

LANDICE

ORTHOCANADA

1-800-561-0310

Rehab Treadmill
90 Series
Owner's Manual



Part Number: 73060

Important Safety Instructions

Read all instructions before using the treadmill.

DANGER

To reduce the risk of electric shock: always unplug the treadmill from the electrical outlet immediately after using and before cleaning.

WARNING

To reduce the risk of burns, fire, electric shock or injury to persons:

- 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.
- Close supervision is necessary when the treadmill is used by or near children or persons with disabilities.
- Use the treadmill only for its intended use as described in this manual. Do not use attachments not recommended by Landice.
- Never operate treadmill if it has a damaged cord or plug, if it is not working properly, or if it has been damaged. Call your dealer or certified service provider immediately for examination and repair.
- Keep the power cord away from heated surfaces. Be sure the cord has plenty of slack and cannot be pinched under the treadmill when it elevates and de-elevates.
- Never operate the treadmill with the motor cover air openings blocked. Keep the air openings free of lint, hair, dust, or debris.
- Do not drop or insert objects into any opening on the treadmill. Be sure no objects are near or beneath the treadbelt when you are using the treadmill.
- Do not use treadmill outdoors.
- Do not operate treadmill where aerosol (spray) products are being used or where oxygen is being administered.
- To disconnect, press **STOP** twice, pull the safety lanyard out, then remove plug from outlet.

WARNING

Failure to observe the following warning statements can result in serious injury!

- Do not use this product without first consulting your doctor if you suffer from any illness, condition, or disability that affects your ability to run, walk or exercise.
- Do not use this product without supervision present if you are suffering from any illness, condition, or disability which affects your ability to run, walk or exercise. Failure to do so can result in serious injury should you fall while the treadbelt is moving.
- Failure to leave ample clearance around the treadmill could cause you to be trapped between the treadmill and a wall if you fall, resulting in burns or other serious injury from the moving treadbelt. **Allow a minimum clearance of 18 inches (46 cm) on each side of the treadmill. Allow a minimum clearance of 6 feet (183 cm) at the rear of the treadmill.**
- Never stand on the treadbelt when starting the treadmill. A sudden start could cause you to lose your balance. Always begin by placing your feet on the side traction strips, straddling the treadbelt, before turning the treadmill on.
- Always wear the safety lanyard clip securely on your clothing while exercising. Failure to do so can result in severe injuries should you accidentally fall while exercising.
- Test the emergency stop safety lanyard regularly by pulling on the cord and ensuring that the treadbelt comes to a complete stop when key is pulled.
- Familiarize yourself with this manual. Be sure you understand operation of the treadmill before use.
- Always follow basic safety precautions when using an electrical appliance.

⚠ WARNING

Connect treadmill to a properly grounded, dedicated electrical outlet only. See the following Grounding Instructions.

This product must be grounded. If it should malfunction or break down, 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.

⚠ DANGER

Improper connection of the grounding connector can result in a risk of electric shock. Check with a qualified electrician/service technician if you are in doubt as to whether the treadmill is properly grounded. Do not modify the plug provided with the treadmill—if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

- 120-Volt Treadmills

Treadmills marked 120 VAC are intended for use with a grounding plug in a nominal 120-volt circuit. Ensure the treadmill power cord is connected to an outlet having the same configuration as the plug. No adapter should be used with 120 VAC treadmills.

- 200 – 250-Volt Treadmills

Treadmills marked 200-250 VAC are intended for use on a circuit having a nominal rating greater than 120V and are factory-equipped with a specific power cord and plug to permit connection to a proper electrical circuit. Ensure the treadmill power cord is connected to an outlet having the same configuration as the plug. No adapter should be used with 200 – 250 VAC treadmills.

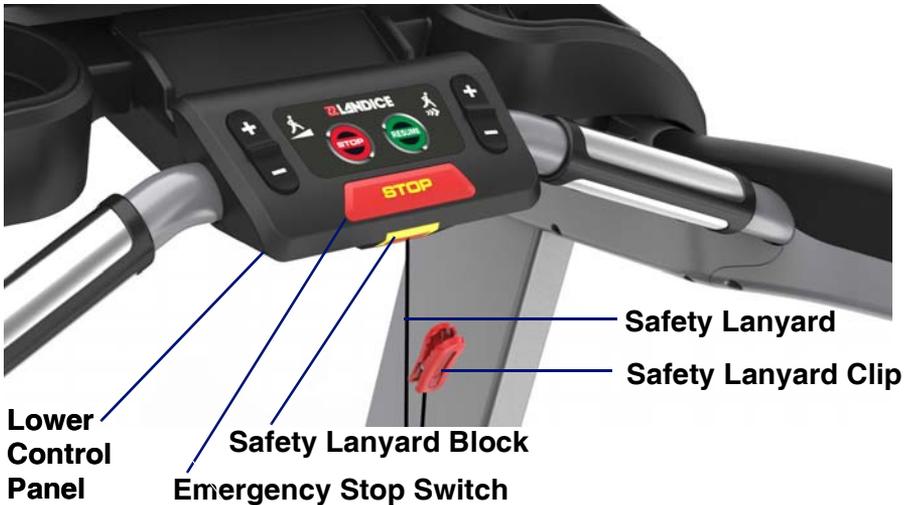
If the treadmill must be configured for use on a different type of electrical circuit, qualified service personnel should make the proper connection.

Treadmill Quick Start Guide

Before you Start the Treadmill: Safety

⚠️ WARNING

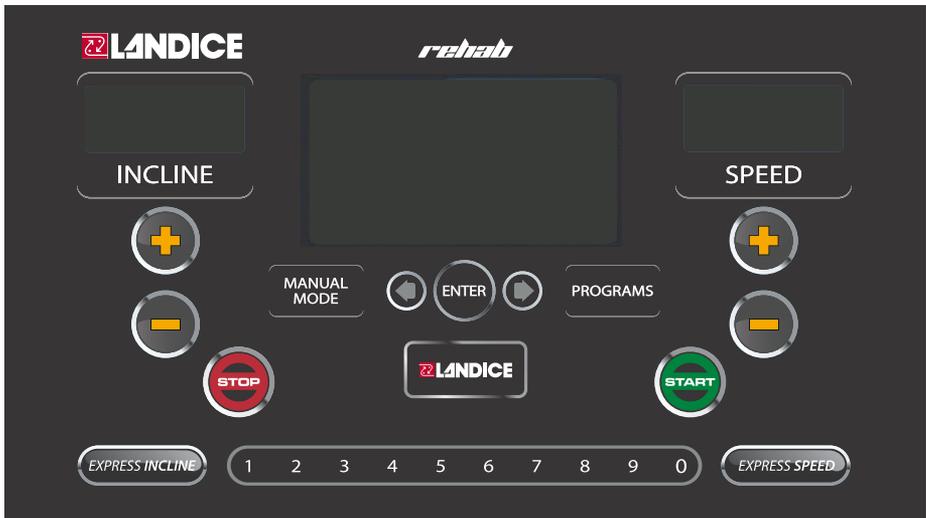
The treadmill will not operate unless the yellow emergency stop Safety Lanyard Block is pushed in. During operation, pulling the safety lanyard pulls the Safety Lanyard Block out, stopping the treadmill. To help prevent injury, always clip the Safety Lanyard Clip to your clothing while using the treadmill, to stop the treadmill if you slip or fall during your workout.



Using the Control Panel

This manual covers the Landice Rehabilitation treadmill control panel. Quick start instructions are included. For detailed instructions, see “Rehab Treadmill Operation” on page 41.

Rehab Treadmill Console



Treadmill Controls: Quick Start Guide

| | |
|---|--|
|  | <p>To start the treadmill: Press START to power up treadmill and light all displays.</p> |
|  | <p>To turn off the treadmill: Press STOP once to stop the treadbelt and put the unit in pause mode. Press STOP twice to power down the treadmill. The treadmill will shut off and all current statistical information will be cleared.</p> |
|  | <p>To restart the treadmill: Press RESUME on the lower control panel to power up treadmill. All displays light and the treadbelt begins to move at 1.0 mph (1.6 km/hr in metric mode).</p> |
|  | <p>To change treadbelt speed: Press and hold SPEED (+) to increase speed. Pressing for more than 2 seconds increases speed faster. Release (+) key when desired speed is shown on SPEED display. Press and hold SPEED (-) key to slow speed. Pressing for more than 2 seconds reduces speed more quickly. Release (-) key when desired speed is shown on the SPEED display.</p> |

Treadmill Controls: Quick Start Guide (Continued)

| | |
|---|---|
|  <p>The image shows two circular buttons. The top button is labeled 'INCLINE' and has a plus sign (+). The bottom button has a minus sign (-).</p> | <p>To change treadbelt incline: Press and hold INCLINE (+) key to increase incline. Pressing for more than 2 seconds raises incline faster. Release key when desired incline is shown on INCLINE display. Press and hold INCLINE (-) key to lower incline. Pressing for more than 2 seconds lowers incline faster. Release key when desired incline is shown on INCLINE display.</p> |
|  <p>The image shows a circular button with the word 'ENTER' in the center.</p> | <p>To view different screens during workout: Press ENTER or use the arrow keys at any time to choose the display screen that best suits your workout. The ENTER button can be used to enter workout variables.</p> |
|  <p>The image shows two circular buttons with left and right arrow symbols.</p> | <p>The left and right arrows move between the motivational screens and are used to enter values.</p> |
|  <p>The image shows a yellow 'CAUTION' warning sign with a triangle and exclamation mark. Below it are two rectangular buttons: 'EXPRESS SPEED' and 'EXPRESS INCLINE'.</p> | <p>Using the EXPRESS keys causes rapid changes in speed and incline. Press EXPRESS INCLINE to see the incline shortcut screen, which lets you rapidly change incline level. Press EXPRESS SPEED to view the speed shortcut screen, which lets you rapidly change to a different speed.</p> |

Switching English/Metric Display Units

The treadmill display shows English units (mph for speed, lb for weight) by default. To change to metric units (kilometers per hour for speed and kilograms for weight):

- Ensure the treadmill is plugged in and powered off.
- Press and hold **MANUAL/PROGRAM/START** simultaneously then release all. Press **STOP** to save.

Repeat the same steps to return the display to English units if desired.

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1. Introduction

Your Landice treadmill is a high-quality fitness tool that will provide many years of fitness benefits. Unpleasant weather is no longer an obstacle to getting your exercise. Cold, windy, wet days will never discourage you again, nor will heat and humidity. If you like to multi-task, you can watch your favorite TV program or listen to music and take care of your health at the same time.

This manual covers the Rehab treadmill. Be sure you understand how to operate your treadmill's control panel before using the treadmill. See "Rehab Treadmill Operation" on page 41.

1.1. Before You Begin

Please do the following before you start to exercise on your treadmill:

- **Register your treadmill.** Landice backs your treadmill with a strong warranty. For the factory to respond if your treadmill has a problem, we need your warranty information on file. Register online at the link below.
<http://www.landice.com/support/product-registration>
- Ensure that a suitable electrical outlet is available:
 - LTD Treadmills: 120VAC/15 amp dedicated circuit or optional 220VAC/15 amp dedicated circuit
- Select the proper location. The treadmill should be installed in a climate-controlled room. See "Installation" on page 21.
- Familiarize yourself with the features of the treadmill, shown in the following figures.

