

M1 Folding Treadmill Service Manual



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Landice Warranty Policy

PARTS

All M1 Treadmills Sold Will Come with a 1 Year Parts Warranty Only:

Our policy requires that defective part(s) need to be returned back upon Landice discretion. All warranty part(s) that are required will be billed back to the Service Provider if not returned within 30 days. Landice will adjust the invoice off the account once receipt of any defective part(s) that have been returned. Landice will provide return freight tags (ARS tags) for all parts required back. It is our policy to ship all parts UPS ground. Any expedited shipments will need Landice approval.

FLOOR MODELS

The following warranty applies to floor models and dealer stock. If the dealer sells a treadmill to a customer within one year of its purchase from Landice, the warranty period will be extended to start from the date of sale to the customer. If a treadmill is over 1 year old when sold to a customer, the remainder of the parts warranty will be honored from the date of shipment not sale.

Landice Warranty Policies are subject to change without notice.



Operation and Safety Instructions

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

Always unplug the treadmill before cleaning or removing the motor cover.

Improper connection of the grounding connector can result in 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 the plug will not fit in the outlet, have a proper electrical outlet installed by a qualified electrician.

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

- An appliance should never be left alone or 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 in use 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's 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 not 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 used, or where oxygen being administered.
- To disconnect, press **STOP & TURN THE POWER SWITCH OFF**, then remove plug from outlet.



Electrical Requirements

Please Note: All M1 Treadmills only comes as a 110v unit

Landice requires that a dedicated circuit needs to be wire for each piece of Landice equipment. For optimal performance, **DO NOT** plug equipment into an **AFCI** or **GFI** circuit breaker/outlet. Adapters or extension cords is not recommended.

Treadmills marked 120 VAC recommended for use with a grounding plug in a nominal 120-volt circuit. Ensure the treadmill power cord connected to an outlet having the same phase configuration as the power cord plug.

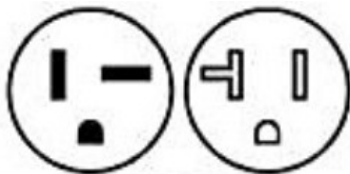
Treadmills marked 200-250 VAC recommended for use on a circuit having a nominal rating greater than 120V, and are factory-equipped with a specific power cord and plug to permit connection to a proper electrical circuit. Ensure the treadmill power cord connected to an outlet having the same configuration as the plug. Landice recommends, not using adapters with 200-250 VAC treadmills.

If any treadmill needs configuration for use on a different type of electrical circuit, we will require that an authorized service provider make the proper configurations to meet the electrical requirements.

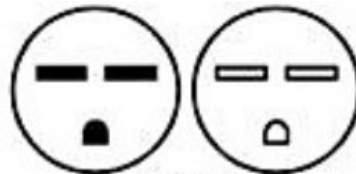
For 220v & 110v units using 3-phase voltage:

- Each treadmill must have its own circuit breaker and be run on the same phase; same power leg.
- If 220v power is required, all treadmills must run on the same two phases (power legs) and on their own circuit breakers.

110v Electrical Requirements
Plug NEMA Style 5-20P
Receptacle NEMA Style 5-20R



220v Electrical Requirements
Plug NEMA Style 6-15P
Receptacle NEMA Style 6-15R



Maintenance Checklist

Weekly Maintenance:

- Wipe down display. Use mild solution of non-phosphate cleaner on damp microfiber cloth.
- Wipe down handrails and traction strips with soft cotton cloth and mild soap and water. Cloth should be damp not wet.
- Vacuum or wipe down the deck area between treadbelt and frame, including the visible part of the rear roller.
- Clean treadbelt walking surface: Vacuum treadbelt to remove loose dirt. If vacuuming does not remove dirt, Landice recommends the use of a medium stiff nylon bristle brush to remove dirt trapped in treadbelt surface. A damp (not wet!) sponge can be used to finish the cleaning process.

Monthly Maintenance:

- Take off motor cover and vacuum. Be careful not to touch any of the circuit boards.
- Move the treadmill and vacuum around the treadmill area.
- Examine the deck and treadbelt for wear and replace if necessary.
- Check condition of line cord for any cuts, gouges, or broken prongs on the plug ends.

Every Six Months:

- Check all locking levers not to be broken and for tightness, especially the upright and bed area.
- You can also perform an amperage check to see if the treadbelt is dragging excessively and thus drawing excessive current as follows.



Static Electricity: What to Look For

Static electricity can be generated from many sources. While a shock may occur occasionally while using the machine and is normal, it can lead to issues with the treadmill's components. Here are the most commonly found sources of Static Electricity:

- ❖ **Treadmill placed on carpet** - When you use your treadmill directly on a carpet, it is far more prone to static build up. Instead, install a rubber treadmill mat (**LANDICE #73062**) underneath the machine. This will help reduce static buildup.
- ❖ **Dry Climate & Lack of Humidity** - Whether it's the winter months, or you live in a dry location, static buildup is more likely to occur low humidity environments. You can compensate for this by using a humidifier in your treadmill's location.
- ❖ **Dehydration and Dry Skin**- Your own level of dryness can lead to static buildup. If you are dehydrated while working out, dry skin will increase risk of static buildup. You can combat this by drinking more water, and using moisturizer as needed on dry areas of the skin.
- ❖ **Your workout clothing and shoes** - The type of material used in your workout clothes can make a world of difference when it comes to combating static buildup. Synthetic materials like Polyester, Spandex, and Acrylic fiber will build up static electricity much faster. Instead, use natural materials like Cotton in your workout clothing.
Likewise, if your shoes are worn down, you will dramatically increase the chance of static buildup. Check the tread of your shoe, and replace them if they are worn down.
- ❖ **Worn out parts** - The condition of the treadbelt, deck and motor brushes can all increase the risk of static buildup. Do monthly maintenance such as vacuuming under the motor cover. Use Simple Green to wipe down the deck, hand rails and display. Check the treadbelt tension, and look for cracks or fraying. A Landice Authorized service provider can help to do a full diagnostic on your treadmill for a fee.
- ❖ **Using Surge Protectors, Extension Cords** - Landice requires plugging directly into a dedicated outlet. Using a surge protector or extension cord increases resistance on the flow of power, meaning increased stress on electrical components and premature failure, as well as the increased risk of static shock.



Measuring AC & DC Amperage

AC Amperage must be performed on the **BROWN WIRE** of the linecord.

DC Amperage must be performed on the **RED WIRE** from the drive motor.



PERFORMING AMPERAGE INSTRUCTIONS

While straddling the belt, start the treadmill and bring the speed up to 3.0 mph at 0% elevation. Once the treadmill is up to speed start walking on the treadmill while looking at the voltmeter. The voltmeter will start giving you an amperage reading. The average highest reading possible equals your amperage reading. The more friction, the hotter the treadbelt will become which will increase your amperage reading.

USE THE CHART BELOW TO DETERMINE THE TREADBELT CONDITION

AC Amperage	DC Amperage	Treadbelt Condition
2.0-4.0 AC Amps	4.5-6.0 DC Amps	Good
5.0-7.0 AC Amps	7.0-9.0 DC Amps	Normal
7.0-10.0 AC Amps	9.0-12.0 DC Amps	Replace



Using Your Multimeter

A Multimeter is a device used to measure a variety of electrical functions. The multimeter best suited to diagnosing a treadmill will be able to measure AC and DC voltage, as well as Ohms and electrical continuity.



Make sure the batteries in your Multimeter are fresh before you begin!

