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# **ELLIPTICAL E7 / E950 HOME & COMMERCIAL SERVICE MANUAL Starting with Serial # E010004**

## **Version 3.2**

**For Technical Service Call 1-(800)-LANDICE, Ext. 170  
EMAIL: [service@landice.com](mailto:service@landice.com)**

8-31-15

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## L7 / L8 TREADMILL U7 / R7 BIKE AND E7 ELLIPTICAL LIFETIME HOME WARRANTY



To ensure the quality of our service and meet the requirements of this commitment, this warranty is contingent on the following conditions. **Failure to meet these conditions without Landice's expressed written consent shall void the factory warranty.**

### Conditions

- All home treadmills, bikes and ellipticals must be dealer-installed within a 60-mile driving radius of the selling dealer's nearest retail store. In cases of uncertainty, internet-based driving directions will be used to determine mileage.
- Product registration must be completed online at [landice.com/support/product-registration](http://landice.com/support/product-registration) within 30 days of purchase to validate warranty.
- Warranty applies to original owner as long as the product resides in the US or Canada.
- Floor models and demonstration units over one year from date of manufacture shall carry a 5-year parts warranty.

### Parts

This warranty does not cover cosmetic damage, damage due to acts of God, accident, misuse, abuse, improper maintenance or negligence to the product. This warranty does cover normal wear items on the treadmill such as the treadmill and deck. The touch screen control panel, headphone cables and USB port are warranted for a 5-year period. Bearing damage on treadmills, due to over-tightened drive belts or treadbelts, is not covered by this warranty. High-wear items on the bike, such as pedal straps, have a 90-day warranty against defects in material and workmanship. Worn or defective parts must be returned to Landice within 30 days of repair for analysis.

### Labor

For a period of 1 year, Landice will reimburse the selling dealer according to the terms, rates and conditions in effect at the time of service. A service authorization number must be obtained prior to performing service in order to qualify for reimbursement. This warranty does not cover customer instruction, installation, setup or adjustments. Note that treadmill tensioning and tracking are the responsibility of the user and are not covered by this warranty.

Effective April 1, 2015, this Landice warranty covers all HOME SERIES TREADMILLS, BIKES and ELLIPTICALS as follows:

FRAME .....	LIFETIME
PARTS .....	LIFETIME
WEAR ITEMS .....	LIFETIME
TOUCH SCREEN/CABLES/ USB .....	5-YEAR
HIGH-WEAR ITEMS .....	90-DAY
LABOR .....	1-YEAR

For product registration, please go to <http://www.landice.com/support/product-registration>.

## COMMERCIAL U9 / R9 BIKES AND E9 ELLIPTICALS 5-YEAR PRODUCT WARRANTY



To ensure the quality of our service and meet the requirements of this commitment, this warranty is contingent on the following conditions. **Failure to meet these conditions without Landice's expressed written consent shall void the factory warranty.**

### Conditions

This warranty is valid for all applications including light commercial, rehabilitation, health clubs and pay-for-membership facilities. To receive this warranty the product must be registered online with Landice within 30 days of purchase to validate warranty and needs to be utilized in specified applications. Commercial series products placed in residential settings will NOT carry a warranty. This warranty is valid for the original owner as long as the product resides in the US or Canada.

### Ellipticals

Ellipticals need to be wiped down and cleaned after each use as per the owner's manual. Headphone jack cable and USB port are warranted for defects in material and workmanship for a 3-year period.

### Bikes

Bikes need to be wiped down and cleaned, pedals checked and tightened after each use as per the owner's manual. High-wear items such as pedal straps have a 90-day warranty against defects in material and workmanship.

### Parts

This warranty does not cover cosmetic damage, damage due to acts of God, accident, misuse, abuse, improper maintenance or negligence to the product. All parts are warranted for defects in material and workmanship. Defective parts must be returned to Landice within 30 days of repair for analysis.

### Labor

For a period of 1 year, Landice will reimburse the selling dealer according to the terms, rates and conditions in effect at the time of service. A service authorization number must be obtained prior to performing service in order to qualify for reimbursement. This warranty does not cover customer instruction, installation, setup or adjustments.

Effective April 1, 2015, this Landice warranty covers all COMMERCIAL BIKES and ELLIPTICALS as follows:	FRAME.....	5-YEAR
	PARTS.....	5-YEAR
	WEAR ITEMS.....	3-YEAR
	HIGH-WEAR ITEMS.....	90-DAY

For product registration, please go to <http://www.landice.com/support/product-registration>.

# LANDICE WARRANTY AND POLICIES

The Service Warranty covers installation of parts shown to be defective in material or workmanship. The selling dealer is responsible for labor for ellipticals needing repairs. A Service Authorization (SA) number must accompany any service reimbursement request. Service Authorization numbers are given when the selling dealer or the service technician calls Landice **prior** to beginning work on the elliptical. This allows Landice to verify that the elliptical is within the labor warranty and also aids us in helping the technician troubleshoot the elliptical. Landice welcomes technicians to call us from the field and gives these calls the highest priority.

This Service Warranty does **not** cover customer instruction, installation, setup, or maintenance. Line Cords (power cords) are also not covered by this warranty as these can only be damaged by misuse or abuse.

This warranty does not cover cosmetic damage, damage due to acts of God, accident, misuse, abuse, or negligence of the product. The part will be covered in full only if it exhibits evidence of a manufacturing or material defect during the warranty period. Please keep in mind, “negligence of the product” includes damage inflicted by using the elliptical in an improper fashion.

### **SERVICE REIMBURSEMENT POLICY:**

This is offered to all Landice dealers as well as all authorized Landice service providers. Landice covers our ellipticals with a 1-year labor reimbursement policy. That means we will pay to fix our ellipticals as long as it's within one year from the date the elliptical was purchased.

### **OUR POLICY:**

Landice will reimburse the selling dealer according to our labor rate schedule. If you are a service provider for Landice and do not sell our product, you have the option of billing us direct or you can bill the dealer that you are providing service for. Generally, if our capped rate does not cover your labor charge you would bill the selling dealer. The current rate is \$30.00 per hour and is capped at a maximum of one hour labor and one hour travel per elliptical failure. Diagnostic and return trips are not covered. If parts were credited out or Invoice was partially paid, the claim will be denied. Note that set-up procedures are not covered by this warranty.

Set-Up Includes: Assembly, replacing parts due to cosmetic damage or abuse, and performing any additional adjustments that may have been upset during shipping.

The dealer must call for a service authorization number **prior** to performing any service to verify the elliptical is under labor warranty. It is advisable to call Landice from the elliptical location to successfully diagnose the problem. This will insure that the correct part will be shipped out the first time. Labor claim forms must be submitted within three months from the date service was performed. Labor claim forms must be completely filled out and have the Landice Service Authorization number at the top. Generally service claims are paid out upon the return of defective parts and/or crediting of the warranty invoice. If parts are outstanding for a period of more than 90 days previously submitted service claims will be returned unpaid.

### **FLOOR MODELS AND DEALERS STOCK:**

If the dealer sells an elliptical 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 residential elliptical is over 1 year old when sold to a customer, the elliptical will carry a 5 year parts warranty and there will be NO labor warranty. If a commercial unit is over 1 year old when sold to a customer, the elliptical will carry the remainder of the parts warranty from the date of shipment with NO labor warranty.

**PARTS POLICY**

Our policy requires that all defective parts be returned to Landice. All warranty parts will be billed to the dealer at dealer cost. Landice will credit this invoice upon receipt of defective parts. It is the dealer's responsibility to return the defective parts to Landice with a copy of the invoice or packing slip. If the defective parts are not returned within 30 days, payment of invoice is expected in full.

**WARRANTY PART ORDERING:**

When you order parts under warranty please have the following information available. Warranty orders cannot be processed without this information:

- 1) Customer's name, address and phone number
- 2) Elliptical serial number
- 3) Detailed description of failure

**PURCHASE PART ORDERING:**

Serial numbers are recommended to help ensure the correct part is shipped. Purchased parts are covered by a 90 day replacement part warranty from the date the order shipped.





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RANDOLPH, NJ 07869

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SERVICE@LANDICE.COM

**SERVICE CLAIM FORM**

SA#

<b>DEALER INFORMATION:</b>		
Service Dealer / Dealer Name:		
Address		
City	State	Zip
Phone(        )		
Contact		

<b>CUSTOMER INFORMATION</b>		
Name		
Address		
City	State	Zip
Phone(        )		Contact

<b>ELLIPTICAL/TREADMILL INFORMATION</b>	
Model Type:	Date of Service
Frame Serial #	Date of Purchase
DCP Serial # (if applicable)	
Out of box problem	Yes                  No

<b>CUSTOMER COMPLAINT</b>

<b>SERVICES PERFORMED/PARTS REPLACED</b>
TRAVEL / LABOR: Travel Time:                          Labor Time:                          TOTAL TIME: _____

<b>VALIDATION SIGNATURES</b>		
Service Rep. Signature	<i>Customer Signature</i>	Date

IN ORDER TO PROCESS THIS CLAIM IN THE LEAST AMOUNT OF TIME,  
**SEND THE SERVICE CLAIM WITH THE DEFECTIVE WARRANTY PART.**  
DO NOT SUBMIT SERVICE CLAIMS WITHOUT SERVICE AUTHORIZATION NUMBERS.

**RECOMMENDED TOOLS FOR SERVICING LANDICE ELLIPTICALS**

1. 4-18mm Allen Key socket or wrench set
2. 4-18mm wrenches
3. 3/8 to 7/8 standard socket and wrench set
4. Ratchet & Extension
5. Vise Grips
6. #1, 2, or 3 Phillips Head Screwdriver or power bits
7. #1, 2, or 3 Flat Head Screwdriver or power bits
8. Cordless or Corded Drill
9. Rubber Mallet
10. Diagonal cutters/Dykes
11. Wire Stripper
12. Wire Cutters
13. Digital Multimeter (Analog meters are not recommended)
14. C-Clamp or Pressure clamp (12" span)
15. Snap ring pliers
16. Flat tip punch set
17. Sandpaper
18. Two 12" long 2x4 pieces of wood

## IMPORTANT OPERATING SAFETY INSTRUCTIONS

**WARNING:** Failure to observe the following operating instructions can result in serious injury!

- [1] If you are suffering from any illness, condition, or disability which affects your ability to run, walk or exercise, do not use this product without consulting your doctor first.
- [2] If you are suffering from any illness, condition, or disability which affects your ability to run, walk or exercise, do not use this product without supervision present. Failure to do so may result in serious injury should you fall while the machine is in motion.
- [3] Failure to leave ample clearance around the elliptical could result in the user becoming trapped between the mechanism and a wall, resulting in serious injury.

Allow a minimum clearance of 6 inches on each side of the elliptical.

Allow a minimum clearance of 1 foot at the rear of the elliptical.

- [4] Be sure to familiarize yourself with the owner's manual. Look it over carefully. Be sure you understand the control panel operation before using the elliptical.

**When using an electrical appliance, basic precautions should always be followed. Read all instructions before using.**

**DANGER: Always unplug the elliptical before cleaning or removing any shrouds. To reduce the risk of electrical shock in the event of an electrical storm, always unplug the elliptical from the electrical outlet after using.**

## IMPORTANT OPERATING SAFETY INSTRUCTIONS

**WARNING: To reduce the risk of electrical shock or injuries to persons:**

- [1] An appliance should never be left unattended when plugged in. Unplug from outlet when not in use.
- [2] Close supervision is necessary when this unit is used by or near children or disabled persons.
- [3] Use this elliptical only for its intended use as described in this manual.
- [4] Never operate this elliptical if it has a damaged cord or plug, if it is not working properly, or if it has been damaged. Call your selling dealer immediately for examination and repair.
- [5] Keep the power cord away from heated surfaces. Be sure the line cord has plenty of slack and does not get pinched underneath the elliptical.
- [6] Never drop or insert any object into any opening. Be sure no objects are near or underneath the elliptical
- [7] Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- [8] Connect this appliance to a properly grounded dedicated outlet only.
- [9] To disconnect, press the OFF button, and unplug the unit from the wall outlet.

## **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 risk of electrical shock. This product is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

### ***120 VOLT ELLIPTICALS***

Ellipticals marked 120 VAC are intended for use in a nominal 120-volt circuit with a grounding plug. Make sure the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product.

### ***200 – 250 VOLT ELLIPTICALS***

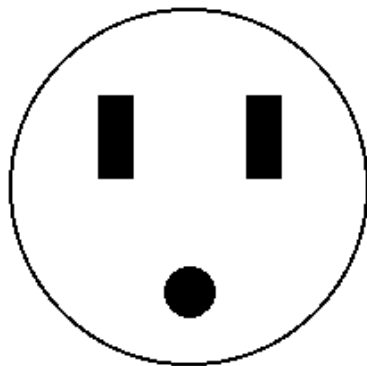
Ellipticals marked 200 – 250 VAC are intended for use on a circuit having a nominal rating more than 200V and are factory-equipped with a specific cord and plug to permit connection to a proper electric circuit. Make sure the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product. If the product must be reconnected for use on a different type of electric circuit, qualified service personnel should make the reconnection.

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

## **ELECTRICAL REQUIREMENTS FOR E-SERIES ELLIPTICAL**

All Ellipticals are automatically rated for 110 or 220 VAC with no external transformer. The power supply will know what voltage it's receiving and will bring it to a 12Vdc supply to power the upper console.

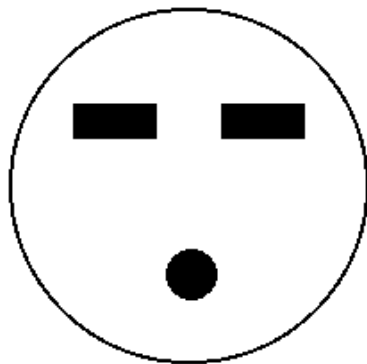
### **110 VAC ELLIPTICAL PLUG**



HOME & COMMERCIAL ELECTRICAL REQUIREMENTS:  
110 VAC, 60 HZ, 15 AMP - DEDICATED CIRCUIT & GROUND

PLUG - NEMA 5-15P (PLUG)  
RECEPTACLE - NEMA 5-15R (RECEPTACLE)

### **220 VAC CLUB & INTERNATIONAL PLUG**



220V CLUB & INTERNATIONAL ELECTRICAL REQUIREMENTS:  
220 VAC, 60 Hz, 15 AMP - DEDICATED CIRCUIT & GROUND

PLUG - NEMA 6-15P (PLUG)  
RECEPTACLE - NEMA 6-15R (RECEPTACLE)



1 Cut straps and open box. Place upright on base frame mounts. Use the alignment pins to help you correctly set the upright down.



2 Lightly set the 4 bolts (A) with flat washers (N) by hand – you will tighten them later.



3 Mount the Side Hand Rails. Slide the side handrail into position and *lightly tighten* the rail up top with 2 button head cap screws (J).



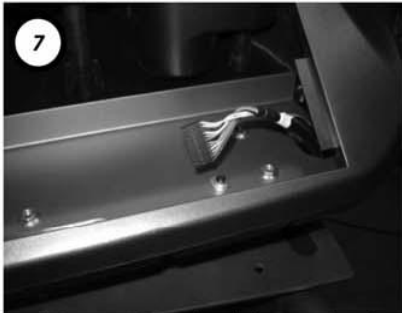
4 Firmly tighten at the base of the Side Hand Rail with 3 bolts (E) with spring washers (Q). Go back and tighten bolts from Steps 2 and 3.



5 Feed the upright harness down the upright and catch it at the bottom of the base. You may need to jiggle/spin it to make it to the bottom.



6 Exit through access hole and clip the harness to the 2 harness clips along the frame finally connecting to the green relay board.



7 Install the control panel pod. As you place the pod on top, pull the top of the upper harness through prior to bolting it down.



8 Mount the Pod to the plate using the 4 bolts (H) with flat washers (N) from beneath – 2 at each end of the plate.



9 Install the contact handgrips. First feed the cables through, then mount the grips using the 4 bolts (G) with flat washers (N) from beneath.



10 Install the Stride Arms. Set in place using 2 bolts (B), lock washers (P) and flat washers (O). Tighten both bolts simultaneously.



11 Install the Crank Arm Top using a socket head cap screw (C), spring washer (Q), and flat washer (R). Once set, press the finishing cap.



12 Connect each Crank Arm Bottom to the crank using 4 socket head cap screw (D).



13 Install the Foot Pedals. Use a socket head cap screw (F), spring washer (Q), flat washer (N) and nylon lock nut (M) for each pedal.



14 Install the Knuckle Covers. Use 2 phillips screws (K) to secure both sets of covers.



15 Install the Base Endcaps using 4 phillips screws (I) for each.



16 Install the Front Cover using 12 phillips screws (I) to secure it.



17 Install the Upright Mount Covers. Screw the outer and inner pieces together trapping the upright and slide them down until they click.



18 Install the Crank Arm Bottom Covers. Press them down until they click in place.



19 Carefully place the membrane in the control panel Pod (don't scratch plastic edges) tilting it towards you so you can make all connections.



20 Connect the 2 heart rate cables to the 2 side by side 3-pin connectors on the small PC board on the far side of the membrane.



21 Connect the upper harness from the upright to the edge connector and the accessory harness coming from the POD to the 3-pin connector.



22 **DO NOT PRY FROM FRONT**  
Press membrane into set position. *If you need to free the membrane, use a long screw driver to pop it out from back using the access hole.*



23 Install the rear step with 2 phillips screws (L).



24 Check stability of unit by verifying that all leveling feet are pressing against the floor.



## E7/E950 LVS Instructions

\*\*\* (includes iPod Video Cable Option) \*\*\*

1. Use a ½" socket to secure the bracket from the underside of the pod. The hardware is attached to the bracket.



2. Insert Power, Cable line and \*iPod cable\* connections into the back of the TV.



3. Feed the power cord from the bracket thru the access hole at the bottom of the upright.



4. Feed the power cord down the right upright leg to the base. You may have to jiggle the cord to make it thru the access hole.



5. Run the power cord along the frame and rest it on the ground.



6. Feed the cable line and \*iPod Cable\* from the base of the bracket into the pod through the 1¼" access hole.



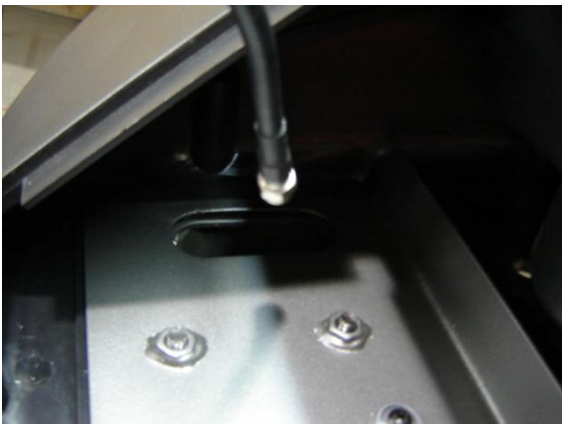
7. **If you have an iPod Cable**, then connect the headphone plug to the available jack on the inside of pod.



8. **If you have an iPod Cable**, then feed the docking connector through the pod and reinsert the black plastic access cap.



9. Feed the cable line down the left upright leg thru the access hole at the base.



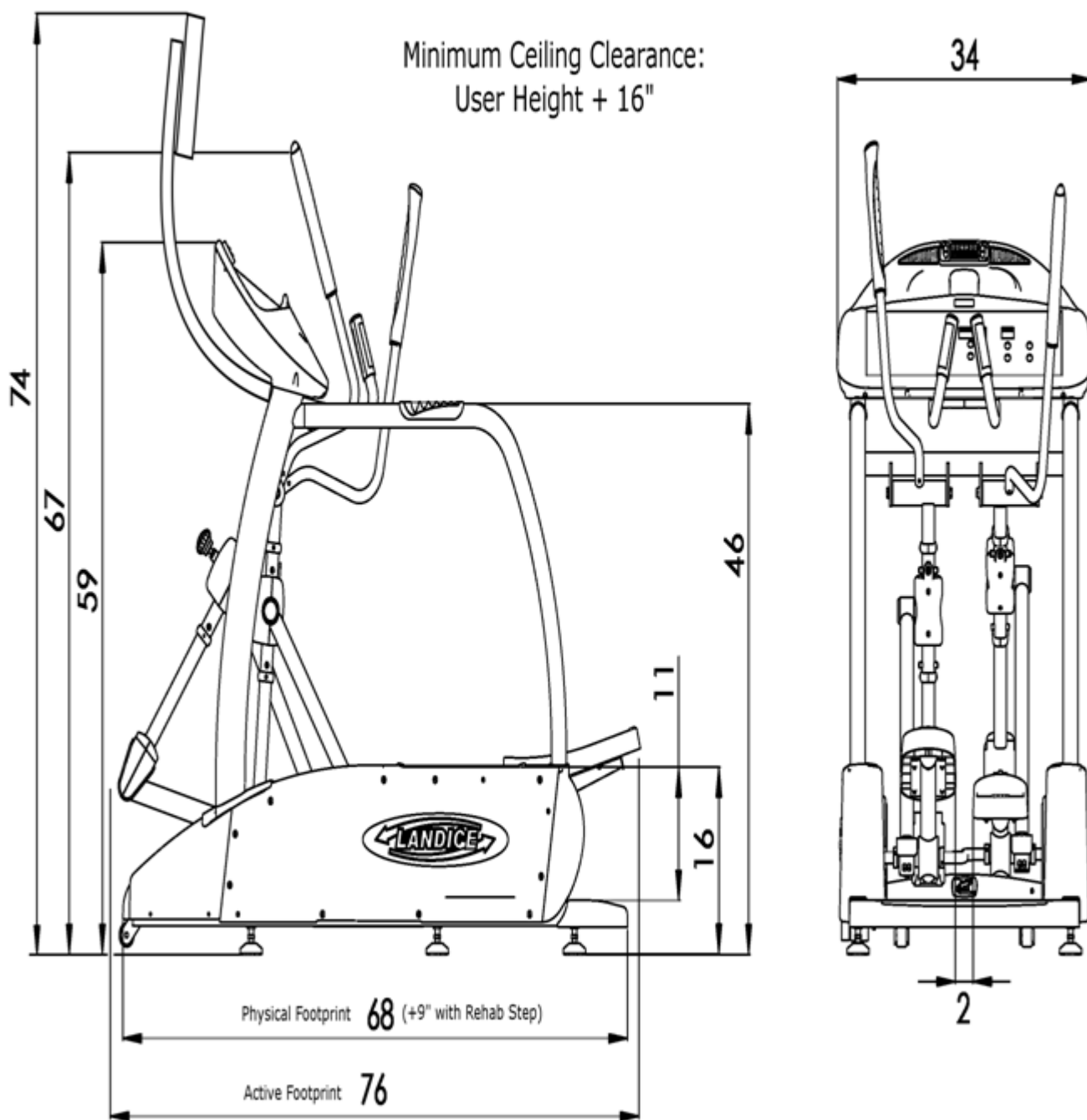
10. Connect the cable line to the inside of the motor cover before securing it. Then mount motor cover to frame



11. Connect one female end of the "Y-shaped" AC power splitter into the main power outlet located at the motor cover. Connect the other female end into the power cord from the LVS TV. Connect your line cord into the male end of the AC power splitter.



