Workouts 20 minutes and longer will have a cool down length of 5 minutes.

**FAN:** Allows for fan speed selection (fan has three operating speeds.)

## CHAPTER 4: T7x OVERLAY AND WORKOUT DESCRIPTION

### T7x CONSOLE DESCRIPTION

The MATRIX treadmill is inspected before it is packaged. It is shipped in four pieces: the base, the upright console supports, the handlebar and the console. Carefully unpack the unit and dispose of the box material.



**MULTI-PURPOSE KEYS:** Keys have different functions depending on each screen.

**QUICK START/GO:** One touch Start and Quick Start.

**ENTER:** To confirm each program setting.

**UP/DOWN INCLINE:** Easy information and incline selection.

**UP/DOWN SPEED:** Easy information and speed selection.

**UP/DOWN TIME:** Easy information and time adjustment.

**EMERGENCY STOP / IMMOBILIZATION:** To stop all functions and immobilize the unit. The emergency stop on this treadmill must be returned to its original position in order to allow normal operation of the unit.

**STOP:** Ends workout and shows workout summary data.

**PAUSE:** Pauses workout. Pause duration can be set in manager mode.

**NUMBER KEYPAD:** Workout data input for workout setup. Speed adjustment during workout.

**COOL DOWN:** Puts treadmill into Cool Down mode. Cool Down time is dependent on the length of the workout. Workouts 19 minutes and shorter will have a cool down length of 2 minutes. Workouts 20 minutes and longer will have a cool down length of 5 minutes.

**FAN:** Allows for fan speed selection (fan has three operating speeds.)

### T7x ENTERTAINMENT ZONE

**POWER:** If add-on TV is present, acts as the power control button. If add-on TV is not present, acts as a display toggle button.

**iPOD®:** Will take the user directly to the iPod screen to allow for iPod control and playlist selection.

**VOLUME UP/DOWN:** Adjusts the volume output through the headphone jack of either add-on TV, integrated console TV or iPod output.

**NUMBER KEYPAD:** Allows for easy TV channel selections. These buttons work for either the add-on TV or the integrated console TV.

**CHANNEL UP/DOWN:** Allows for channel selection on either the add-on TV or the integrated console TV.

**DISPLAY MODE:** Allows user to cycle through console display options, iPod, TV or profile display.

**LAST CHANNEL:** Allows the user to cycle between the current channel and the previous channel they were viewing.

## CHAPTER 4: T7xe OVERLAY AND WORKOUT DESCRIPTION

### T7xe CONSOLE DESCRIPTION

The MATRIX treadmill is inspected before it is packaged. It is shipped in four pieces: the base, the upright console supports, the handlebar and the console. Carefully unpack the unit and dispose of the box material.



The T7xe has a full integrated touch screen display. All information required for workouts is explained on screen. Exploration of the interface is highly encouraged. The information explaining how to program for various workouts will give an explanation about the contents of each screen on the T7xe.

**QUICK START/GO:** One touch Start and Quick Start.

**STOP:** Ends workout and shows workout summary data.

**COOL DOWN:** Puts treadmill into Cool Down mode. Cool Down time is dependent on the length of the workout. Workouts 19 minutes and shorter will have a cool down length of 2 minutes. Workouts 20 minutes and longer will have a cool down length of 5 minutes.

**EMERGENCY STOP / IMMOBILIZATION:** To stop all functions and immobilize the unit. The emergency stop on this treadmill must be returned to its original position in order to allow normal operation of the unit.

### T7xe ENTERTAINMENT ZONE

**POWER:** If add-on TV is present, acts as the power control button. If add-on TV is not present, acts as a display toggle button.

**iPOD®:** Will take the user directly to the iPod screen to allow for iPod control and playlist selection.

**VOLUME UP/DOWN:** Adjusts the volume output through the headphone jack of either add-on TV, integrated console TV or iPod output.

**NUMBER KEYPAD:** Allows for easy TV channel selections. These buttons work for either the add-on TV or the integrated console TV.

**CHANNEL UP/DOWN:** Allows for channel selection on either the add-on TV or the integrated console TV.

**DISPLAY MODE:** Allows user to cycle through console display options, iPod, TV or profile display.

**LAST CHANNEL:** Allows the user to cycle between the current channel and the previous channel they were viewing.



## CHAPTER 4: T5x, T7x, T7xe OVERLAY AND WORKOUT DESCRIPTION

### 4.2 MANUAL WORKOUT OPERATION

#### QUICK START OPERATION

Press the **GO** or **QUICK START** button(s) and the treadmill will enter into a manual mode of operation. All energy expenditure values will be calculated using the default weight measurement.

#### MANUAL WORKOUT OPERATION

Manual is a workout that allows you to manually adjust the speed and incline values at anytime. The manual workout also contains a setup screen which allows you to input your weight to help calculate a more accurate caloric burn rate.

To enter into this workout on a T5x, use the following guidelines:

1. Choose **MANUAL** by selecting the manual workout button and press **ENTER**.
2. Enter the desired workout length using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
3. Enter user weight (user weight is used to calculate the caloric expenditure value-providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
4. Enter the desired initial incline value using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
5. Enter the desired start speed using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
6. Press **GO** or **QUICK START** to begin the workout.

To enter into this workout on a T7x or T7xe, follow the onscreen prompts.

### 4.3 OPERATING LEVEL BASED PROGRAMS

Your Matrix treadmill offers a variety of level-based workouts to challenge users of all fitness levels. The following information will briefly explain the workout and how to program the treadmill for each workout selection.

#### ROLLING HILLS WORKOUT OPERATION

Rolling hills is a level-based workout that automatically adjusts the incline value to simulate walking or running up hills.

1. Choose **ROLLING HILLS** by selecting the rolling hills workout button and press **ENTER**.
2. Enter the desired intensity using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
3. Enter the desired workout length using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
4. Enter user weight (user weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
5. Press **GO** or **QUICK START** to begin the workout.