Figure 1-1. Treadmill Features and Controls

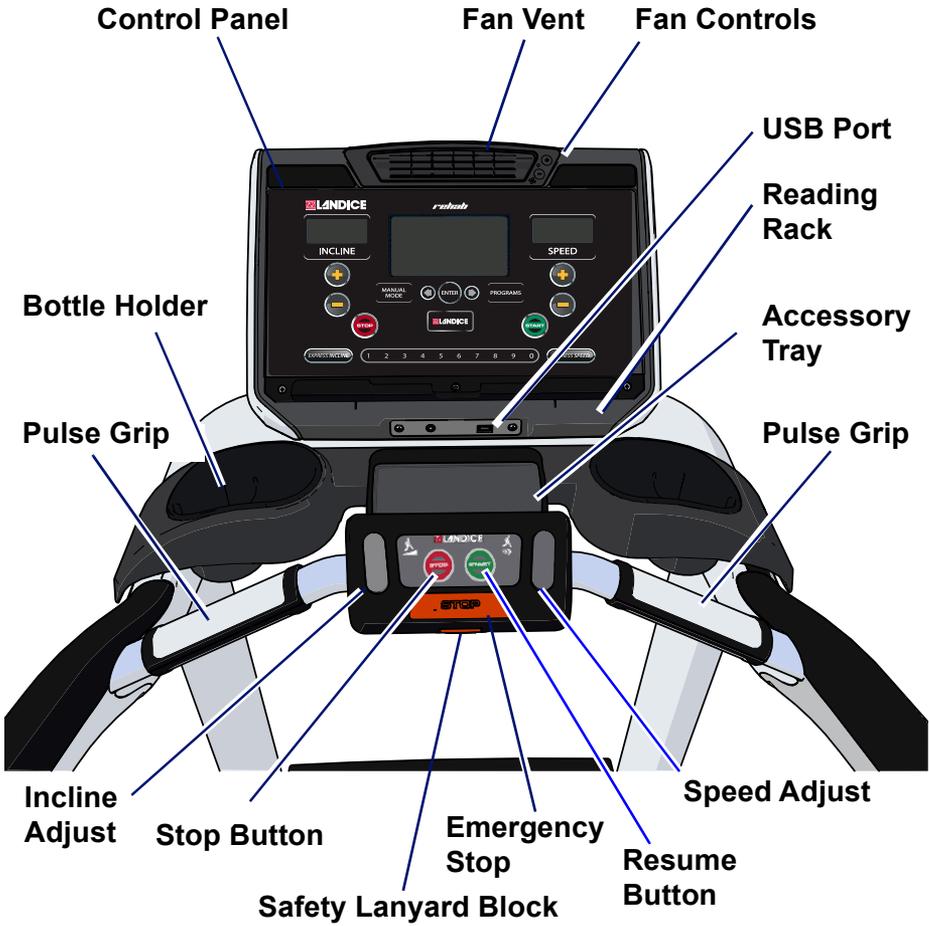


Table 1-1 Treadmill Features and Controls

| Item | Description |
|---------------|--|
| Control Panel | Provides workout displays and controls. Control panels vary by model. |
| Fan Vent | Directs airflow when treadmill is operating. |
| Fan Controls | Fan operates when treadmill is on. Powers cooling fan on/off and controls fan speed. |

Table 1-1 Treadmill Features and Controls (Continued)

| Item | Description |
|--|---|
| USB Port | Provides a charging port for most devices up to 600mA. Service use only: allows treadmill software to be updated. |
| Reading Rack | Holds reading material or tablet. |
| Accessory Tray | Provides accessory storage. |
| Pulse Grips (2) | Detects pulse when hands are placed on the grips, allowing treadmill to calculate and display heart rate. |
| <p>Lower Control Panel Controls</p> <p>The lower control panel is located between the pulse grips. This area provides easy-to-reach controls for stopping, resuming or changing speed or incline during your workout.</p> | |
| Speed Adjust | Increases/decreases treadbelt speed when pressed up/down. Performs the same function as the SPEED (+/-) keys on the control panel. |
| Emergency Stop Switch | Press to stop the treadbelt. |
| Safety Lanyard Block | Provides the connection for the safety lanyard. The treadbelt will not move unless the safety lanyard block is pushed in. |
| Resume-Stop Buttons | Resumes/stops the treadbelt. The STOP button functions like control panel STOP. The RESUME button takes the treadmill out of pause mode. |
| Incline Adjustment | Raises/lowers the front of the treadbelt when pressed up/down. Performs the same function as the INCLINE (+/-) keys on the control panel. |
| Bottle Holder | Holds bottles/cups. |

1.2. Heart Rate Monitoring

This section provides basic concepts of heart rate monitoring so you can better understand how to use it to reach the fitness level you desire.

1.2.1. What is exercise intensity?

Exercise intensity is simply a measure of how hard you are working at a given time during exercise. The ACSM, the world's leading medical and scientific authority on sports medicine and fitness, recommends that every individual involved in an exercise program know how hard his/her body is working during exercise.

Your heart provides key information for determining how intensely you are working during exercise. Your heart rate (how many times your heart beats per minute) is really an efficiency rating for your entire body. The number of times your heart beats during each minute of exercise is a measurement of the intensity of the exercise. If your heart rate is low, exercise intensity is low; if your heart rate is high, your exercise intensity is high.

1.2.2. What is maximum heart rate?

Maximum Heart Rate (MHR) is the maximum attainable heart rate your body can reach before total exhaustion. True maximum heart rate is measured during a fatigue or "stress" test. This test must be done in a clinical setting and is not practical or accessible for most people.



The use of this formula assumes no underlying heart or respiratory disease or other condition, which could be adversely affected by exercise. Consult your doctor before using this chart!

Your maximum heart rate can be established with a high degree of accuracy using the following simple formula:

Estimated Maximum Heart Rate = 220 minus your age.

If John is 35 years old, what is his estimated maximum heart rate?

John's estimated maximum heart rate is: $220 - 35 = 185$

185 beats per minute is the estimated maximum number of times John's heart can beat before his body would fatigue or "max out." This number is extremely helpful because it indicates the absolute highest exercise intensity John can handle before his body wears out. The ACSM says that during exercise, John should keep his heart rate below his maximum so that he will not become exhausted and have to quit. In fact, the ACSM gives John a specific percentage range of his maximum heart rate to exercise in, known as his Target Heart Rate Zone.(THRZ).

1.2.3. Why should I monitor exercise intensity?

Your heart is the most important muscle in your body and, like all muscles, must be exercised regularly to remain strong and efficient. According to fitness experts, exercise is more effective when you work out in a specific heart rate range or zone. This is referred to as your Target Heart Rate Zone (THRZ) and is reflected by the number of heart beats per minute. This zone can vary greatly depending on your age, fitness level and various other factors. If your heart rate is too low during exercise, your body reaps little or no benefit. This means you're not likely to see the results you want, like weight loss or increased endurance. If your heart rate is too high during exercise, you may tire too quickly, become fatigued or even run the risk of injury.

Monitoring exercise intensity helps you to stay at a level of exercise that allows you to accomplish your goals. In fact, the ACSM recommends that, in order to get the most benefit from your cardiovascular exercise, you should work within your THRZ for at least 20 to 60 minutes per workout, 3 to 5 times per week. Knowing your exercise intensity (THRZ) will allow you to work at the right level of exercise to accomplish this.

1.2.4. How do I determine my Target Heart Rate Zone?

Your THRZ represents the minimum and maximum number of times your heart should beat in one minute of exercise. The ACSM recommends that all individuals should work within a Target Heart Rate Zone of 60% to 85% of Maximum Heart Rate. This means that your heart rate during exercise should not fall below 60% or rise above 85% of your maximum heart rate. Let's look at John from our earlier example. John is 35 years old, so his estimated maximum heart rate is 220 minus 35, or 185 beats per minute (bpm). The ACSM recommendation is that John should exercise between 60% and 85% of 185 beats per minute to stay in his THRZ. Let's determine John's THRZ:

- John's estimated maximum heart rate: 185 bpm
- Lower target limit: $185 \text{ (MHR)} \times 0.6 = 111 \text{ bpm}$
- Upper target limit: $185 \text{ (MHR)} \times 0.85 = 157 \text{ bpm}$
- John's target heart rate zone: 111-157 bpm

111-157 beats per minute is the range or zone for John's heart rate during exercise in order to achieve his goals. If John is a beginning exerciser, he'll want to stay at the low end of his THRZ. If John is a more advanced exerciser, he may want to work at the higher end of his THRZ to challenge himself more. The following list shows the different intensity levels within a target heart rate zone:

- Beginner: 60% of MHR
- Weight Loss: 75% of MHR
- Aerobic: 85% of MHR

1.3. Heart Rate Monitors

Heart rate monitors are built into the treadmill's pulse grips, and a wireless chest strap monitor is also available on residential models.

Exercising too hard can put you at a risk for injury. A heart rate monitor reminds you of the safe and effective heart rate

intensity at which you should exercise and warns you if your workouts go too far.

If you want to reach your exercise goals, it's important to stay in your THRZ during workouts. A heart rate monitor provides a reminder of the intensity and quality of each workout session.

Landice heart rate monitors are used to monitor your level of exercise intensity during workouts. Pulse meters have a high margin for error. Manual pulse measurements during exercise can result in errors as high as ± 15 beats per minute, with the risk of potential error increasing as heart rate increases.

1.3.1. Wireless Chest Strap Monitoring System

Note: The wireless chest strap is optional.

The Wireless Chest Strap transmitter works best against bare skin. Because sweat (salt water) is an electrical conductor, the transmitter will work over a T-shirt if the shirt is wet with sweat. If you are having trouble getting an accurate pulse reading, try wearing the belt against bare skin.

Figure 1-2. Wireless Chest Strap Transmitter



1. Center the transmitter on the chest as high under the pectoral muscles (breasts) as possible. Tighten the strap so that the belt is as tight as possible without being uncomfortable.
2. A tube of Landice Cardio Gel was shipped with your treadmill. Pull the belt away from your chest and apply a small dab of gel onto each electrode. This will ensure a strong electrical contact between the transmitter and your chest.

1.3.2. Contact Heart Rate Monitoring System

The Contact Heart Rate Monitoring System is designed for use at walking speeds. A natural running motion involves using your arms to maintain balance. Because the Contact Heart Rate Monitoring System requires your arms to remain stationary, we recommend using the pulse grips at speeds of less than approximately 4 mph (6.4 km/h) or the fastest speed at which you are comfortable walking.

The Contact Heart Rate Monitoring System can be used in place of the wireless chest strap to perform any of the following functions:

- Monitor your Time in Zone
- Heart Rate Control (HRC) program adjustment
- Help you maintain your Target Pulse

To use the Contact Heart Rate Monitoring System:

1. Switch to any screen that shows Pulse.
2. Grab the pulse grip portion of the center rail. When you place your hands on the grips the display flashes. The pulse will “beat” briefly and then display your heart rate. Your heart rate will be continuously monitored while your hands remain on the grips.

The HRC programs make speed and elevation adjustments to maintain your target heart rate while your hands remain on the grips. If you remove your hands the HRC programs will not change speed or elevation until you place your hands on the grips. These programs are available on the Cardio and Executive models.

Note: If you are wearing the wireless chest strap, the heart rate from the pulse grips overrides the wireless signal from the chest strap while your hands are on the pulse grips. When you release the grips, the treadmill uses the wireless chest strap signal for pulse calculation.

1.4. Treadmill Program Capabilities

The treadmill has the following program capabilities:

- **Built-in Programs:** You enter the program's maximum time, speed and incline. 5 Built-in Programs. See page 45.
- **User-Defined Programs:** A User-Defined Program looks and runs exactly like a Built-In Program. The primary difference between Built-In and User-Defined Programs is customization. User-Defined Programs allow you to manually edit individual segments. User Programs. See page 48.
- **Specific Goal Programs:** The numeric keypad is used to enter Time and Distance. Goal Programs. See page 51.
- **Heart Rate Control (HRC) Programs:** The heart rate program will automatically vary the speed and incline based upon your target heart rate. This target training maximizes your workout performance while minimizing your workout time. See page 52.
- **Fitness Tests:** The Fitness Tests will measure your fitness level based on your age, gender, and performance. Your Fitness level is calculated using different protocols. See "Fitness Testing" on page 55.

2. Installation

2.1. Tools Needed

- Socket set with 3/8" socket, 1/2" socket, and 9/16" socket
- Open end wrenches 14mm and 19mm, or adjustable open end wrench
- Hex wrenches: 4mm, 5mm, 6mm
- Cross-tip screwdriver
- Razor blade knife

2.2. Unpacking

Unpacking and installation of the treadmill should be done by a qualified technician. The packaged treadmills are very heavy and weigh as follows:

- L7 models: 360 lb, packaged
- L8 models: 435 lb, packaged



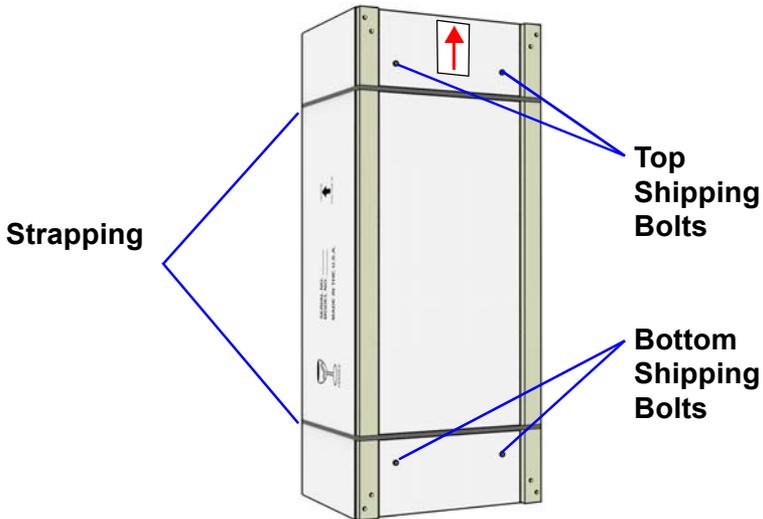
To avoid injury, use caution when moving and lifting the treadmill during unpacking and assembly.