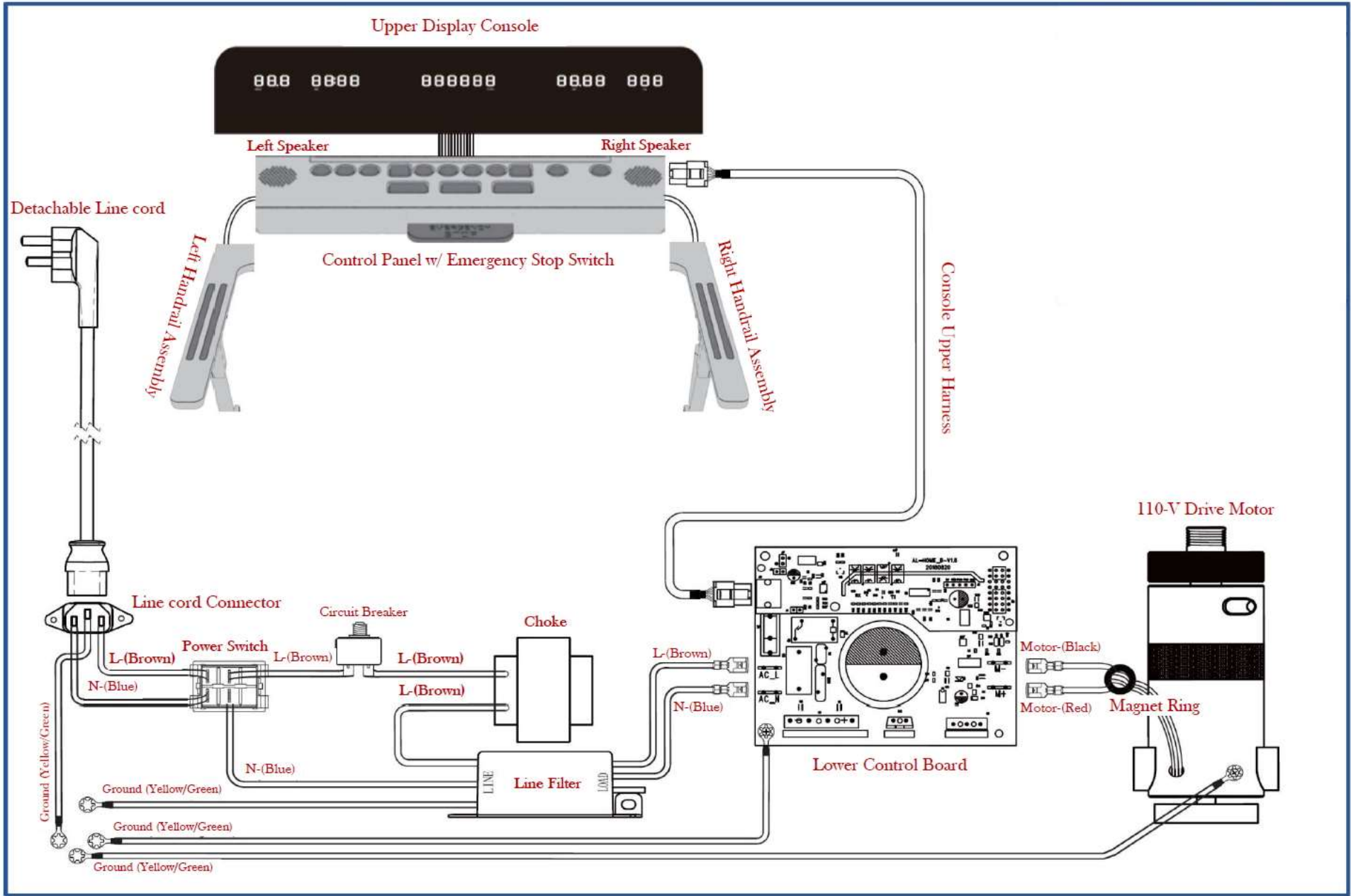
Vac - Alternating Current reverses polarity from plus (+) to minus (-). For the M1 Treadmill, you can test **Vac** coming from the outlet into the unit.

Vdc - Direct Current only flows in one direction, and provides a constant voltage over time.

Ohms - The electrical resistance of a component or conductor measured in **ohms**. You can check the condition of a drive motor ohm.

Continuity - Electrical Continuity is the continuous, uninterrupted flow of electricity. You will use continuity to check fuses, wire harnesses, power cord and pins for any interruption. You can also use it to perform a membrane bypass test (where applicable).

M1 Upper & Lower Wiring Diagram



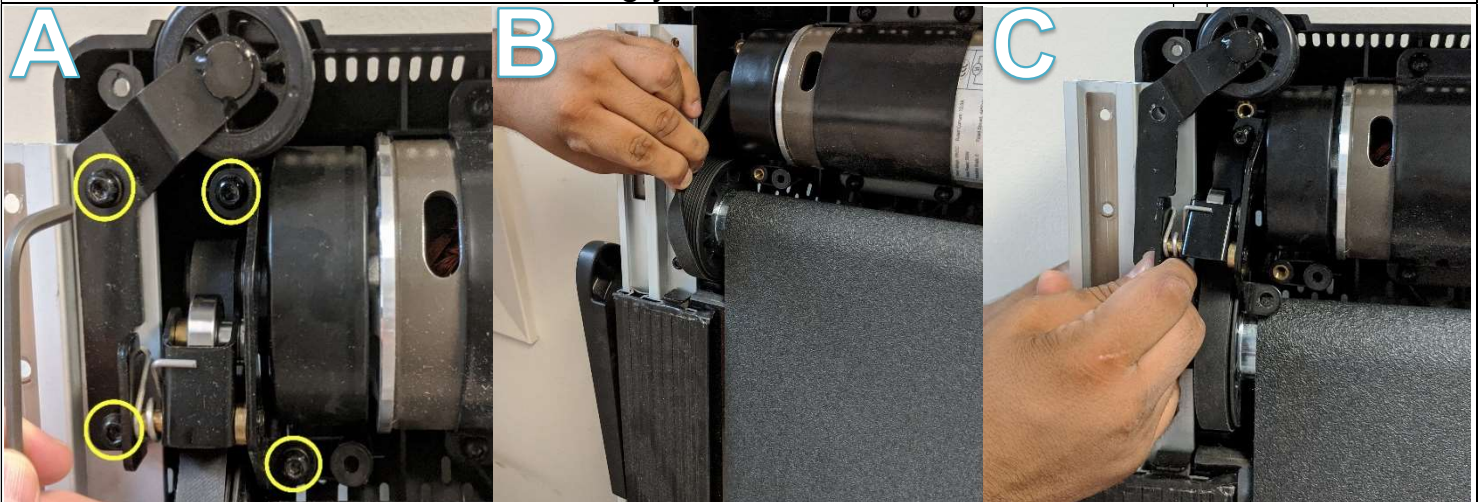
Motor Cover Removal

TOOLS NEEDED: • 3 & 4mm Allen Head Wrench



UNPLUG UNIT BEFORE STARTING

Begin by folding the arms down, and then leaning the treadmill up against a surface for easy access to the motor cover. Using a **3mm** Allen Wrench, you will remove **11 bolts** in total: **7** on the bottom of the pan, and **2** on each wheel. Remove wheel plate on each side, allowing you to remove the cover.

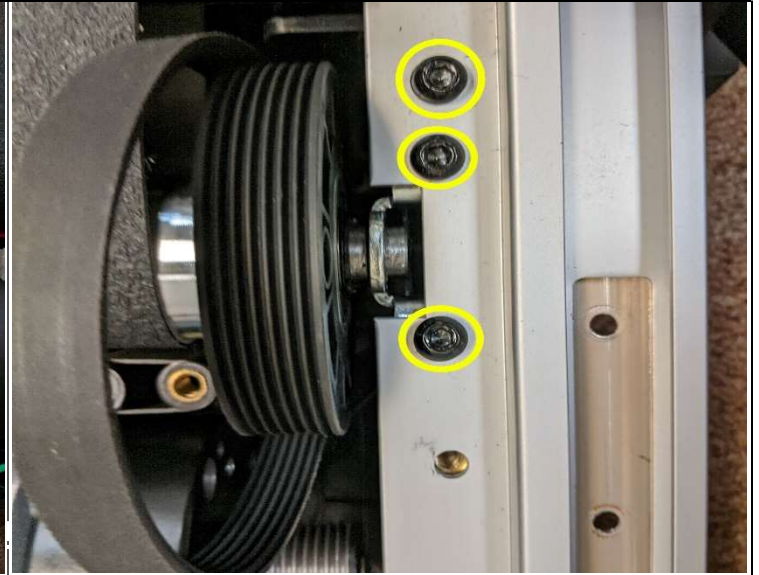
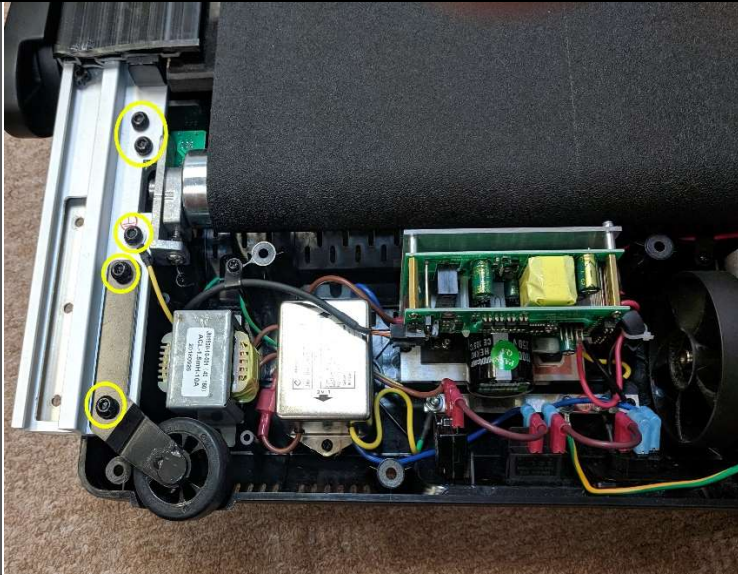