To enter into this workout on a T7x or T7xe, follow the onscreen prompts.

#### FAT BURN WORKOUT OPERATION

Fat burn is a level-based workout that is designed to help user's burn fat through various incline changes.

To enter into this workout on a T5x, use the following guidelines:

1. Choose **FAT BURN** by selecting the fat burn workout button and press **ENTER**.
2. Enter the desired intensity level using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
3. Enter the desired workout length using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
4. Enter user weight (user weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
5. Press **GO** or **QUICK START** to begin the workout.

To enter into this workout on a T7x or T7xe, follow the onscreen prompts.

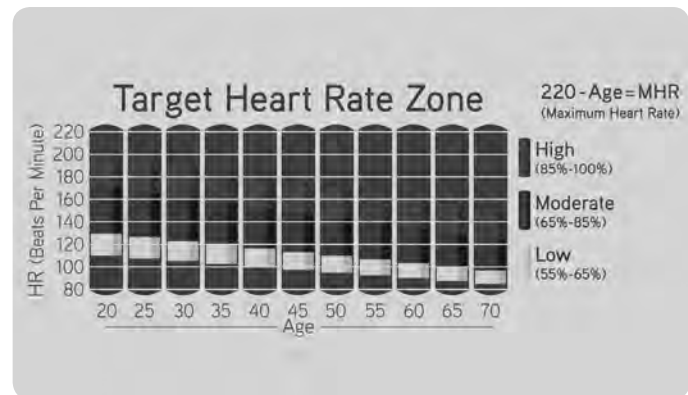
### 4.4 HEART RATE CONTROL WORKOUT OPERATION

Your Matrix treadmill offers a heart rate control workout mode. The heart rate control workout mode allows the user to program their desired heart rate zone and maximum allowable incline and the treadmill will automatically adjust the incline based upon the user's heart rate. The heart rate zone is calculated using the following equation:  $(220 - \text{Age}) \times \% = \text{target heart rate zone}$ . The user must wear a telemetric heart rate monitor or continually hold onto the contact heart rate grips for this workout.

To enter into this workout on a T5x, use the following guidelines:

1. Choose **TARGET HEART RATE** by selecting the target heart rate workout button and press **ENTER**.
2. Enter age using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
3. Enter the desired percent of maximum heart rate using the **ARROW KEYS** and press **ENTER**.
4. Enter the desired workout length using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
5. Enter user weight (user weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
6. Press **GO** or **QUICK START** to begin the workout.

To enter into this workout on a T7x or T7xe, follow the onscreen prompts.



## CHAPTER 4: T5x, T7x, T7xe OVERLAY AND WORKOUT DESCRIPTION

### 4.5 FITNESS TEST WORKOUT OPERATION

Your Matrix treadmill offers a variety of fitness tests-the Gerkin firefighter protocol, the WFI firefighter protocol, the Army, Navy, USMC, and USAF as well as the Physical Efficiency Battery (PEB).

The Gerkin protocol was developed by Dr. Richard Gerkin of the Phoenix (Arizona) Fire Department. It is a sub-maximal graded treadmill evaluation used by many Fire Departments across the United States to assess the physical condition of the firefighters. The test requires constant monitoring of the user's heart rate so the use of a telemetric chest strap is highly encouraged. The workout operates as follows:

**Warm-up:** The warm-up is 3 minutes long and runs at 3.0 mph (4.8 kph) and 0% incline.

**Stage 1:** At the 3 minute mark, the treadmill will gradually increase speed to 4.5 mph (7.2 kph). The actual test begins at 4.5 mph (7.2 kph).

**Stage 2:** After one minute, the treadmill incline will increase to 2%.

**Stage 3:** After one minute, the treadmill speed increases to 5.0 mph (8.0 kph).

**Stages 4 through 11:** After every odd minute, the treadmill incline will increase by 2%. After every even minute, the treadmill speed will increase by 0.5 mph (0.8 kph). Once the user's heart rate exceeds the target heart rate (85% of maximum as determined by the equation  $(220 - \text{Age}) \times \% = \text{target heart rate zone}$ ), the individual continues the evaluation for an additional 15 seconds. During the 15 second period, the evaluation remains at the stage where the target heart rate is exceeded, without any change to speed or incline. If the heart rate does not return to or below the target heart rate, the evaluation ends and the final evaluation stage is recorded. If the heart rate returns to or below the target heart rate, the program continues at the point where it would have been had the program not stabilized for 15 seconds.

**Test completion:** The test is completed when user heart rate exceeds the target for more than 15 seconds or the user completes all 11 stages, whichever occurs first. The treadmill will enter a cool down cycle for 3 minutes at 3.0 mph (4.8 kph), 0% incline.

To enter into this workout on a T5x, use the following guidelines:

1. Choose the Gerkin test by pressing the **FITNESS TEST WORKOUT** button until Gerkin is shown in the message window and press **ENTER**.
2. Enter age using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
3. The message window will display your target heart rate based upon your age and the target heart rate zone of 85%.
4. Select gender using the **ARROW KEYS** and press **ENTER**.

5. Enter user weight (user weight is used to calculate the caloric expenditure value-providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.

6. The message window will notify the user that the start speed is 3.0 mph (4.8 kph) and 0% incline during the warm-up.

7. Press **GO** or **QUICK START** to begin the workout.

To enter into the Gerkin testing workout on a T7x or a T7xe, follow the onscreen prompts.