# E7/E950 DIMENSIONS



ALL DIMENSIONS IN INCHES

## E7/E9 ELLIPTICAL CONTROL PANEL & FEATURES



### EXECUTIVE ON ALL E7 & E9 MODELS

**Production Date:** July 6, 2010 Serial# E0-10026

**Control Panel Features:** 8.5 inch computer-animated video display, Chest Strap and Contact Heart Rate Crossbar, 5 Built-in programs, 5 User-defined programs, 6 Fitness Tests: Balke, Firefighter, Army, Navy, USMC & USAF

**Electronics:** Relay board, Brake controller.

**Home & Commercial Settings:** Level 1-20 Effort Levels, MPH, REV/MIN, or KMH



### CARDIO ON ALL E7 & E9 MODELS

**Production Date:** February 12, 2008, Serial# E0-10020

**Control Panel Features:** LCD Display windows, Chest Strap and Contact Heart Rate Crossbar, 5 Built-in Programs, 5 User-defined programs, 3 Fitness Tests: Balke, Firefighter, & Army, 2 Built-in heart rate monitoring programs, 2 User-defined heart rate monitoring programs.

**Electronics:** Relay board, Brake controller.

**Home & Commercial Settings:** Level 1- 20 Effort Levels, MPH, REV/MIN, or KMH.





### PRO SPORT ON ALL E7 & E9 MODELS

**Production Date:** February 12, 2008, Serial# E0-1001

**Control Panel Features:** LCD Display windows, Chest Strap and Contact Heart Rate Crossbar, 5 Built-in Programs, 5 User-defined programs,

**Electronics:** Relay board, Brake controller.

**Home & Commercial Settings:** Level 1- 20 Effort Levels, MPH, REV/MIN, or KMH.



### PRO TRAINER ON ALL E7 & E9 MODELS

**Production Date:** February 13, 2008, Serial# E0-10004

**Control Panel Features:** LED digit display, Chest Strap and Contact Heart Rate Crossbar, 5 Built-in Programs, 2 User-defined programs.

**Electronics:** Relay board, Brake controller.

**Home & Commercial Settings:** Level 1-20 Effort Levels, MPH, REV/MIN, KMH.

### **Accessing Features on the E7/E950 Elliptical**

To access functions, turn Elliptical off and press and hold first button listed then press next button listed. Release ALL buttons at same time to access feature.

#### **Executive Trainer 2**

- |   |                              |
|---|------------------------------|
| 1) MENU / START   | Diagnostic mode & Open Loop  |
| 2) MAIN MENU, go to SETUP,<br>go to UNITS   | Configures Metric or English |
| 3) UNITS ( - ) / PAUSE / START  | Reboots                      |
| 4) With unit off, press in this order:<br>top left & top right center screen<br>buttons and the START button<br>at the same time. | Resets hours and miles       |

#### **Cardio Trainer 4**

- |                              |                              |
|------------------------------|------------------------------|
| 1) ENTER / START             | Diagnostic mode & Open Loop  |
| 2) Display (+) & (-) / START | Self-Diagnostics             |
| 3) MANUAL / PROGRAMS / START | Configures Metric or English |
| 4) UNITS (-) / PAUSE / START | Reboots                      |
| 5) 1 / 5/START               | Resets hours and miles       |

#### **Pro Sport Trainer 4**

- |                              |                              |
|------------------------------|------------------------------|
| 1) ENTER / START             | Diagnostic mode & Open Loop  |
| 2) Display (+) & (-) / START | Self-Diagnostics             |
| 3) MANUAL / PROGRAMS / START | Configures Metric or English |
| 4) UNITS (-) / PAUSE / START | Reboots                      |
| 5) 1 / 5/START               | Resets hours and miles       |

#### **Pro Trainer 2**

- |                                      |                              |
|--------------------------------------|------------------------------|
| 1) DISPLAY / START                   | Diagnostic mode              |
| 2) Speed (+) / START                 | Open Loop Speed              |
| 3) SPEED (-) / ELEVATION (-) / START | Configures Metric or English |
| 4) PAUSE / START                     | Display Software version     |
| 5) WEIGHT INPUT / PAUSE / START      | Reboots                      |

## ***DEFINITION OF PARTS***

### **Amplifier**

An amplifier is an electronic device that filters sound and allows volume control through the speakers on the High Tech Entertainment Center.

### **Brake Motor**

The brake motor controls the resistance level of your work out.

### **Brake Motor Cable (External)**

The brake motor cable (external) attaches to the brake motor and magnetic flywheel. This cable pulls on a nylon piece inside the magnetic flywheel to increase/decrease resistance when the brake motor engages. The cable will move internal components inside the brake wheel to adjust your resistance.

### **Brake Motor Cable (Internal)**

The brake motor cable (internal) moves magnetic brake shoes inside the flywheel to increase/decrease the level effort.

### **Brake Motor Harness**

The brake motor harness attaches to the brake motor and relay board. This harness transfers voltage and data between the relay board and brake motor for level effort change.

### **Crank Arm**

The crank arm attaches to the crank shaft and stride arm assembly. This arm coordinates the movement of the stride arm with the crank shaft.

### **Crank Arm Cap**

The crank arm cap covers the top of the crank arm and bearing.

### **Crank Bearing**

The crank bearing is part of the crank assembly. The crank side arm attaches to the bearing for stride movement.

### **Center Drive Shaft Assembly**

The center drive shaft assembly provides clockwise and counterclockwise rotation for stride movement. This assembly consists of pedal rollers, crank bearings, nylon sleeves and locking collars.

### **Control Heart Rate Crossbar (CHR)**

The contact heart rate handgrip will provide the user heart rate reading during use.

### **Drive Belt**

The drive belt rotates the drive pulley assembly and braking system.

**Drive Pulley Assembly**

The drive pulley assembly allows the center drive shaft assembly to rotate. This consists of a spindle and magnetic disc for the speed sensor.

**Drive Wheel Assembly**

The drive wheel assembly attaches to the arm pinion and crank assembly. The assembly will run concurrently with the crank shaft. This does not have the drive belt.

**Faceplate**

The faceplate overlay is found on the Pro Trainer model and is screwed onto the upper display board.

**Fan**

The fan blows cool air during workouts. This is attached inside the high tech entertainment center.

**Fan Control Buttons**

The fan control buttons allow the customer to control the fan speed.

**Footpad**

The footpad (gel insert) is the cushion inside the pedal.

**Harness, Main upper**

The upper harness transmits data from the upper board to the relay board.

**HRC Dual Receiver**

The HRC dual receiver takes transmission signals from the chest strap or CHR crossbar and converts it to a digital signal to display heart rate info on the upper console.

**Isolation Damper**

The isolation damper is a nylon piece that isolates the crank arm from the crank bearing to prevent metal on metal noise.

**Leveling Feet**

The elliptical has 6 leveling feet to level the equipment and prevent it from rocking.

**Line Cord**

The line cord supplies power from the wall outlet to the elliptical.

**Locking Collars**

The locking collars slide onto the nylon spacers to lock them down and prevent the crank bearing or pedal roller from moving left or right while the machine is in use.

**Magnetic Brake Wheel**

The magnetic brake wheel provides mechanical resistance for user's performance. The brake wheel uses magnetic force to provide mechanical resistance for different levels of performance.



**Membrane Panel**

The membrane panel sends commands to the upper board when the customer presses one of the buttons.

**Motor Shroud Cover**

The motor shroud cover is at the front of the machine to cover the relay board and transformer.

**Moving Handlebar Grip**

The moving handlebar grip is a foam grip that slides over the handlebar on the stride assembly. This allows the user to comfortably grip the handlebar while using the machine.

**Nylon Spacers**

White nylon spacers that crank bearings, locking collars and pedal rollers slide onto allow easy removal or adjustments.

**Pedal Roller**

The pedal roller is hard, concave shaped plastic part with bearings inside. It spins on the center drive shaft when force from the user's stride pushes the pedal tube. The edges are flared out so that the pedal tube stays centered on the roller.

**Pedal Tube**

The pedal tube bolts to the end of the stride arm and rides on the pedal roller. This part takes the force from the user's stride and moves the crank arm & shaft to create an elliptical motion.

**Relay Power Supply Board**

The relay board takes power from the upper display board to supply power to the fan and speakers inside the high tech entertainment center.

**Rear Step**

The rear step platform is located at the rear of the elliptical.

**Relay Board**

The relay board powers the upper board and sends a command to the brake motor for resistance.

**Shroud Cover**

The shroud covers are plastic covers around the inner and outer part of the frame.

**Speaker**

The speaker allows sound to be emitted from an \*iPod\* or MP3 player.

**Speaker Control Buttons**

The speaker control buttons allow the user to control the volume for the \*iPod\* or MP3 player.

**Spindle**

The spindle is a metal clamp that attaches to the drive pulley and locks the center drive shaft into place.

**Spindle/Frame Bearings**

The spindle/frame bearing is located inside the frame and allows the spindle to rotate.

**Stride Arm Assembly**

The stride arms are bolted to the upright. The crank arm and pedal tube attach to this arm. The arm is adjustable for user stride comfort.

**Stride Adjustment Covers**

The stride adjustment covers are located over the stride adjustment knuckle.

**Stride Adjustment Knob**

The stride adjustment knob allows the user to adjust the stride and locks the stride in place after user has set it to desired height.

**Stride Adjustment Knuckle**

The stride adjustment knuckle attaches to the stride t-handle, adjustment knob and crank arm. It allows the crank arm to move up and down when the user adjusts the stride.

**Transformer**

The transformer takes AC voltage from the line cord and converts it to DC voltage to power the relay board and upper display.

**Upright**

The upright frame portion of machine consists of the high entertainment center, upper display, fixed handrails, stride arms, contact heart rate crossbar and VESA-D Bracket (optional).

**Upper Display Board**

The upper display board is the electronic device that displays the user's effort level, time, distance, calories, heart rate and speed and performs commands given by the membrane panel or faceplate. Also receives feedback from the relay board to confirm correct level effort and speed.

**VESA-D Bracket**

The VESA-D bracket (optional) gets mounted underneath the bottom base of the upright to support up to a 24" TV screen.

## TESTING COMPONENTS

### 1. AMPLIFIER:

The amplifier takes 12V dc from the power supply board to power up the speakers. When the user presses the volume control buttons, the amplifier increases/decreases its voltage to control volume. You can measure voltage going into the amp to make sure it's powering up or measure voltage out of the CN7 harness to test the volume control. Please refer to the High Tech Entertainment Voltage Reading spec sheet in this manual for further info.

### 2. BEARINGS:

Bearings are used to allow mechanical parts to rotate when a force is applied. They can make noise or give a binding feel when they start to fail. You can diagnose the bearings by listening to them with an automotive stethoscope or place your finger in the inner diameter of the bearing and slowly rotate it to see if you hear a noise or feel a binding point while rotating it.

### 3. BRAKE MOTOR:

Remove the brake motor from the drive pulley bracket and disconnect the harness. Take out the Phillips head screws holding the DC motor in place and pull DC motor out. Using a digital multi-meter set to ohms ( $\Omega$ ), place your meter probes inside the clear insulation across the yellow and orange wires. You are measuring resistance so you do not need to observe polarity.

- Turn knob of pot completely counterclockwise. Then slowly turn the knob clockwise and you should measure  $1.5\Omega - 4.6K\Omega$ .
- Turn knob of pot completely counterclockwise and you should measure  $4.6K\Omega - 1.5\Omega$

Now place meter probes across red and orange.

- Turn the knob of the pot completely clockwise. Then slowly turn the knob counterclockwise and you should measure  $4.6K\Omega - 1.5\Omega$ .
- Turn knob of pot completely clockwise and you should measure  $1.5\Omega - 4.6K\Omega$ .

Now place meter probes across yellow and red.

- Total resistance should be  $4.6K\Omega$

### 4. COOLING FAN:

This fan is powered and controlled by the power supply board located inside the High Tech Entertainment Center. If the fan does not turn on or only runs at one speed make sure that it is receiving proper voltage out of the power supply board. Please refer to the High Entertainment Center spec sheet in this manual for further info.

## **5. FACEPLATE:**

Pro Trainer (PT) models utilize a faceplate. The faceplate is designed as a passive panel. This part has no mechanical or electrical components that can fail. However, if you press a key and it fails to respond, or if there appears to be a button that is always pressed, check for proper display board spacing. When the user presses a key (pushes thru the faceplate) they activate a switch mounted on the upper display board. If the display board to faceplate distance is too great, the display board switch will not be fully activated and will result in a dead response. Conversely, if the faceplate is too close (touching) to the display board a button will be activated.

## **6. HEART RATE RECEIVER:**

The heart rate receiver runs off DC voltage supplied from the upper display board. The display board will power the receiver by sending 5Vdc across the black and red wires. When the heart rate system receives a transmission signal from the chest strap or Contact Heart Rate grips, it will send a low DC voltage signal back to the upper board across the yellow and black wires. Please refer to the heart rate diagnostic section of this manual for further info.

## **7. MAGNETIC FLYWHEEL:**

The magnetic flywheel consists of 2 brake cables and magnetic brake shoes to increase and decrease the effort level. The external brake motor cable pulls or releases on the magnetic brake shoes to change the effort level. This applies resistance to the drive pulley and belt. If the effort level feels really difficult at level 1, or resistance does not feel like it is changing, that is a good indication of a broken brake cable.

## **8. MEMBRANE PANEL:**

The membrane panel has small micro switches laminated inside that transmit the user's commands into treadmill functions. Enter "Diagnostic Mode" (see Accessing Diagnostic Features) to confirm proper operation of the membrane panel. In this test mode you will be able to check each key on the membrane panel by pressing a key. You will hear an audible beep and also see a numeric code appear in the main display window. There is a numeric code assigned to each key on the panel (except the STOP key). For a complete list of these codes see the chart on **E7 Display Button Feedback**. If you do not hear a "BEEP" or see the proper code appear, then the key is bad and the membrane panel must be replaced.

## **9. PEDAL ROLLERS**

The pedal rollers have a molded material that the pedal tubes ride on to keep the pedal tube centered during its rotation. The molded material wraps around a sleeve that has bearings at either end. The bearings allow the pedal roller to rotate on the crank shaft as the customer applies force on the pedal tubes. Pedal rollers can be inspected for failure by lifting up on the pedal tube; place your fingers in center of the roller with one hand, rotate the pedal roller with the other hand and see if you feel a bump along the center of the roller. If so then it needs to be replaced. Slowly rotate the pedal roller back and forth to feel if the bearings are binding and causing noise. If the bearings are bad the pedal roller must be replaced.

## **10. POWER SUPPLY BOARD:**

This board is powered by DC voltage from the upper board. This board powers up the fan and amplifier. It also regulates the voltage for volume and fan speed control. Confirm DC voltage is coming in through the power supply harness. Confirm 12Vdc coming out of this board to the fan and amplifier. Also see if voltage increases or decreases when pressing the fan control + or – buttons.

## **11. RELAY BOARD:**

The relay board runs on DC voltage. The DC voltage is delivered to the relay board from the J1 connector from the power pack. If the green +12V LED is illuminated that means the relay board is being powered from the power pack. If this LED does not come on, check to make sure AC voltage is coming out of the wall. After confirming voltage out of the wall, inspect the line cord for any damage. If the condition of the line cord is fine, then check the connections from the power pack to the relay board. If the connections are fine, then measure DC voltage from the J1 connector. Set your voltmeter to DC volts, place your red test lead at the back of the J1 connector and your black test lead on any of the Phillips head screws that mount the relay board into place. You should measure at least 12Vdc. If the relay board is receiving DC voltage it must be replaced.

## **12. SPEED SENSOR:**

The speed sensor can be checked for proper operation by entering DIAG mode (see Accessing Features on the E7/E9 Elliptical). There is also a yellow SPEED LED soldered to the relay board. The LED will flash ON and OFF when you rotate the drive pulley slowly by hand. This indicates proper operation of the speed sensor. If this flashing does not occur, then check for proper speed sensor gap and check connections. If these are correct, then replace the speed sensor.

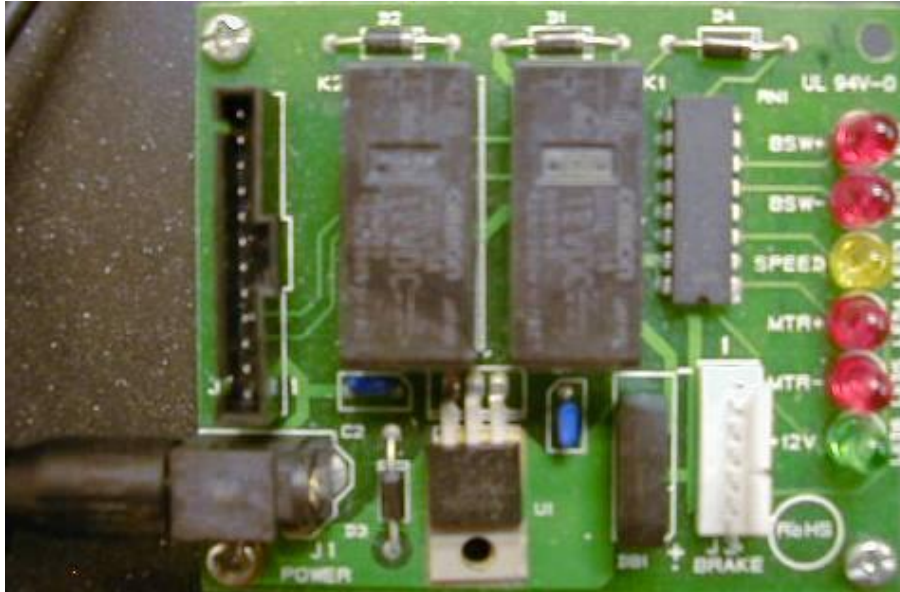
## **13. TRANSFORMER:**

Takes AC voltage from the wall and converts it to DC voltage to power the relay board. A green LED will illuminate on the transformer if its getting AC voltage. The green +12V LED will illuminate if DC voltage is going thru the relay board. You can measure DC voltage out of the transformer by placing your red test lead at the back of the Transformer jack and place your black test lead on one of the screws for the relay board.

## **14. UPPER DISPLAY BOARD:**

The upper board is powered by DC voltage. DC voltage is supplied from the relay board. Confirm the upper display board is getting DC voltage delivered to it. You can measure across the black and green wires from the upper wire harness. If the display board is getting the proper DC voltage supplied to it and it does not light, then perform a membrane bypass test for ET & CT Models (ELLIPTIMILL PT-2/PST-4/CT-4/ET-2 MEMBRANE BYPASS). If the display lights up with the membrane by pass test then the membrane is bad and needs to be replaced. If it's a PT Model check that the Faceplate is properly aligned and spaced and/or remove the Faceplate and hit the START button manually to see if it turns on.

## LED CONFIGURATIONS: RELAY BOARD



The relay board is designed with diagnostic LED lights. The LEDs are color coded according to their specific function. Green light for +12v should always be ON when power is supplied to the elliptical. Here is a list of each LED and what it signifies:

**+12V (green)** – The +12V LED illuminates when DC voltage is being supplied to the relay board. The power pack takes the AC voltage from the wall, converts it to DC voltage and sends it to the relay board.

**BSW+ & BSW- (red)** – These LEDs tell you if the upper board is sending a signal to close the relays on the board. When the LED lights, it tells you that the coil on the relay is being energized.

**MTR+ & MTR- (red)** – These LEDs illuminate when DC voltage is being supplied to the brake motor. When this LED lights the relay has energized and is sending DC voltage to the brake motor.

**SPEED (yellow)** – The speed LED flashes on and off (relative to rotation of the drive pulley) when the speed sensor is operating properly.

# **E7-E950 SERIES DISPLAY**

## **BUTTON FEEDBACK**

(See “Accessing Diagnostic Features”  
then proceed to chart on next page)

	<b>Executive 2</b>	<b>Cardio 4</b>	<b>Pro Sport 4</b>	<b>Pro 2</b>
1	LEFT 1 (TOP)	AGE	AGE	START
2	LEFT 2	0	0	PAUSE
3	LEFT 3	1	1	DISPLAY
4	LEFT 4 (BOTTOM)	START	START	
5	RIGHT 1 (TOP)	4	4	LEVEL (+)
6	RIGHT 2	7	7	LEVEL (-)
7	RIGHT 3	PAUSE	PAUSE	UNITS (+)
8	RIGHT 4 (BOTTOM)	DISPLAY -	DISPLAY -	UNITS (-)
9	BACK	WEIGHT	WEIGHT	
10	MENU	ENTER	ENTER	
11	NEXT	2	2	
12	START	PROGRAM	PROGRAM	
13	PAUSE	5	5	
14	LEVEL (+)	8	8	
15	LEVEL (-)			
16	UNITS (+)	ENTER	ENTER	
17	UNITS (-)	UNITS (-)	UNITS (-)	
18	AGE			
19	WEIGHT	3	3	
20	0	LEVEL (-)	LEVEL (-)	
21	1	6	6	
22	2	9	9	
23	3			
24	4			
25	5	UNITS (+)	UNITS (+)	
26	6			
27	7			
28	8			
29	9	HRC BUTTON		
30	NEXT	MANUAL	MANUAL	
31		LEVEL (+)	LEVEL (+)	
32		DISPLAY +	DISPLAY +	



## ELLIPTIMILL PT-2/PST-4/CT-4/ET-2 MEMBRANE BYPASS

**NOTE: +12-17Vdc must be confirmed across the black and green wires at the upper connector on the wire harness to perform this procedure.**

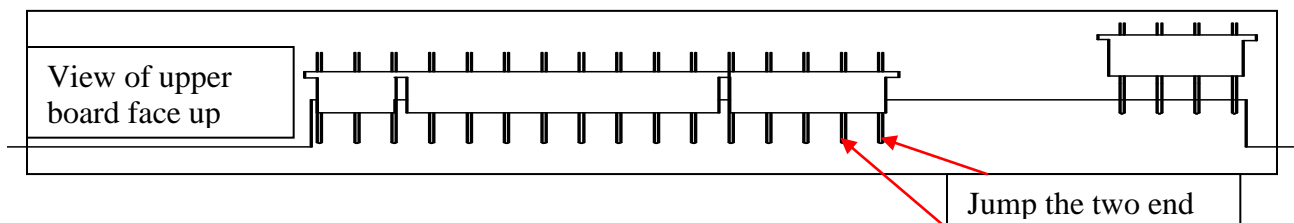
### Tools Required:

- Phillips Head Screwdriver
- Digital Multimeter
- Jumper wire (only if your multimeter doesn't have a continuity setting)
- Towel or bubble wrap.