Using a **4mm** Allen Wrench, remove the **4 bolts** keeping the wheel and drive belt pulley in place. **(Fig A)** Remove the wheel plate from the unit. **(Fig B)** Then, carefully work the drive belt off the drive motor. **(Fig C)**

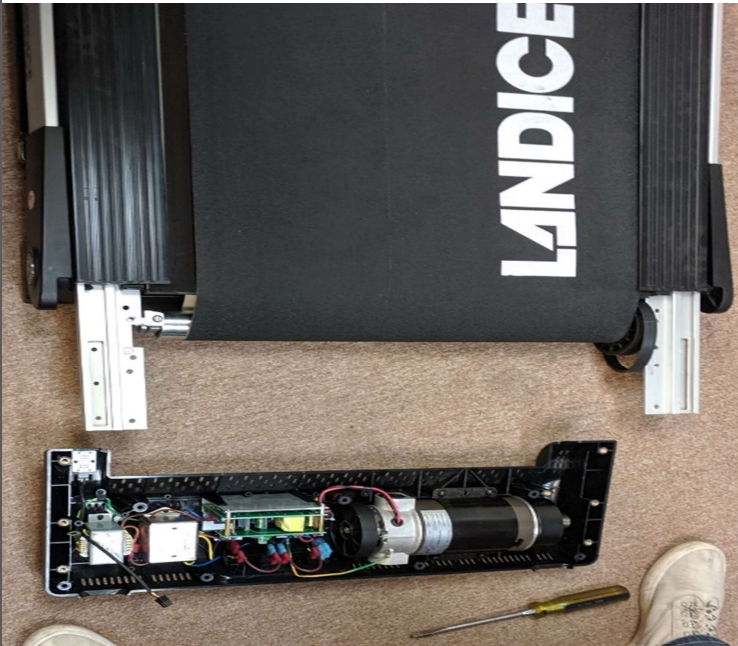
Motor Pan Removal - Front Roller & Drive Belt Replacement Instructions

IMPORTANT: If you are only replacing a component in the motor pan, STOP here and proceed to the specific install instruction page!

If you are removing the Treadbelt, Front Roller, Drive Belt, or Deck, continue below.



Using a 4mm Allen Wrench, continue removing all the bolts circled above.



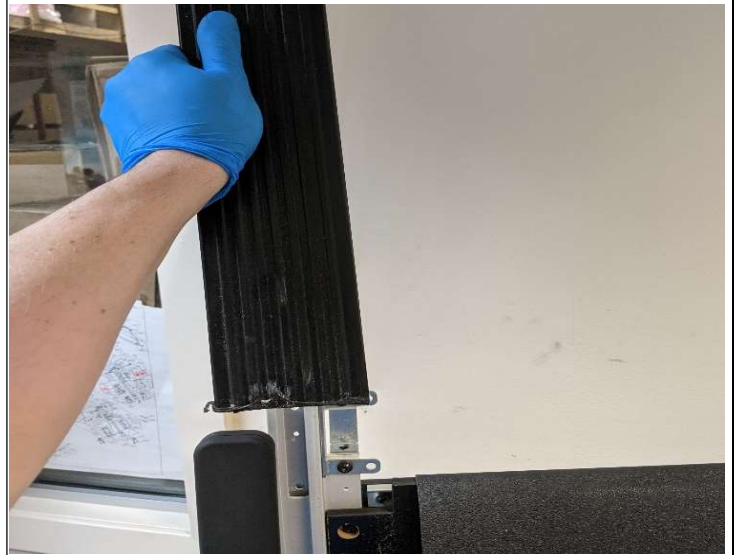
Once the bolts are removed, you are now able to remove the entire motor pan from the machine. From here, you can simply remove the **drive belt** and/or **front roller** and replace if necessary.

Please proceed to “**Treadbelt and Deck Replacement Instructions**” if you are replacing those specific parts.

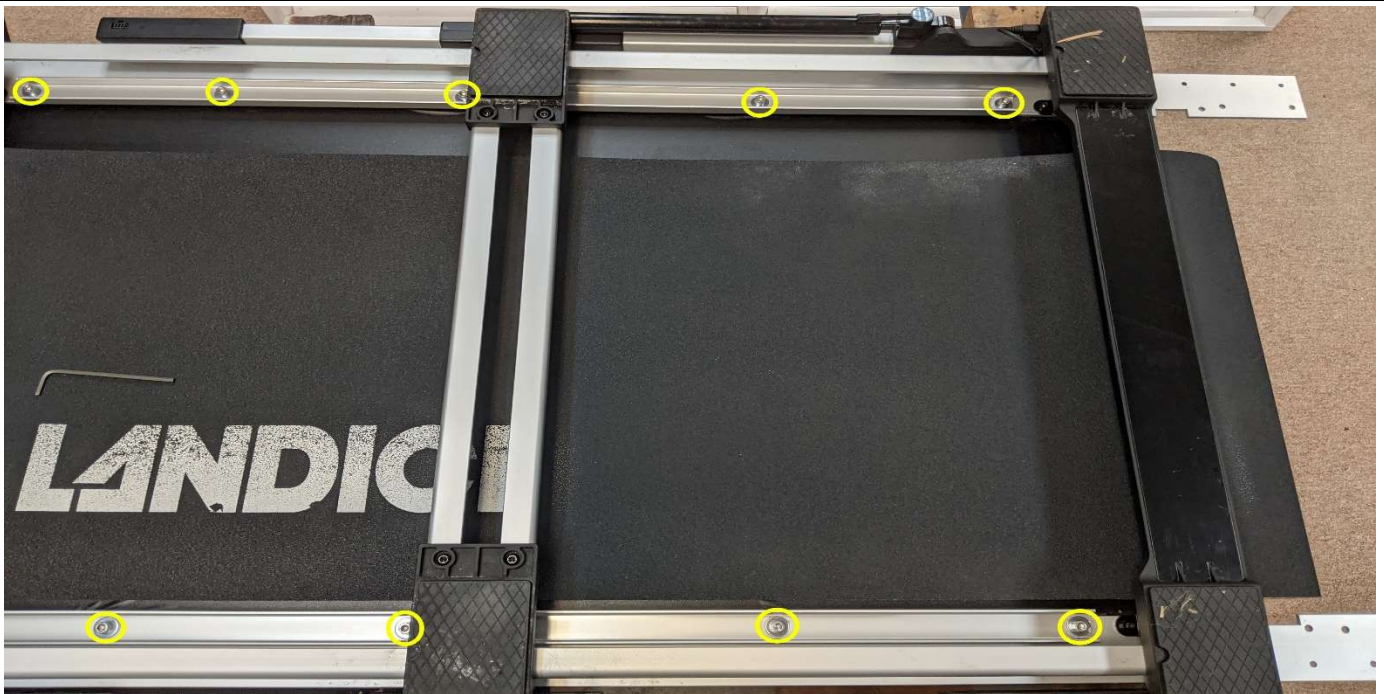
Treadbelt & Deck Replacement

TOOLS NEEDED: • 5mm Allen Head Wrench

BEFORE YOU BEGIN: You will need to remove the motor cover, motor pan, Front and Rear Rollers from the unit to access the treadbelt. Please refer to “**Motor Cover & Pan Removal**”, “**Rear Roller**” and “**Front Roller**” Instructions for more assistance.