Submaximal treadmill evaluation conversion table

Stage	Time	Converted VO2max
1	1:00	31.15
2.1	1:15	32.55
2.2	1:30	33.6
2.3	1:45	34.65
2.4	2:00	35.35
3.1	2:15	37.45
3.2	2:30	39.55
3.3	2:45	41.3
3.4	3:00	43.4
4.1	3:15	44.1
4.2	3:30	45.15
4.3	3:45	46.2
4.4	4:00	47.5
5.1	4:15	48.6
5.2	4:30	50
5.3	4:45	51.4
5.4	5:00	52.8
6.1	5:15	53.9
6.2	5:30	54.9
6.3	5:45	56
6.4	6:00	57
7.1	6:15	57.7
7.2	6:30	58.8
7.3	6:45	60.2
7.4	7:00	61.2
8.1	7:15	62.3
8.2	7:30	63.3
8.3	7:45	64
8.4	8:00	65
9.1	8:15	66.5
9.2	8:30	68.2
9.3	8:45	69
9.4	9:00	70.7
10.1	9:15	72.1
10.2	9:30	73.1
10.3	9:45	73.8
10.4	10:00	74.9
11.1	10:15	76.3
11.2	10:30	77.7
11.3	10:45	79.1
11.4	11:00	80

## CHAPTER 4: T5x, T7x, T7xe OVERLAY AND WORKOUT DESCRIPTION

### 4.5 FITNESS TEST WORKOUT OPERATION

#### CARDIOVASCULAR FITNESS PERCENTILES

Males:	VO2 max (ml/kg/min)			
	20-29	30-39	40-49	50-59
SUPERIOR	>58.8	>58.9	>55.4	>52.5
	54.0	52.5	50.4	47.1
EXCELLENT	51.4	50.3	48.2	45.3
	48.2	46.8	44.1	41.0
GOOD	46.8	44.6	41.8	38.5
	44.2	42.4	39.9	36.7
FAIR	42.5	41.0	38.1	35.2
	41.0	38.9	36.7	33.8
POOR	39.5	37.4	35.1	32.3
	37.1	35.4	33.0	30.2
VERY POOR	34.5	32.5	30.9	28.0
	31.6	30.9	28.3	25.1

Females:	VO2 max (ml/kg/min)			
	20-29	30-39	40-49	50-59
SUPERIOR	>53.0	>48.7	>46.8	>42.0
	46.8	43.9	41.0	36.8
EXCELLENT	44.2	41.0	39.5	35.2
	41.0	38.6	36.3	32.3
GOOD	38.1	36.7	33.8	30.9
	36.7	34.6	32.3	29.4
FAIR	35.2	33.8	30.9	28.2
	33.8	32.3	29.5	26.9
POOR	32.3	30.5	28.3	25.5
	30.6	28.7	26.5	24.3
VERY POOR	28.3	26.5	25.1	22.3
	25.9	25.1	23.5	21.1

The WFI (Wellness Fitness Initiative) protocol is a modified Gerkin test used by firefighters to evaluate aerobic fitness capacity as part of pre-employment testing and annual fitness testing. The goal is to meet or exceed 12 minutes and 30 seconds. This assessment is a series of one-minute intervals, alternating between speed and percent grade. The WFI protocol is only available on the T5x.

To enter into this workout on a T5x, use the following guidelines:

1. Choose the WFI test by pressing the **FITNESS TEST WORKOUT** button until WFI is shown in the message window and press **ENTER**.
2. Enter age using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
3. The message window will display your target heart rate based upon your age and the target heart rate zone of 85%.
4. Select gender using the **ARROW KEYS** and press **ENTER**.
5. Enter user weight (user weight is used to calculate the caloric expenditure value-providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
6. The message window will notify the user that the start speed is 3.0 mph (4.8 kph) and 0% incline during the warm-up.
7. Press **GO** or **QUICK START** to begin the workout.

The Military Test programs and the Physical Efficiency Battery (PEB) provide workouts of a preset distance. These distances are established by the various branches of the Military with the objective of each test to complete the distance as quickly as possible. At the completion of the test, a time-based score as defined by the respective Military branch will be shown on the console.

1. To enter into this workout on the T5x, use the following guidelines:
2. Choose your desired Military test by pressing the **FITNESS TEST WORKOUT** button until your desired branch test is shown in the message window and press enter.
3. Enter age using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
4. Select gender using the **ARROW KEYS** and press **ENTER**.
5. Enter user weight (user weight is used to calculate the caloric expenditure value-providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
6. Enter the desired start speed using the **ARROW KEYS** or the **NUMBER KEYPAD** and press **ENTER**.
7. Press **GO** or **QUICK START** to begin the workout.

To enter into a Military Fitness Test workout on a T7x or a T7xe, follow the onscreen prompts.