Note: Move the shipping crate/pallet to location of final assembly. Allow 3-5 feet working space to safely remove box and pallet.

Note: For L7 treadmills begin with step 1, for L8 treadmills step 2.

1. Carefully lower L7 treadmill crate from the upright position (Figure 2-1) to horizontal position (Figure 2-2). While lowering, place upper end of crate/pallet onto a sturdy item such as a tool box. With crate/pallet securely placed on tool box, remove the top two shipping bolts with 1/2" socket as shown in Figure 2-1. Carefully lift, remove tool box and lower pallet onto floor. Repeat this step at the opposite end of pallet to remove bottom two shipping bolts.

Figure 2-1. Shipping Bolt Locations and Strapping



2. Remove strapping in Figure 2-1 from box and pallet. Use caution, straps may be under tension.
3. Using a razor knife carefully cut the box just above the staple line on all four sides shown in Figure 2-2. Remove box and discard.
4. The L8 treadmill and final assembly components including 90 Series Hardware kit for both models are held together with plastic strapping. Remove these straps using caution as they may be under tension.
5. Carefully lift and remove upright tower and assembly component boxes from treadmill base. Place these items safely aside for assembly. (See “Assembly” on page 24.)
6. Position yourself at end of treadmill running surface and using both hands carefully lift and slide treadmill off the pallet to left or right. Repeat process at opposite (heavy end). Remove pallet and discard.

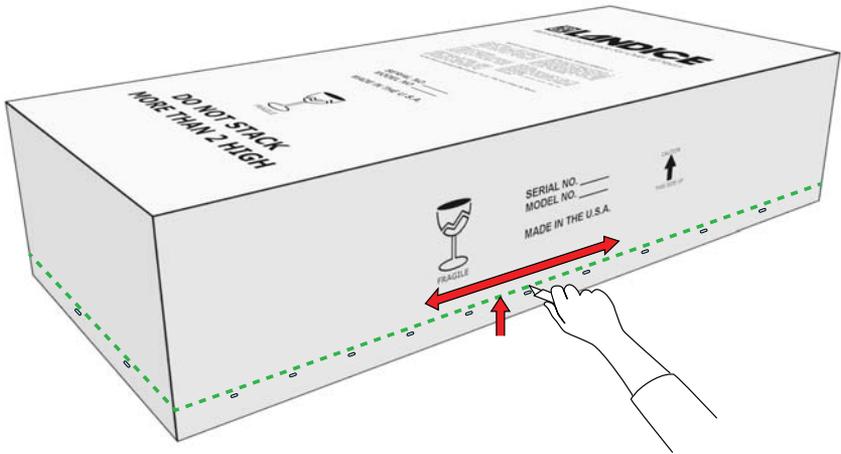


Be careful! Straps are under pressure.



To avoid damaging the treadmill, DO NOT cut through the center of the box.

Figure 2-2. Cut Line



2.3. Assembly

WARNING

Failure to leave ample clearance at the rear of the treadmill could result in the user becoming trapped between the treadmill and the wall should the user accidentally trip and fall while exercising.

Locate the plastic bag that contains the Owner's Manual and the 90 Series Hardware Kit.

• **90 Series Hardware Kit contains:**

- Handrail screws-12x
- Console screws-4x
- Cup holder screws-6x

• **Medical Rail Hardware:** The medical rail hardware is attached to the medical rail: (2x) 5/16" bolts and (2x) 5/16" lock washers (Figure 2-6).

• **Frame Hardware:** Frame hardware, (4x) 1/4x20 self-tapping screws are started in the frame at the appropriate mounting points (Figure 2-6).

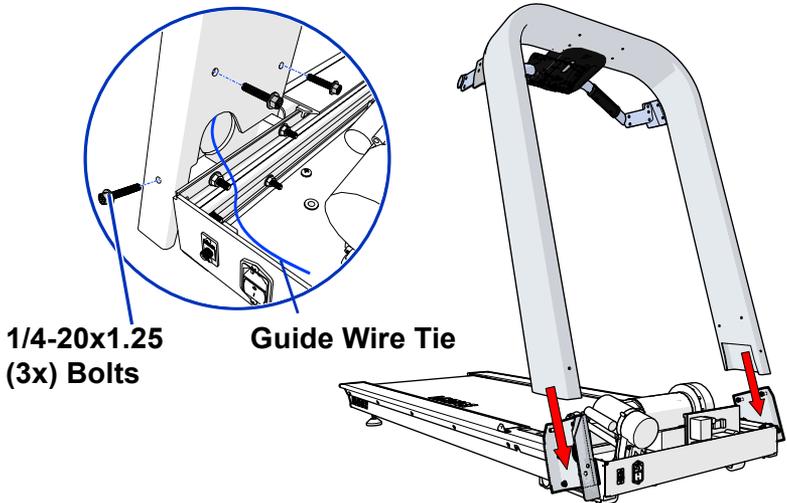
2.3.1. Base Assembly Instructions

1. Position the base where the treadmill is to be located:
 - Allow a minimum clearance of 18 inches (46 cm) on each side of the treadmill.
 - Allow a minimum clearance of 6 feet (183 cm) at the rear of the treadmill.

Note: Do not remove the wire tie protruding from Upright Center Hole on upright. You will need this to guide the upper wire harness down through the upright in "Plastic Bridge Installation" on page 30.

- Use a 3/8" socket to remove three bolts from each side of the upright bracket on the frame. Slide the upright down over both brackets (Figure 2-3). Upright legs may require slight compression to properly fit between the upright brackets. Secure each side using three bolts per side starting with the inside bolts first, then the outside bolt. Tighten all securely. The right side is shown in the detail.

Figure 2-3. Upright Installation



- Proceed to either “Medical Rail Installation” below or 2.3.3 “Optional Handrail Installation” as appropriate for your treadmill.

2.3.2. Medical Rail Installation

Tools needed:

- 4mm Allen Wrench
- 6mm Allen Wrench
- 7/16" and 1/2" socket wrench
- Cross Tip Screwdriver

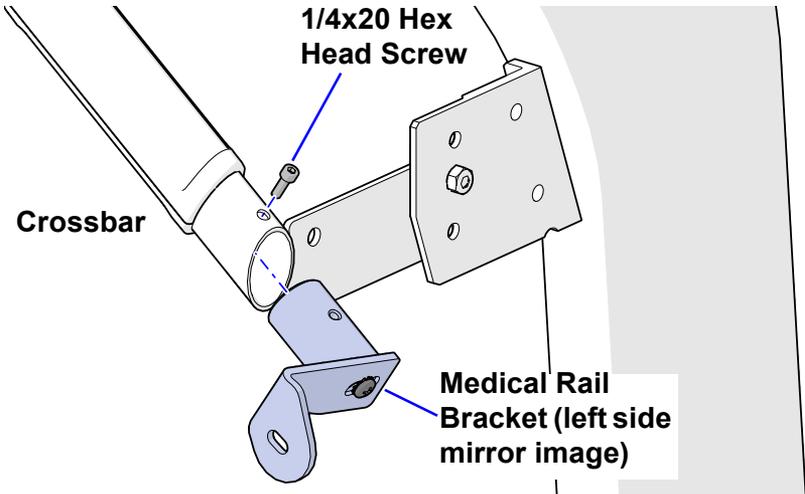
Parts provided:

- 2-Medical Rails (Left and Right)
- 2 Medical Rail Brackets located inside medical rail cover box

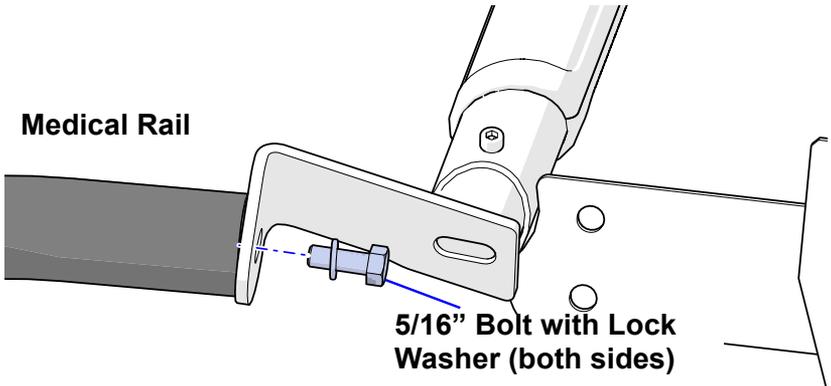
Installation

- 2 Medical rail covers: left and right
 - 12 Medical rail cover screws, M8x16, found in the 90 Series Hardware Kit
 - 2- 5/16" bolts to attach Medical Rail to Medical Rail Bracket with 2-5/16" lock washers - found in Medical Rail
 - 4- 1/4x20 self-tapping screws to mount Medical Rail to Frame - found in frame
1. Locate both Medical Rail Brackets (Figure 2-4), insert them into both ends of the Crossbar and secure them in place using 1/4x20 hex head screws and 7/16" socket to Crossbar.

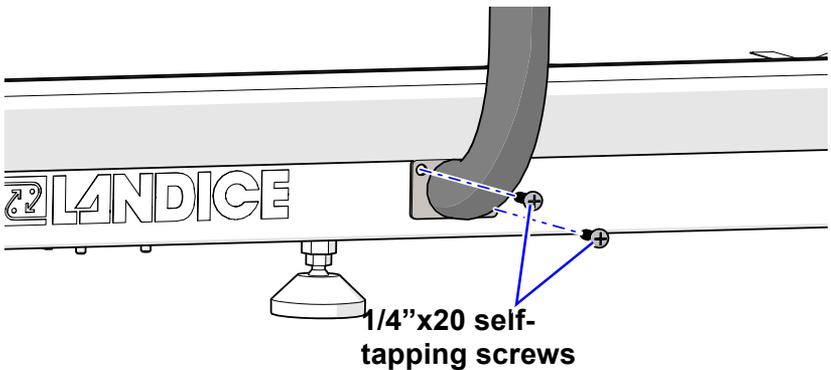
Figure 2-4. Medical Rail Bracket Installation



2. Attach Medical Rail to Medical Rail Bracket (Figure 2-5) using 5/16" Hex Bolt with lock washer and 1/2" wrench.

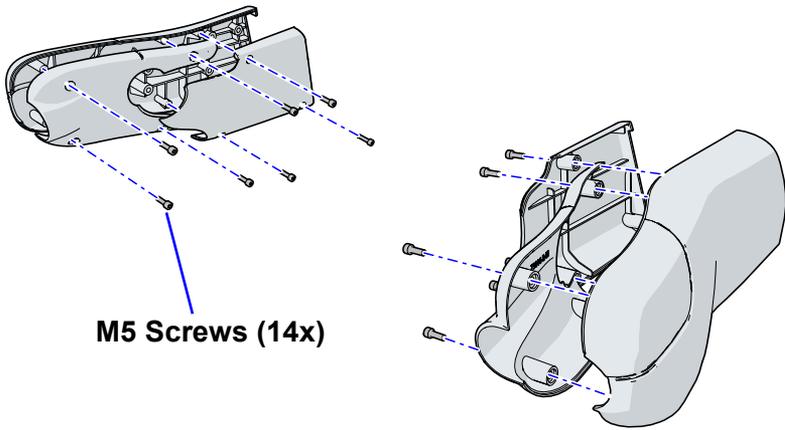
Figure 2-5. Medical Rail Bolt

3. Attach Medical Rail to Frame (Figure 2-6) using 1/4x20 self-tapping screws with long cross tip screwdriver.

Figure 2-6. Medical Rail to Frame Attachment Points

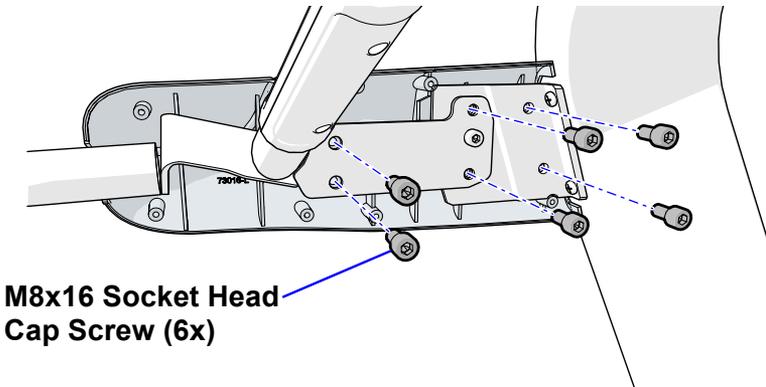
4. Separate the Covers as shown below (Figure 2-7).