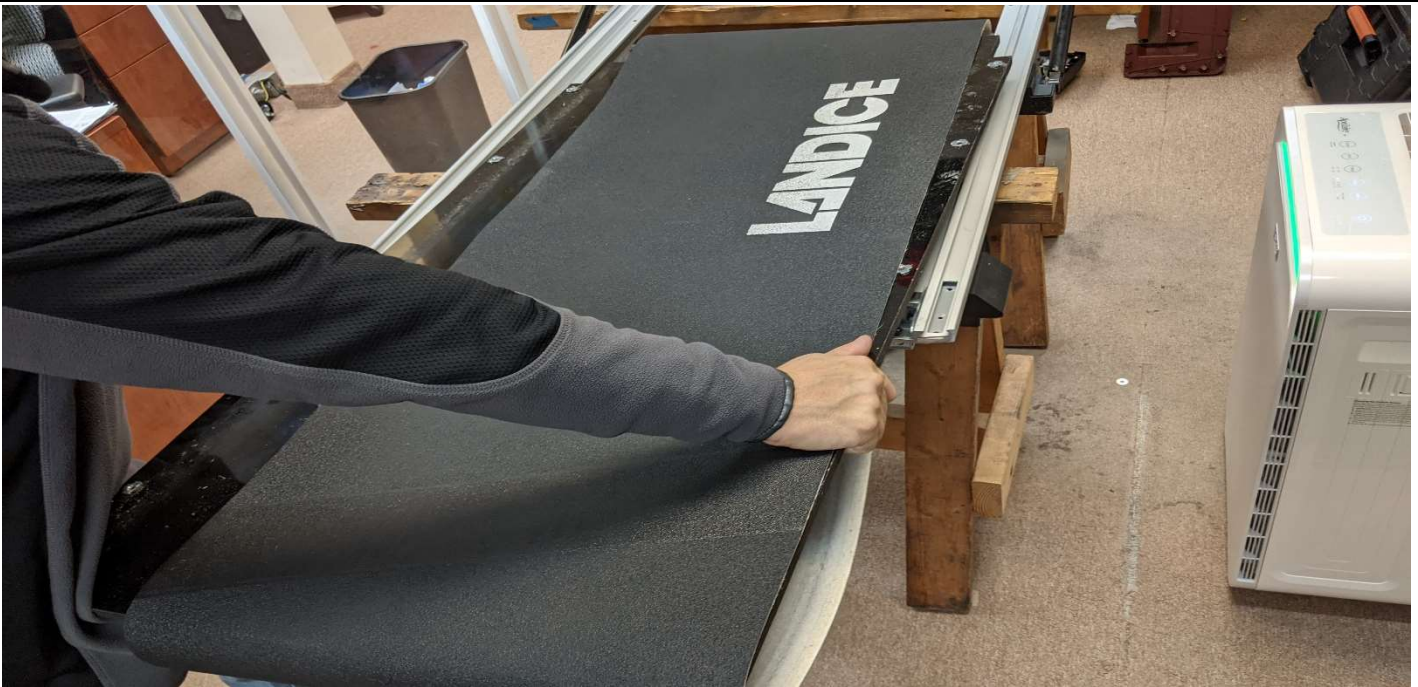
Begin by folding the arms down on the machine flat, and then propping the treadmill up against a wall, rear roller side up. Slide the side frame covers up and off the unit.



Next, lay the treadmill face down. Using a **5mm** Allen Wrench, remove all 10 bolts, as circled above. Remove the deck brackets from the unit.



Treadbelt and Deck Replacement



Next, flip the treadmill back over to its normal position, face up. You can now remove the deck and treadbelt from the frame of the unit, and slide the treadbelt off the deck. To re-install, follow these instructions in reverse.



Rear Roller Replacement

TOOLS NEEDED: • 4mm, and 6mm Allen Head Wrench

UNPLUG UNIT BEFORE STARTING



It is helpful to lean the unit up against the wall for this installation. Begin by using your **6 mm** Allen wrench to remove the tensioning bolt on either side. Next, use your **4mm** Allen wrench to remove 4 bolts keeping the rear bottom end cap in place. Next, remove both the front and bottom end cap components.

Step 2



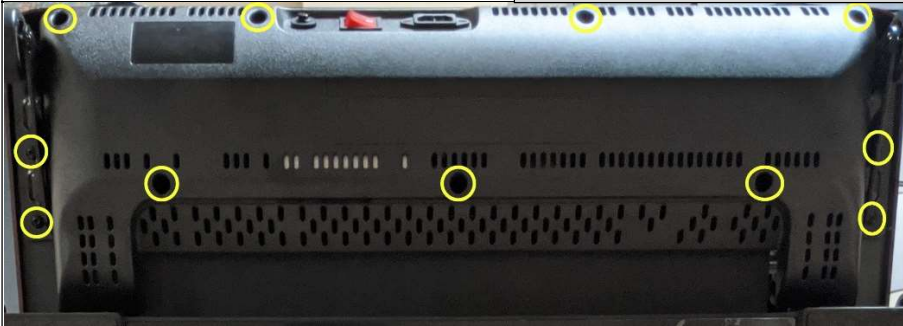
You should now have access to the rear roller. On the left side of the treadmill, there is a small bracket holding the roller in place. (**Illustration A - circled above**) Remove this from the roller shaft and reuse to install the new roller. Finally, slide the roller out from the belt. To re-install, reverse the instructions.



Drive Motor Replacement

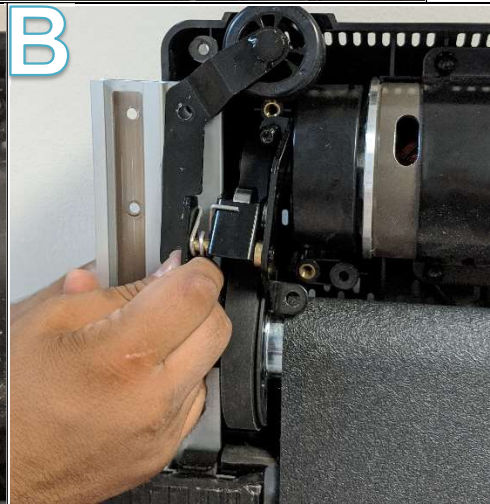
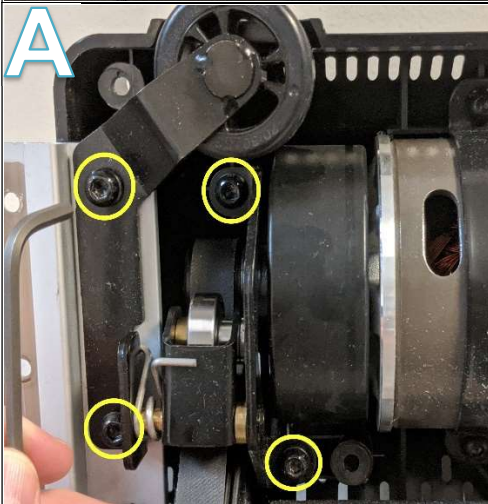
TOOLS NEEDED: • 3mm and 4mm Allen Head Wrench

Removing the Motor Cover

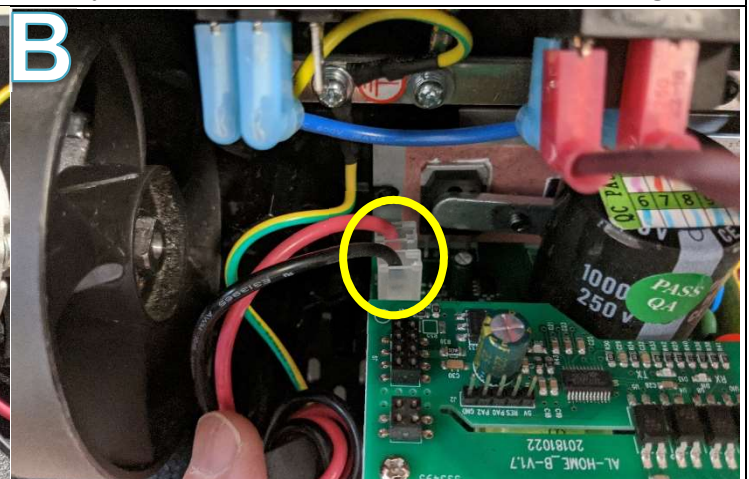
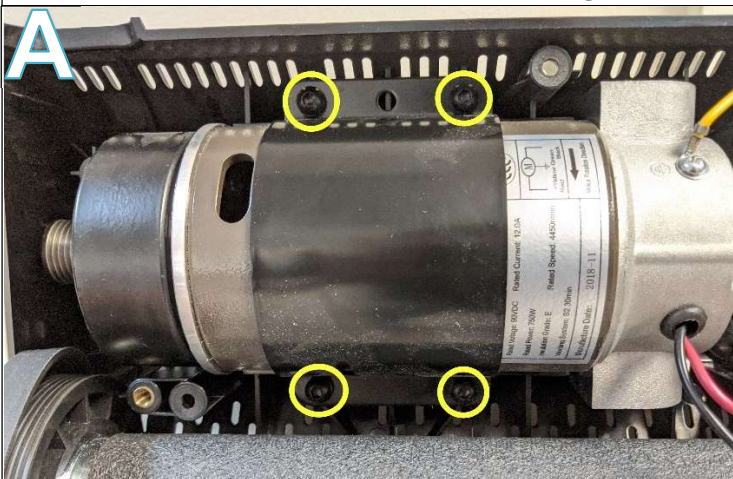


UNPLUG UNIT BEFORE STARTING

Begin by folding then leaning the treadmill up against a surface for easy access to the motor cover. Using a **3mm** Allen Wrench, you will remove **11 bolts** in total: **7** on the bottom of the pan, and **2** on each wheel. Remove wheel plate on each side, allowing you to remove the cover.