## CHAPTER 5: T5x, T7x, T7xe TREADMILL SPECIFICATIONS, PARTS, AND ASSEMBLY GUIDES

### 5.1 T5x, T7x, T7xe MODEL SPECIFICATIONS






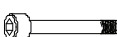





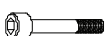






	T7xe Treadmill	T7x Treadmill	T5x Treadmill
<b>Features</b>			
Deck Type	Ultimate™ Hard-Wax reversible 1" deck	Ultimate™ Hard-Wax reversible 1" deck	Ultimate™ Hard-Wax reversible 1" deck
Belt Type	Habisat - 2-ply commercial grade	Habisat - 2-ply commercial grade	Habisat - 2-ply commercial grade
Running area	60" x 22"	60" x 22"	60" x 22"
Deck Step Height	9.5"	9.5"	9.5"
Cushion System	Ultimate Deck™ Cushioning System	Ultimate Deck™ Cushioning System	Ultimate Deck™ Cushioning System
Incline Range	0-15% (1,300 lb thrust incline motor)	0-15% (1,300 lb thrust incline motor)	0-15% (1,300 lb thrust incline motor)
Speed Range	0.5 - 15* mph	0.5 - 15* mph	0.5 - 12 mph
Contact & Telemetric HR sensors	Yes	Yes	Yes
Transport wheels	Yes	Yes	Yes
<b>Drive System</b>			
Motor	Matrix 5.0 hp AC Dynamic Response Drive System™	Matrix 5.0 hp AC Dynamic Response Drive System™	Matrix 5.0 hp AC Dynamic Response Drive System™
Motor Controller	Commercial treadmill AC Drive	Commercial treadmill AC Drive	Commercial treadmill AC Drive
<b>Console</b>			
Display type	15" Touch Screen LCD	7" LCD	Dot-matrix LED
Display feedback	Time, distance (kilometers or miles), calories, calories per hour, speed, incline, pace, heart rate, METs, watts, dynamic profile display, static profile display	Time, distance (kilometers or miles), calories, calories per hour, speed, incline, pace, heart rate, METs, watts, profile	Time, distance, calories, speed, incline, pace, heart rate, METs, watts
User defined multi-language display	Yes - English, German, French, Italian, Spanish, Dutch, Portuguese, Chinese, Japanese	Yes - English, German, French, Italian, Spanish, Dutch, Portuguese, Chinese, Japanese	"No - Accessible through Manager Menu: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese"
Workouts	Manual, Rolling Hills, Fat Burn, 5k, Target HR, Gerkin Protocol, Army PFT, Navy PRT, Marine PFT, Air Force PRT, Physical Efficiency Battery (PEB)	Manual, Rolling Hills, Fat Burn, 5k, Target HR, Gerkin Protocol, Army PFT, Navy PRT, Marine PFT, Air Force PRT, Physical Efficiency Battery (PEB)	Manual, Rolling Hills, Fat Burn, 5k, Target HR, Gerkin Protocol, Army PFT, Navy PRT, Marine PFT, Air Force PRT, Physical Efficiency Battery (PEB), WFI Protocol
One-button quick start	Yes	Yes	Yes
CSAFE, FitLinx ready	Yes	Yes	Yes
Pause function	Yes	Yes	Yes
On-the-fly program change	Yes	Yes	Yes
Fit Touch Technology™	Yes	No	No
Integrated Vista Clear™ Digital Ready Television	Yes-15" screen size	Yes-7" screen size	No
Virtual Active™ compatible	Yes	No	No
FITCONNECTION™ ready	No	Yes	Yes
Wireless Data transmitter	Yes	Yes	Yes
iPod® compatible	Yes	Yes	No
Nike + iPod compatible	Yes	Yes	No
Personal Fan	Yes	Yes	Yes
Crossbar controls	Quick start, stop, cool down, speed and incline control	Quick start, stop, cool down, speed and incline control	Quick start, stop, cool down
Manager mode	Resettable defaults with accumulated time and distance	Resettable defaults with accumulated time and distance	Resettable defaults with accumulated time and distance
<b>Tech Specs</b>			
Overall dimensions	84"L x 33.25"W x 58"H	84"L x 33.25"W x 58"H	84"L x 33.25"W x 58"H
Maximum user weight	400 lbs	400 lbs	400 lbs
Weight	375 lbs	370 lbs	370 lbs
Shipping weight	487 lbs	487 lbs	487 lbs
Electrical receptacle & plug	NEMA 5-20R 120v	NEMA 5-20R 120v	NEMA 5-20R 120v
Electrical receptacle & plug	NEMA 6-20R 220v	NEMA 6-20R 220v	NEMA 6-20R 220v
Electrical Requirements	120 volt 20 amps-dedicated circuit required-non-looped grounded	120 volt 20 amps-dedicated circuit required-non-looped grounded	120 volt 20 amps-dedicated circuit required-non-looped grounded
Electrical Requirements	220 volt 10 amps-dedicated circuit required-non-looped grounded	220 volt 10 amps-dedicated circuit required-non-looped grounded	220 volt 10 amps-dedicated circuit required-non-looped grounded

\*15 mph rating good up to 350 lbs user

\*\*Light Commercial Warranty - 6 hours of use or less daily

## CHAPTER 5: T5x, T7x, T7xe TREADMILL SPECIFICATIONS, PARTS, AND ASSEMBLY GUIDES

### 5.2 T5x, T7x, T7xe MODEL REQUIRED FASTENERS & ASSEMBLY TOOLS

	Part #:	Part Name:	Outline:	Dimensions:	Quantity:	Bag Color:
10	020090-00	Socket head cap screw		M8 x 20mm	10	Black
14	0000086571	Flat Washer		6.2 x 12 x 1.6	10	Black
20	0000084935	Left Connection Bracket		SPHC 4.0T	1	
21	0000084936	Right Connection Bracket		SPHC 4.0T	1	
11	004541-AC	Socket Head Cap Screw		M8 x 1.25P x 45 mm	2	White
12	035882-AB	Socket Head Cap Screw		M8 x 1.25P x 75 mm	4	White
14	0000086571	Flat Washer		6.2 x 12 x 1.6T	6	White
17	004539-AD	Socket Head Cap Screw		M8 x 1.25P x 25mm	2	Blue
19	0000088905	Spacer		6.2 x 12.0 x 1.6	2	Blue
15	004859-AC	Button Socket Head Cap Screw		M8 x 1.25 x 20 mm	6	Red
14	0000086571	Flat Washer		6.2 x 12 x 1.6T	6	Red
13	020072-00	Socket Head Cap Screw		M8 x 1.25 x 60mm	4	Yellow
16	062769-00	Socket Head Cap Screw		M8 x 1.25 x 15mm	2	Yellow
23	0000089835	Ribbed Lock Washer		8.5 x 12.8 x .8/1.3H	6	Yellow
22	0000086284	Power Cord Holder		SPHC 1.6	1	Green
	002153-C	Power Cord			1	Green
18	004386-00	Button Head Screw		6.2 x 12.0 x 1.6T	2	Green
	005394-00	T-Shaped Wrench		8mm x 186L	1	