Figure 2-7. Medical Rail Covers



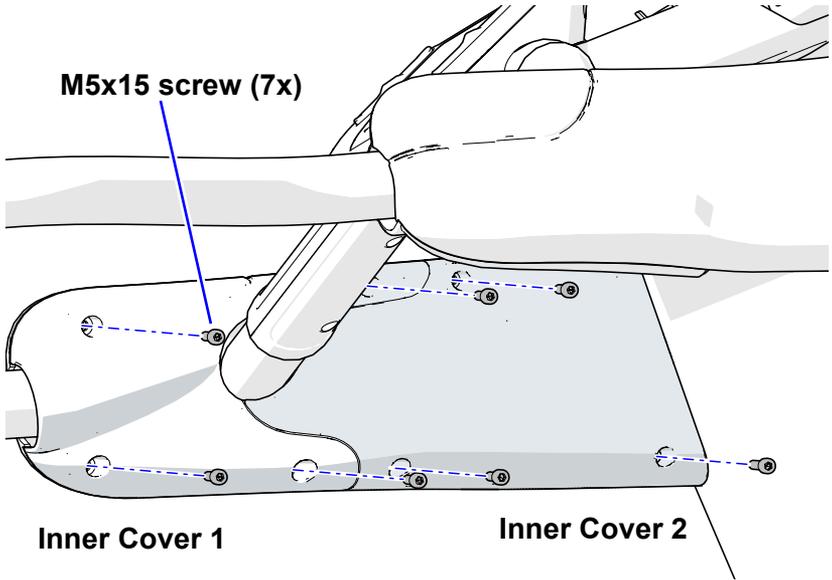
5. Remove (7) M5 socket head cap screws holding each medical rail cover assembly together. Separate each set of covers for installation, attaching hardware will be reused. (Figure 2-8).

Figure 2-8. Outer Cover Mounting Points



6. Begin with left outside cover installation by inserting the (6) M8x16 Socket Head Cap Screws (found in 90 series hardware kit) through the upright mounting bracket into the outside cover corresponding threaded holes. Be certain to start all (6) screws by hand prior to tightening. Repeat steps for right outside cover installation.

Figure 2-9. Inner Covers Installation

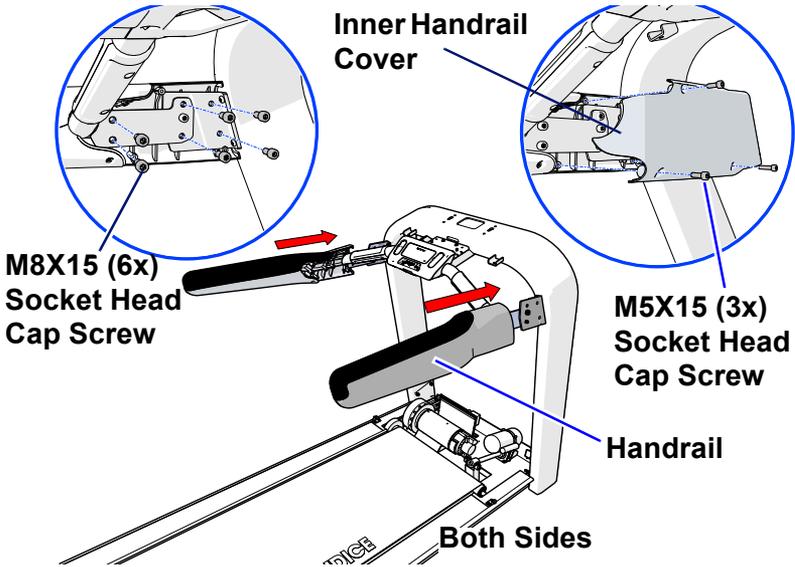


7. Attach inner left Cover 1 using (4) M5 socket head cap screws removed during Medical Rail Cover disassembly. (Figure 2-9).
8. Attach inner left Cover 2 using (3) M5 socket head cap screws removed during Medical Rail Cover disassembly. (Figure 2-9).
9. Repeat steps 6, 7 and 8 to attach right side outer and inner covers.

2.3.3. Optional Handrail Installation

1. Using a 4mm hex wrench, remove (3) M5X15 screws from each inner handrail cover. Slide the handrail onto the bracket found on the upright and secure with (6) M8x15 socket head cap screws found in the 90 Series Hardware Kit. Repeat on other side. (Figure 2-10).

Figure 2-10. Optional Handrail Installation

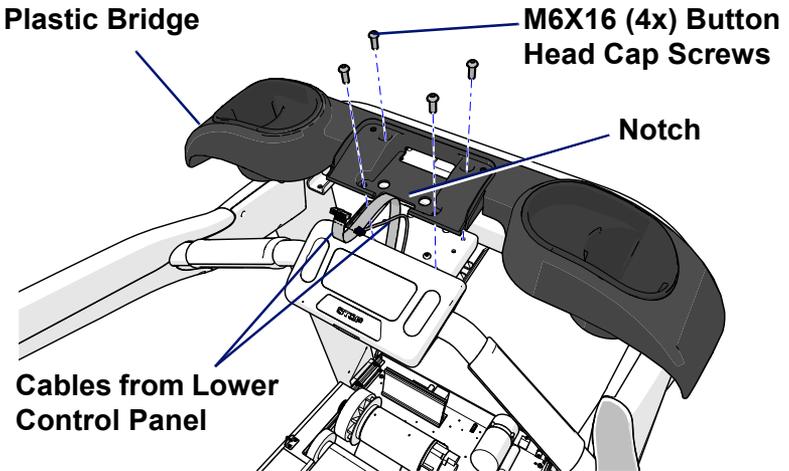


2. Install the inner handrail covers on both sides with (3) M5x15 socket head cap screws using the 4mm hex wrench.

2.3.4. Plastic Bridge Installation

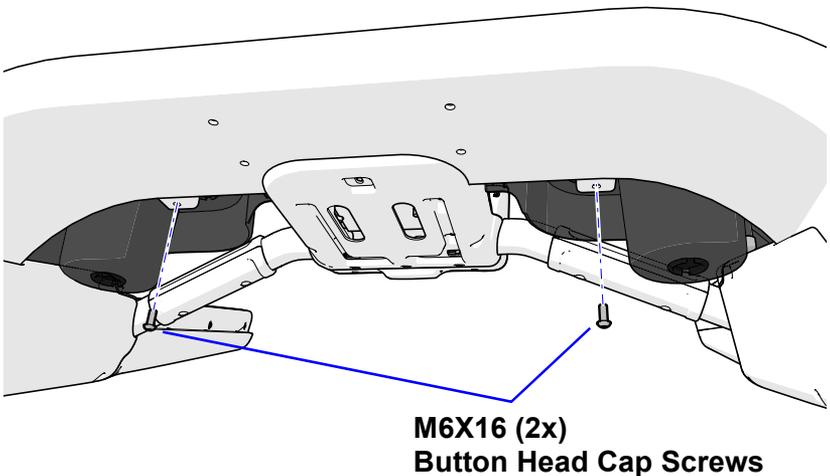
1. The ribbon cable and pulse cable from the lower control panel needs to be placed in the center notch over the plastic bridge so you can thread them through the upright in Step 6 on page 33. Then place the plastic bridge over the handrails and secure from the top with (4) M6x16 screws found in the hardware kit, using 5mm hex wrench.

Figure 2-11. Plastic Bridge Installation - Upper Screws



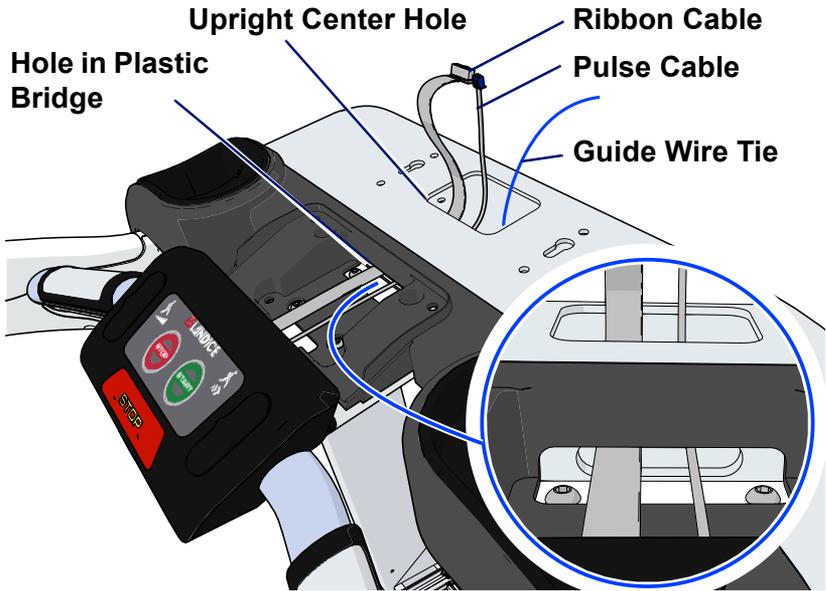
2. Attach bridge from underneath with (2) M6x16 button head cap screws from the hardware kit with a 5mm hex wrench. (Figure 2-12). **Tip:** Start both screws before tightening.

Figure 2-12. Plastic Bridge Installation - Lower Screws



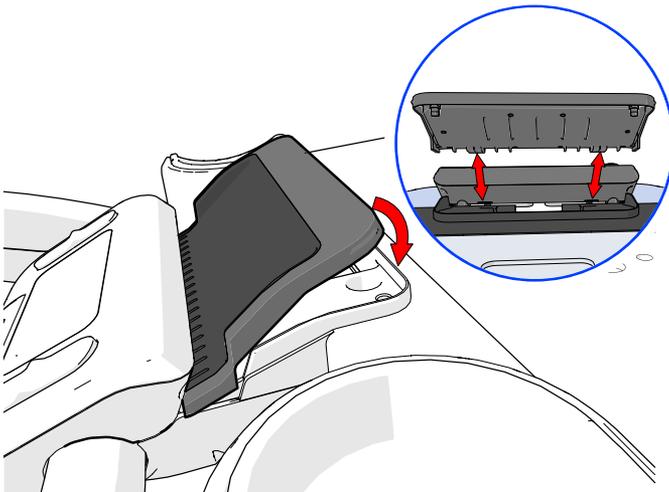
3. Locate the Ribbon Cable and Pulse Cable coming from the Lower Control Panel. Feed them through the hole in the plastic bridge and up through the hole in the center of the upright (Figure 2-13).

Figure 2-13. Lower Control Panel Cables



4. Engage the tray tabs in the notches of the plastic bridge. Rotate the Accessory Tray as shown to snap the posts into their receivers. (Figure 2-14).