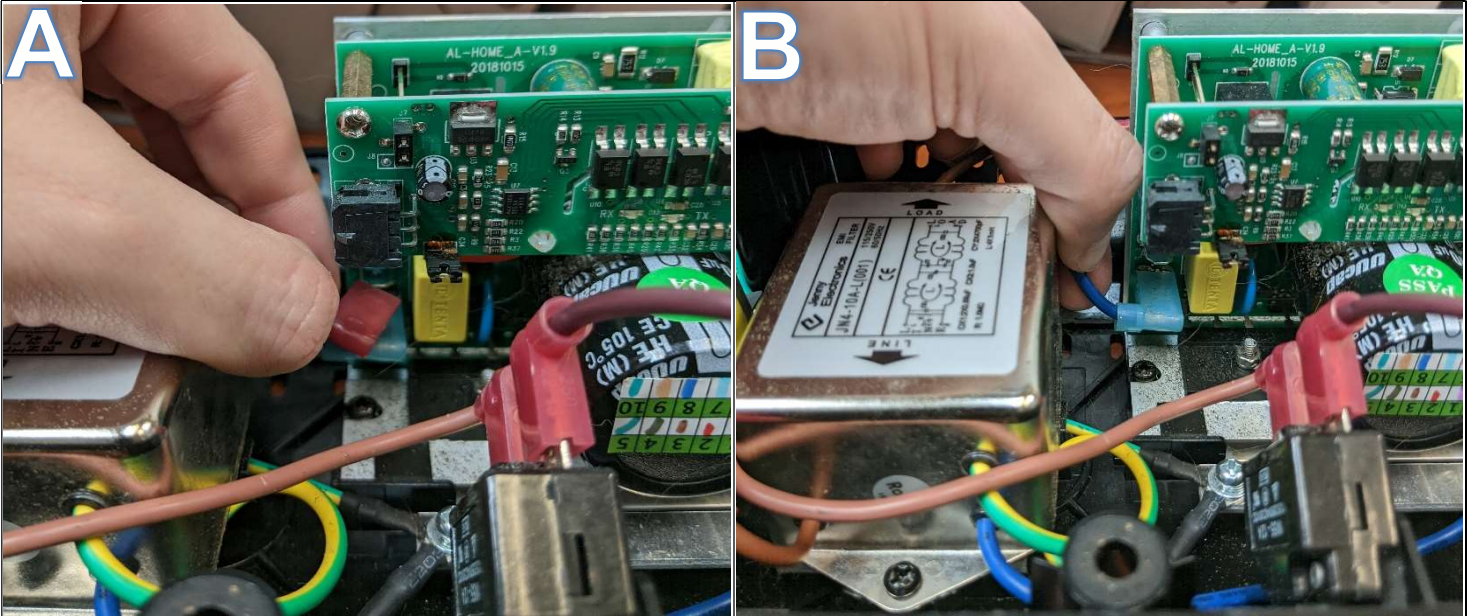
Using a **4mm** Allen Wrench, remove the **4 bolts** keeping the wheel and drive belt pulley in place. **(Fig A)**
Remove the wheel plate from the unit. **(Fig B)** Then, carefully work the drive belt off the drive motor. **(Fig C)**



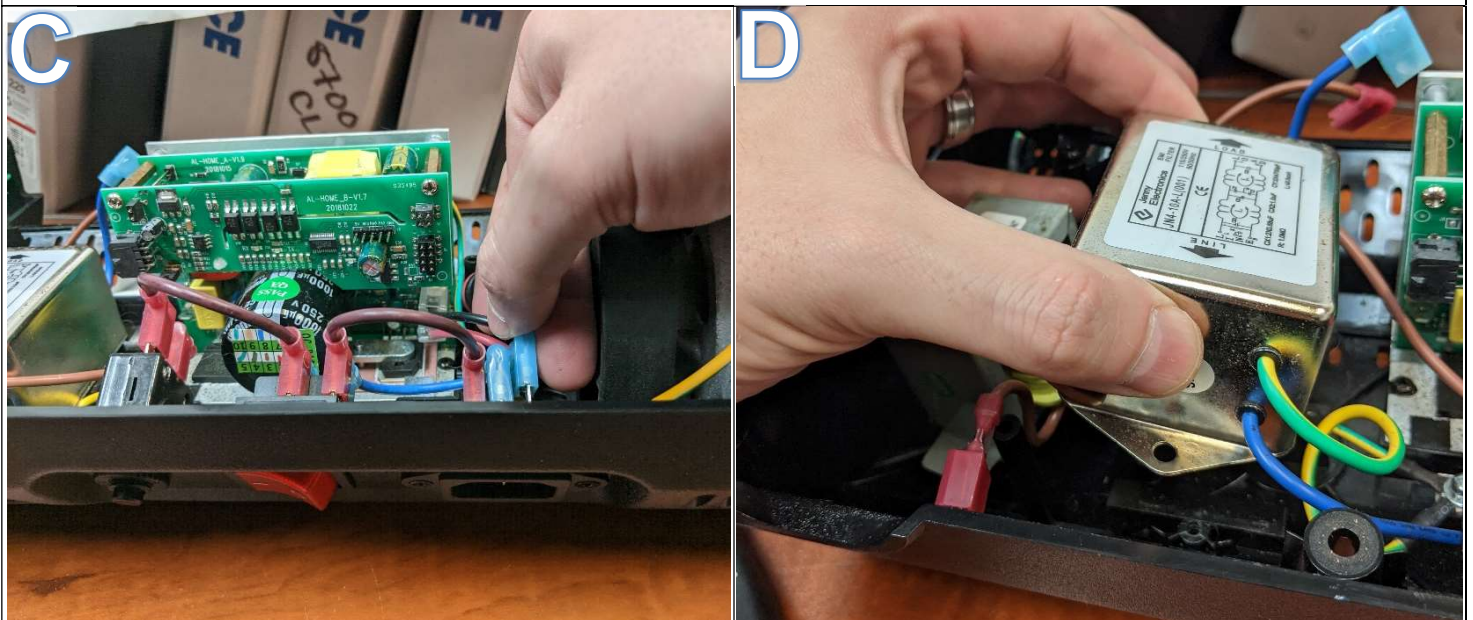
Using a 4mm Allen Wrench, remove the 4 remaining bolts from the drive motor. **(Fig A)**
Remove the black and red wires from the lower circuit board. **(Fig B)**
Now you can remove the drive motor. Reverse the directions to install.



Filter Removal



Use your hands (or Needle Nose Pliers) to remove the brown (**Picture A**) and blue (**Picture B**) wire connections to the **lower board**.



Remove the blue wire leading from the Filter to the Power Inlet (**Picture C**). You should now be able to remove the Filter from the unit (**Picture D**). To install, please reverse the instructions.