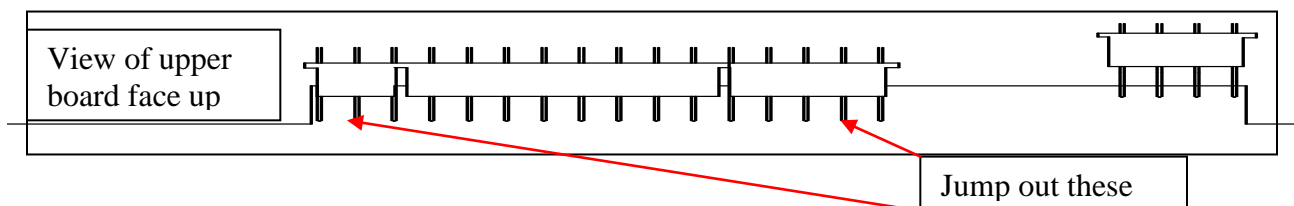
### Instructions:

1. Pull the console forward of the Velcro seal and then disconnect the membrane ribbon cable.
2. Remove all the display board screws holding the upper board to the membrane.
3. Pop the upper display board off the membrane panel but leave the wire harness connected to the upper board.
4. Lay your towel or bubble wrap inside the control panel frame and lay the upper board face up.
5. Set your voltmeter to continuity and touch your two test leads together to make sure they beep. Then proceed to follow the steps below to jump out the START & GND pins on the upper board model you are working on.

### FOR ET-2 UPPER BOARDS:



### FOR PST-4 / CT-4 UPPER BOARDS:



### FOR PT-2 UPPER BOARDS:

Once you lay the upper board on a towel the START button is already on it. Just press it manually and if it doesn't turn on the upper board is bad. If it does then it's a mounting issue.

## HEART MONITOR DIAGNOSIS:

### Contact Heart Rate (CHR) Grips Diagnosis:

1. There should be a constant 4.8-5.0VDC across the red & black wires on CHR Grip harness. If there is 0VDC, then make sure that the Upper Board is powering the h/r receiver board. Measure across RED & BLK wires at the UPDB. If you measure 0VDC then the upper board is bad. If the upper board is sending 5VDC to the receiver but the receiver is not sending 5VDC to the CHR grips then the receiver is bad.
2. If the CHR Grips are working properly this is what you should see with your voltmeter (not touching the grips):

**TABLE A**

WIRES	Vdc	OHMS
RED & BLACK	5Vdc	No reading
RED & WHITE	0Vdc	No reading
BLACK & WHITE	4.85Vdc	1.67M ohms

If the CHR Grip **is** working properly with a Pulse Simulator or when touching the grips, this is what you should see on your meter:

**TABLE B**

WIRES	Vdc	OHMS
RED & BLACK	5Vdc	No reading
RED & WHITE	Voltage fluctuation between 3.2V – 4.6Vdc *NOTE: Fluctuation will get faster as you increase heart rate*	No reading
BLACK & WHITE	Voltage fluctuation between .3V – 1.5Vdc *NOTE: Fluctuation will get faster as you increase heart rate*	4.5M – 23M ohms *NOTE: Fluctuations will get faster as you increase the heart rate*

If the CHR Grip **is not** working properly with a Pulse Simulator or when touching the grips, this is what you should see on your meter:

**TABLE C**

WIRES	Vdc	OHMS
RED & BLACK	5Vdc	No reading
RED & WHITE	3.2Vdc (reading will be steady)	No reading
BLACK & WHITE	.3Vdc (reading will be steady)	4.5M ohms (reading will be steady)

If you get readings from TABLE B and the console won't output a heart rate reading then the upper board has failed.

**Heart Rate Receiver / Chest Strap Diagnosis:**

1. There should be a constant 4.5Vdc – 5Vdc across the red & black wires on the heart rate receiver harness. If you measure 0Vdc across those two points then the upper board is bad.
2. If the upper board is working properly, this is what you should see on your voltmeter (not touching the grips)

**TABLE A**

<b>WIRES</b>	<b>Vdc</b>	<b>OHMS</b>
RED & BLACK	5Vdc	0 ohms
RED & YELLOW	4.3Vdc	0 ohms
BLACK & YELLOW	0Vdc	9.85M ohms

If the heart rate receiver **is** working properly with your pulse simulator or chest strap, this is what you should see on your voltmeter:

**TABLE B**

<b>WIRES</b>	<b>Vdc</b>	<b>OHMS</b>
RED & BLACK	5Vdc	0 ohms
RED & YELLOW	4.3Vdc	0 ohms
BLACK & YELLOW	Voltage will fluctuate from .6Vdc – 1.4Vdc (Fluctuation gets faster as you increase your heart rate)	Ohms will fluctuate from 9.85M ohms – 20M ohms. (Fluctuation gets faster as you increase your heart rate)

If the heart rate receiver **is not** working properly with your pulse simulator or chest strap, this is what you should see on your voltmeter:

**TABLE C**

<b>WIRES</b>	<b>Vdc</b>	<b>OHMS</b>
RED & BLACK	5Vdc	0 ohms
RED & YELLOW	4.2Vdc	0 ohms
BLACK & YELLOW	.6Vdc (reading will be steady)	9.85M ohms (reading will be steady)






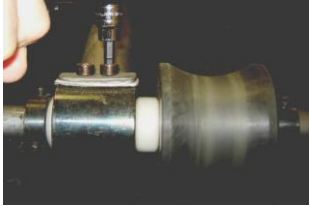
If you get the readings from **TABLE B** and the upper display board still doesn't show a heart rate output then the upper board is bad and needs to be replaced.

## ***E7/ E950 ELLIPTICAL PEDAL ROLLER/CRANK & FRAME BEARING REMOVAL & REPLACEMENT INSTRUCTIONS***

### **Tools Required:**

Phillips Screwdriver  
 4mm, 6mm, 8mm, 10mm Allen Sockets & Wrenches  
 Ratchet  
 Rubber Mallet  
 C-Clamp  
 2 Blocks of wood

### **REMOVING THE CRANK BEARING & PEDAL ROLLER**

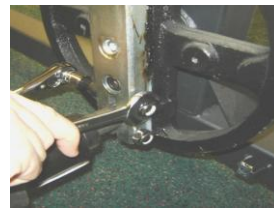
<p style="text-align: center;"><b>STEP 1</b></p>  <p>Using a <b>Phillips Screwdriver</b>, loosen &amp; remove the shroud disc &amp; both inner &amp; outer side covers from the elliptical.</p>	<p style="text-align: center;"><b>STEP 2</b></p>  <p>Using a <b>Phillips Screwdriver</b>, loosen &amp; remove both inner &amp; outer knuckle covers.</p>	<p style="text-align: center;"><b>STEP 3</b></p>  <p>Using an <b>8mm Allen</b> socket head ratchet w/ wrench, loosen the pedal tube assembly nut and bolt.</p>
<p style="text-align: center;"><b>STEP 4</b></p>  <p>Remove the pedal tube assembly from the elliptical.</p>	<p style="text-align: center;"><b>STEP 5</b></p>  <p>Remove the crank arm plastic snap cover from the crank arm.</p>	<p style="text-align: center;"><b>STEP 6</b></p>  <p>Using a <b>6mm Allen</b> socket &amp; ratchet loosen &amp; remove all 4 crank arm bolts from each side of the crank arm assembly.</p>

**STEP 7**

Spin the drive wheel & locate the 1" hole on the wheel. Using a **Phillips Screwdriver** remove the screw on each side of the crank assembly.

**STEP 8**

Using a **4mm Allen** socket head & ratchet loosen all 8 collar screws on the left & right bearing & pedal roller assembly.

**STEP 9**

Using a **10mm Allen** socket head w/ ratchet & wrench, loosen the two crank bolts on each side of the crank assembly.

**STEP 10**

Using an **8mm Allen** socket head & ratchet loosen and remove the main spindle bolt on both sides.

**STEP 11**

Using a **rubber mallet** tap & remove the entire crank arm assembly from the elliptical.

**STEP 12**

Using a **4mm ratchet** loosen all of the collar screws on the left & right bearing & pedal roller assembly. Remove the keyways on either end of the shaft and slide out the bearing assembly.

**STEP 13**

Using a **flat tip punch**, tap out the white nylon plastic pedal & crank sleeves then install the replacement parts.

## REMOVING FRAME BEARINGS

**TO REMOVE FRAME BEARINGS- Follow "Removing Crank Bearing and Pedal Roller" steps until you reach Step 10 then continue below:**

### STEP 10



Using an **8mm Allen** socket head & ratchet loosen and remove the main spindle bolt on both sides.

### STEP 11



Once the main spindle bolt is removed slide out the wheel and spindle assembly from the elliptical.

### STEP 12



Using a **screwdriver & mallet** tap out the frame bearing.

### STEP 13



Using a fine grit piece of sandpaper clean off any residue left in the hub of the elliptical. Apply a little grease on the hub of the elliptical and bearing.

### STEP 14



Using the **rubber mallet** gently tap both bearing in place on either side of the elliptical.

### STEP 15



Using the **clamp** and two pieces of wood press the new set of bearings back into place.



## REINSTALLING CRANK SHAFT

ILLUSTRATION A



STEP 1  
ILLUSTRATION B



ILLUSTRATION C



### Rotate the crank assembly 180 degree.

- To reinstall the crank shaft assembly, insert one end of the crank between the spokes at one end of the drive wheel assembly as shown in **Illustration A**.
- Take the other end of the crank shaft, align the key end of the crank assembly with the slots on the spindle and slide it into place making sure the locking collar rest against the spindle as shown in **Illustration B**.
- Rotate the other end of the drive wheel 180 degrees, align the other end of the crank with the slots on the spindle and slide it into place as shown in **Illustration C**.

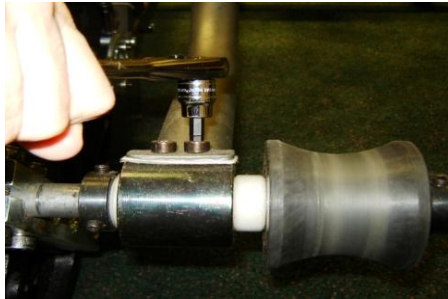
**(Do not tighten the two spindle bolts on the crank assembly.)**

STEP 2



Install both crank arms on the stride arm. Using an **8mm Allen** socket & ratchet install and tighten the stride arm bolt.

STEP 3



Install both of the crank arms on the crank assembly. Using a **6mm Allen** socket & ratchet tighten all of the Allen bolts on the crank assembly.

STEP 4



Install both pedal tubes back on the stride arms and insert the pedal tube assembly nut & bolt. Using an **8mm Allen** socket head ratchet w/ wrench, tighten the pedal tube assembly nut & bolt.

**STEP 5**

Once the pedal tubes are installed, get on the elliptical and rotate the crank arm assembly forward and backwards a few revolutions to properly align the pedal tubes and crank arm assembly on the unit.

**STEP 6****ILLUSTRATION A****ILLUSTRATION B**

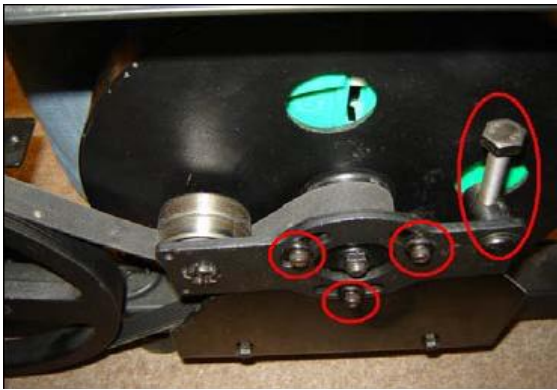
- Once the crank assembly is completely assembled and aligned, using a **10mm Allen** socket head w/ ratchet & wrench tighten down the crank bolts on each side of the crank assembly as shown on **Illustration A**.
- Make sure that the rollers and entire crank assembly are tightly fit together with no gaps before tightening down the collars or they will make noise when in use. Using a **4mm** Allen socket head & ratchet tighten 8 collar screws on the left & right crank bearing and pedal roller collars as shown on **Illustration B**.

**PLEASE CALL LANDICE TECHNICAL  
SERVICE 1-800-526-3423  
FOR FURTHER ASSISTANCE**



## Replacing an Internal Magnetic Brake Cable on E7/E9

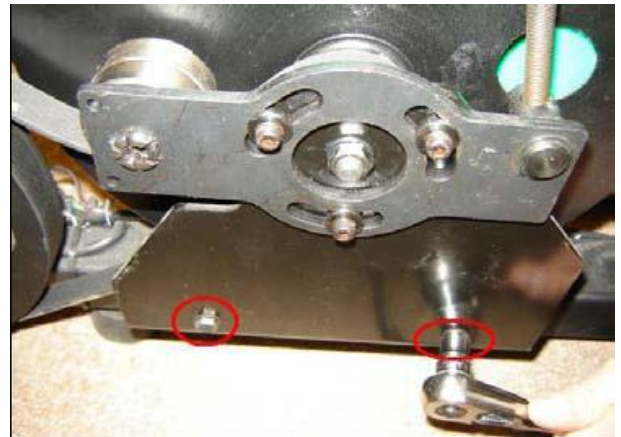
1. Turn on and set Effort Level to 20. Turn off the unit once Level 20 is reached.
2. Take off inner and outer big plastic side covers on the left side (in reference to someone operating the machine) of the unit.
3. Detach the blue motor assembly from the black frame and free the wire from the white nylon spool. **Carefully note how it's wound; you will have to duplicate it later.**
4. Loosen the tension on the magnetic brake assembly. This will involve loosening the three smaller screws, followed by the big tension bolt.



5. Remove the (2) 6 mm socket cap screws at the base of the magnetic brake assembly.



6. Remove the (2) 10 mm bolts that hold the brake assembly brackets together. Be aware that it is a 3-part assembly: screw, nut, and spacer.



7. Remove 9/16" bolts on both sides of the magnetic brake assembly.



8. Carefully pull out the brake assembly and lay it down as shown in the picture.



**9.** Remove the snap-ring from the end of the shaft. Please use a snap-ring pliers tool to protect bearings assembly.



**10.** Remove the magnetic brake from the flywheel using a rubber mallet and gently striking the end where the snap ring was located.



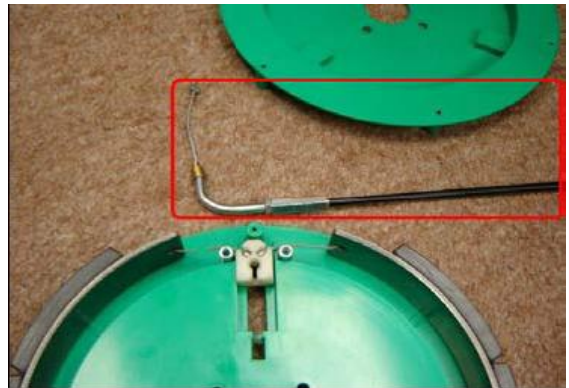
**11.** Unscrew the (4) zinc screws at the base of the shaft. Remove the shaft assembly from the magnetic brake.



**12.** Remove the (4) black oxide screws around the perimeter of the magnetic brake. You will now be able to open it and expose the core.



**13.** Take out the (2) big springs and disconnect the motor cable from the nylon block in the brake assembly.



**14.** Take out the broken brake cable and feed the replacement back into the same position.





**15.** When both cables are in properly and the nylon block is sitting correctly in the channel, carefully reinstall the springs.



**16.** Align the top and gently pop it back on. Screw back on the (4) black oxide perimeter screws.



**17.** Using a pen or screw driver, slide the nylon block up and down to verify brake is working properly on both sides of the magnetic brake.



**18.** If brake is working properly, you can now feed the motor cable back into the nylon block.



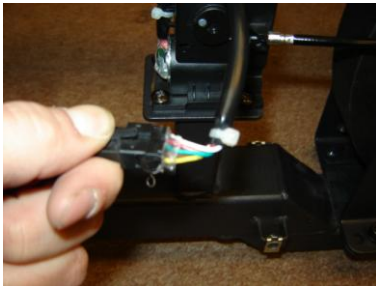
**19.** When installing the shaft assembly back on to the magnetic brake, use the new snap-ring (provided with this kit) and install with snap-ring pliers to ensure a proper fit.

**20.** You can now reassemble the unit following most of these instructions in reverse. ***Remember: When setting the flywheel assembly to the bracket, the nylon block channel should be in view and aligned vertically.***



## **E7/E9 BRAKE MOTOR REPLACEMENT INSTRUCTIONS**

**NOTE: THE LEFT INNER & OUTER SHROUD COVERS SHOULD BE REMOVED BEFORE PROCEEDING WITH INSTRUCTIONS.**



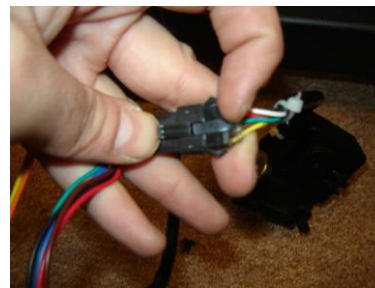
- 1) Disconnect the brake motor harness from the brake motor.



- 2) Loosen the two screws in picture A. Do not take them all the way out as the housing is slotted. Then take out the other two screws illustrated in picture B. You can now slide the brake motor out to remove.

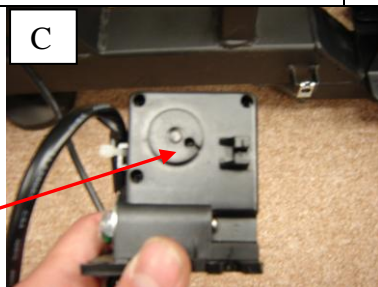


- 3) Remove the brake motor from the elliptical. Unwrap the brake cable from the motor and slide the cable out of the notch.

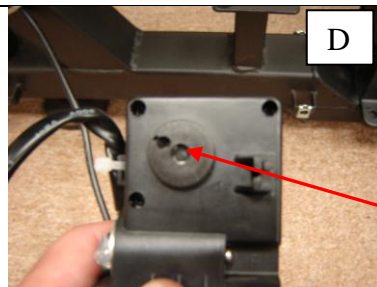


- 4) Reconnect the brake harness to the brake motor. **NOTE: DO NOT ENTER DIAG MODE TO SET THE RESISTANCE. YOU MAY GO PAST LEVEL 1 OR 20 AND BREAK THE MOTOR.**

Turn the machine on by hitting START. The brake motor will automatically adjust itself to Level 1.

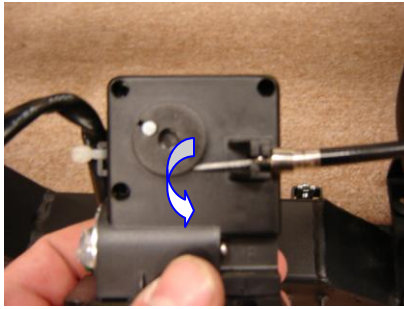


Notch points to 4 o'clock at Level 1

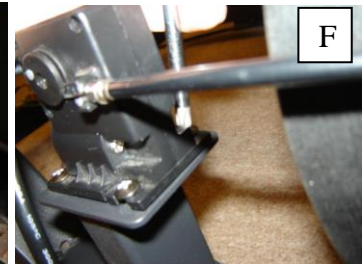
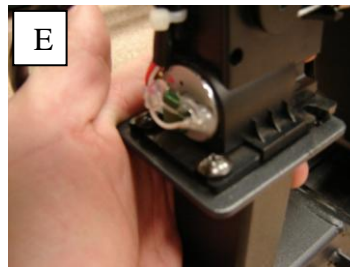


Notch points to 10 o'clock at Level 20.

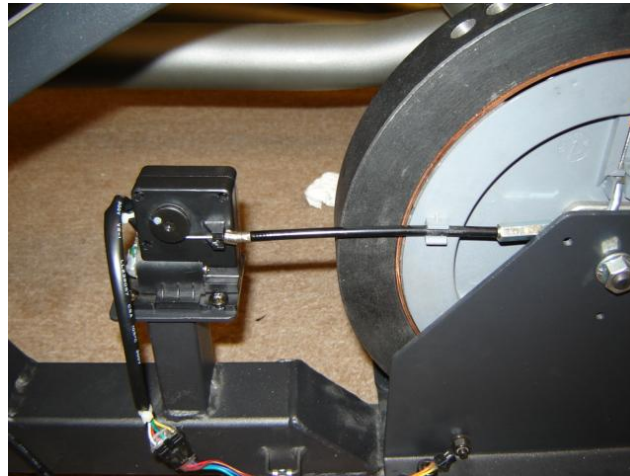
- 5) Look at the notch in picture C. The notch part should be pointing to 4 o'clock at Level 1. When you increase the resistance level to 20, the notch points to 10 o'clock in picture D.



6) Insert the cable back into the notch and wrap the cable under the pulley in a counterclockwise direction.



7) Slide the brake motor into the screws as shown in picture E but **do not** tighten them down. Insert and tighten the two back screws shown in picture F. Then tighten the rest of the screws.

