

BODYCRAFT

Service Manual for EXP Series Treadmills

from 2019 to Current

**EXP-Series Treadmills
T1000 (T1K1 & T1K2) model**

**EXP-Series Treadmills
T800 (T801& T802) model**

**EXP-Series Treadmills
T400 (T401 & T402) model**

Ver. 1.7c

For parts orders, owners manuals, software update files, exercise guides and contact information scan this QR code.

Or go to:

<https://www.bodycraft.com/customer-support.html>

For service videos scan this QR code.

Or go to:

<https://www.youtube.com/channel/UCScTmOHpGuqwQLyEXEDX9qQ/playlists>



Energy Saving function: These treadmill consoles are equipped with power saving function. This means after 10 minutes of inactivity; the treadmill will automatically power off. Press any key on the dash board to wake up the console from power save mode.

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PRODUCT SAFETY

Basic precautions should always be followed, including the following safety instructions when using this equipment:



To reduce the risk of serious injury, read the following Safety Instructions before using the Treadmill.

1. Wear the safety cord and clip all times while using the treadmill. Always stand on the side rails before the treadmill starts.
2. Before beginning any exercise program on the treadmill, it is important to consult with your physician if you have any of the following: History of heart disease, high blood pressure, diabetes, chronic respiratory diseases, elevated cholesterol, or if you smoke cigarettes or experience any other chronic diseases or physical complaints.
3. If over the age of 35 or overweight or pregnant, consult with your physician before beginning any exercise program.
4. If you experience dizziness, nausea, chest pains or other abnormal symptoms during exercise, stop the exercise session immediately. Consult your physician before continuing.
5. Drink fluids if you exercise for twenty or more minutes on the treadmill.
6. Always follow the console instructions for proper operation.
7. This treadmill should never be left unattended when plugged in. Unplug from outlet when not in use, and before servicing or moving the unit.
8. Close supervision is necessary when using this treadmill around children, pets, or disabled persons. Keep children & pets away from the treadmill. Hands and feet may get caught in the moving parts which could result in serious injury.
9. Never operate your treadmill if it has a damaged cord or plug, or if it is not working properly. Contact your authorized BODYCRAFT fitness dealer for service and repair.
10. Keep the power cord away from heated surfaces.
11. Never insert any objects into openings. Keep hands and feet away from all moving parts.
12. Use the handrails when getting on and off your treadmill.
13. Check the power requirement for your unit to see if it matches your local power outlet.
14. Do not operate the heart rate monitor transmitter together with an electrical heart pacemaker. The transmitter may cause electrical disturbances.
15. Inspect this treadmill prior to exercising to ensure it is working properly. Always make sure all components are fastened securely.
16. This treadmill is intended for indoor use. Do not place the unit outdoors.
17. Place your treadmill on a solid, level surface when it is in use. Adjust the levelers at the rear of the treadmill if necessary.
18. Do not dismount the treadmill until it has come to a complete stop.
19. Make sure the running belt is at a complete stop before exiting the machine.
20. Do not operate if oxygen equipment is being utilized or if aerosol (spray) products are being used in



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TROUBLESHOOTING FOUNDATIONS

- **KNOW THE EQUIPMENT**

Difficulty isolating problems is often the result of not being acutely familiar with the unit. Being able to examine its operation, understand its gauges, and interpret certain printouts is paramount to discerning issues.

- **THINK IT THROUGH BEFORE TAKING ACTION**

Before you begin replacing parts and disassembling the equipment, investigate possible reasons for the issue. Troubleshooting in an unorganized manner without following procedural steps, can lead to more problems and more time.

- **DEVELOP PROCEDURES FOR TROUBLESHOOTING**

Troubleshooting procedures need to be established. The specific details depend on overall knowledge of the equipment and accessibility to tools, parts & test units. It could include procedures for components or boards. Faulty boards may be repaired at a later time or sent to the manufacturer depending on your level of maintenance.

- **A TOTALLY DEAD UNIT OR MULTIPLE ISSUES**

These problems are usually related to a faulty or malfunctioning power supply.

- **INTERMITTENT PROBLEMS**

Erratic issues that come and go are almost always due to bad connections.

- **ISSUES THAT CHANGE AS THE UNIT WARMS UP**

Sometimes problems will decrease or disappear as the equipment warms up. These issues are often the result of dried up electrolytic capacitors.

- **CATASTROPHIC FAILURES**

These problems are often identified by the smell or visual inspection of parts or components that are burnt, melted, scorched, cracked, or exploded.

- **SIGNS OR SOUNDS OF ARCING**

Snapping or sizzling sounds may be an indication of arcing. They can lead to more serious and expensive outcomes. Heavy indication of electrical issues and immediate safety concerns.