## CHAPTER 5: T5x, T7x, T7xe TREADMILL SPECIFICATIONS, PARTS, AND ASSEMBLY GUIDES

### 5.3 T5x, T7x, T7xe MODEL ASSEMBLY STEPS

#### • ATTENTION

After assembly and installation is complete the treadmill will need to be calibrated using the auto-calibration feature found in the manager mode screen. Please refer to the Matrix treadmill service manual for instructions on how to enter management mode. **DO NOT stand on the belt while the auto-calibration sequence is in progress.**

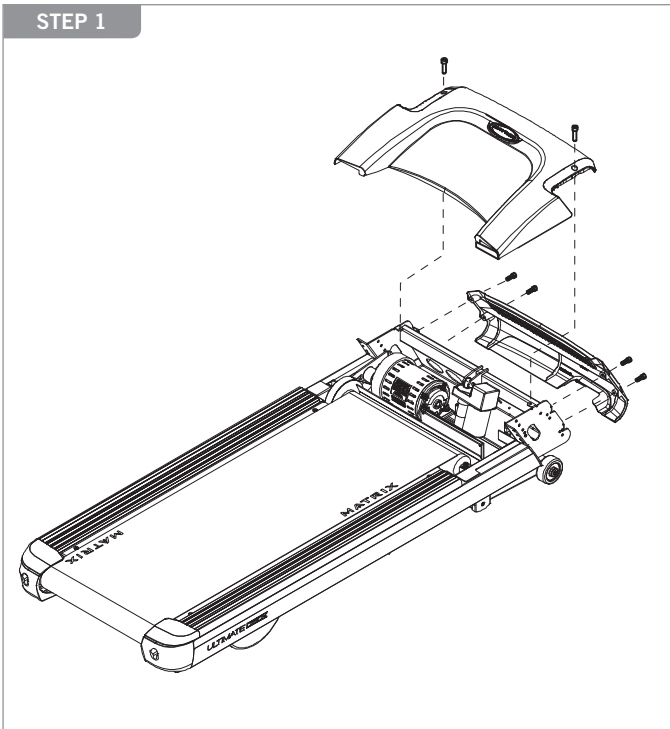
Prior to assembling the treadmill, unpack all of the contents of the box and make sure that all necessary components are present. Review the contents of the hardware package for completeness. Contact Matrix customer service at 866.693.4863 to report any missing items.

#### • ASSEMBLY INSTRUCTIONS

Please make sure that the power plug is not plugged into the wall outlet while completing the following procedure. To ensure correct assembly of the treadmill, carefully read and follow these steps:

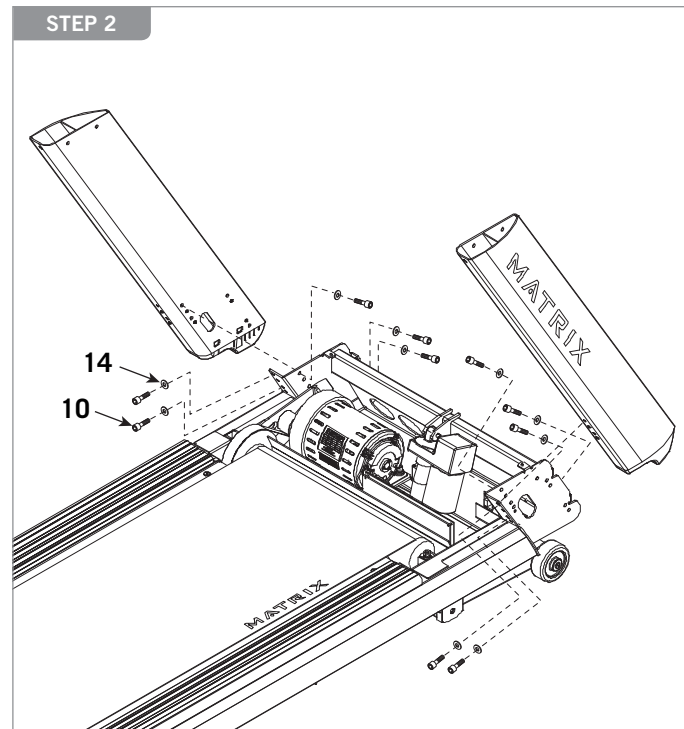
\*Assembly steps are shown using a T5x. Assembly steps for T7x and T7xe are identical to what is shown below.

#### STEP 1



Remove the motor cover(s) and set aside. The motor cover(s) need to be removed to gain access to the motor compartment so that wire harness connections can occur.

#### STEP 2

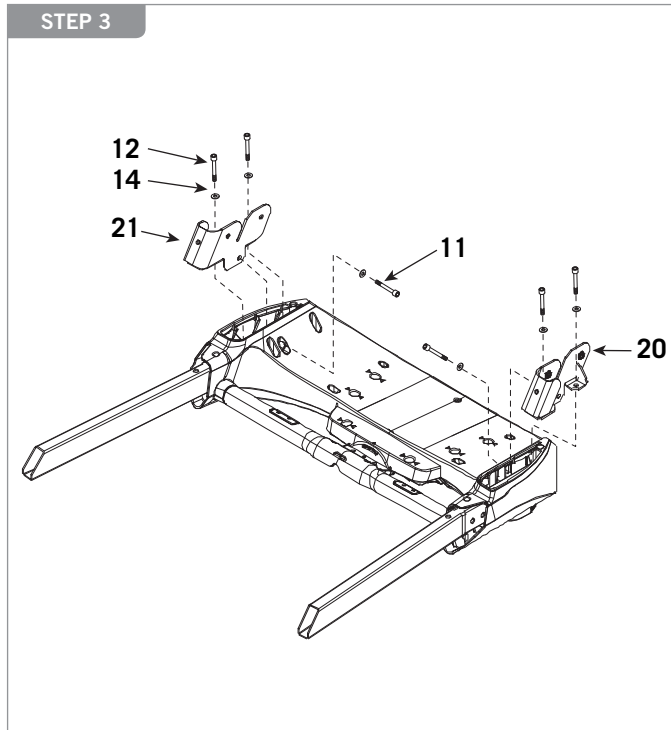


Open **Black Assembly Bag**. Assemble both the left and right console masts to the treadmill base using item **10-socket head cap screw** and item **14-flat washer**.