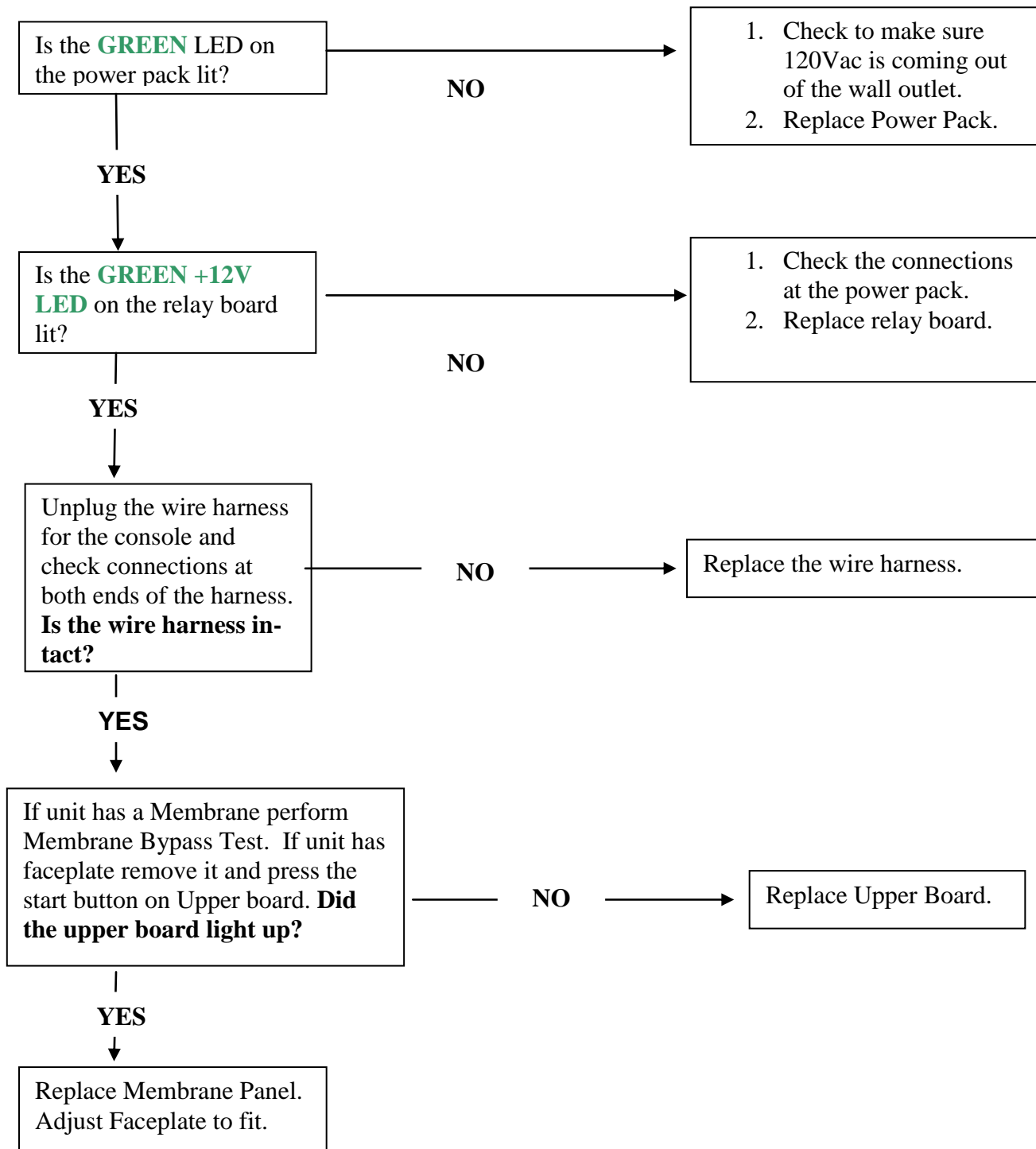


8) After the brake motor is tightened down, clip in the brake cable to the clips on the magnetic flywheel. Test operation in MANUAL mode by hitting START and increase/decrease resistance.

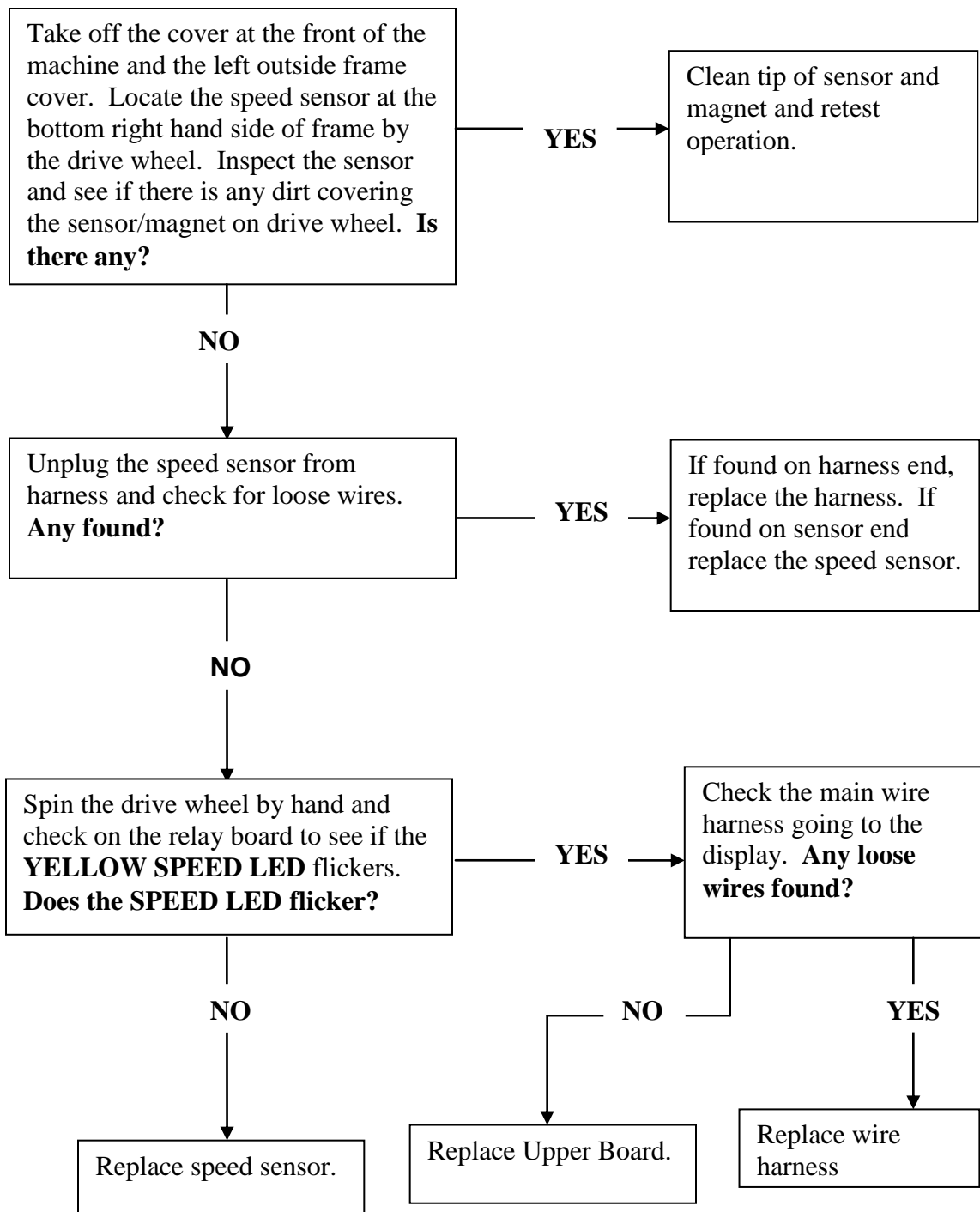
**PLEASE CONTACT THE LANDICE TECHICIAL SERVICE DEPARTMENT**  
**@ 1-800-526-3423 ext. 170 FOR FURTHER ASSISTANCE.**

# Flowcharts to Diagnose Common Problems

## ***PRESS START, MACHINE WONT TURN ON, NO LIGHTS TO THE UPPER DISPLAY***

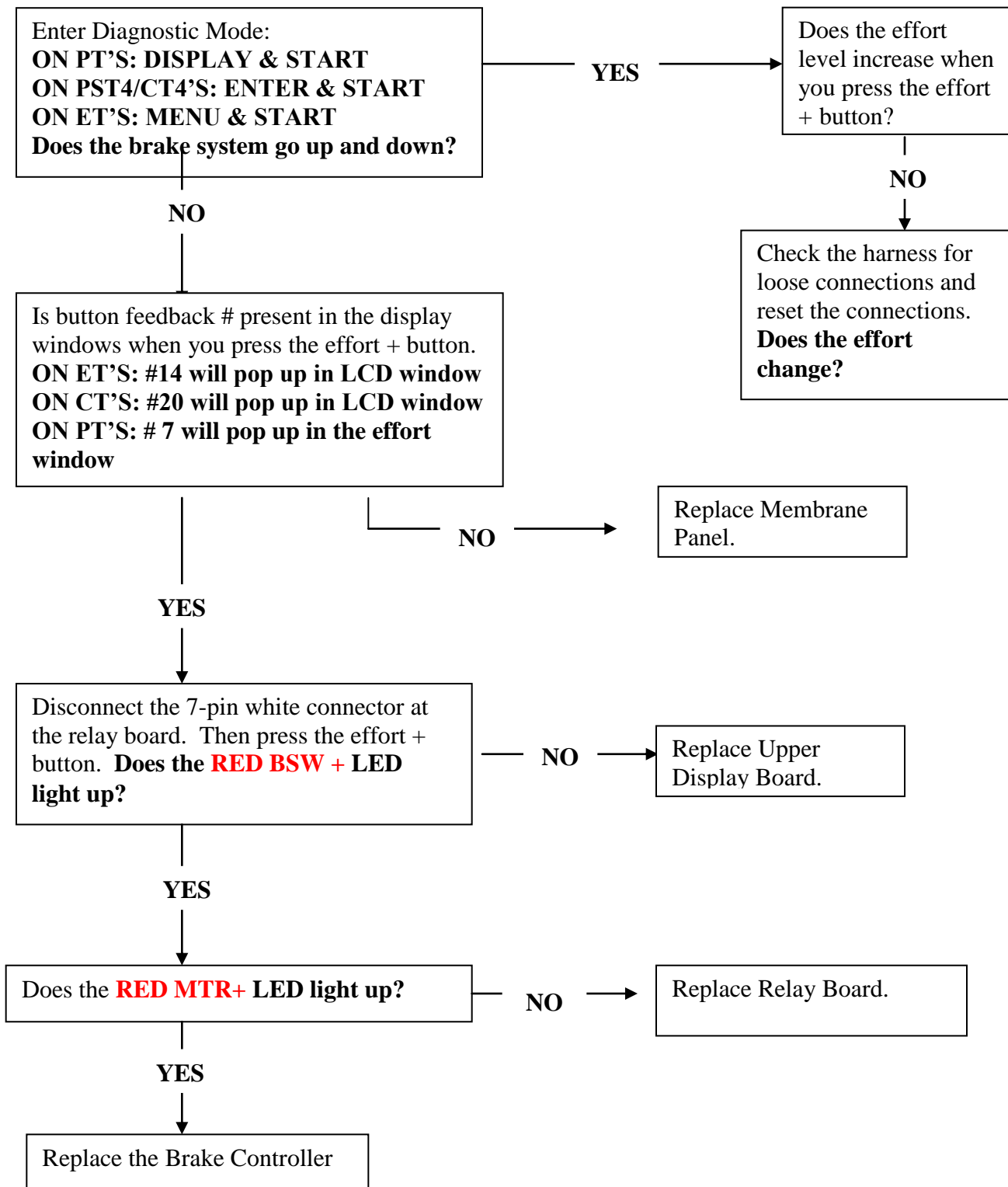


***DISPLAY LIGHTS UP, MACHINE RUNS BUT THERE IS NO SPEED FEEDBACK IN SPEED WINDOW.***

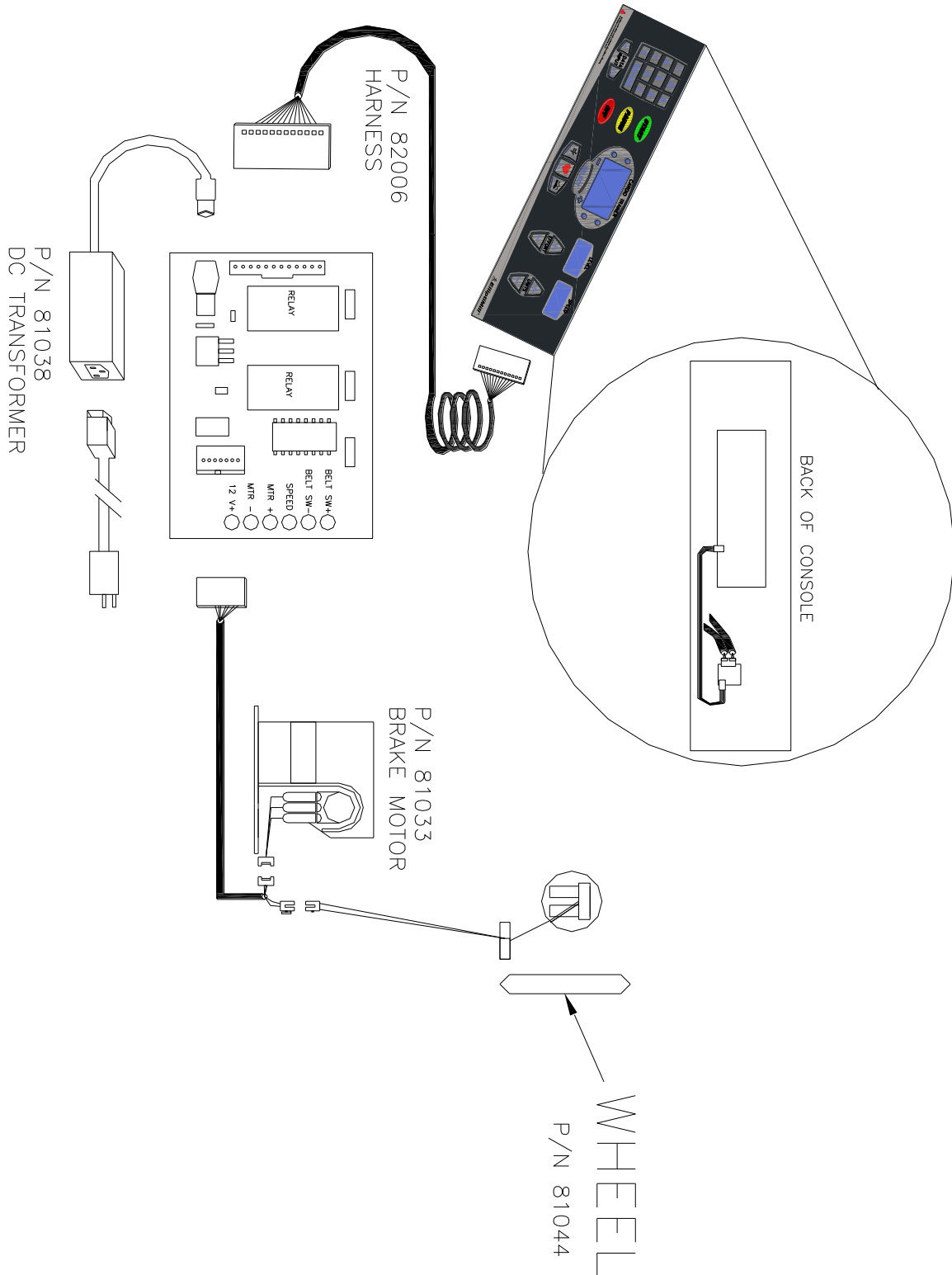




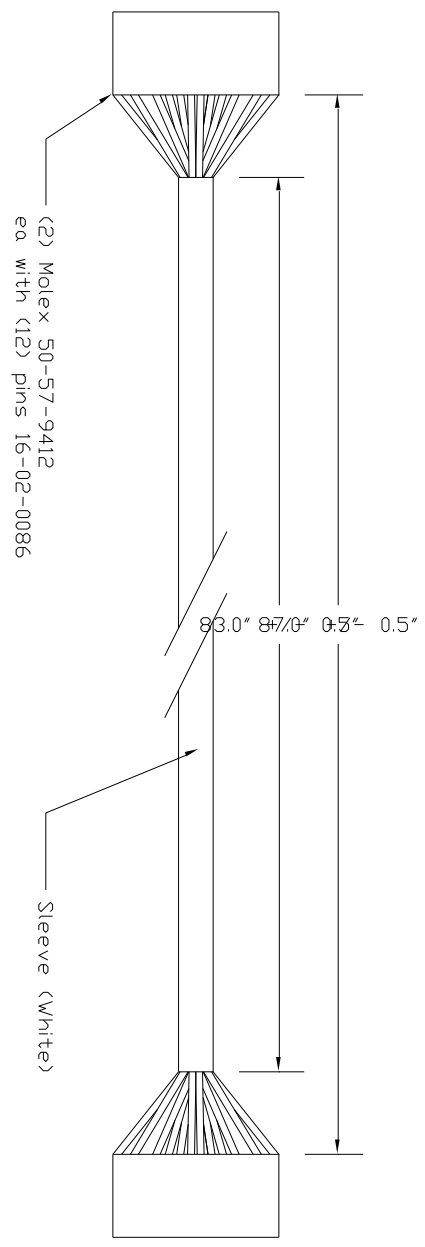
**PRESS START, NO RESISTANCE, ERROR DETECTED IN BRAKE CONTROLLER/ PO ERROR.**



# ELLIPTICAL WIRE SCHEMATIC



# ELLIPTICAL MAIN HARNESS



PIN	COLOR	FUNCTION
1	BLACK	12VDC UNREG
2	GREEN	GROUND
3	PINK	GRADE UP
4	WHITE	GRADE DOWN
5	GREY	BELT DN
6	PURPLE	BELT PWM
7	DARK BLUE	SPEED
8	LIGHT BLUE	GRADE
9	RED	GRADE PWR/OFF
10	BROWN	TD LOWER START
11	YELLOW	DATA UP
12	ORANGE	DATA DOWN

<b>LANDICE, Inc.</b>		
Title Main Harness, Elliptical		
Tolerances .xxx = ±.060 .xxx = ±.030 .xxxx = ±.015 All angles ±.25		
Scale		Drawing No.
Date	Drawn by	Checked by
9/27/77	Ricardo E.	

The logo for LANDICE, featuring the word "LANDICE" in white, bold, sans-serif capital letters on a dark blue rectangular background.

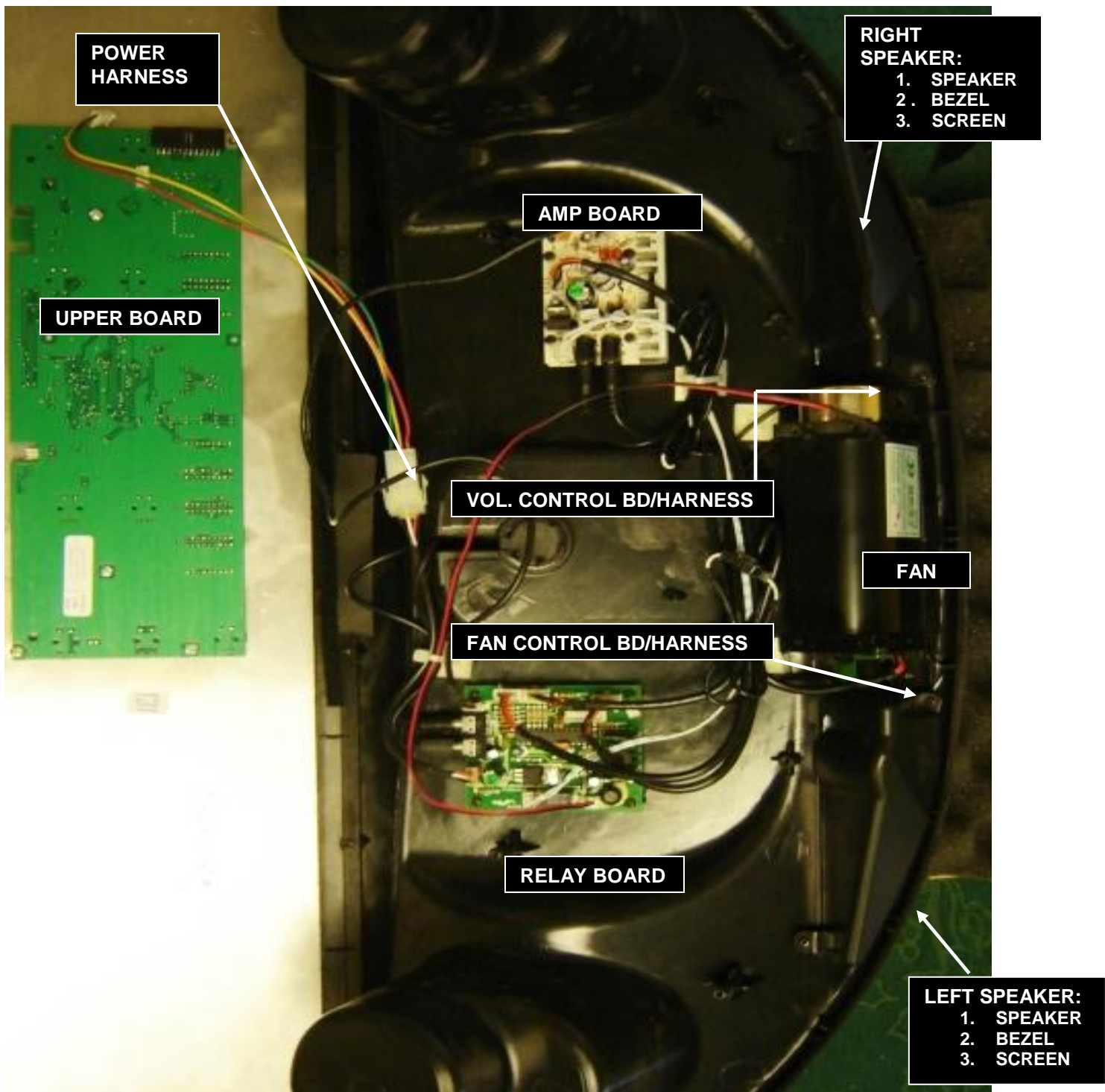
LANDICE, INC.  
111 CANFIELD RD., SUITE A-1  
RANDOLPH, NJ 07869