Lower Board Replacement

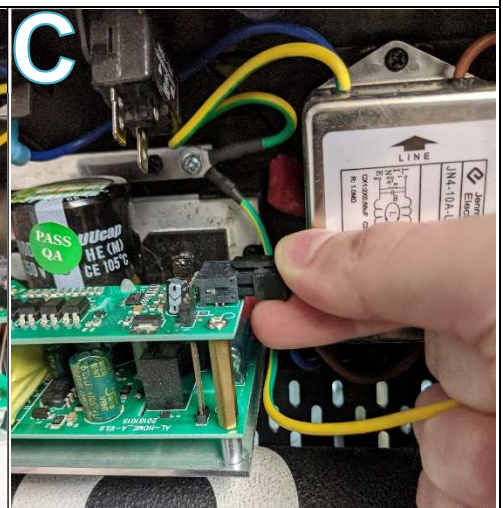
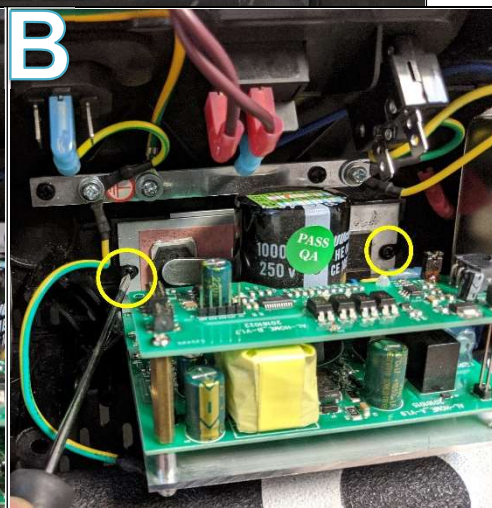
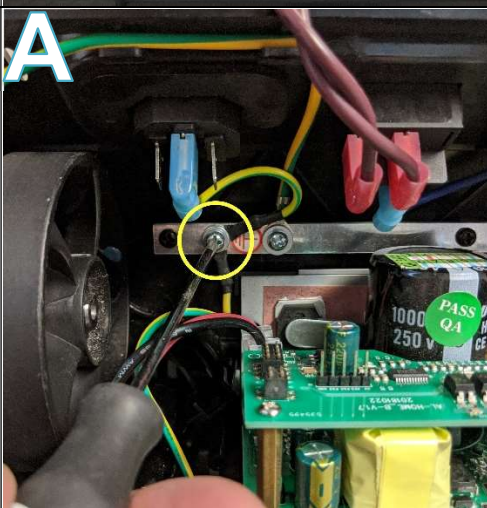
TOOLS NEEDED: • 3mm and 4mm Allen Head Wrench • Phillips Head Screwdriver

Removing the Motor Cover

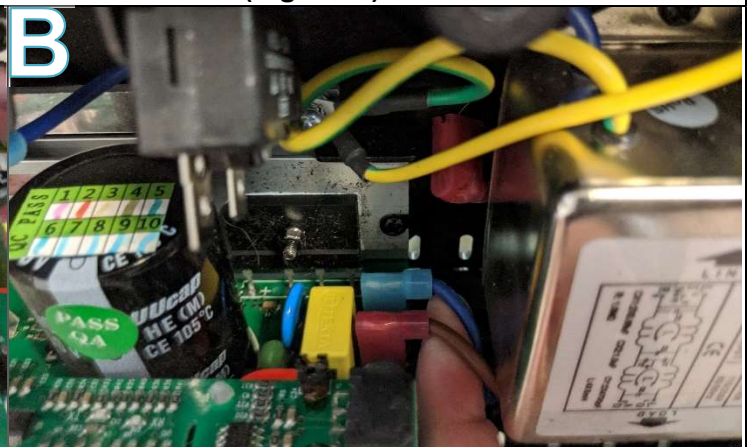
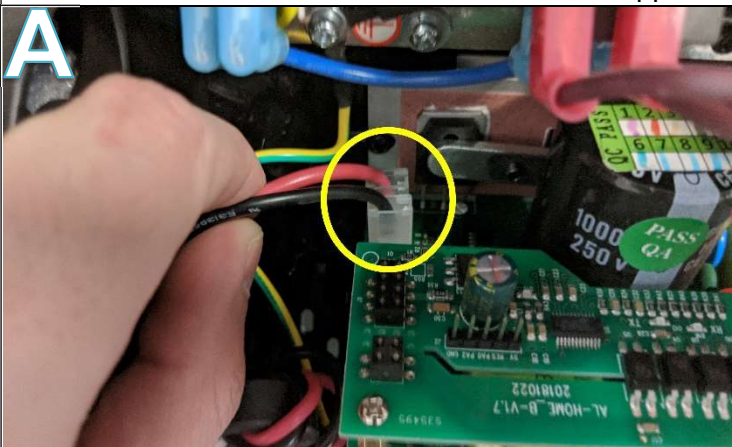


UNPLUG UNIT BEFORE STARTING

Begin by folding, then leaning the treadmill up against a surface for easy access to the motor cover. Using a 3mm Allen Wrench, you will remove 11 bolts in total: 7 on the bottom of the pan, and 2 on each wheel. Remove wheel plate on each side, allowing you to remove the cover.



Using your Phillips head screwdriver, remove the screw holding the lower board grounding wire in place. **(Figure A)** Next, remove the two screws holding the lower board in place. **(Figure B)** Then, remove the upper harness connection. **(Figure C)**



Next, locate the black/red drive motor wires and disconnect from the lower board. **(Figure A)** Finally, locate brown/blue wires and disconnect from the lower board. **(Figure B)** Remove the lower board. Reverse the instructions to install.



Folding Strut Replacement

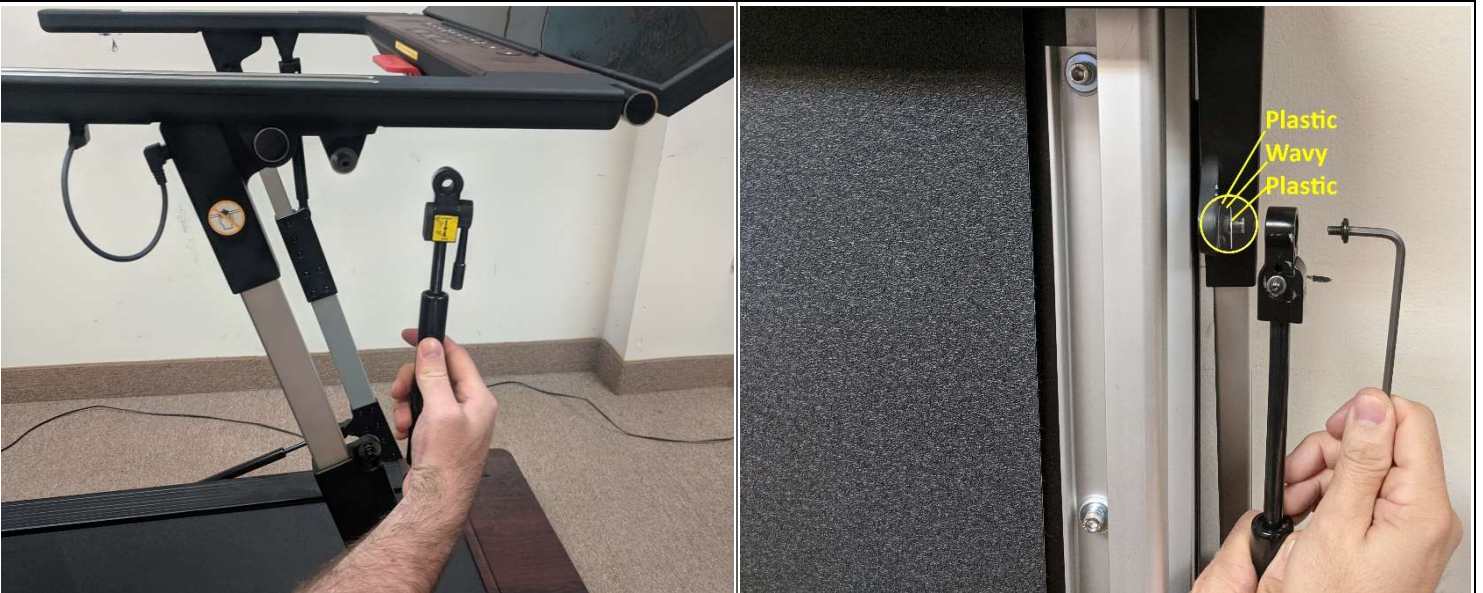
TOOLS NEEDED: • 5mm Allen Head Wrench • #2 Phillips Head Screwdriver

POWER OFF THE UNIT BEFORE STARTING. REPLACE ONE STRUT AT A TIME!



Using your Allen head wrench, remove the M5x10 Allen head shoulder screws as shown above.

Step 2



You can now remove the strut from the machine. It may be helpful to unlock opposite strut and rotate upright assembly up and down to aid with strut replacement. The new strut is shipped slightly compressed to aid with installation. Be careful to keep the washers in place as you replace the strut.

Correct Order = Plastic/Wavy/Plastic Washer.



Adjustable Lever Replacement

TOOLS REQUIRED: 1/8" Allen wrench,
Exacto Knife or Razor Blade

Contents of Box: Adjustable Lever,
Allen head bolt, Lock/unlock Sticker

NOT INCLUDED: flat washer, bolt
washer

Make sure the other Adjustable levers
are in the locked position before
starting!