## CHAPTER 6: T5x, T7x, T7xe TREADMILL SPECIFICATIONS, PARTS, AND ASSEMBLY GUIDES

### 5.3 T5x, T7x, T7xe MODEL ASSEMBLY STEPS

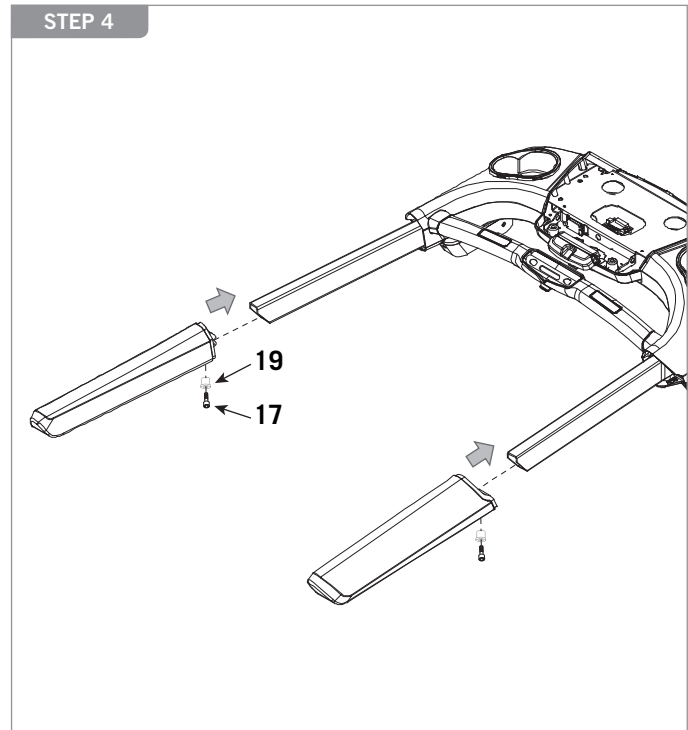
#### STEP 3



Open **White Assembly Bag**. Assemble the **left** and **right bracket**-items **20** and **21** to the console base using item **12-socket head cap screw**, item **14-flat washer** and item **11-socket head cap screw**.

**Assembly tip:** It is much easier to accomplish this task if the console base is left inside its shipping container.

#### STEP 4



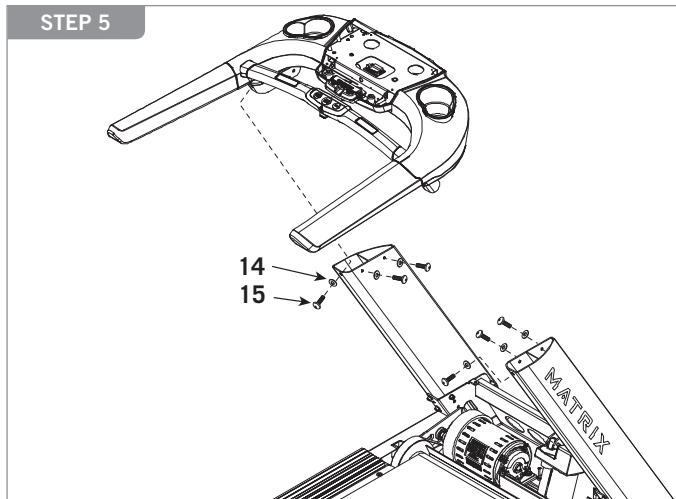
Open **Blue Assembly Bag**. Slide the urethane arms over the steel tubes on the console base. Fasten the urethane arms to the steel tubes using item **17-socket head cap screw** and item **19-spacer**.



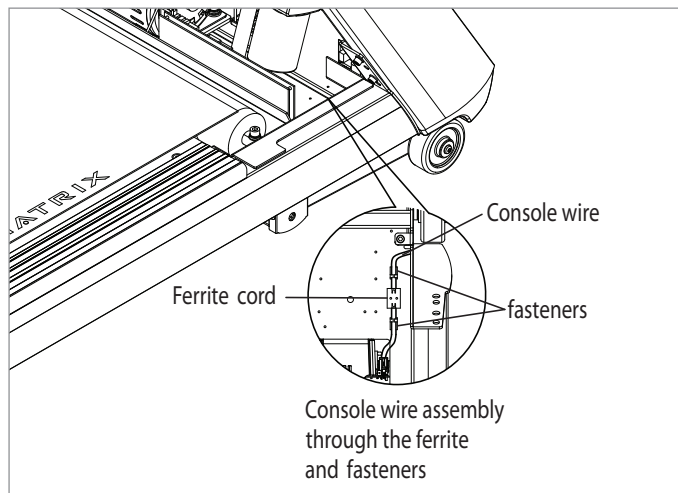
## CHAPTER 5: T5x, T7x, T7xe TREADMILL SPECIFICATIONS, PARTS, AND ASSEMBLY GUIDES