PHONE: (973) 927-9010  
FAX: (973) 927-0630  
SERVICE@LANDICE.COM

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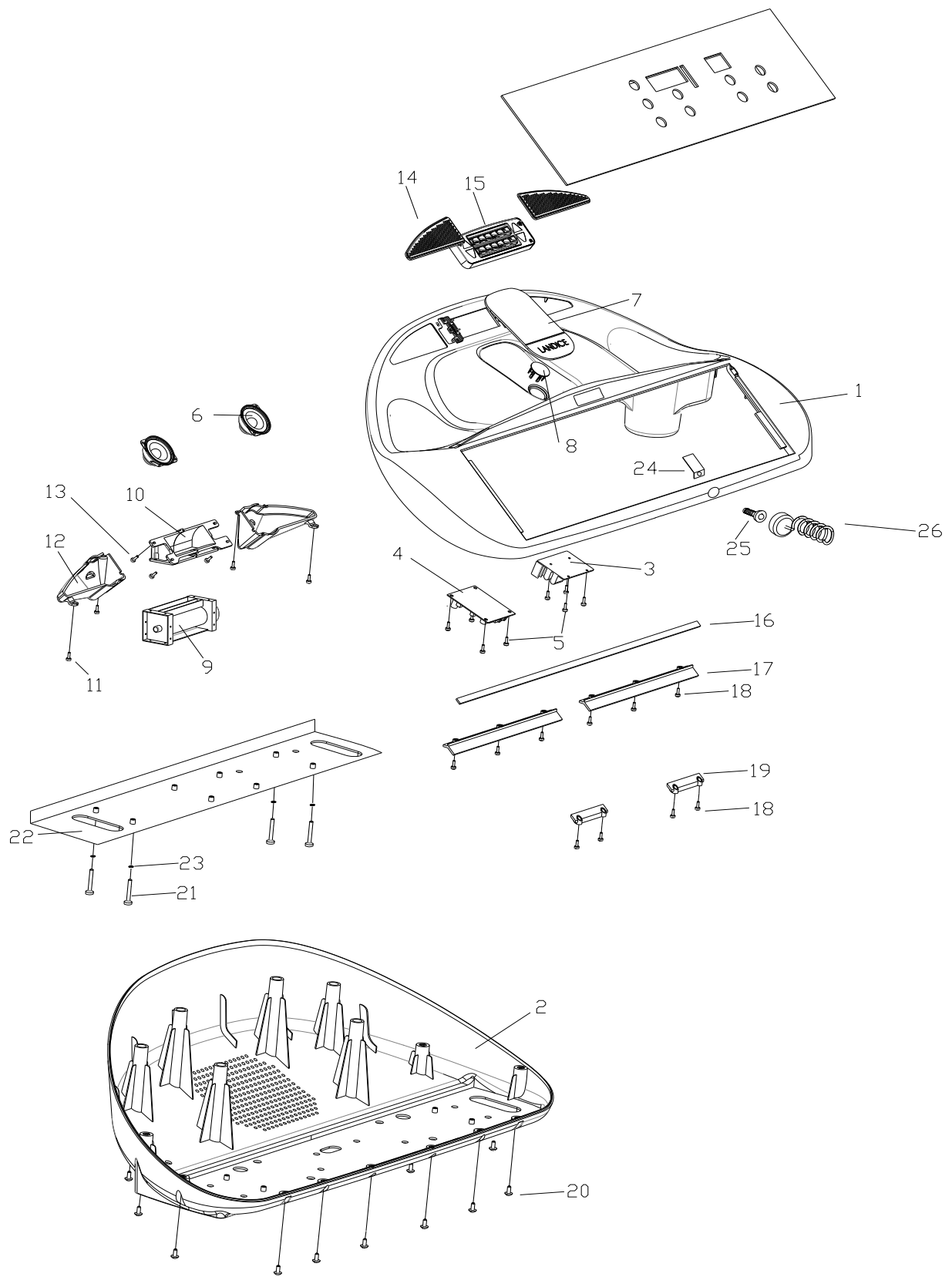
**ELLIPTICAL E7/E950  
HOME & COMMERCIAL  
HIGH-TECH ENTERTAINMENT  
CENTER DIAGNOSTIC  
ADDENDUM**

# HIGH TECH ENTERTAINMENT CENTER PARTS CONFIGURATION

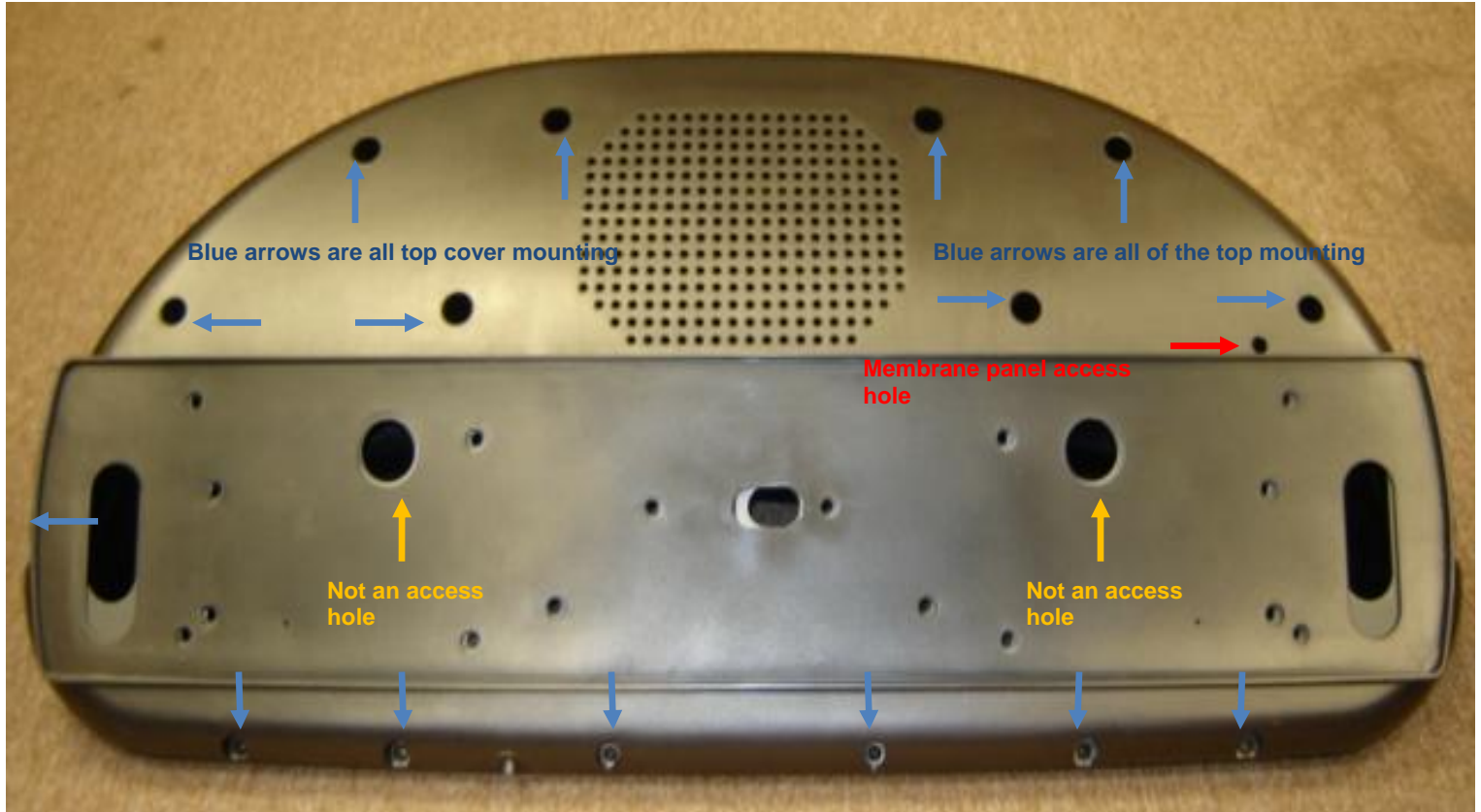


# High-Tech Entertainment Center Explosion Part List

Item Number	Description	Part Number
1	Top	91119
2	Bottom	91118
3	Relay Board	91116
4	Amplifier	91107
5	Board screws	Misc
6	Speakers	91105
7	Pod Grip	70543
8	Plug 1 inch snap	91117
9	Fan	91120
10	Fan Vent	91131
11	Enclosure Screws	M3X10_PPHTS
12	Speaker Enclosure, Right	91129
	Speaker Enclosure, Left	91130
13	Fan Vent Screws	M3X15_PPHTS
14	Bezel, Speaker, Right	91103
	Bezel, Speaker, Left	91104
15	Diverter Assembly (Fan)	70828
16	Velcro Strip 26 ¼ x3/16	70095L
17	Membrane Channel Support, Top	91102
18	Channel Support & board screw	M3x9_PPHTS
19	Membrane Channel Support, Top	91101
20	Screws	M4X10_PPHTS
21	Plate Hex Head Bolt	M8X20_HHB
22	Plate	91132
23	Washer	5/16_FW_BK
24	Flux guide (Treadmill Only)	70821
25	Magnetic Stud (Treadmill Only)	70716
26	Safety Key (Treadmill Only)	71011-NEW



## **HTEC DISASSEMBLING INSTRUCTIONS (ELLIPTICALS)**



**ALL OF THE BLUE ARROWS ARE FOR THE TOP COVER MOUNTING SCREWS.**

**RED ARROW IS THE ACCESS HOLE TO REMOVE THE MEMBRANE PANEL.**



**STEP #1**

A



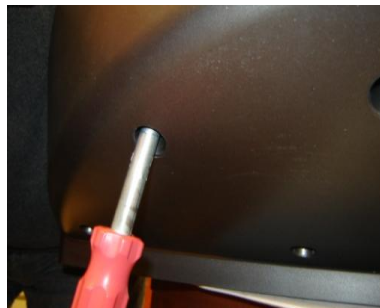
B



C



- 1) Using a long push rod or a Phillips screwdriver insert it through the access hole on the back of the HTEC Assembly as indicated in (Illustration A).
- 2) While pushing through the HTEC Assembly, grab the panel, and remove it completely from the HTEC Assembly as indicated in (Illustration B).
- 3) Do not use any of the two access holes located underneath the control panel to remove the console from the HTEC Assembly as shown on (Illustration C).

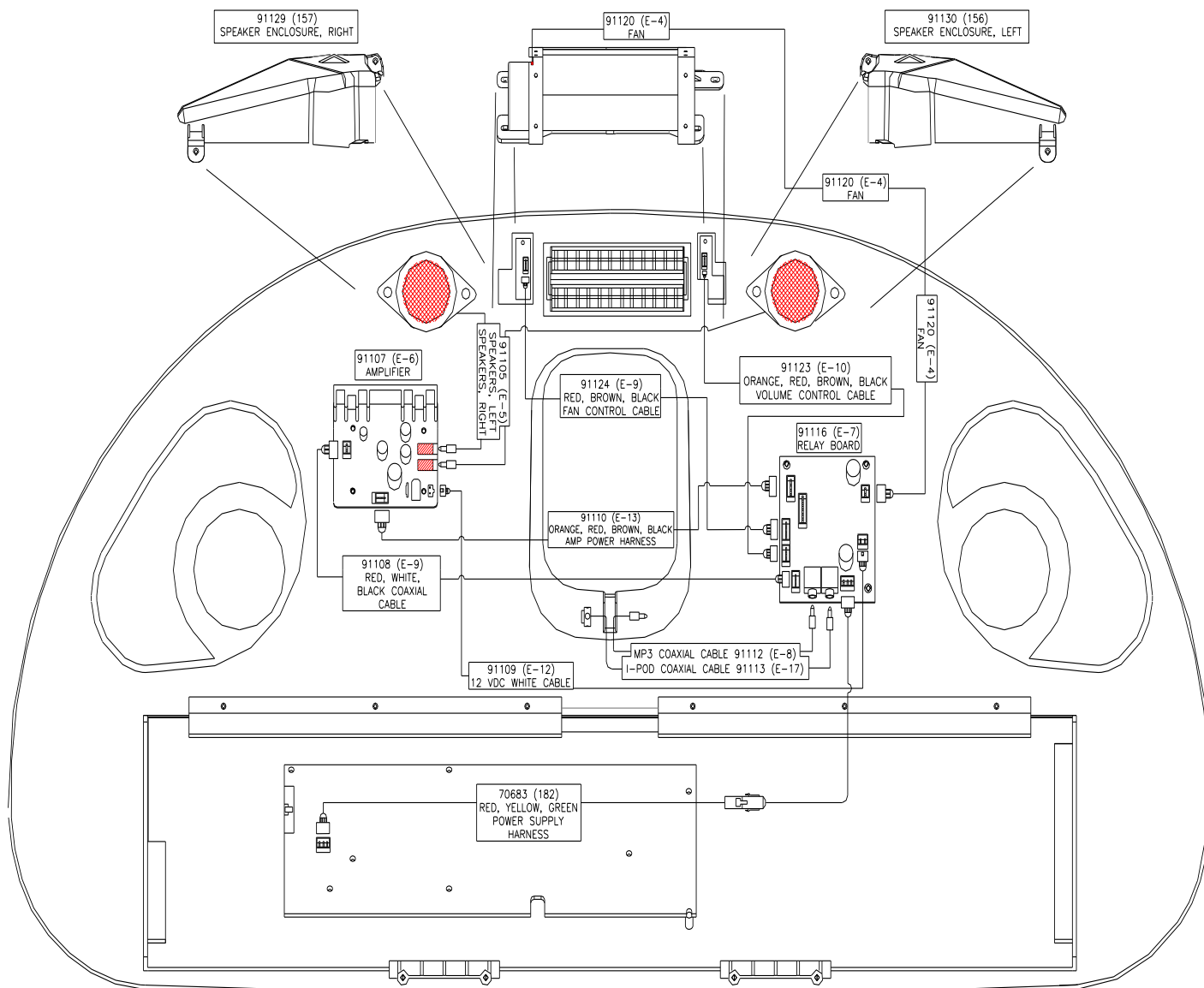
**STEP #2**

- 1) Using a long Phillips screwdriver loosen and remove all of the top cover mounting screws.
- 2) Once all of the screws are removed go ahead and separate the top cover from the HTEC Assembly.

**(All of the screws are shown in blue arrows on the main page.)**

**NOTE: (FOLLOW THE STEPS IN REVERSE TO REASSEMBLE THE HTEC ASSEMBLY).**

# High-Tech Entertainment Center / Wiring Diagram

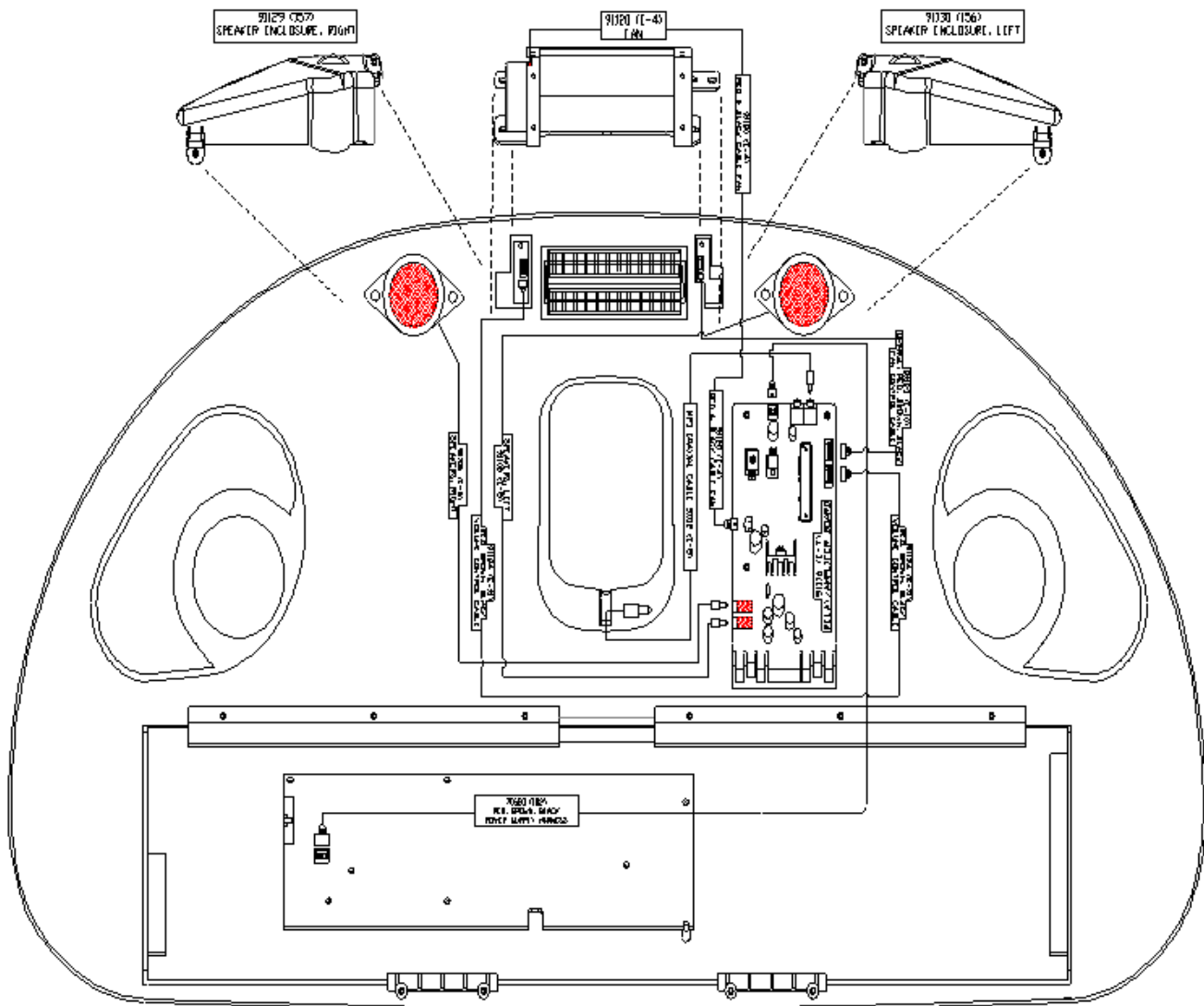


## **INNER POD WIRING DIAGRAM**

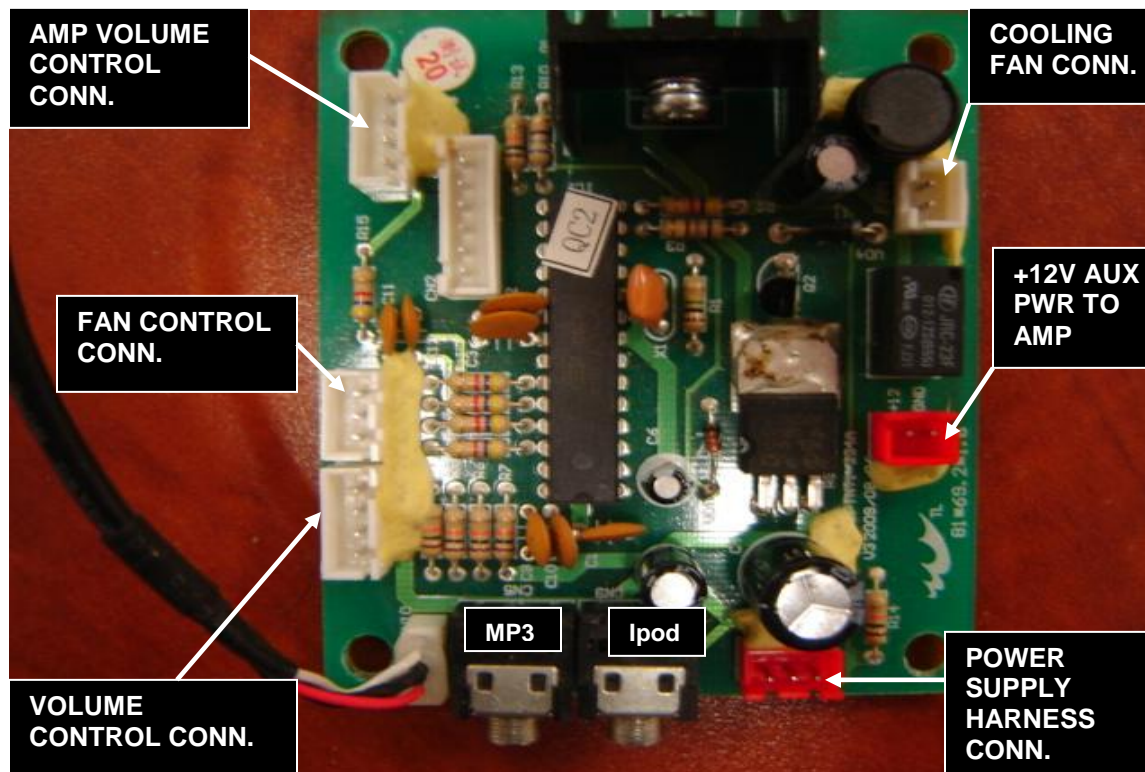
October 13, 2011

# High-Tech Entertainment Center / Wiring Diagram

## SINGLE BOARD



## HIGH TECH ENTERTAINMENT CENTER RELAY BOARD CONFIGURATION.



**+12V AUX PWR to Amp:** Sends +12Vdc thru the white & white/blue (dashed) wires to power up the amplifier.

**Amp Volume Control Connection:** The volume control harness plugs into this board to increase or decrease volume from the speakers.

**Cooling Fan Connection:** Cooling fan plugs into this 2-pin connection to control the speed of the fan. Outputs a variable voltage for fan speed control.