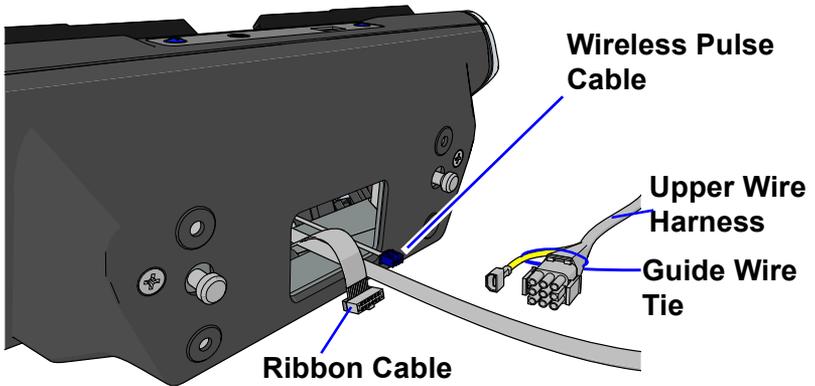
Figure 2-14. Accessory Tray Tabs



5. Remove Display Console from box. There are (3) cables coming from the bottom of the Console: the long Upper

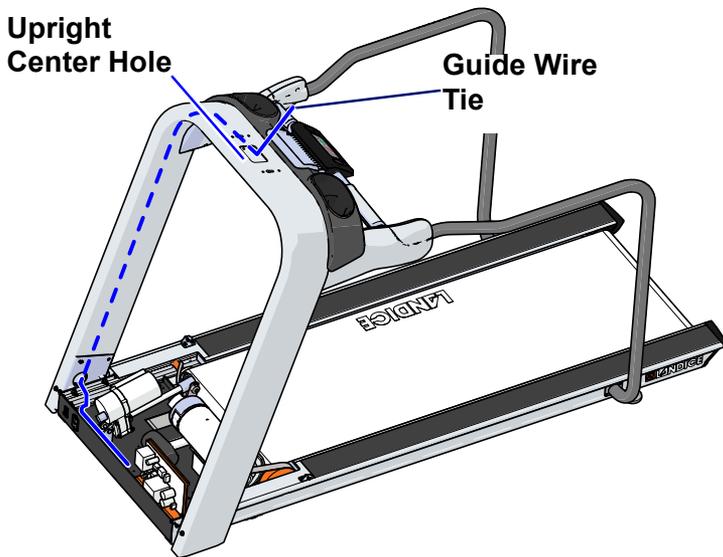
Wire Harness, the flat ribbon cable, and the wireless pulse cable. (Figure 2-15).

Figure 2-15. Display Console Cables



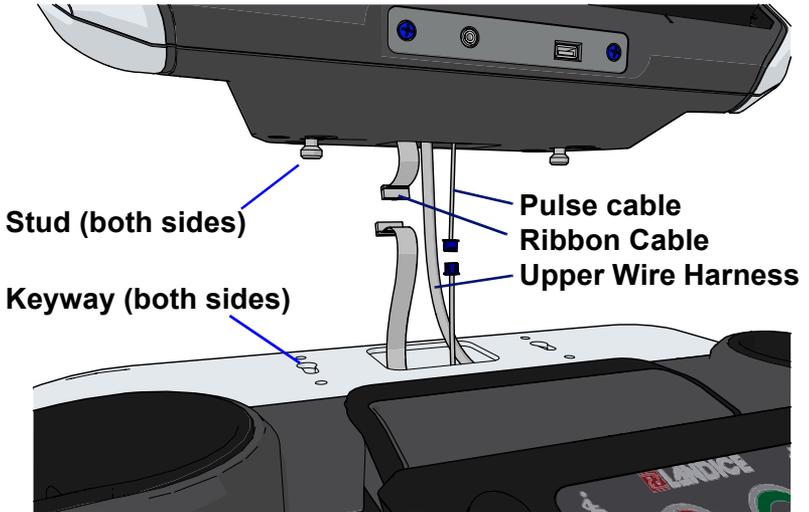
6. Find the wire tie coming from the Upright Center Hole. Wrap the wire tie around the Upper Wire Harness (see Figure 2-15) and feed the connectors into the Upright Center Hole. Pull the wire tie from the lower access hole to guide the Upper Wire Harness through the upright and out of the lower access hole (Figure 2-16) into the motor pan.

Figure 2-16. Upper Wire Harness Routing Path



7. Connect the ribbon cable and the pulse cable from the upright center hole to the to the corresponding cables from the Display Console (Figure 2-17).
8. Ensure cables are not crimped or caught between console and upright, then engage the studs on the console in their keyways in the upright then pull forward to lock the Display Console in place. (Figure 2-17).

Figure 2-17. Console Assembly Installation



9. Remove power cord from motor pan and plug into receptacle at front of treadmill.
10. Run the Upper Wire Harness behind the Elevation Motor (opposite screw end, Figure 2-19) and connect it to the Motor Control Board.
11. Push ground wire from upper harness to the grounding cable wire coming from the motor pan.

Figure 2-18. Base Grounding Point

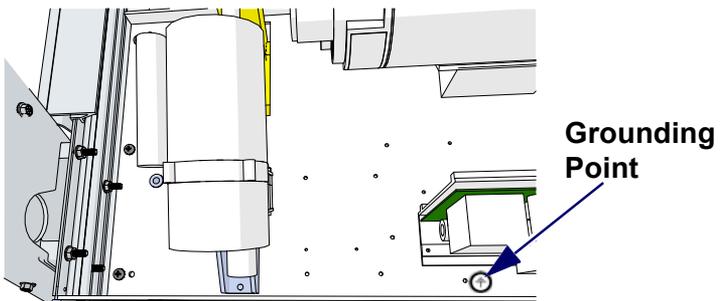
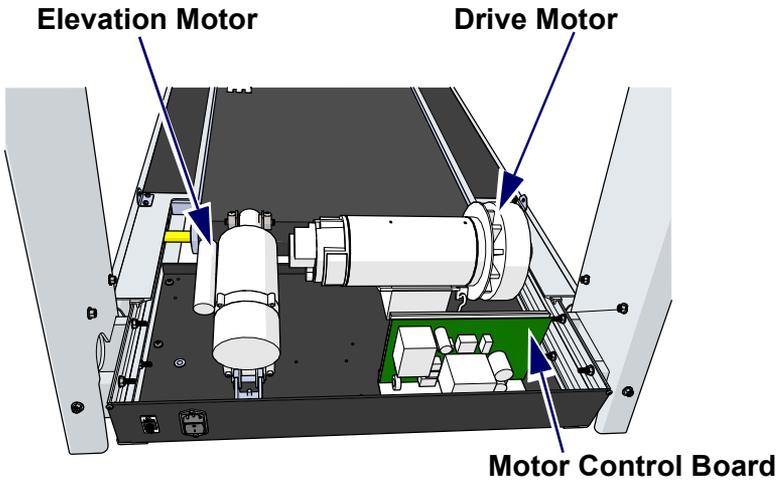
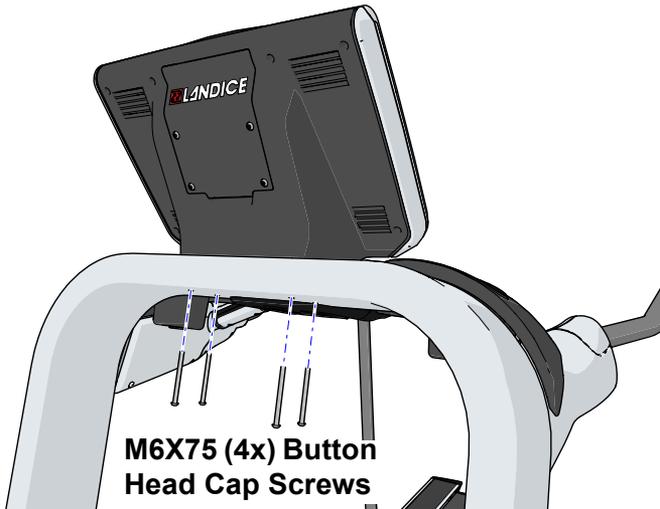


Figure 2-19. Motor Wiring Connections



- Using (4) M6x75 button head cap screws from the 90 Series Hardware Kit and a 5mm hex wrench, secure Display Console assembly to upright. (Figure 2-20).

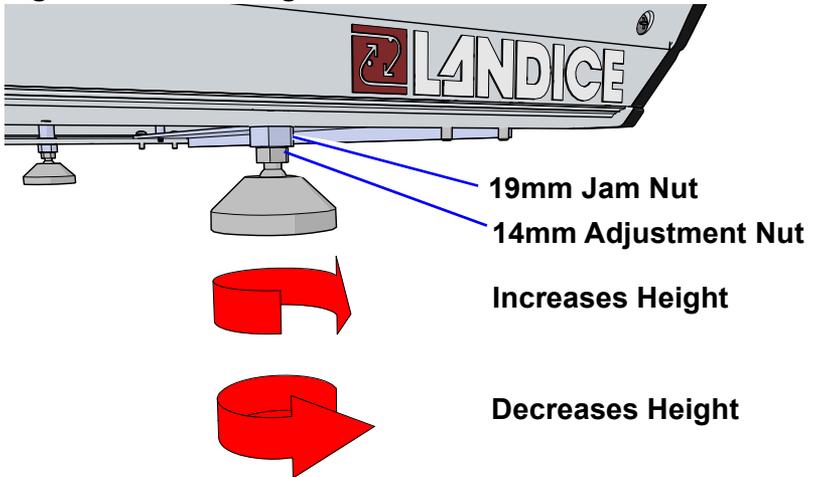
Figure 2-20. Console Assembly Bolts



2.3.5. Leveling Feet

1. Confirm that all treadmill feet are touching the ground. If necessary, loosen the 19mm and 14mm nuts using open end or adjustable wrench, until foot touches the floor. (Figure 2-21).

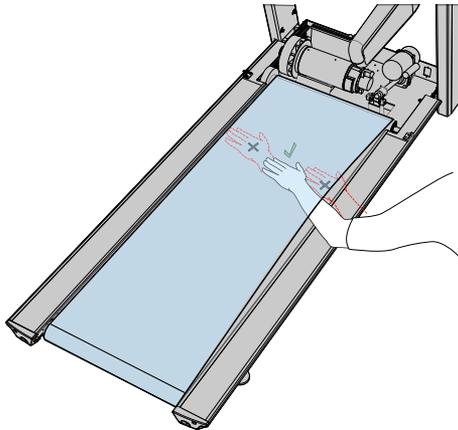
Figure 2-21. Leveling Foot



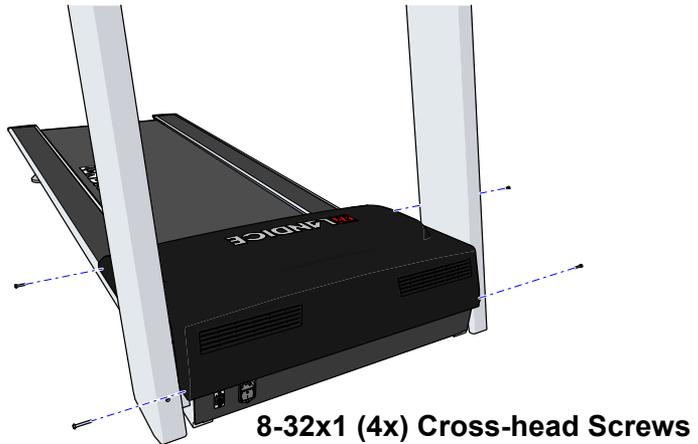
2. Place a level across the rear of the machine and stand in the middle of the running surface, facing the rear of the treadmill. Check if the bubble is centered on the level.
 - If the bubble goes to the right (while standing on treadmill), adjust the left rear foot. Loosen the 19mm nut by turning it clockwise and rest it against the 14mm nut. Turn the 14mm nut clockwise to raise the foot. Stop adjusting the foot when the bubble is centered on the level.
 - If the bubble goes to the left (while standing on treadmill), adjust the right rear foot. Loosen the 19mm nut by turning it clockwise and rest it against the 14mm nut. Turn the 14mm nut clockwise to raise the foot. Stop adjusting the foot when the bubble is centered on the level.
3. Confirm that the bubble is centered on the level.

4. Lock each leveling foot into place by threading the 19mm nut until it touches the bottom of the frame. Turn the 19mm nut counterclockwise and 14mm nut clockwise using an open end wrench to lock each foot into place.
5. Before checking treadbelt tension, make sure treadmill is level. (See steps 1 through 4.) At proper tension you should be able to place your hand between the belt and deck and reach the center of the treadmill (Figure 2-22).
 - If you cannot reach the center, the belt is too tight.
 - If your hand reaches past the center, the belt is too loose.

Figure 2-22. Treadbelt Tension Check



6. To install the motor cover, remove (4) 8-32x1 cross head screws from the frame (Figure 2-23). Tilt motor cover between uprights and place over motor pan. Using the cross head screws you just removed from the frame, install the motor cover.