### 5.3 T5x, T7x, T7xe MODEL ASSEMBLY STEPS

#### STEP 5

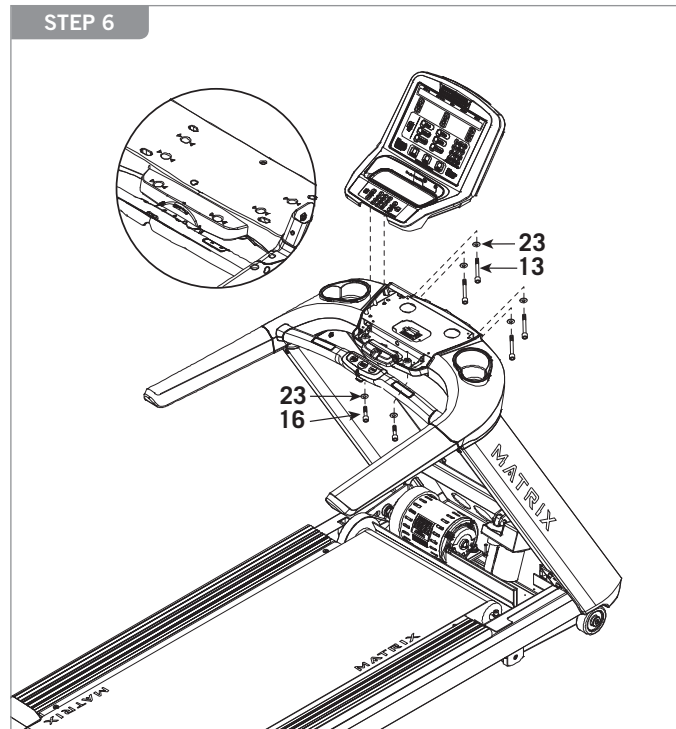


Open **Red Assembly Bag**. Assemble the console base to the console masts using item **15-button head cap screw** and item **14-flat washer**. Be sure to route the console cables down the console mast through the larger opening in the mast which is closest to the running belt. Make all appropriate wire connections within the motor compartment.



Secure the **console wire** to the **fasteners** and lock the console wire securely into the **ferrite**. Connect the **console wire** to the **MCB**.

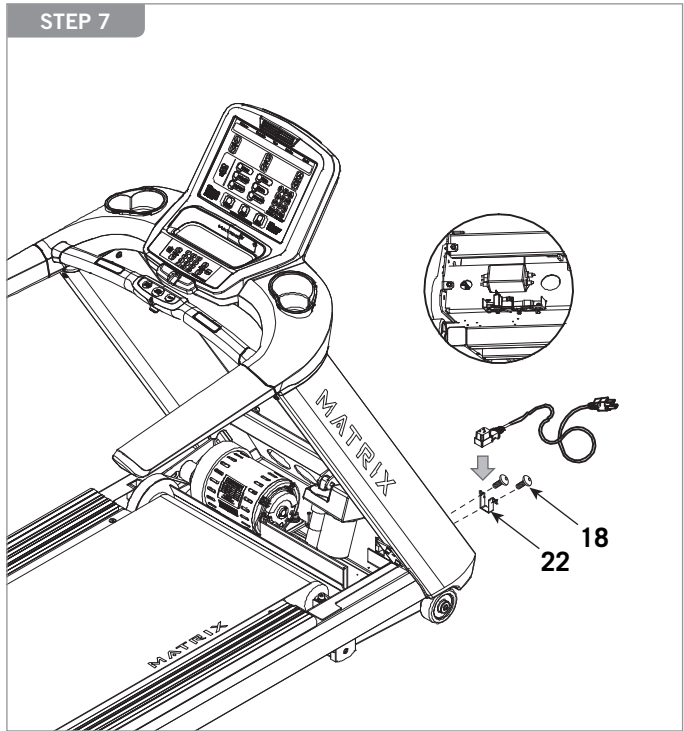
#### STEP 6



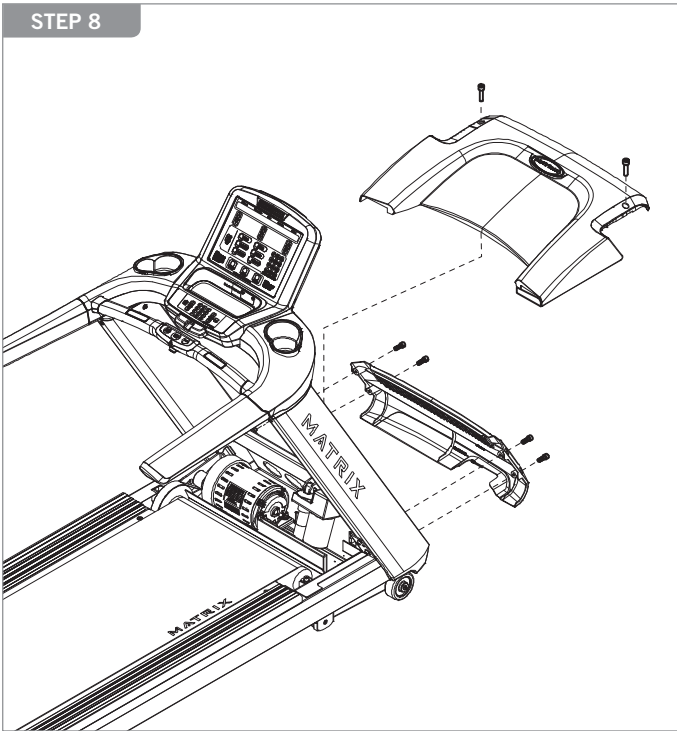
Open **Yellow Assembly Bag**. Make appropriate wire connections to the faceplate and then assemble to the console base using item **13-socket head cap screw**, item **23-lock washer**, item **16-socket head cap screw** and item **23-lock washer**. Item 16 is a shorter socket head cap screw and gets assembled into the holes closest to the running surface. All holes applicable to this assembly step can be noted by the embossed arrow next to the hole.



5.3 T5x, T7x, T7xe MODEL ASSEMBLY STEPS



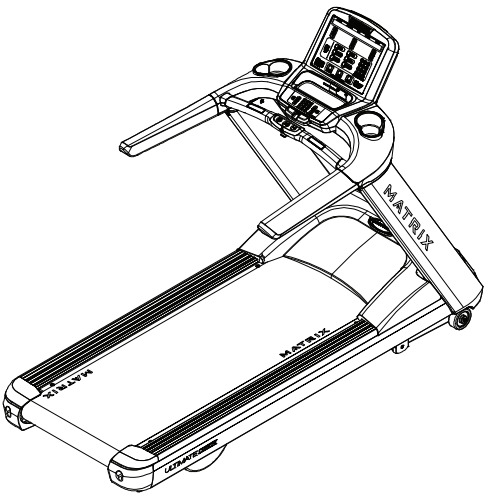
Open **Green Assembly Bag**. Install the power cord and assemble item **18-power cord holder** with item **22-button head screw**. If your hardware pack is missing item 22, check to see if the screws are already assembled on the treadmill.