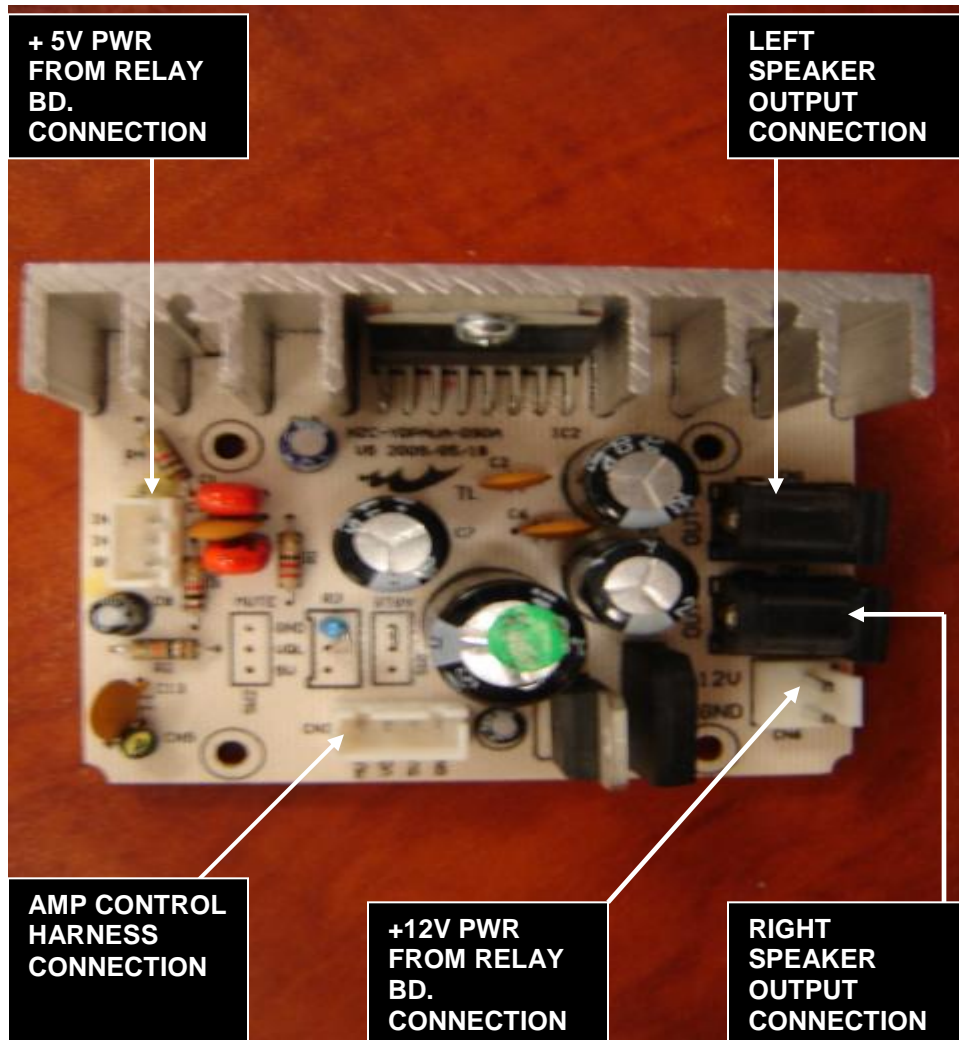
**Fan Control Connection:** Receives a signal from the fan control board to increase or decrease voltage in the relay board for the output voltage for the fan speed.

**iPod Connection:** This connection allows you to use your iPod® by connecting the iPod® harness.

**MP3 Connection:** This connection allows you to connect your MP3 player to allow sound thru the speakers.

**Power Supply Harness Connection:** +12 & +5Vdc travels thru this harness from the upper board to power up the relay board and amp.

## HIGH TECH ENTERTAINMENT CENTER AMP. CONFIGURATION.



**+5V PWR from Relay Bd:** +5Vdc is supplied from the relay board thru the red, black and white wires to power the volume control circuit on the amp.

**+12V PWR from Relay Bd:** +12Vdc is supplied from the relay board thru the white and white/blue (dashed) wires to power up the amplifier board.

**LEFT speaker output:** Sends a signal out of the jack to allow the speakers to emit sound from your iPod or MP3 player.

**RIGHT speaker output:** Sends a signal out of the jack to allow the speaker to emit sound from your iPod or MP3 player.

**Volume Control Harness:** Sends voltage into the relay board for the volume control.

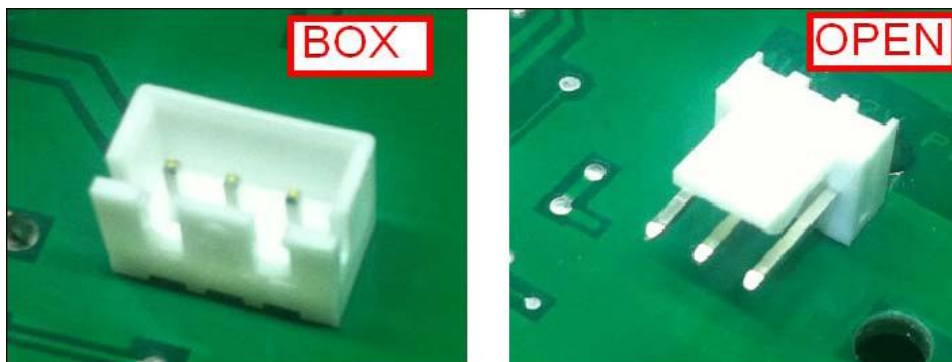
## HIGH TECH ENTERTAINMENT CENTER VOLTAGE TABLE

<b>P/N#70683 (182) / AUX PWR TO RELAY BD.</b>		<b>P/N#91108 (E-9) / RELAY BD TO AMP</b>	
<b>BROWN</b>	+15VDC	<b>RED</b>	+5VDC
<b>BLACK</b>	+15VDC	WHITE	+5VDC
<b>RED</b>	COMMON	<b>BLACK</b>	COMMON
<b>P/N#91109 (E-12) / RELAY BD. TO AMP</b>		<b>P/N#91110 (E-13) / RELAY BD TO AMP</b>	
WHITE WIRE	+12VDC	<b>RED</b>	+5VDC
		<b>BLACK</b>	+5VDC
WHITE / BLUE WIRE	COMMON	<b>BROWN</b>	COMMON
		<b>ORANGE</b>	0VDC
<b>P/N#91123 (E-10) / VOL CTRL TO RELAY BD</b>		<b>P/N#91124(E-11) / FAN CTRL TO RELAY</b>	
<b>RED</b>	+5VDC	<b>RED</b>	+5VDC
<b>BLACK</b>	0VDC	<b>BLACK</b>	+5VDC
<b>BROWN</b>	COMMON	<b>BROWN</b>	COMMON
		<b>ORANGE</b>	+15VDC
<b>FAN VOLTAGE OUTPUT TABLE</b>			
LEVEL 1 (SLOW)		7.0-7.5VDC	
LEVEL 2 (MEDIUM)		9.75VDC	
LEVEL 3 (FAST)		10-11VDC	
<b>VOLUME VOLTAGE OUTPUT TABLE (ACROSS RED &amp; BLACK WIRES FROM 91100)</b>			
OFF		0VDC	
SLOW (1 <sup>ST</sup> CLICK)		1.5VDC	
LOW/MEDIUM (2 <sup>ND</sup> CLICK)		2.0VDC	
MEDIUM (3 <sup>RD</sup> CLICK)		3.0VDC	
MEDIUM/HIGH (4 <sup>TH</sup> CLICK)		4.0VDC	
HIGH (5 <sup>TH</sup> CLICK)		5.0VDC	
<b>FAN CONTROL HARNESS CONTINUITY TEST FOR + &amp; - BUTTONS</b>			
<b>BROWN &amp; BLACK</b>		Get continuity when you press the Fan + button	
<b>RED &amp; BROWN</b>		Get continuity when you press the Fan - button	
<b>VOLUME CONTROL HARNESS CONTINUITY TEST FOR + &amp; - BUTTONS</b>			
<b>BROWN &amp; BLACK</b>		Get continuity when you press the Volume + button	
<b>RED &amp; BROWN</b>		Get continuity when you press the Volume – button.	

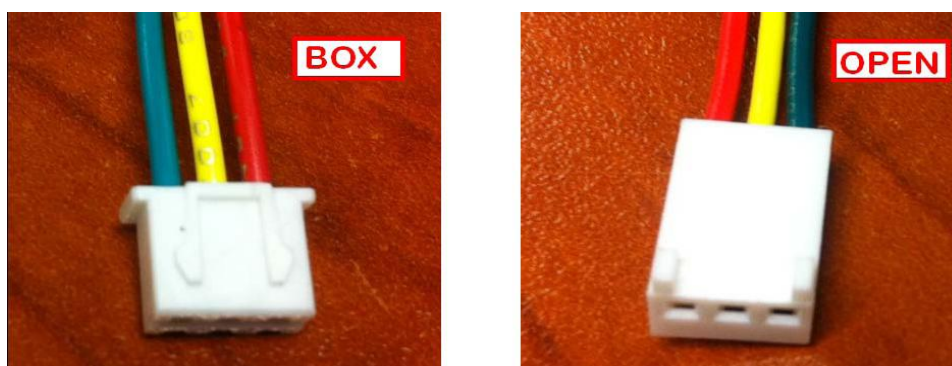


## E7 Fan/Speaker Not Working – OUT OF BOX

1. Identify Connector. On the back of the upper display, you will find an available white 3-pin connector. There are two possible connector types: Box and Open.

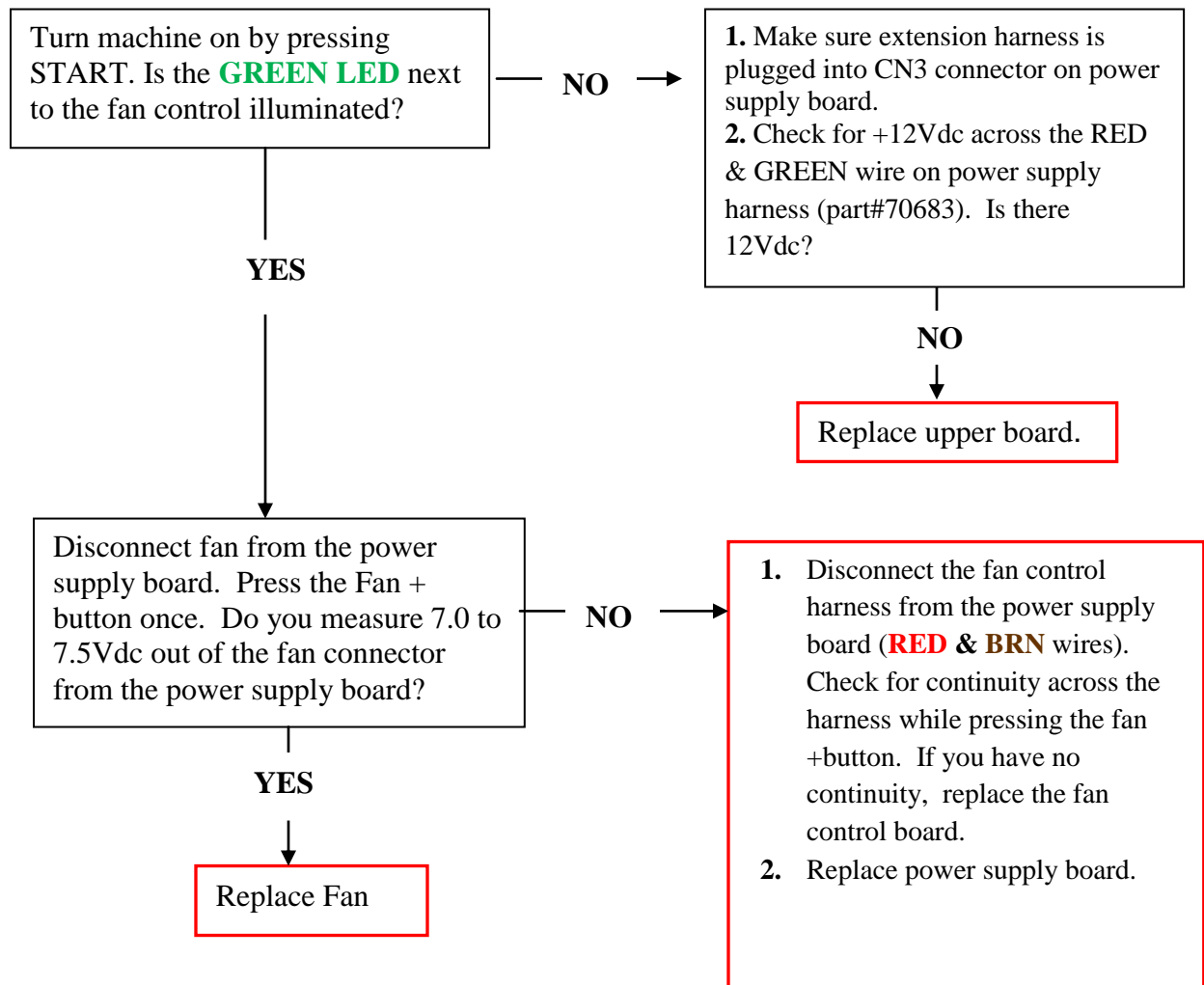


2. Using the correctly specified harness (70683-Box or 70683-Open), connect the upper board to the available 3-pin Molex connector hanging down from the inside of the POD.



***\*\*\*Make sure you are using the correct harness and connectors are going in as intended. Forcing an incorrect connection may result in severe damage to the speakers and fan\*\*\*.***

## DISPLAY LIGHTS UP, FAN WILL NOT TURN ON





## ***FAN RUNS AT ONE SPEED***

Disconnect the fan from the power supply board. **\*\*HAVE THE POWER CORD DISCONNECTED FROM THE MACHINE\*\***

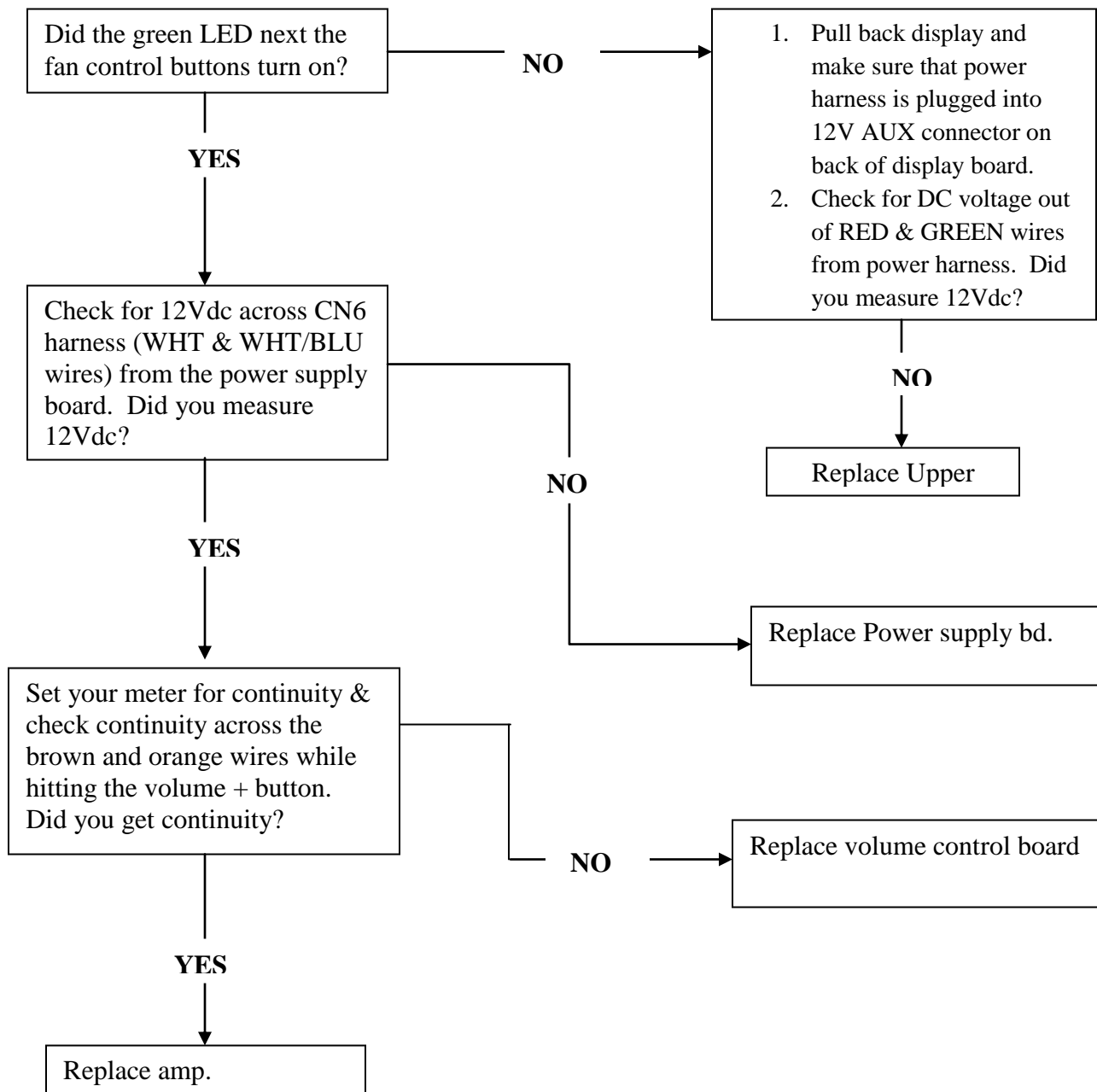
1. Plug machine into the wall, then press START. Here is the voltage table for the fan control from the power supply board.

2.

FAN CONTROL	VOLTAGE READINGS
W/O FAN RUNNING	0Vdc
SLOW	7.0 – 7.3Vdc
MEDIUM	9.5 – 10Vdc
FAST	11-12Vdc

If the voltage does not change when you increase the fan control, replace the power supply board. If the voltage readings are correct then check continuity across the red & brown wires from the fan control harness without pressing the + or – button.