Step 1



Using a Razor blade or Exacto knife, firmly cut into the hard sticker attached to the adjustable lever. It is a sturdy sticker, so use firm pressure until you break through. Once done, remove the sticker.



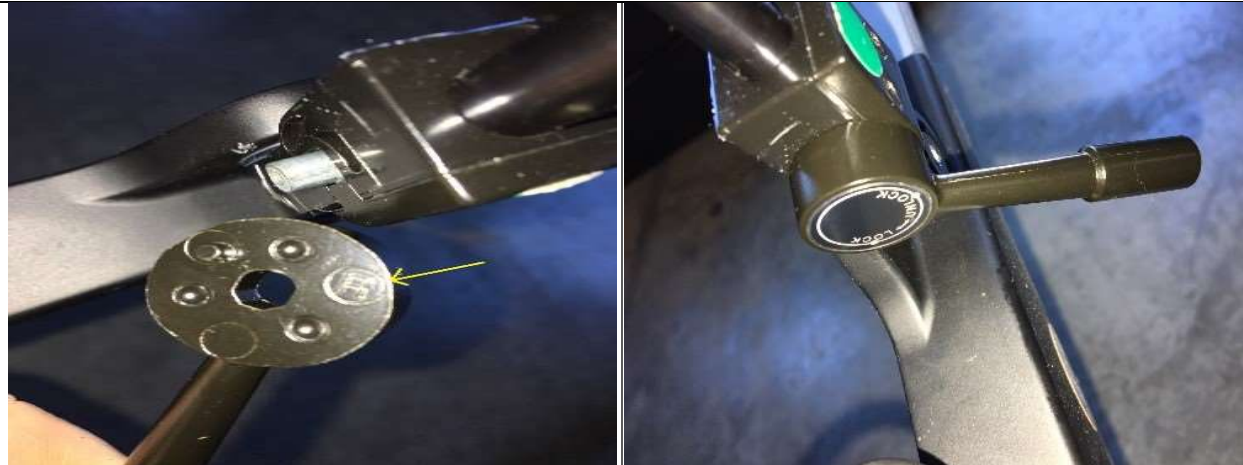
Adjustable Lever Replacement

Step 2



Using a 1/8" Allen wrench, remove the bolt and bolt washer, that was previously hidden by the sticker. Then remove the lever. PLEASE NOTE: You will need to use the same Silver washer and Bolt Washer, so make sure you put them in a safe place.

Step 3



Levers are keyed and identified as "L" left and "R" right, and will only install on the correct side, so ensure the lever you are replacing matches with the side. Install lever into position, and secure using the provided bolt, with the bolt washer and silver washer from the previous step. Do not over tighten. Check to verify that lever functions properly between LOCK and UNLOCK positions. Make sure the position of new lever orientation label is matching lever function (LOCK/UNLOCK). Press label firmly in place.

PLEASE CALL LANDICE TECHNICAL SERVICE

1-800-526-3423, OPTION 3 FOR FURTHER ASSISTANCE



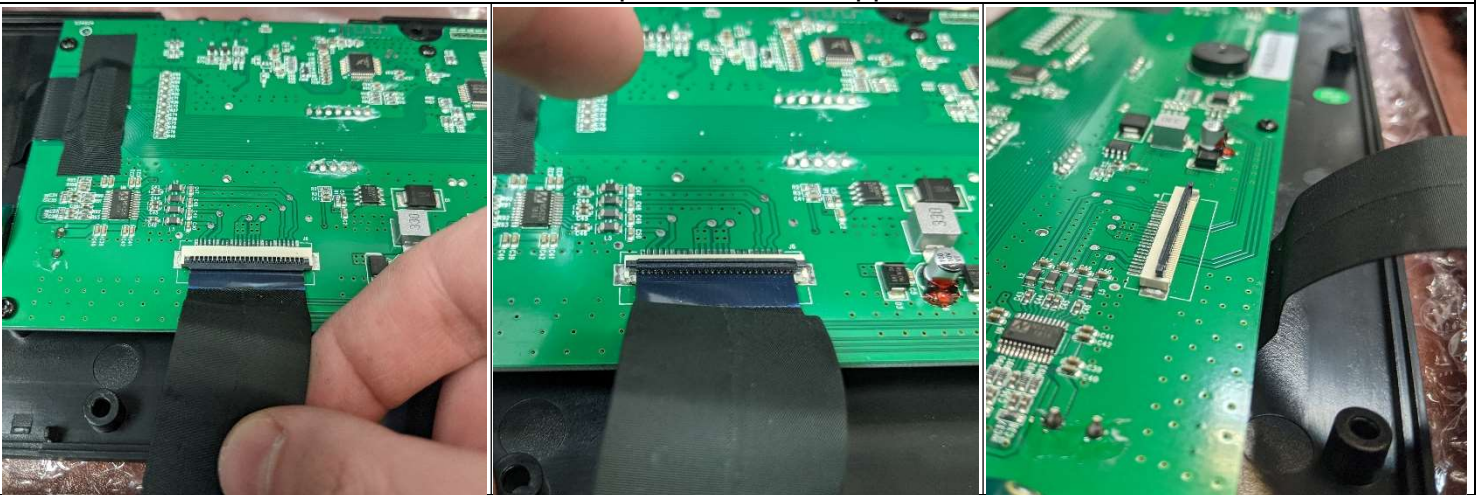
Upper Console Replacement Instructions

TOOLS NEEDED: • #2 Phillips Head Screwdriver

POWER OFF THE UNIT BEFORE STARTING.



Begin by using your Phillips head screwdriver to remove 12 screws from the back of the display. Remove the back panel to reveal upper circuit board.

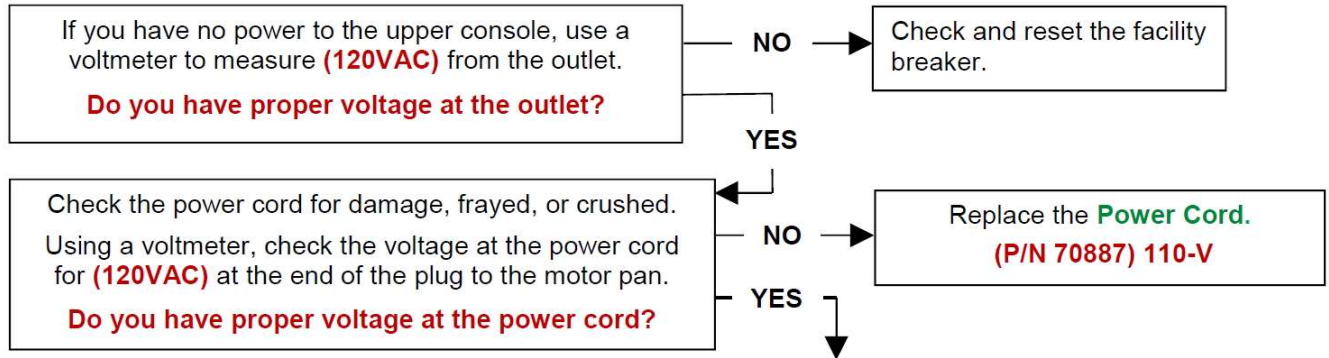


Locate the ribbon connection that leads to the button panel. Using your finger, nudge the black tab into the upward position, as shown above. You will then be able to remove the ribbon from the membrane. Next, remove the entire upper display assembly from the treadmill. To replace, follow the instructions in reverse.