Figure 2-23. Motor Cover Screw Locations

Do not plug treadmill into a surge suppressor or GFI outlet.

7. Plug the treadmill power cord into a dedicated power outlet. Ensure that the power cord has plenty of slack and will not be pinched beneath the treadmill as the treadmill elevates up and down.
8. Turn on the power switch located next to the power cord and make sure the safety lanyard block is pushed in. Start the treadmill and increase speed to 2 mph. Check that the treadbelt is tracked (centered) and not moving off to one side. If belt is going toward one side, follow tracking instructions in step 13. If belt is tracked (centered) correctly, proceed to walk on the treadmill at 2 mph. If belt feels like it is slipping under your feet, follow tension instructions in step 12.
9. When belt tension and tracking are both correct, move to the next step.
10. Start treadmill and walk at 2 mph for 20 minutes, walking from front to back over the entire surface, to properly “walk in” the lubrication.

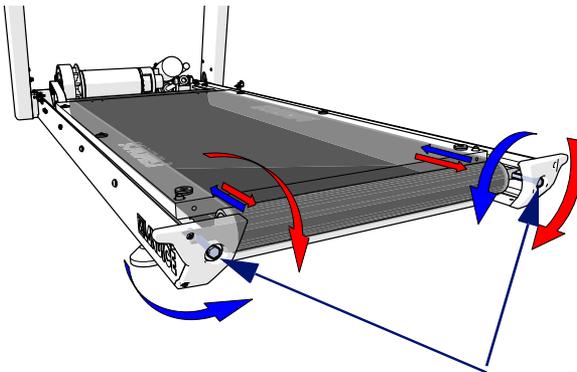
11. As you walk, test the treadmill by adjusting speed and incline. Ensure all displays light.
12. The treadbelt is tracked (centered) and tensioned by the take-up screws located at the back of the treadmill (Figure 2-24). If the treadbelt is too loose (slipping as you walk), turn both screws clockwise by 1/4 turn to tighten using the 9/16" socket.

CAUTION

DO NOT OVER-TIGHTEN the belt. The rollers and motor can be damaged.

13. If the treadbelt does not track straight, adjust speed to 3 mph and tighten the screw on the side to which the belt is pulling by 1/4 turn. Allow time for belt to adjust, approximately 2-3 minutes. Adjust by 1/4 turn as necessary to achieve proper tracking. If more than 3/4 turn is necessary, loosen the opposite side by 1/4 turn.
14. Recheck tension and tracking to confirm the adjustments.

Figure 2-24. Treadbelt Tensioning Take-up Screws



Treadbelt Take-up Screws (2x)

15. After confirming proper treadmill operation, turn the treadmill off by pressing **STOP** twice.
16. Your treadmill is now ready for use.

3. Rehab Treadmill Operation

3.1. Rehab Control Panel

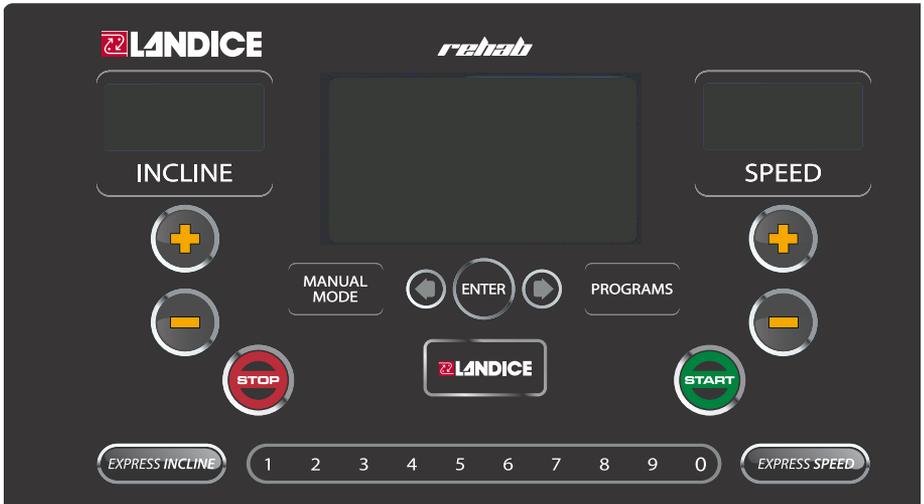


Table 3-1 Control Panel Functions

| Function | Description |
|---|---|
| INCLINE | Displays the incline of the treadmill in percent (%). |
| SPEED | Displays the current speed of the treadbelt in MPH (km/hr in metric mode). |
|  | Powers up the treadmill and lights all displays. |
|  | Press STOP once to pause the treadmill or twice to turn it off. The statistical information is cleared when the treadmill is turned off. |
|  | Press ENTER to scroll through the display screens or after any data entry. |
|  | To manually control the speed and incline of the treadmill, press MANUAL MODE and adjust the speed and incline to desired values. |

Table 3-1 Control Panel Functions (Continued)

| Function | Description |
|--|--|
|  | <p>To use the built-in, user-defined and heart rate workout programs:</p> <p>Press PROGRAMS at any time to display the programs selection screen. Use arrow to scroll through the program previews and select the desired program by pressing ENTER. You are then prompted to enter the program's specific parameters (Maximum Speed, Incline, Time, etc.). Use the numeric keypad or the arrow to select the desired values. Press START to begin the program.</p> |
|  | <p>The optional REVERSE button allows the user to switch treadbelt direction from forward to reverse and vice versa. The Rehab treadmill will run in reverse when REVERSE button is pressed twice. The first time the REVERSE button is pressed a special screen will appear explaining the feature. The second time the REVERSE button is pressed it activates.</p> |
| | <p>The optional remote START/STOP switch functions exactly as the PAUSE feature on the Control Panel. Press the remote START/STOP switch to place the treadmill in PAUSE mode. All statistical information will be preserved. Press START/STOP switch again to resume at previous speed or 1.0 mph, whichever is lower. Normal treadmill operation can also be resumed by pressing either the START or the RESUME button.</p> |
|  | <p>Press and hold to increase incline or speed. Pressing for longer than 2 seconds causes the incline or speed to increase at a faster rate. Release the key when the display shows desired incline or speed.</p> |
|  | <p>Press and hold to decrease incline or speed. Pressing for longer than 2 seconds causes the incline or speed to decrease at a faster rate. Release the key when the display indicates desired incline or speed.</p> |
|  | <p>The left and right arrows move between display sections or to set values.</p> |

Table 3-1 Control Panel Functions (Continued)

| Function | Description |
|--|--|
|   | The Express Speed and Express Incline keys, in conjunction with the numeric keypad, allow you to directly enter a target speed or incline without using the (+/-) keys. Press EXPRESS SPEED or EXPRESS INCLINE , then enter the desired value using the numeric keypad. Then press ENTER or wait 3 seconds for the treadmill to adjust to the new settings. |
| The numeric keypad is used to change speed and incline with the Express keys, enter user settings, and configure programs. | |
|  | |

3.2. Display Features

The screens at right are the options available for displaying workout information. Table 3-2 provides information about the available options.

To toggle between these screens during your workout, press **ENTER** or use the arrow keys.



Statistics Screen



Heart Rate Screen

Table 3-2 Display Features

| Feature | Description |
|---|--|
| TIME | Time logged on treadmill, displayed as Minutes:Seconds |
| DISTANCE | Miles logged on treadmill (kilometers when in metric) |
| PACE | Time to complete 1 mile (1 kilometer when in metric) |
| CALORIES | Total calories burned, based on entered user weight |
| CALS/HR | Approximate calories used per hour, based on user weight |
| LAP (Progress) | 1/4-mile (400 meter in metric) track and Lap Indicator |
| LAP (Counter) | Number of laps completed |
| PULSE | Current heart rate |
| TIME IN ZONE | Time spent in zone. The zone is ± 8 beats from target heart rate. |
| IN ZONE | User's heart rate is within 8 beats of the target heart rate |
| OUT OF ZONE | User's heart rate is outside zone (more than 8 beats above or below target heart rate) |
| ABOVE MAX | User's heart rate is above the maximum desirable heart rate |
| MAX | Maximum allowable heart rate to remain in zone |
| TARGET HR | Target heart rate (user-defined in Heart Rate Status screen) |
| MIN | Minimum allowable heart rate to remain in zone |
| BELOW MIN | User is below minimum allowable heart rate in zone |
| TOTAL TIME | The total time of the user's workout |
| METS* | Current MET level, based on user weight / incline / speed |
| *One MET is the energy consumed at rest by the average adult. | |

3.3. Using the Treadmill

1. Make sure you have read and understand this owner's manual before beginning.
2. Plug the treadmill power cord into its outlet.
3. Straddle the treadbelt with one foot on each traction strip.
4. Press **START**. The power-up screen is displayed.
5. After 3 seconds display will show 0.0 mph.
6. Enter your weight using the numeric keypad or arrows. Press **ENTER** or wait 3 seconds to advance to the first of the motivational screens.
7. The treadmill is now ready to use. You can vary the speed or incline, if desired, by using the **SPEED (+/-)** and **INCLINE (+/-)** keys or **EXPRESS SPEED** and **EXPRESS INCLINE** keys.

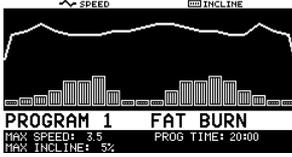
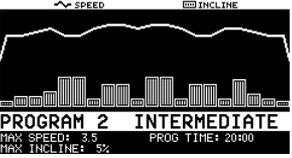
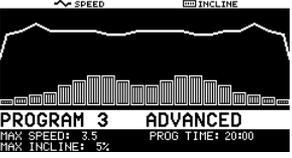
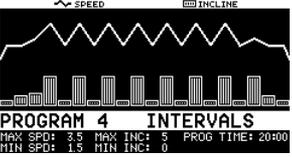
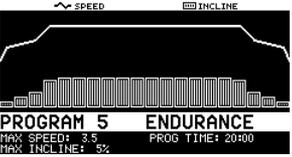


3.4. Using the Built-in Programs

3.4.1. Description

The 5 Built-in Programs differ in speed and incline. Each program lets you select a maximum speed, incline, and time (5 to 99 minutes). (Intervals Program requires a minimum speed and incline.) The treadmill will not go above the maximum number unless manually overridden. Each program has 20 segments of equal time, beginning with 3 warm-up segments and ending with 2 cool-down segments. For example, a 40-minute program contains 20 2-minute segments.

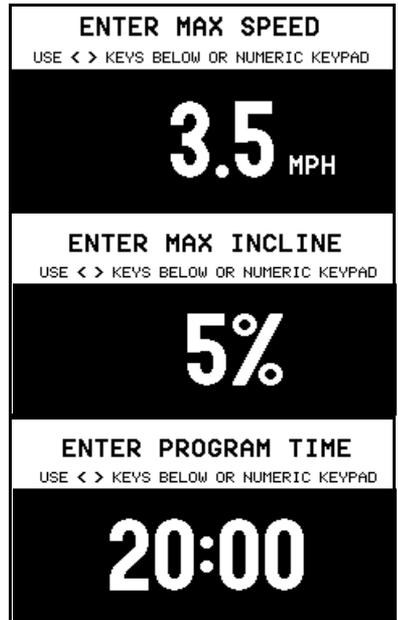
Table 3-3 Built-In Programs

| Screen | Program Description |
|--|--|
|  <p>PROGRAM 1 FAT BURN MAX SPEED: 3.5 MAX INCLINE: 5% PROG TIME: 20:00</p> | <p>FAT BURN: This program features two elevation peaks along with gradual changes in speed. The overall goal is to raise heart rate, maintain the raised heart rate for most of the workout, then gradually bring heart rate down during the last 2 cool down segments.</p> |
|  <p>PROGRAM 2 INTERMEDIATE MAX SPEED: 3.5 MAX INCLINE: 5% PROG TIME: 20:00</p> | <p>INTERMEDIATE: This program features 5 elevation peaks matched to changes in speed. The overall goal is to vary heart rate by elevating and lowering it several times, providing a challenging cardiovascular workout.</p> |
|  <p>PROGRAM 3 ADVANCED MAX SPEED: 3.5 MAX INCLINE: 5% PROG TIME: 20:00</p> | <p>ADVANCED: This program features high elevations combined with top speeds. The overall goal is to raise heart rate using speed and elevation for an advanced cardiovascular workout.</p> |
|  <p>PROGRAM 4 INTERVALS MAX SPD: 3.5 MAX INC: 5 MIN SPD: 1.5 MIN INC: 0 PROG TIME: 20:00</p> | <p>INTERVALS: This program features high speeds and elevations alternating with low speeds and elevations. The overall goal is to vary your workout, taking you from peak level to recovery 8 times throughout the workout.</p> |
|  <p>PROGRAM 5 ENDURANCE MAX SPEED: 3.5 MAX INCLINE: 5% PROG TIME: 20:00</p> | <p>ENDURANCE: This program features a maximum speed with maximum elevation. The overall goal is to raise heart rate with speed and elevation for the ultimate cardiovascular workout.</p> |

3.4.2. Running a Built-In Program

1. Start a workout as outlined in “Using the Treadmill” on page 45.
2. Press **PROGRAMS** to display the Programs selection screen.