## ***DISPLAY TURNS ON, NO SOUND FROM SPEAKERS.***



# PARTS

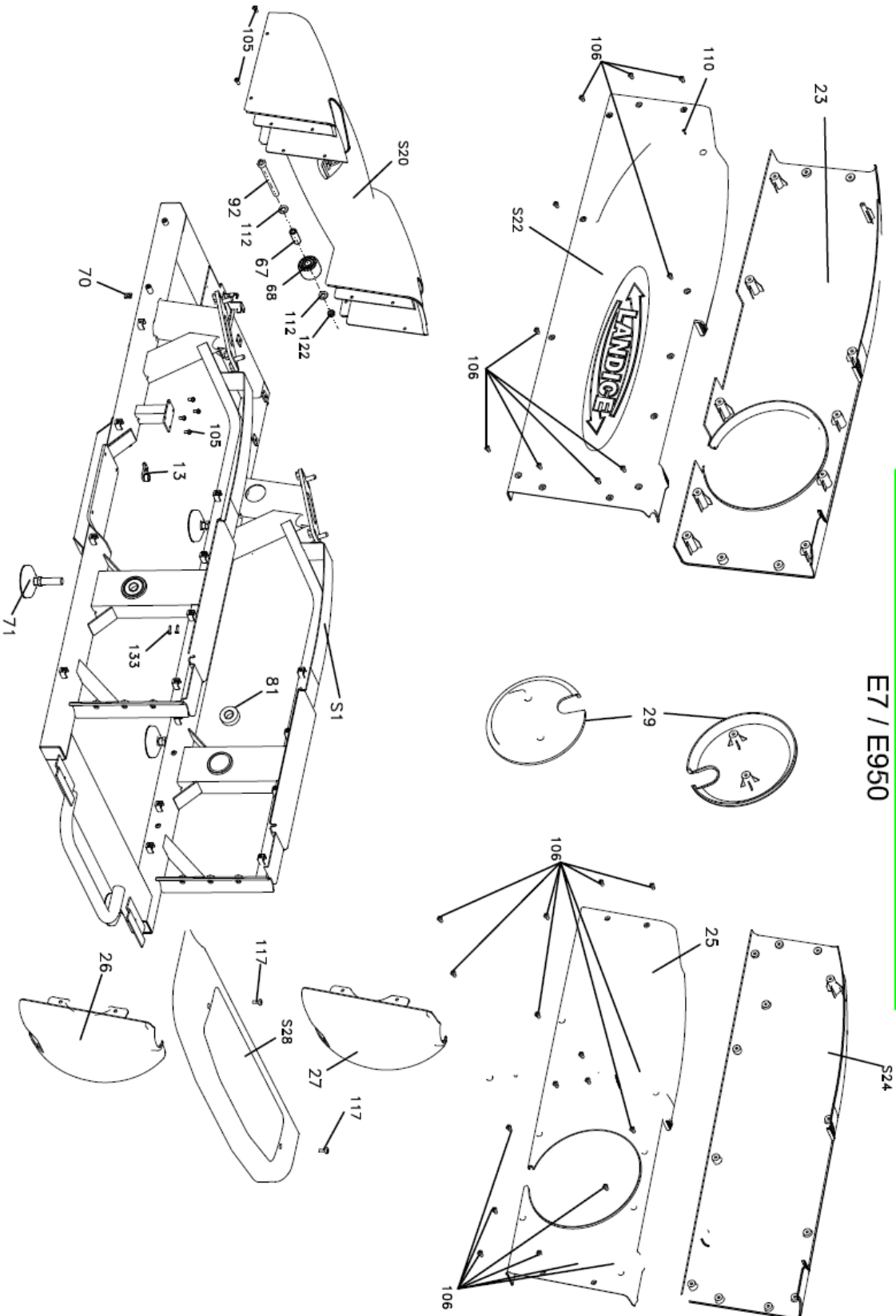
# EXPLOSIONS

# LANDICE

## FRAME AND SHROUD COMPONENTS

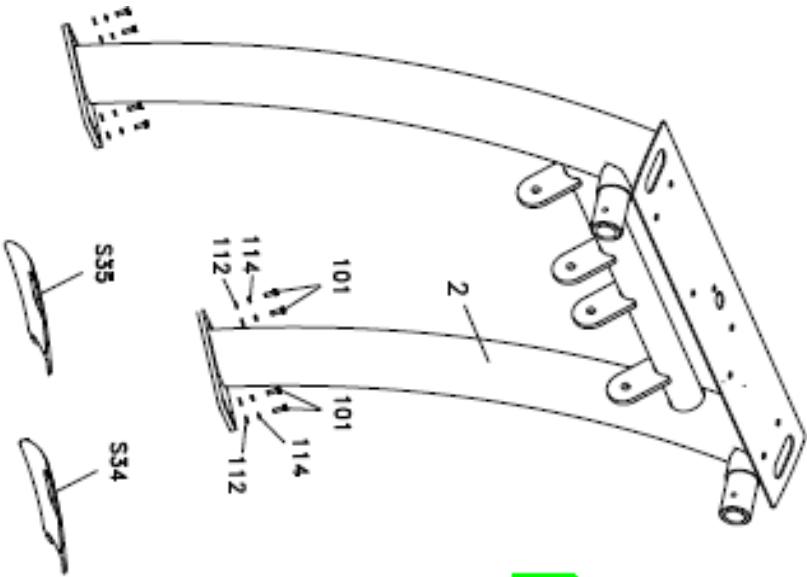
E7 / E950

7/11/12



# LANDICE

UPRIGHT AREA

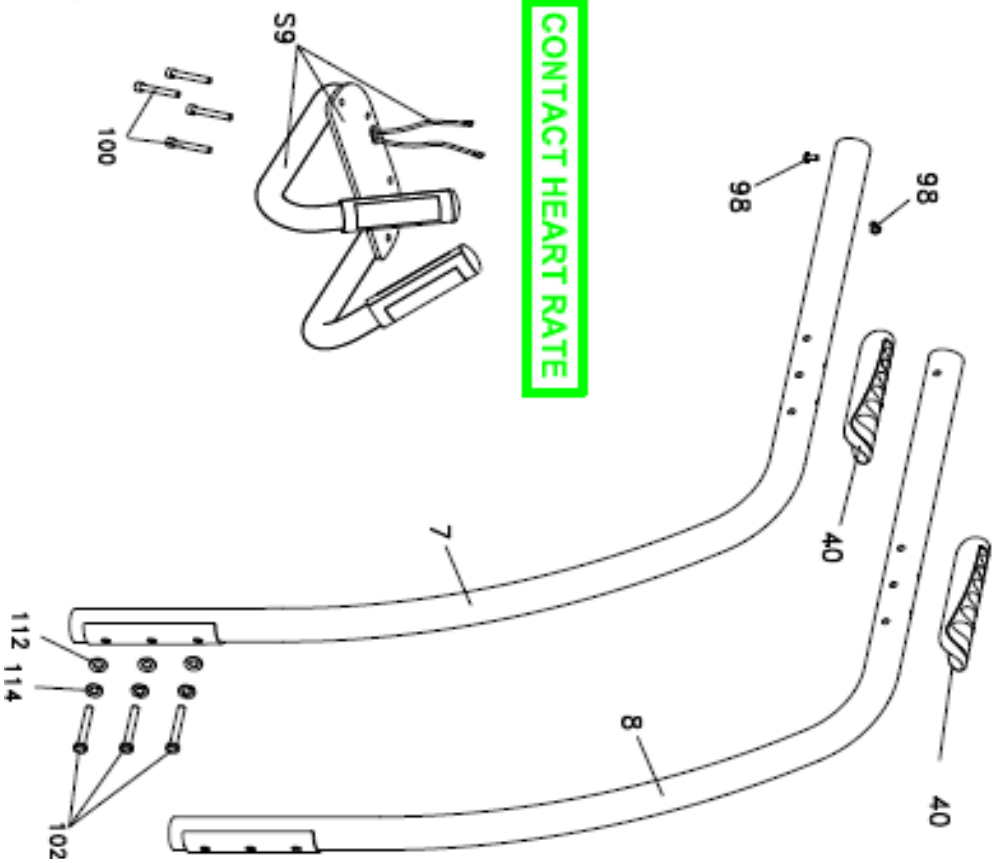


STATIONARY HANDRAILS

E7 / E950

7/11/12

CONTACT HEART RATE



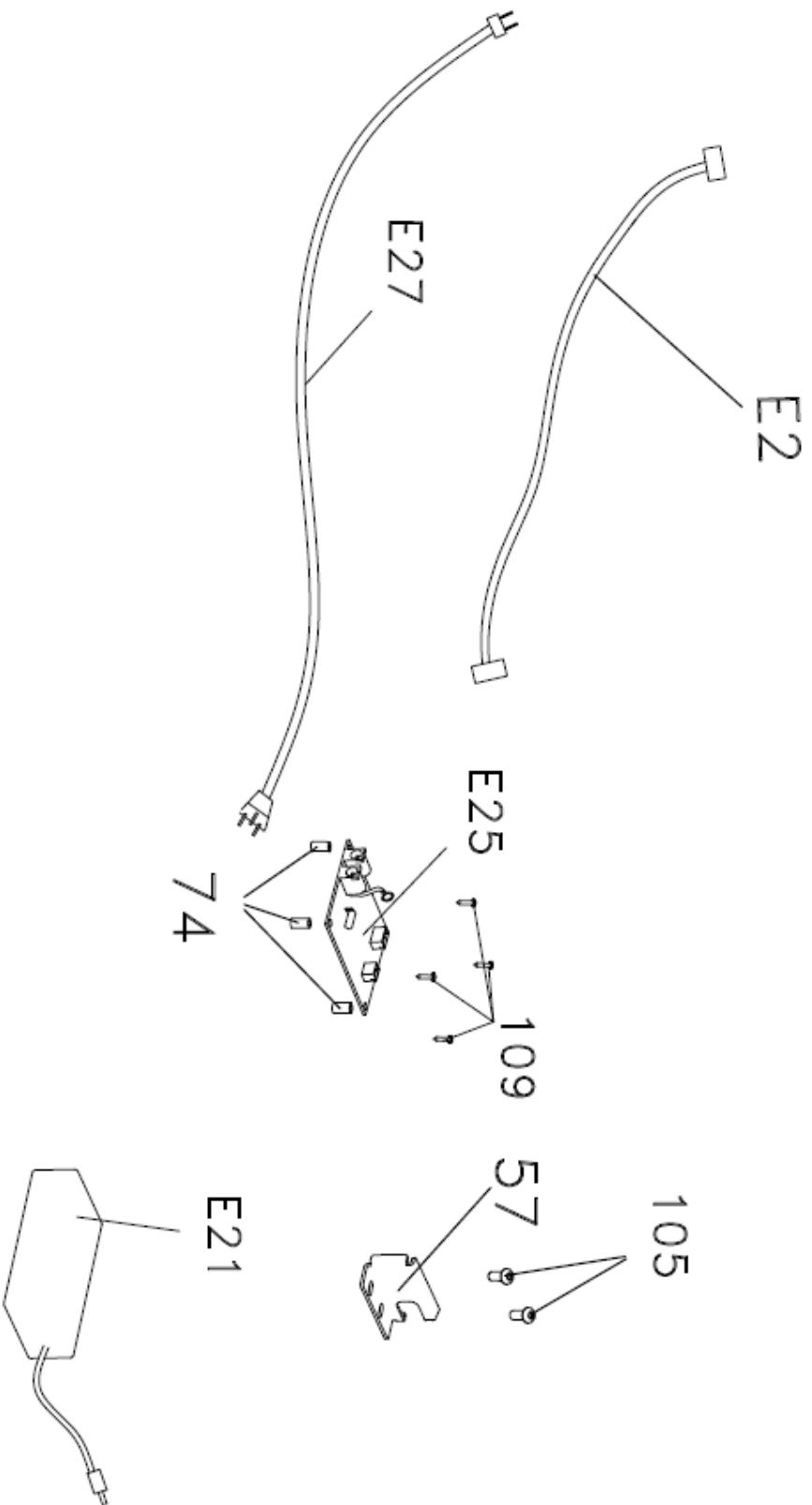
# LANDICE

E7 / E950

7/11/12

## HARNESS AND POWER CORD

## LOWER ELECTRONICS COMPONENTS

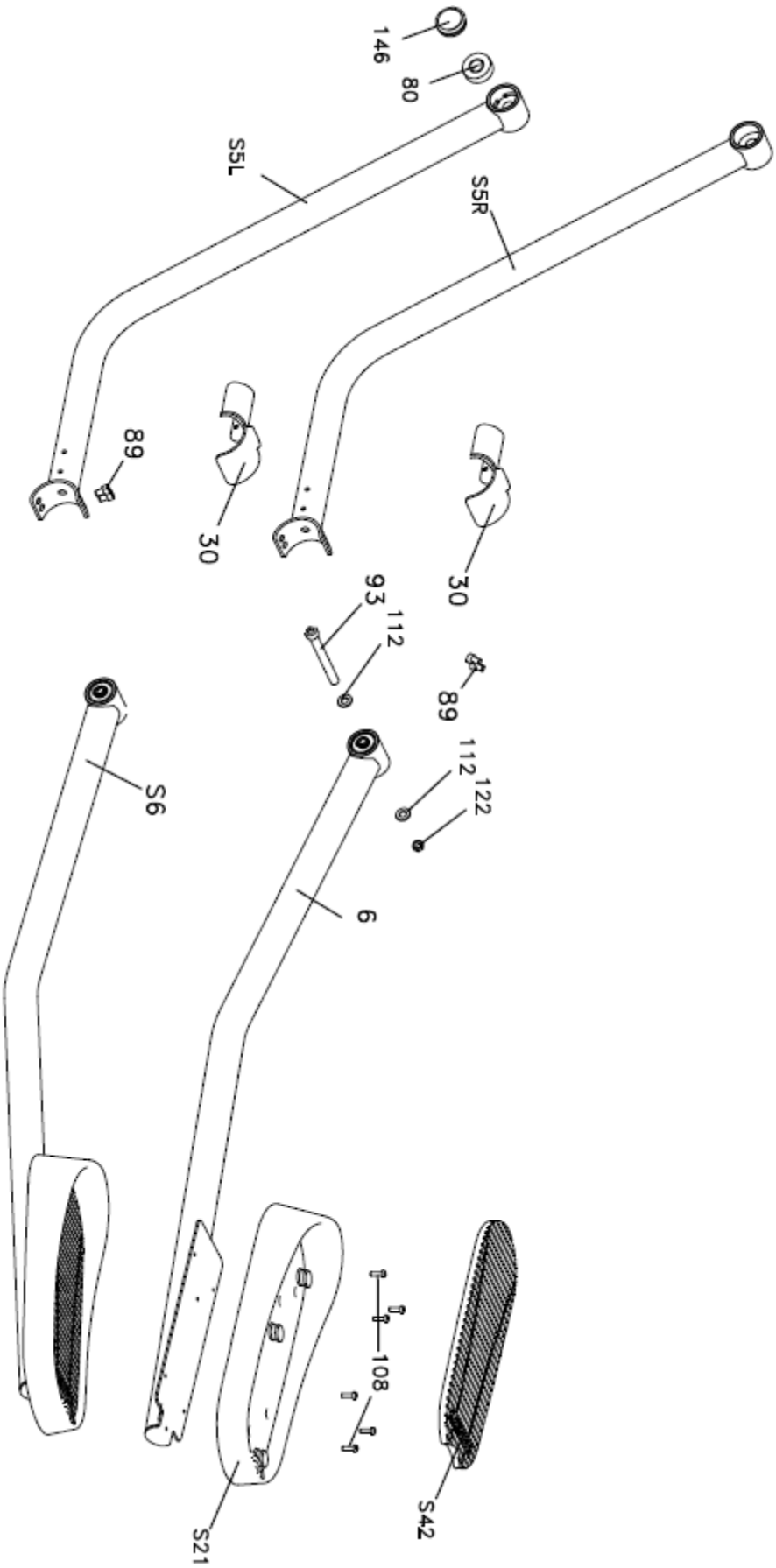




# LANDICE

## CRANK ARM AND PEDAL COMPONENTS

E7 / E950

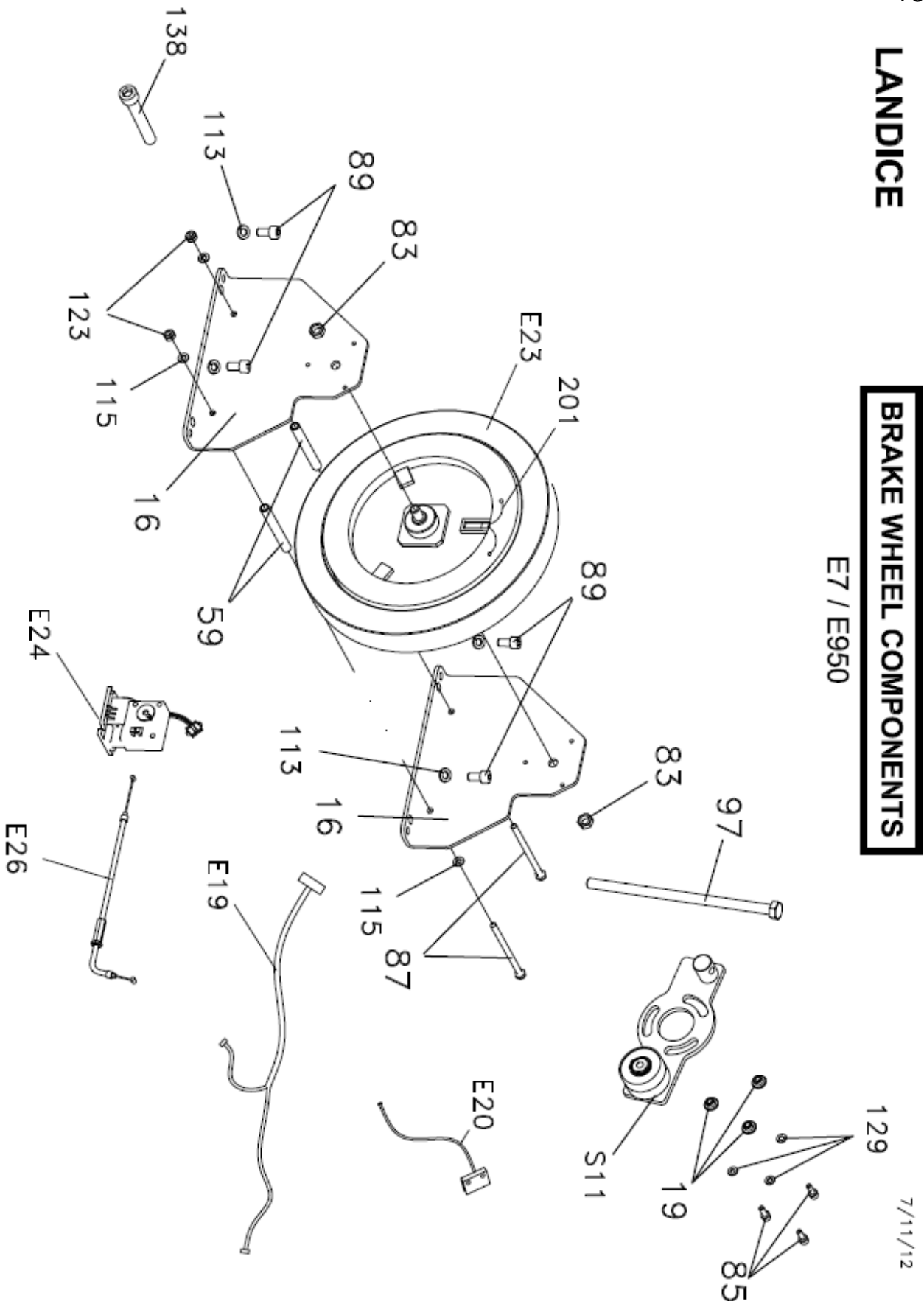




# LANDICE

## **BRAKE WHEEL COMPONENTS**

E7 / E950

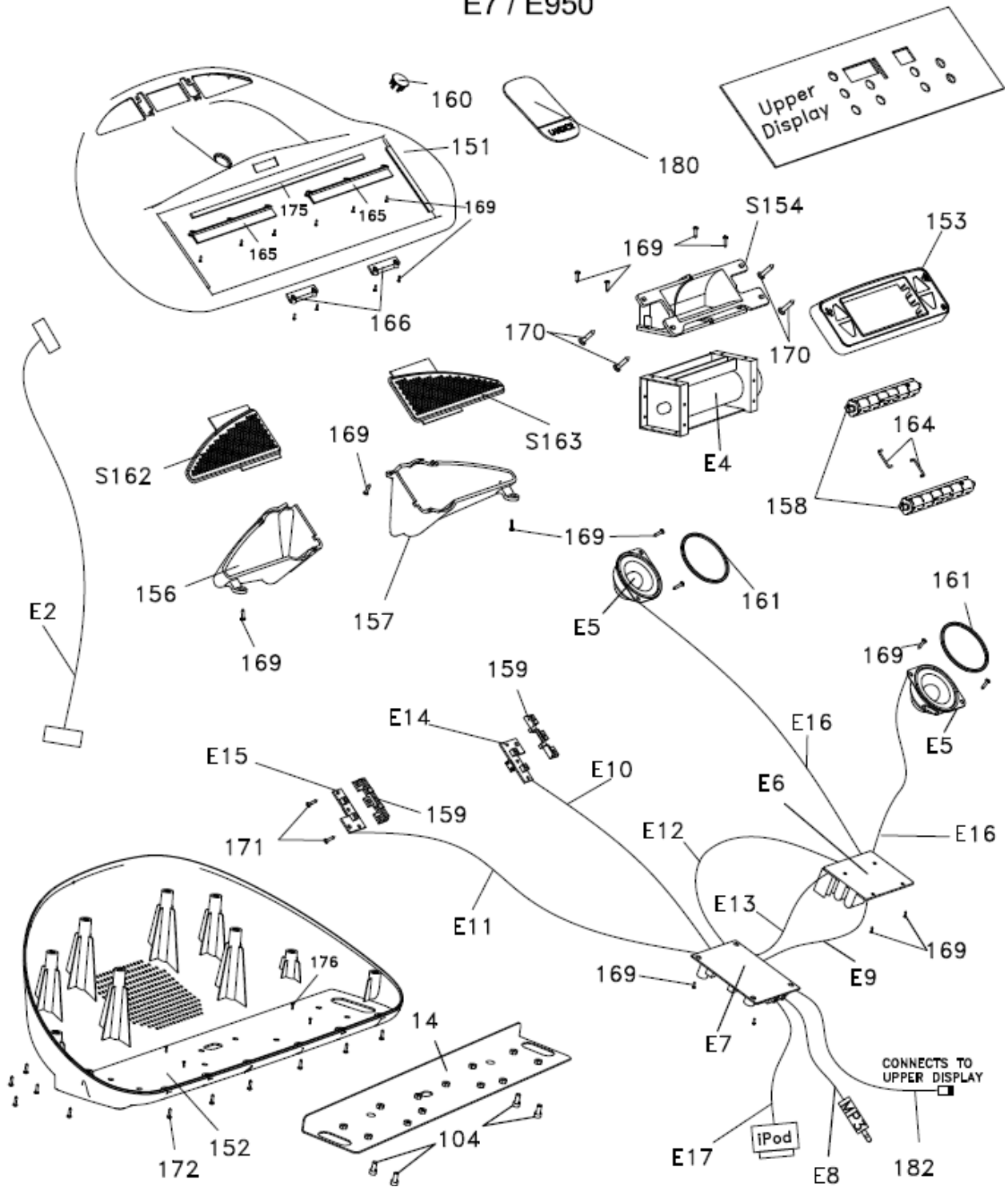


LANDICE

**HIGH TECH ENTERTAINMENT  
SYSTEM COMPONENTS**

7/11/12

E7 / E950



## Landice ElliptiMill E7/E950 Dealer/Technical Parts Listing

**LANDICE - E-SERIES ELLIPTIMILL PART # WITH EXPLODED VIEW #**

E7 / E950

October 23, 2012

FRAME & SHROUD COMPONENTS				
Model	Item	Part Number	View #	Notes
E7/E950	Frame, E7/E950	91059	S1	<b>NOT AVAIL FOR PURCHASE</b>
E7/E950	Crank house bearing (Crank/Spindle)	91213	81	4 per Frame
E7/E950	Screw Clip (M5)	91070	70	
E7/E950	M5 x 10 Phillips Pan Head Mounting Screw	M5x10 PPHMS	105	Brake Motor Screw / 4 total
E7/E950	Tension Bolt Stop	91088	13	
E7/E950	M3.5 x 13 Self Tapping Screw	M3.5X13 PPHTS	133	
E7/E950	Wheel	91081	S68	
E7/E950	Wheel Sleeve	91080	67	
E7/E950	M10 x 65 Socket Head Cap Screw	M10x65 SHCS	92	Wheel Bolt 1 per side
E7/E950	M10 Lock Nut <b>**ORDER TOGETHER**</b>	M10 LOCK NUT	122	
E7/E950	M10 Washer	M10 WASH	112	
E7/E950	Shroud Cover, Front (with clips)	91038	S20	
E7/E950	M5 x 10 Phillips Pan Head Mounting Screw	M5x10 PPHMS	105	For Shroud Cover & Side Shroud
Shroud Cover each side = 2 inside & 4 outside				
E7/E950	Rear - Step	91002	S28	
E7/E950	Step - Rehabilitation	92027		
E7/E950	M6 x 25 Socket Head Cap Screw	M6x25 SHCS	117	Rear Step Screw / 2 total
E7/E950	Leveling Foot	91067	71	3 per side
E7/E950	Shroud Cover, Inside Right	91031	25	
E7/E950	Shroud Cover, Outside Right	91033	S24	
E7/E950	Shroud Cover, Inside Left	91032	23	
E7/E950	Shroud Cover, Outside Left	91034	S22	
E7/E950	M4 x 13 Phillips Pan Head Tapping Screw	M4x13 PPHTS	110	1 each side
E7/E950	M5 x 15 Phillips Pan Head Machine Screw	M5x15 PPHMS	106	For Side Shroud & Shroud Cover
Shroud each side = 9 inside & 8 outside				
E7/E950	End Cap, Frame-Right (with clips)	91035	26	
E7/E950	End Cap, Frame-Left (with clips)	91036	27	
E7/E950	Shroud Disc	91037	29	1 each side
UPRIGHT AREA COMPONENTS				
Model	Item	Part Number	View #	Notes
E7/E950	Upright Tower	91072	2	
E7/E950	Upright Mounting Cover, Right	91039	S34	
E7/E950	Upright Mounting Cover, Left	91040	S35	
E7/E950	M10 Washer	M10 WASH	112	2 per side
E7/E950	M10 Spring Washer	M10 S WASH	114	2 per side
E7/E950	M10 x 30 Hex Head Bolt	M10X30 HHB	101	2 per side
STATIONARY HANDRAIL COMPONENTS				
Model	Item	Part Number	View #	Notes
E7/E950	Side Handrail, Right (Stationary)	91203	8	
E7/E950	Side Handrail, Left (Stationary)	91204	7	
E7/E950	M8 x 15 Button head Cap Screw	M8x15 BHCS	98	Top Handrail Bolt / 2 per side
E7/E950	M10 Washer	M10 WASH	112	
E7/E950	M10 Spring Washer	M10 S WASH	114	
E7/E950	M10 x 7 Hex Head Bolt	M10x7 HHB	102	Btm Handrail Bolt / 2 per side
E7/E950	Grip, Side Handrail, left or right (Stationary)	91205	40	
CONTACT HEART RATE SYSTEM				
Model	Item	Part Number	View #	Notes
E7/E950	Contact Heart rate Grip Assembly	91206	S9	
E7/E950	M8 x 60 Hex Head Bolt	M8x60 HHB	100	
E7/E950	HRC Dual Mode RECEIVER, ElliptiMill	82005		Goes behind control panel