Replace the motor cover(s) and power the treadmill unit on. The power button is located next to the power cord inlet.

ASSEMBLY COMPLETE

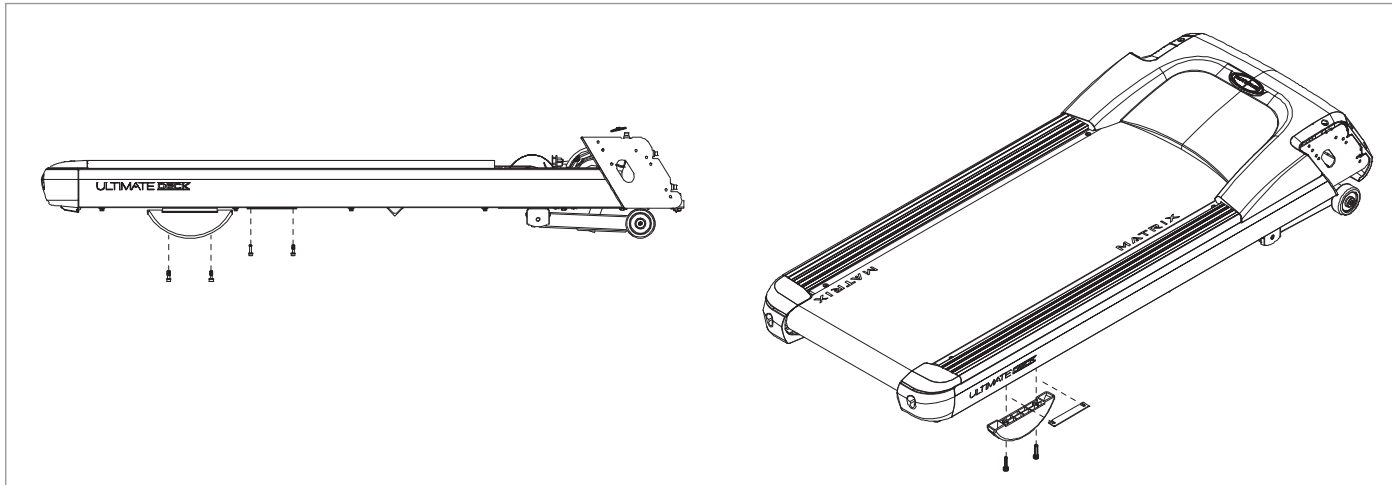
Assembly is complete and the auto-calibration sequence must be run at this time.



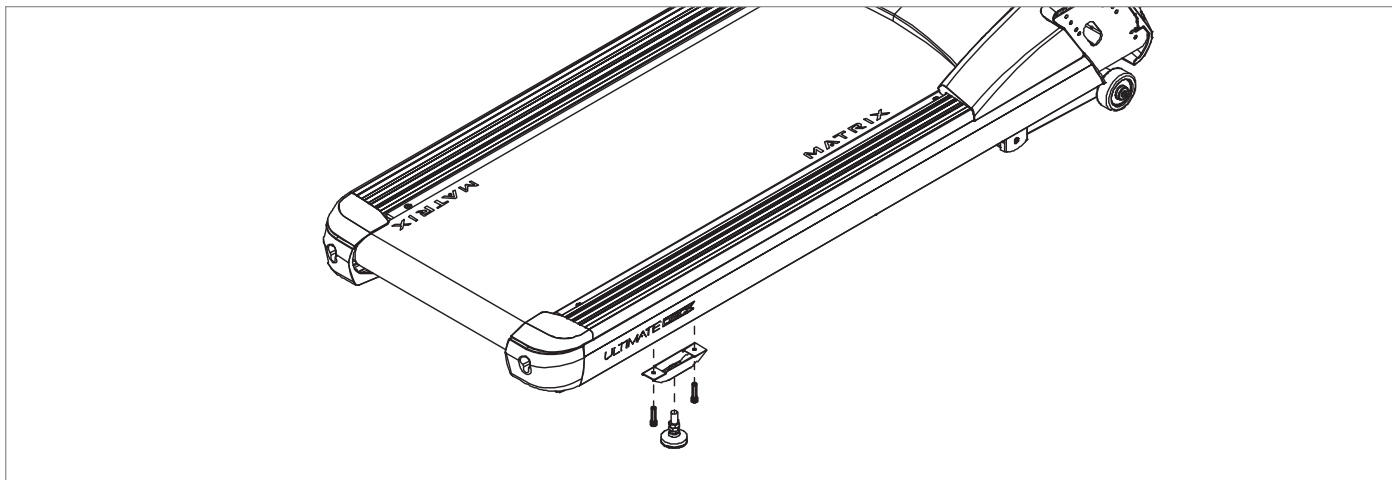
## OPTIONAL LEVELING ASSEMBLY TECHNIQUES:

Use of shim or adding leveling foot.

**NOTE:** It is extremely important that the levelers are correctly adjusted for proper operation. An unbalanced unit may cause belt misalignment or other issues. Use of all level is recommended.



Remove the leveling shim provided on the underside of the treadmill. The shim can be found mounted on the underside of the right hand side rail. Remove the rear foot on the side of the treadmill that is resting low. Install the shim as shown above and return the rear foot.



When installing the optional rear leveling foot accessory, remove the existing rear foot. Replace with new leveling foot and fasten to the frame using the existing fasteners that held in the half-moon foot.



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