3. Select a built-in program by using the arrow to scroll through the list, then press **ENTER**. You are prompted to enter the following program parameters:
 - **Maximum Speed:** This scales the speed curve to the maximum speed entered.
 - **Maximum Incline:** This scales the elevation curve to the maximum incline entered.
 - **Program Time:** Sets the total length of time you want the program to run.
 - **Minimum Speed/Incline:** INTERVALS Program only.
4. Enter the Maximum Speed using the numeric keypad or the arrow to select a value, then press **ENTER** or wait 3 seconds.
5. Enter the Maximum Incline using the numeric keypad or the arrow to select a value, then press **ENTER** or wait 3 seconds.
6. Enter Program Time using the numeric keypad or the arrow keys, then press **ENTER** or wait 3 seconds. The time should be at least 5 minutes and not more than 99 minutes.
7. Press **START** to begin your workout. The Program Progress Detail screen displays your current segment speed, incline and remaining time.
8. To view other segments, press and hold **ENTER** for 3 seconds. Use the arrow keys to move left or right. To exit, press **ENTER**.



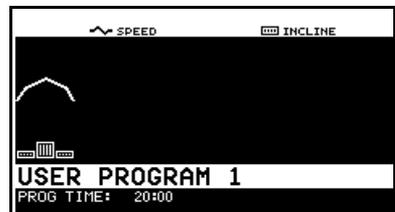
9. Press **ENTER** or use the arrow keys at any time to view any of the other motivational screens during your program, including the Program Profile screen to see a program overview. When viewing a motivational screen other than the Program Progress Detail screen during a segment change, the display temporarily shows the Program Progress Detail screen then returns to the original screen. During a segment change, the speed and/or incline window will flash if there is a change in either.

3.5. User Programs

Rehab treadmills can store up to 5 individual, modifiable user-defined program profiles.

A user-defined program looks and runs exactly like a built-in program, but it can be customized to suit the user. Unlike the built-in programs, user-defined programs allow editing of individual segments as well as the number of segments.

1. Press **PROGRAMS** to display the Programs selection screen.
2. Scroll through the program options by pressing **PROGRAMS** or use the arrow keys. When **USER PROGRAM PREVIEW** is shown, press **ENTER**. The User Program Preview Screen displays the program overview and total program time.
3. Press **ENTER** or wait 3 seconds. The screen displays **PRESS START TO BEGIN OR ENTER TO EDIT**.
4. Press **ENTER**. **EDIT MODE** requires a time for segment 1 (area highlighted in white).



| EDITING USER 1 | 1st SEGMENT | 2nd SEGMENT |
|-------------------|----------------|----------------|
| Speed | 0.5 | Speed |
| Incline | 0% | Incline |
| Time | 00:00 | Time |

Use ENTER to toggle between Spd, Inc & Time
Use Numeric Keypad or Speed/Incline +/-
keys to enter new values.
After final segment, set 0:00 as Time to ENC
Use < > keys below to change segments.

Note: Pressing **ENTER** toggles between speed, incline and time values for the current segment. To change segments, press either arrow. You can change segments in either the forward or reverse direction.

5. Use the numeric keypad to change the value and press **ENTER**. Continue to another segment by pressing the appropriate arrow key.
6. If you want a program to have less than 20 segments, create the last segment with 0 in the time field. The time reads **END**. The program ends when it reaches this segment.
7. When you finish editing your User-Defined Program, you can begin your program by pressing **START**.

| 3rd SEGMENT | 4th SEGMENT | 5th SEGMENT |
|-------------|-------------|-------------|
| 3.0 Speed | 0.5 Speed | |
| 0% Incline | 0% Incline | |
| 3:00 Time | END Time | |

Use ENTER to toggle between Spd, Inc & Time.
 Use Numeric Keypad or Speed/Incline +/- keys to enter new values.
 After final segment, set 0:00 as Time to END.
 Use < > keys below to change segments.

Note: If you attempt to advance the cursor past the 20th segment, you are prompted with **PRESS START TO BEGIN OR ENTER TO EDIT**. You can also exit Edit Mode by pressing **MANUAL MODE** or **PROGRAMS** at any time.

3.5.1. Learn Mode

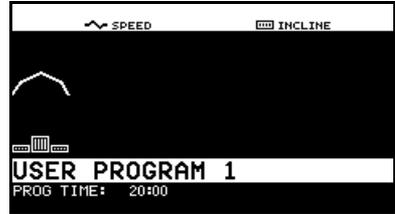
When you run a User-Defined Program and the speed or incline is adjusted, the treadmill saves the last change to the current segment.

Note: Learn Mode allows you to adjust existing segments in your user program, but you cannot add segments to it in Learn Mode.

Rehab Treadmill Operation

1. Start a workout, then press **PROGRAMS** to display the Programs selection screen.

2. Scroll through the program options by pressing **PROGRAMS** or use the arrow keys. When the **USER PROGRAM PREVIEW** you desire is shown, press **ENTER**. The User Program Preview Screen displays the program overview and the total program time.



3. Press **START** to begin your program. When you begin, the Program Progress Detail screen is displayed. The speed and incline values of your current segment are displayed in the center. To

| PREVIOUS SEGMENT | CURRENT SEGMENT | NEXT SEGMENT |
|--|-----------------|-----------------|
| 2.5 Speed | 3.0 Speed | 3.5 |
| 0% Incline | 1% Incline | 1% |
| 1:00 Time | 0:55 Time | 1:00 |
| PROGRAM TIME | | CURRENT SEGMENT |
| 18:55 | | 2 of 20 |
| TO VIEW OTHER SEGMENTS, HOLD ENTER FOR 3 SEC | | |

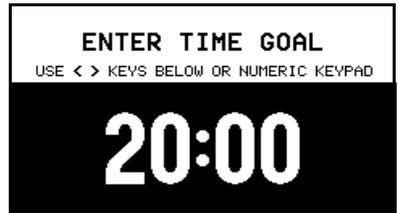
change the speed or incline of your current segment, press the **SPEED (+/-)** or **INCLINE (+/-)** keys. The modified segment is stored with these new settings for the next time you run this program.

3.6. Specific Goal Programs

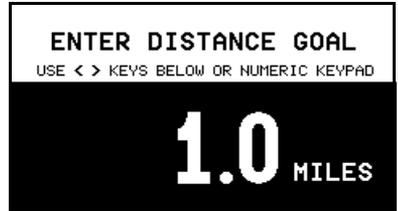
The Rehab treadmill provides Specific Goal programs. Whether you want to go for a 3-mile run or simply exercise for 15 minutes, the Goal Progress screen accurately assesses your progress with a variety of statistics. During these programs you retain full manual control.

1. Start a workout as outlined in “Using the Treadmill” on page 45.
2. Press **PROGRAMS** to display the Programs selection screen and select the goal program that you want to run:

- For **TIME GOAL PROGRAM**, set a Program Time Goal using the numeric keypad or the arrow keys. Enter a time from 10 to 99 minutes, then press **ENTER** or wait 3 seconds.



- For **DISTANCE GOAL PROGRAM**, set a Program Distance Goal using the numeric keypad or arrow keys. Enter a distance from 0.1 to 99.9 miles (km in metric), then press **ENTER** or wait 3 seconds.



3. Press **START** to begin. The Goal Progress screen shows your Specific Goal (Time or Distance), counting down (noted by a negative sign).
4. Press **ENTER** at any time to view any of the other screens during your program.

3.7. Heart Rate Control Program

The Rehab treadmill offers a Heart Rate Control (HRC) program that displays your heart rate and automatically varies treadmill speed and elevation. HRC training allows you to maximize your workout performance while minimizing your workout time.

You must use the Pulse Grips or the optional Wireless Chest Strap to detect your heart rate during the HRC program.

HRC varies treadmill speed and elevation to keep your heart rate near the target heart rate for the entire workout.

Table 3-4 Heart Rate Control Program

| Segment | Stage | % of Target Heart Rate | |
|---------|-----------|------------------------|----------------------|
| | | HRC | Interval HRC |
| 1 | Warm Up | 70 | 70 |
| 2 | Warm Up | 80 | 80 |
| 3 | Warm Up | 90 | 90 |
| 4-18 | Training | 100 | Alternating 80 & 100 |
| 19 | Cool Down | 90 | 90 |
| 20 | Cool Down | 80 | 80 |

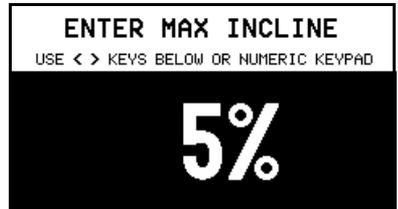
3.7.1. Built-in HRC Program

1. Press **PROGRAMS** to display the Programs selection screen. Press **ENTER** while the HR Control program is displayed.

2. Select a program by using the arrow to scroll through the list, then press **ENTER**. You are prompted to enter the Maximum Speed: This scales the speed curve to the maximum speed entered.



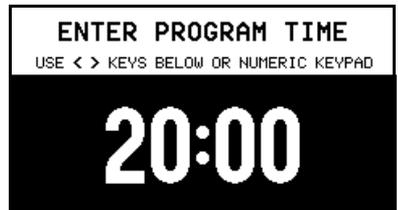
3. Use the numeric keypad or arrow keys to select your maximum incline. Press **ENTER** or wait 3 seconds.



4. Use the numeric keypad or arrow keys to enter your target pulse. The treadmill will vary the speed and elevation in an effort to make you reach this heart rate. Press **ENTER** or wait 3 seconds.



5. The display prompts you to set a Program Time using the numeric keypad or center arrow. For HRC, enter a time between 20-99 minutes. This will scale the 20 segments of the program equally throughout your selected time. Press **ENTER** or wait 3 seconds.



6. Press **START** to begin.

4. Fitness Testing

4.1. Introduction

The Rehab treadmill has built-in tests that measure fitness level based on your age, gender, and performance.

A person's fitness level can be measured by the amount of oxygen their body can consume while exercising at maximum capacity. The maximum amount of oxygen (in milliliters) an individual can use in one minute per kilogram of body weight is referred to as VO_2 Max.

When you perform one of the fitness tests described in this section, the treadmill calculates approximate VO_2 Max and provides a fitness evaluation.

Note: Scores may vary due to line voltages, component tolerances, and individual capabilities. For a more accurate VO_2 Max calculation, take the average of the Balke and Firefighter Fitness Test scores.

4.2. Balke Fitness Test

Note: You must use the pulse grips or optional wireless chest strap for this test.

This is a walking pace, variable incline fitness test. The test increases in difficulty to raise your heart rate. Upon reaching your Target Heart Rate, the test ends and the treadmill calculates your fitness assessment. Parameters cannot be modified. Your age determines the test's target heart rate and the scaling of the fitness assessment.

Test Parameters:

- Maximum Speed: 4.4 mph
- Maximum Incline: 15%
- Maximum Heart Rate: 80% of Maximum Heart Rate (See Heart Rate Monitoring sections).

To run the test:

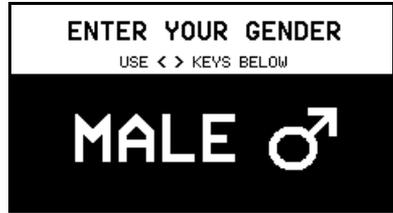
1. Press **PROGRAMS** to view the programs selection screen. To scroll through the programs, either continue to press

PROGRAMS or use the arrow keys. Select the Balke Fitness Test by pressing **ENTER**.