## Landice ElliptiMill E7/E950 Dealer/Technical Parts Listing

**LANDICE - E-SERIES ELLIPTIMILL PART # WITH EXPLODED VIEW #****E7 / E950****October 23, 2012**

<b>LOWER ELECTRONICS</b>				
Model	Item	Part Number	View #	Notes
E7/E950	Relay Board, Main Power	91085	E25	
E7/E950	Bushing, M3 x 7.8, Plastic	91086	74	
E7/E950	Speed Sensor	91069	E20	
E7/E950	Transformer, AC (110 or 220V)	91083	E21	
E7/E950	Transformer Mounting Bracket	91084	57	
E7/E950	M5 x 10 Phillips Pan Head Mounting Screw	M5x10 PPHMS	105	For Shroud Cover & Side Shroud
E7/E950	M3 x 16 Phillips Pan Head Mounting Screw	M3x16 PPHMS	109	For Relay Board / 4 total
<b>DISPLAY BOARDS &amp; MEMBRANES</b>				
Model	Item	Part Number	View #	Notes
E7/E950	Display Board, (ET-2)	82003		Executive
E7/E950	Display Board, (CT-4)	82050		Cardio
E7/E950	Display Board, (PST-4)	82052		Pro Sport
E7/E950	Display Board, (PT-2)	82008		Pro
E7/E950	Display Board, REHABILITATION	82008-RFT		
E7/E950	Membrane Panel, (ET-2)	82001		Executive
E7/E950	Membrane Panel, (CT-4)	82051		Cardio
E7/E950	Membrane Panel, (PST-4)	82053		Pro Sport
E7/E950	FACEPLATE, REHABILITATION, ISOKINETIC	82060		
E7/E950	Faceplate, Pro (PT-2)	82007		
E7/E950	Sealing Tape, for Faceplate	70537-W		
E7/E950	Velcro Strip (For Membrane and Faceplate)	70095H		
<b>DISPLAY ACCESSORIES</b>				
Model	Item	Part Number	View #	Notes
E7/E950	LCD Display, Executive Trainer 2, color	70584-V5		
E8/E950	Pulse Belt	70072		
E8/E950	Pulse Transmitter, Long Range	70073		
E8/E950	Pulse Cable, non CHR only (PBC)	70313		
E8/E950	Cardio-Gel	71043		
<b>HARNESSES &amp; POWER CORDS</b>				
Model	Item	Part Number	View #	Notes
E7/E950	Line Cord, Plug in, 110V	70530	E27	
E950	Line Cord, Plug in, 220V	70531	E27	
E7/E950	Harness, Upper (Pod)	91071	E2	

## Landice ElliptiMill E7/E950 Dealer/Technical Parts Listing

**LANDICE - E-SERIES ELLIPTIMILL PART # WITH EXPLODED VIEW #****E7 / E950**

October 23, 2012

<b>STRIDE COMPONENTS</b>				
Model	Item	Part Number	View #	Notes
E7/E950	Stride Arm - Left	91047	53	
E7/E950	Stride Arm Cover - Outside ( Left )	91043	45	
E7/E950	Stride Arm Cover - Inside ( Left )	91044	46	
E7/E950	Stride Arm - Right	91048	54	
E7/E950	Stride Arm Cover - Outside ( Right )	91045	184	
E7/E950	Stride Arm Cover - Inside ( Right )	91046	183	
E7/E950	Grip, Moving Handrail (Stride Arm)	91073	36	
E7/E950	Stride Adjusting Knob	91041	63	
E7/E950	Stride Adjusting T-Handle	91042	143	
E7/E950	M5 x 10 Phillips Pan Head Mounting Screw	M5x10_PPHMS	105	For Stride Cover / 3 per side
E7/E950	Kauckle Cover, Outside - Same left and right sides	91049	31	
E7/E950	Kauckle Cover, Inside - Same left and right sides	91050	32	
E7/E950	M5 x 15 Phillips Pan Head Machine Screw	M5x15_PPHMS	106	2 per side
E7/E950	Stride Arm Axle Shaft	91078	51	
E7/E950	Shaft Clip M16	91089	96	
E7/E950	Stride Arm, Shaft Clip M25	91079	77	
E7/E950	M12 Washer (Stride Arm)	M12 WASH	120	
E7/E950	M12 Spring Washer (Stride Arm)	M12 S WASH	132	
E7/E950	M12 x 30 Hex Head Bolt (Stride Arm)	M12x30_HHB	94	Mounting bolts - 2 per side
E7/E950	Stride Block, Inner	91074	47	
E7/E950	M8 x 20 Socket Head Cap Screw	M8x20_SHCS	99	
E7/E950	M10 x 25 Socket Head Cap Screw	M10x25_SHCS	90	
E7/E950	M10 Spring Washer	M10 S WASH	114	
E7/E950	M10 Fender Washer	M10 F WASH	118	
E7/E950	M8 Lock Nut	M8_LOCK_NUT	130	
E7/E950	Stride Plate	91077	64	
E7/E950	Stride Block, Outer	91075	12	
E7/E950	Stride Sleeve	91076	39	

<b>PEDAL COMPONENTS</b>				
Model	Item	Part Number	View #	Notes
E7/E950	Pedal Tube Assembly **(includes 3 items below)	91066	56	
E7/E950	Pedal Tube *	91062	6	
E7/E950	Pedal w/Velcro **	91063	S21	
E7/E950	Gel Insert, Foot Pedal w/Velcro***	91064	S42	
E7/E950	M10 x 85 Socket Head Cap Screw	M10x85_SHCS	93	
E7/E950	M10 Lock Nut	M10_LOCK_NUT	122	
E7/E950	M10 Washer	M10 WASH	112	
E7/E950	M6 x 16 Phillips Pan Head Machine Screw	M6x16_PPHMS	108	

<b>CRANK ARM COMPONENTS</b>				
Model	Item	Part Number	View #	Notes
E7/E950	Crank Arm, Left - with bearing	91052	S5L	
E7/E950	Crank Arm, Right - with bearing	91053	S5R	
E7/E950	Upper Crank Arm Bearing	91212	80	
E7/E950	M8 x 16 Socket Head Cap Screw	M8x16_SHCS	89	Crank Bearing Bolt / 4 per side
E7/E950	Crank Arm Cover, snap on (same left and right side)	91054	30	
E7/E950	Crank Arm Finishing Plug	91051	146	

## Landice ElliptiMill E7/E950 Dealer/Technical Parts Listing

**LANDICE - E-SERIES ELLIPTIMILL PART # WITH EXPLODED VIEW #****E7 / E950**

October 23, 2012

<b>CRANK &amp; BRAKE COMPONENTS</b>				
Model	Item	Part Number	View #	Notes
E7/E950	Crank, Shaft	91061	15	
E7/E950	Key, Crank Shaft	91060	127	
E7/E950	Crank Assembly	91300		
E7/E950	Crank Wheel, Non-Pulley	91209	48	
E7/E950	Crank Wheel, Pulley	91210	S49	
E7/E950	Spindle	91207	10	2 per ElliptiMill
E7/E950	Spindle Spacer, Zinc Plated	91211	18	
E7/E950	M10 Fender Washer, Black Oxide	M10 F WASH	119	
E7/E950	M10 x 20 Socket Head Cap Screw	M10x20 SHCS	91	
E7/E950	Spindle ISO Damper	91208	150	
E7/E950	Sleeve, Crank Bearing, Outside	91056	S52	2 per ElliptiMill
E7/E950	Sleeve, Crank Bearing, Inside	91057	53	2 per ElliptiMill
E7/E950	Bearing, Crank	91058	S58	
E7/E950	M6 Fender Washer	M6 F WASH	116	
E7/E950	M6 x 12 Phillips Pan Head Machine Screw	M6x12_PPHMS	107	
E7/E950	Pedal Roller (with bearings)	91030	S41	2 per ElliptiMill
E7/E950	M12 x 30 Socket Head Cap Screw	M12x30 SHCS	95	4 per ElliptiMill
E7/E950	M12 x 55 Socket Head Cap Screw	M12x55 SHCS	96	4 per ElliptiMill
E7/E950	M12 Lock Nut, Nylon	M12_LOCK_NUT	121	
E7/E950	Drive Belt (Size 460-J)	91092	72	
E7/E950	Magnetic Brake (Flywheel)	91200	E23	
E7/E950	Magnetic Brake Bracket	91201	16	
E7/E950	Cable, Brake Assembly Magnetic Flywheel	91093	201	
E7/E950	Cable, Brake Assembly w/Turabuckle	91097	E26	
E7/E950	Brake Motor	91065	E24	
E7/E950	Harness, Brake Motor	91068	E19	
E7/E950	M8 Spring Washer	M8 S WASH	113	
E7/E950	M8 x 16 Socket Head Cap Screw	M8x16 SHCS	89	
E7/E950	M6 x 100 Socket Head Cap Screw	M6x10 SHCS	87	
E7/E950	M6 Washer	M6 WASH	115	
E7/E950	Bushing, M6	91202	59	
E7/E950	M6 Lock Nut	M6_LOCK_NUT	123	
E7/E950	Tension Bolt	91087	97	
E7/E950	Bolt, 3/8 26 Hex Head Bolt	3/8 26 HHB	83	
E7/E950	M8 x 40 Socket Head Cap Screw	M8x40 SHCS	138	
E7/E950	Idler Assembly	91091	S11	
E7/E950	Bushing, M5 x 7, Flanged, Metal	91090	19	
E7/E950	M5 x 12 Socket Head Cap Screw	M5x12 SHCS	85	
E7/E950	Shaft Clip M16	91089	86	
E7/E950	M5 Spring Washer	M5 S WASH	129	

## Landice ElliptiMill E7/E950 Dealer/Technical Parts Listing

**LANDICE - E-SERIES ELLIPTIMILL PART # WITH EXPLODED VIEW #****E7 / E950****October 23, 2012**

<b>LANDICE VISION SYSTEM (LVS15) 15" (Digital) approx. 05/2010</b>				
<b>Model</b>	<b>Item</b>	<b>Part Number</b>	<b>View #</b>	<b>Notes</b>
E7/E950	LVS 15" (replacement of existing 15")	LVS15-E		
E7/E950	LVS 15" Upgrade from 12" LVS	LVS15-FIELD		Only for upgrade
E7/E950	LVS 15", DVD Player, Spare Part	70705		
E7/E950	LVS 15" Headphone Extension	70708		
E7/E950	Line cord, Splitter (Y), 14", LVS15-E	92020		Plug in at Base
E7/E950	Line cord Extender, 10', LVS15-E	92021		Route Cord Outside
E7/E950	Instructions, Assembly LVS15-E on E7/E950	92024		
E7/E950	Vesa-D Bracket, Assembly	70673		
E7/E950	iPod A/V Video Cable Assembly	70684		

<b>TABLET BRACKET</b>				
<b>Model</b>	<b>Item</b>	<b>Part Number</b>	<b>View #</b>	<b>Notes</b>
E7/E950	Table Bracket Assembly, 10", ElliptiMill	70840-E		
E7/E950	Tablet Bracket Assembly, 7", ElliptiMill	70840-7-E		
E7/E950	Tablet Dock Assembly, 10" Dock (Ball and Grip)	70837		
E7/E950	Tablet Dock Assembly, 7" Dock (Ball and Grip)	70837-7		



## Landice ElliptiMill E7/E950 Dealer/Technical Parts Listing

**LANDICE - E-SERIES ELLIPTIMILL PART # WITH EXPLODED VIEW #****E7 / E950**

October 23, 2012

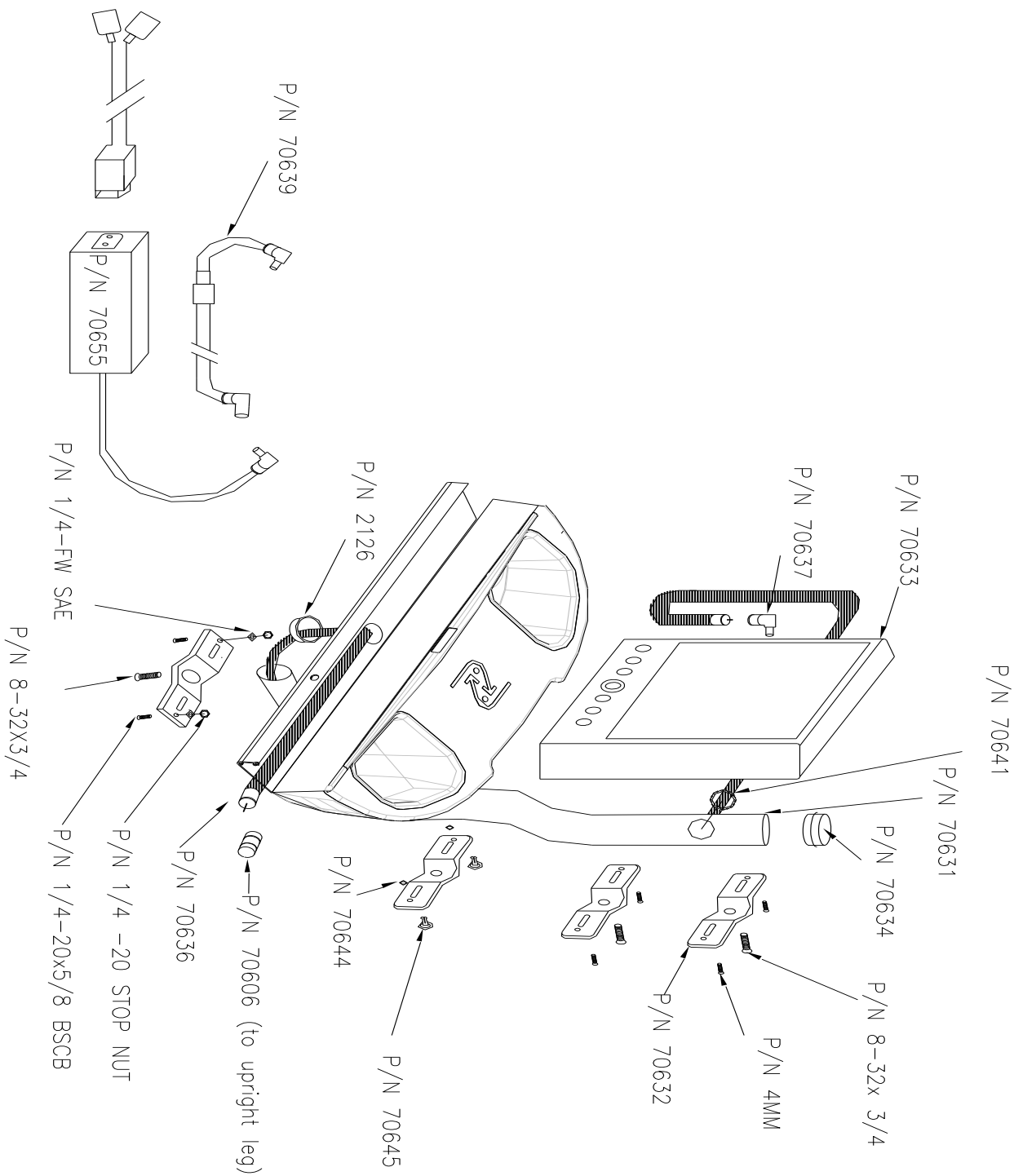
<b>HIGH TECH ENTERTAINMENT CENTER COMPONENTS</b>				
<b>Model</b>	<b>Item</b>	<b>Part Number</b>	<b>View #</b>	<b>Notes</b>
	Pod Assembly (view #200 on MASTER exploded view)	91100	200	includes all parts below
****VIEW #'S BELOW FROM CATEGORY EXPLODED VIEW****				
E7/E950	Pod Top	91119	151	
E7/E950	Pod Bottom	91118	152	
E7/E950	M4 x 12 Phillips Pan Head Tapping Screw	M4x10 PPHTS	176	16 per Pod Bottom
E7/E950	M4 x 13 Phillips Pan Head Tapping Screw	M4x13 PPHTS	172	
E7/E950	Pod Inner Mounting Plate	91132	14	
E7/E950	M8 x 20 Hex Head Bolt	M8x20 HHB	104	4 per Plate
E7/E950	Membrane Channel Support Bottom	91101	166	
E7/E950	Membrane Channel Support Top	91102	165	
E7/E950	Screw for Channel Support and Board - tapping screw	M3x9 PPHTS	169	
E7/E950	Velcro Strip 26 1/4"X 3/16" Loop	70095L	175	
E7/E950	Plug - 1" Snap	91117	160	
E7/E950	Pod Grip	70543	180	
<b>FAN AND SPEAKERS</b>				
<b>Model</b>	<b>Item</b>	<b>Part Number</b>	<b>View #</b>	<b>Notes</b>
E7/E950	Fan Diverter Control Assembly (INCLUDES 8 ITEMS BELOW)	70828		
	Diverter, Fan	91125	158	
	Diverter, Retaining bracket	91126	159	
	Diverter, Clip	91127	164	
	Pod Control Housing	91128	153	
	Fan Control Board	91122	E15	
	Volume Control Board	91121	E14	
	M3 x 8 Phillips Pan Head Tapping Screw (2)	M3x8 PPHTS	171	
	Speaker Enclosure Screws (Phillips Pan Head Tapping Screw)	M3x10 PPHTS	169	
E7/E950	Fan	91120	E4	
E7/E950	Fan Vent	91131	S154	
E7/E950	Fan Vent Screws, (Phillips Pan Head Tapping Screw)	M3x15 PPHTS	170	4 per Fan Vent
E7/E950	Fan Control Board	91122	E15	
E7/E950	M3 x 8 Phillips Pan Head Tapping Screw	M3x8 PPHTS	171	
E7/E950	Speakers (Can be used for left and right)	91105	E5	Can be used as left or right
E7/E950	Speaker - "O" ring	91115	161	
E7/E950	Speaker Cover (Bezel) - Right	91103	S163	
E7/E950	Speaker Cover (Bezel) - Left	91104	S162	
E7/E950	Speaker Enclosure, Right	91129	157	
E7/E950	Speaker Enclosure, Left	91130	156	
E7/E950	Speaker Enclosure Screws (Phillips Pan Head Tapping Screw)	M3x10 PPHTS	169	
E7/E950	Relay Board (Fan & Speakers) (Pod & Fan)	91116	E7	
E7/E950	Volume Control Board	91121	E14	
E7/E950	Amplifier	91107	E6	
<b>HARNESS</b>				
<b>Model</b>	<b>Item</b>	<b>Part Number</b>	<b>View #</b>	<b>Notes</b>
E7/E950	Harness - Upper (ElliptiMill)	91071	E2	
E7/E950	Harness - Volume Control (Relay to Controls)	91123	E10	
E7/E950	Harness - Volume Control (Amp to Pwr Supply)	91108	E9	
E7/E950	Harness - Fan Control (Relay to Controls)	91124	E11	
E7/E950	Harness - Power (Relay to Amp)	91109	E12	
E7/E950	Harness - Input (Relay to Amp)	91110	E13	
E7/E950	Harness - Speaker	91106	E16	
E7/E950	Harness - IPod	91113	E17	
E7/E950	Harness - Pod Accessories - Box Connector	70683		
E7/E950	Harness - MP3	91112	E8	

Prices and availability subject to change without notice.

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# LVS 2<sup>ND</sup> GENERATION FOR ELLIPTICAL

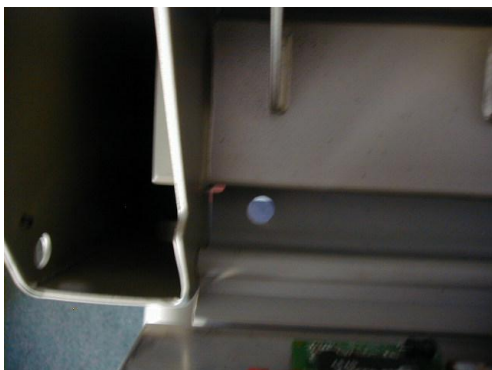


## LVS2 RETROFIT INSTRUCTIONS

### TOOLS NEEDED:

- 6/32 drill bit (starter bit).
- 3/8 drill bit.
- ½ inch drill bit.
- Tape measure, ruler, or t-square.
- Drill
- Fine grit sand paper to remove burrs.

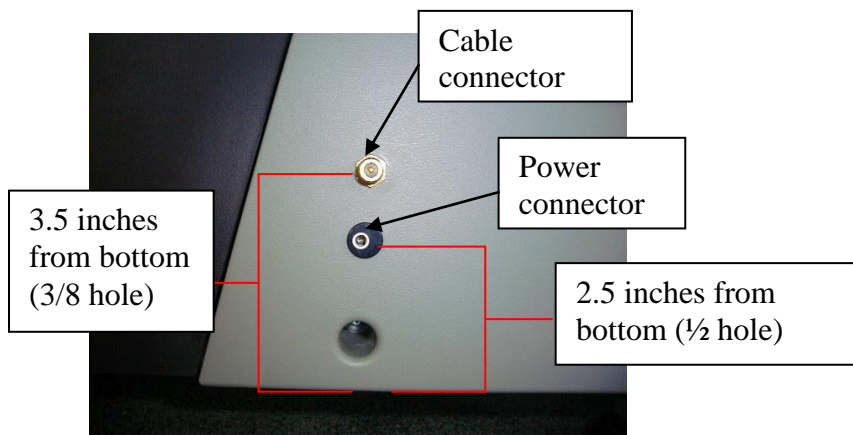
1. Take the upright end caps and upper console off of the control panel.
2. Measure 1 inch from the left side of the control panel and mark it with a pencil to drill the hole.
3. Drill in the center using a 6/32 drill bit. Then drill the hole bigger using a ½ inch drill bit.



4. Now that you drilled out your access hole for the cable and power wires, clean of any burrs from the hole using fine grit sandpaper and run your wires through.
5. After fishing the wires thru the access hole, slide them thru the left side upright. They will come out through the 'u' cut out at the bottom of the upright. (See pictures below).



6. Next take off the outer left stride cover. You will need to drill out holes for the cable & power connectors. Measure 3 ½ inches from the bottom of the stride cover, in line with the bottom left hole for the mounting screw, and mark it with a pencil to drill the hole. Use a 6/32 drill bit as a starter hole. Then drill it out using a 3/8 drill bit.
7. Now measure 2 ½ inches from the bottom of the stride cover, in line with the bottom left hole for the mounting screw and mark it with a pencil to drill your hole. Use a 6/32 drill bit as a starter hole. Then drill it out using a ½ drill bit. Refer to the picture below for steps 6 & 7.



8. Remount the stride cover back onto the elliptical and make your connections. Turn the LVS DVD player on and test it out.