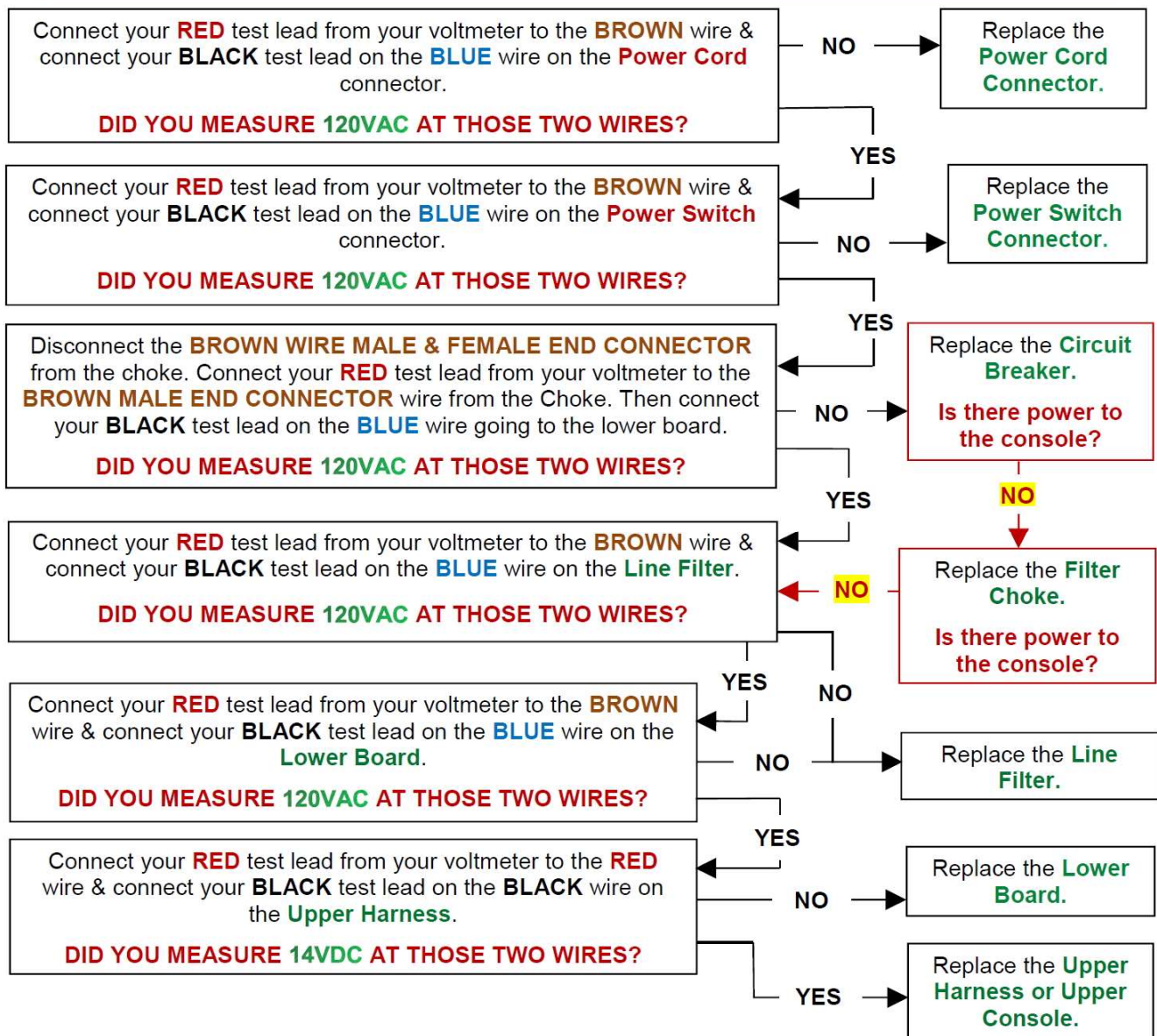


NOTE: USE THIS FOR DIAGNOSING M1 TREADMILL CONSOLE

Error Code: No power to the upper console

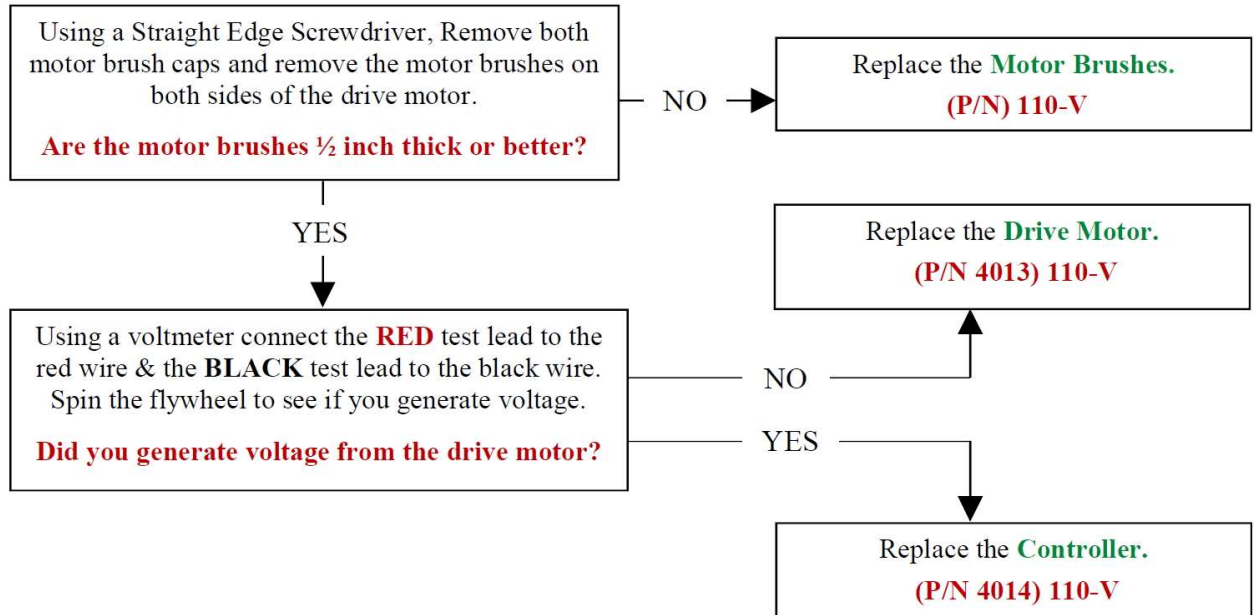


Testing power cord connector w/ switch & circuit breaker assembly by following the steps below:

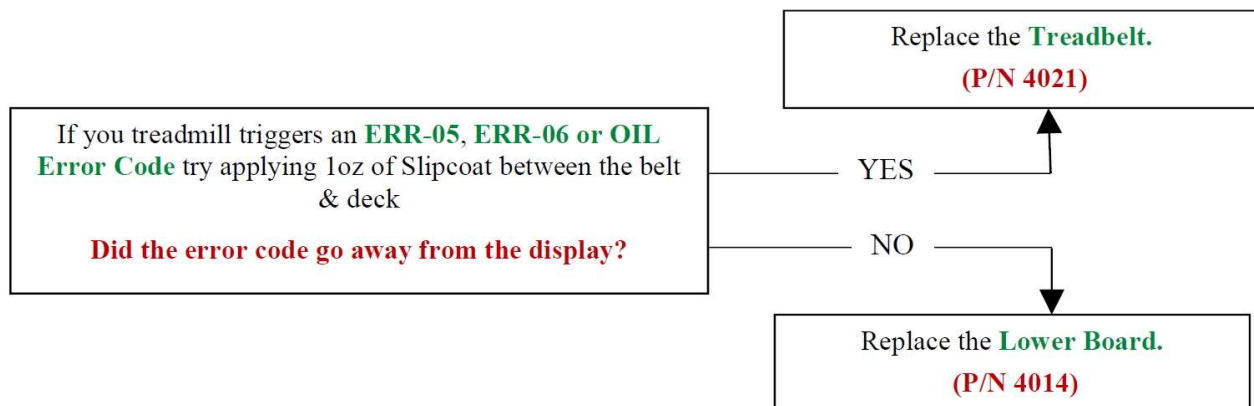


NOTE: USE THIS FOR DIAGNOSING M1 TREADMILL CONSOLE
Error Code: Display Window Reads ERR-02

****You will need to remove the drive motor from the treadmill to perform the following steps****



NOTE: USE THIS FOR DIAGNOSING M1 TREADMILL CONSOLE
Error Code: Display Window Reads ERR-05 & 06 or OIL



M1 TREADMILL EXPLODED VIEW

View #	Parts Description	Part Number
1	Console Assembly/ Display	4019
2	Keyboard Assembly-M1	4020
3	Safety Key	4005
4	Short Gas Spring Assembly-Left	4012
5	Short Gas Spring Assembly-Right	4011
6	Motor Cover	4008
7	Controller	4014
8	Drive Motor	4013
9	Long Gas Spring Assembly-Left	4009
10	Long Gas Spring Assembly-Right	4010
11	Left Side-Rail	4006
12	Right Side-Rail	4007
13	Rear End Cap Upper Cover-Left	4015
14	Rear End Cap Upper Cover-Right	4016
15	Rear End Cap Bottom Cover-Left	4017
16	Rear End Cap Bottom Cover-Right	4018
17	Deck, M1	4036
18	Treadbelt, M1	4021
19	Take Up Roller (Rear Roller) M1	4024
20	Drive Roller (Front Roller) M1	4023
21	Drive Belt, M1	4022
22	Handle, Strut Left-M1	4030
23	Handle, Strut Right-M1	4031