2. Use the keypad or arrow to enter your age (10 to 99), then press **ENTER** or wait 3 seconds.



3. Enter your gender using the center arrow to toggle to MALE or FEMALE. Press **ENTER** or wait 3 seconds.



Note: The calculated target heart rate displayed before you start the test is derived from statistical heart rate capacity averages. (See “Heart Rate Monitoring” on page 14.) If you are uncomfortable with the target heart rate displayed or feel discomfort during the fitness test, stop the test.

Note: You must hold onto the pulse grips or wear the optional wireless chest strap for the entire test. If the treadmill loses the heart rate signal for more than 30 seconds the test is terminated.

4. Press **START** to begin the test.

This automated test increases in difficulty from segment to segment until you reach the target heart rate. When you reach the target heart rate a 30-second countdown follows and ends the test. Any key presses during the test (other than ENTER) will end the test.

When you begin, the Heart Rate Status screen shows your Target Pulse, Time, Heart Rate Status and Time in Zone.

Upon completion the treadmill displays your VO₂ Max score and fitness assessment based on your performance. Use the tables below to interpret your score based on your age and gender.

Table 4-1 Men: VO₂ Max

| Age | | | | | | | Rating |
|-------|-------|-------|-------|-------|-------|-------|-----------|
| <20 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | >69 | |
| >65 | >62 | >58 | >54 | >52 | >50 | >48 | Superior |
| 57-65 | 54-62 | 50-58 | 46-54 | 44-52 | 42-50 | 40-48 | Excellent |
| 47-56 | 44-53 | 40-49 | 37-45 | 35-43 | 32-41 | 30-39 | Good |
| 37-46 | 35-43 | 32-39 | 28-36 | 26-34 | 24-31 | 22-29 | Average |
| <37 | <35 | <32 | <28 | <26 | <24 | <22 | Low |

Table 4-2 Women: VO₂ Max

| Age | | | | | | | Rating |
|-------|-------|-------|-------|-------|-------|-------|-----------|
| <20 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | >69 | |
| >62 | >58 | >54 | >51 | >47 | >44 | >42 | Superior |
| 54-62 | 50-58 | 46-54 | 43-51 | 39-47 | 36-44 | 34-42 | Excellent |
| 42-53 | 39-38 | 35-45 | 32-42 | 29-38 | 25-35 | 23-33 | Good |
| 34-41 | 32-38 | 29-34 | 25-31 | 22-28 | 19-24 | 15-22 | Average |
| <34 | <352 | <29 | <25 | <22 | <19 | <15 | Low |

4.3. Firefighter (Gerkin) Fitness Test

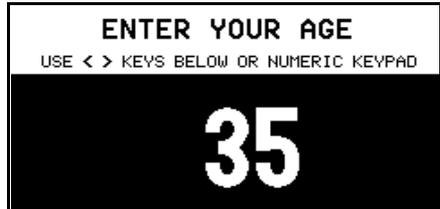
This test requires the optional Wireless Chest Strap. It is a heart rate controlled, variable speed and incline fitness test. The test increases in difficulty to raise your heart rate. When you reach your target heart rate, the test ends and the treadmill calculates a fitness level based on your performance. Your age determines the test's target heart rate and the scaling of the fitness assessment.

Test Parameters

- Maximum Speed: 7 mph
- Maximum Incline: 15% (cannot be modified)
- Maximum Heart Rate: 85% of Maximum Heart Rate (See Heart Rate Monitoring sections).

To run the test:

1. Press **PROGRAMS** to view the programs screen.
2. Scroll through the programs using the arrow keys or by continuing to press **PROGRAMS**.
3. Press **ENTER** to select the Firefighter Fitness Test.
4. When prompted, use the keypad or arrow keys to enter your age (10 to 99), then press **ENTER** or wait 3 seconds.



5. Enter your gender by using the arrow keys to toggle between MALE and FEMALE. Press **ENTER** or wait 3 seconds.



Note: The calculated target heart rate is displayed before you start the test. This heart rate is derived from statistical heart rate capacity averages (see Heart Rate Monitoring Section) If you are uncomfortable with the target heart rate displayed or feel discomfort during the fitness test, stop the test.

6. Press **START** to begin.

Note: You must wear the optional wireless chest strap or hold onto the contact heart rate bars during the entire test. If the treadmill loses the heart rate signal for more than 30 seconds the test is terminated.

This test increases in difficulty until you reach the target heart rate, then a 30-second countdown follows and ends the test.

To stop the test at any time, press any key other than ENTER.

Upon completion the treadmill displays a VO₂ Max score and fitness assessment based on your performance compared to the general population.

Table 4-3 Firefighter Fitness Test Score

| VO2 Max | Rating |
|----------------|---------------|
| >59 | Superior |
| 50-58 | Excellent |
| 40-49 | Good |
| 32-39 | Average |
| <32 | Low |

5. Maintenance and Troubleshooting

5.1. Cleaning

It is recommended to clean the console and screen after each workout.

General: Vacuum around and under the treadmill at least once a month. Wipe any sweat from the treadmill after each workout.

Console and Display Screen: Wipe exposed console surfaces with a microfiber cloth, dampened with a mixture of 30 parts water to 1 part Simple Green® cleaner.
www.simplegreen.com

Wireless Chest Strap (Optional): The transmitter activates when the belt is moist. To conserve battery life, wipe the electrodes dry after each use. Clean monthly with mild soap and water and wipe dry.

CAUTION

To avoid damaging the electrodes, do not use abrasives to clean the chest strap. Do not bend or stretch the electrode strips, especially when storing the chest strap.

5.2. Maintenance

WARNING

Lethal voltages and moving parts capable of causing serious injury are exposed when the motor cover is removed. Under no circumstances should the motor cover be removed except by a Landice factory-authorized technician.

5.2.1. Lubrication

In institutional settings, Landice recommends lubricating the underside of the treadbelt with Landice SlipCoat every 3,000 miles. See instructions included with SlipCoat Lubricant.

5.2.2. Treadbelt Tracking Adjustment

Note: On the L7 model you should see an equal gap on either side of the treadbelt. On L8 models, a yellow warning label is visible on the deck from the rear of the treadmill when the treadbelt is not tracked correctly.

The treadbelt is tracked by means of the two 9/16" hex head bolts at the rear of the treadmill. Tightening (clockwise) the bolt on the side of the treadmill that the belt has moved towards and loosening the bolt on the opposite side an equal amount, will cause the belt to move toward the center. Adjustments should be made in ¼-turn increments, with the treadmill running at 2 to 3 mph. Allow at least 30 seconds for the belt to stabilize between each adjustment. To ensure proper belt tracking and alignment, the treadmill must be placed on a stable and level surface.

5.2.3. Treadbelt Tensioning

The treadbelt is tensioned at the factory but may require adjustment after installation. Need for tensioning is indicated by uneven belt speed and may be felt as sudden stopping of the treadbelt when your foot comes down on the belt.

To check belt tension: run treadmill at 1 mph, then walk on it. If the belt does not feel like it is slipping or hesitating, then the belt is tensioned correctly. If the belt slips/hesitates, then it is not fully tensioned.

The same hex head bolts used for tracking also tension the treadbelt. To tighten the treadbelt, turn both bolts clockwise exactly the same amount, ¼-turn at a time. Failure to turn them equally will affect belt tracking. **DO NOT OVER-TIGHTEN.** Continue checking for treadbelt slipping. When treadbelt is fully tensioned, speed up treadmill to 5 mph. Then, while jogging lightly, check for any sudden slipping/hesitating of the treadbelt. Repeat treadbelt tensioning if required.

5.2.4. Motor Drive Belt Tensioning



Moving parts can cause serious injury. Always unplug treadmill before placing hands beneath the treadbelt!



DO NOT OVER-TIGHTEN. Over-tightening the motor drive belt can damage the drive motor and front roller.

Drive belt tension is preset at the factory. The belt is tensioned by a nut located under the motor pan. This nut is screwed to a hook attached to the motor bracket. Turning the nut clockwise tightens the nut, pulling down the motor bracket, which tightens the drive belt. To measure the tension, twist the drive belt between the motor and the drive roller. Ideal tension allows the drive belt to be easily twisted 45°. If you cannot twist the belt to at least 45°, it is too tight.

5.2.5. Service Checklist

- Tension and track treadbelt
- Lubricate belt and vacuum treadmill
- Check drive belt tension

5.3. Self-Diagnostics

This treadmill is equipped with on-board self-diagnostics. If the treadmill experiences any errors during operation, the treadmill will display the error message. You can run self-diagnostics to get further information on the error by pressing **ENTER**.



LOSS OF SPEED SIGNAL

PRESS ENTER TO BEGIN DIAGNOSTICS

When you choose the option to enter diagnostics you will be prompted with a warning screen. After reading it, straddle the treadmill by stepping on the traction strips on the sides of the running surface and press **ENTER**.

The treadmill will systematically test all of the individual components of the treadmill. During some of the tests, you will be prompted with simple “Yes or No” questions to assist with the diagnosis. Answer the questions using the **LEFT ARROW** for **NO** and the **RIGHT ARROW** for **YES** when prompted.

When the Self-Diagnostics has completed all of the tests, it will read one of the two messages along the bottom: “No Errors Detected”, or “Error Detected, Contact Service Provider”. Contact your Dealer or go to www.landice.com and click on Service Locator to find a provider in your area.

To manually enter self-diagnostics mode, with the treadmill off, press the **CENTER ARROWS** and **START** at the same time.

DIAGNOSTIC TESTS HOME TREADMILL

CAUTION!!

BELT SPEED & INCLINE MAY CHANGE
DURING TESTING. ATTACH SAFETY KEY
THEN PRESS ENTER TO CONTINUE.

| | |
|-----------------|------|
| SAFETY KEY: | PASS |
| DISPLAY MEMORY: | PASS |
| BELT OVERSPEED: | PASS |
| SPEED SENSOR: | 8 |

| | |
|----------------------|-----------|
| SAFETY KEY: | PASS |
| DISPLAY MEMORY: | PASS |
| BELT OVERSPEED: | PASS |
| SPEED SENSOR: | ■ ■ ■ ■ ■ |
| BELT MOTOR VOLTAGE: | PASS |
| INCLINE SENSOR: | PASS |
| ELEVATION MOTOR: | PASS |
| INCLINE CALIBRATION: | PASS |

ERROR DETECTED, CONTACT SERVICE PROVIDER

| | |
|----------------------|------|
| SAFETY KEY: | PASS |
| DISPLAY MEMORY: | PASS |
| BELT OVERSPEED: | PASS |
| SPEED SENSOR: | PASS |
| MOTOR VOLTAGE: | PASS |
| INCLINE SENSOR: | PASS |
| ELEVATION MOTOR: | PASS |
| INCLINE CALIBRATION: | PASS |

NO ERRORS DETECTED

5.4. Hidden Menu

The Hidden Menu provide the ability to control specific settings. To access the Hidden Menu press **INCLINE (-)**, **STOP** and **START** at the same time while the control panel is off. This will provide access to the items below.

To navigate through the menu use the **SPEED** or **INCLINE (+ or -)** keys to move up and down the list. Then press the **START** button to select the opposite setting. Press the left arrow button to return to the main Hidden Menus list. Press **STOP** to save and exit the Hidden Menu section.

- **Error Logs:** Records the number of times a specific error code occurs.
- **Diagnostics:** Provide technicians the ability to test buttons and calibrate.
- **NV Init - Boot:** Manufacturer's use ONLY
- **Reprogram Firmware:** Manufacturer's use ONLY
- **Self-Diagnostics:** Runs an automatic test of specific components to assist service technicians with diagnostics.
- **Toggle Programs:** Enables or disables access to programs through the Programs button on the control panel.
- **Toggle Incline Limits:** Enables or disables maximum incline limits at specific speeds.
- **Lockout Mode:** Enables or disables use of a code to operate the treadmill. When **Lockout Mode** is enabled it provides the ability to set a personalized four digit code to use the treadmill. If the code is forgotten, 9010 will grant access.
- **Toggle Units:** Allows the measurement of units to switch between English and Metric.
- **Toggle Beeper:** Enables or disables the ability to control the beeping sound.
- **Toggle Max Grade:** Maximum incline can be set at 12% or 15%.

- **Toggle Client Mode:** Provides the ability to show two Clients and a guest on home screen. This feature is for residential use only.