- **KNOW WHEN TO STOP AND CONTACT BODYCRAFT CUSTOMER SUPPORT**

Too many times, there is a simple way to diagnose and repair without causing more damage to the machines or put at risk your personal safety. Customer support assists technicians daily and many times can supply solutions that are not common with other manufactures or old service techniques.



Required Info BEFORE Initiating a Service Case

The following information is needed to help expedite troubleshooting and to insure the correct part(s) to be sent if needed for a repair:

- 1) What product / model # do you have?
- 2) Unit serial number?
- 3) Installed by dealer or direct sale?
- 4) Date of installation?
- 5) Date of service issue?
- 6) Complaint or Problem, including any Error Codes?
- 7) Has the software been updated?
- 8) What part(s) are being requested?
- 9) Any picture or video to help with troubleshooting or exact part(s) needed.

Suggested Advanced Tools

Smartphone Chances are you already own one.

1. Take pictures of the product to help with identification.
2. Take pictures or video of the issue.
3. Take a picture or scan (if barcoded) of the serial number
4. Access the Bodycraft website for owners manuals and more.
5. Call or Video chat with a tech from the field using Facetime or Facebook Messenger.



Pocket Size Auto Ranging Multimeter

<https://www.homedepot.com/p/Commercial-Electric-Pocket-Size-Auto-Ranging-Multimeter-MMB-8332R/206029123>

This is a great tool set that allows you to

1. Easily test the outlet for power and proper wiring.
2. Test Continuity of wires and test Speed/ RPM Sensors
3. Read Ohms from Potentiometers (pots).



P3 P4400 Kill A Watt Meter

Amazon ASIN:B00009MDBU
Purchase with an short heavy duty extension cord. Such as the Amazon ASIN:B013Q5DOYY



This will allow you to remotely place the meter to easily view the display during the AMP test. .

This meters allows you to easily test Amp draw in real time and confirm the power specs from the wall are correct without removing the motor cover



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PROFESSIONAL SERVICE TECHNICIAN TOOLS

The following tools are recommended when servicing BODYCRAFT products. Without such, proper diagnostics and repair of equipment will be hampered. Warranty service work requiring a second trip due to not having the correct tools recommended, may not be reimbursed.

- **Multimeter:** (Volt/Ohm meter) Pocket Size Auto Ranging Multimeter.
<https://www.homedepot.com/p/Commercial-Electric-Pocket-Size-Auto-Ranging-Multimeter-MMB-8332R/206029123>
- **Wall Outlet Tester with GFCI:** Detects common wiring problems in standard receptacles.
<https://www.homedepot.com/p/Commercial-Electric-Outlet-Tester-with-GFCI-OTG-102R/206029151>
- **AMP Meter:** (can be built into the Multimeter but we recommend a stand alone kilowatt meter that filters out spikes, easier to get a good reading and one person operation).
<https://www.homedepot.com/p/Kill-A-Watt-Electricity-Monitor-P4400/202196386>
- **Extension Cord:** 10'-12' maximum length, 14 gauge (12 gauge if possible) 120v/15amp.
<https://www.homedepot.com/p/Tripp-Lite-10-ft-14-Gauge-15-Amp-Heavy-Duty-Power-Extension-Cord-P024-010/308847275>
- **Metric & SAE Allen Wrench Set:** L-Style single handles 4mm to 10mm & 1/16" to 3/8". (It's a good idea to also have bits) The all-in-one fold-out set is NOT recommended.
<https://www.homedepot.com/p/Husky-SAE-Metric-Long-Arm-Hex-Key-Set-26-Piece-HLAHKSM26PC/202934869>
- **3/8" Drive Socket Set:** 3/8 in. Drive 100-Position Ratchet and Universal SAE/Metric Socket Wrench Set (20-Piece) <https://www.homedepot.com/p/Husky-3-8-in-Drive-100-Position-Ratchet-and-Universal-SAE-Metric-Socket-Wrench-Set-20-Piece-H1003D20SWS/206038542>
- **Combination Metric & SAE Wrench Set:** 8mm to 19mm & 1/4" to 3/4" (open and closed ends).
<https://www.homedepot.com/p/Husky-SAE-Metric-Combination-Ratcheting-Wrench-Set-20-Piece-HRW20PCSM/205191132>
- **Adjustable (Crescent) Wrenches:** Small & large minimum 8" or larger.
<https://www.homedepot.com/p/Crescent-6-in-and-10-in-Adjustable-Wrench-Set-AT2610CVS/203161685>
- **Wire Stripper & Cutter Crimper tools.** All in one tool
<https://www.homedepot.com/p/Klein-Tools-Klein-Kurve-Multi-Tool-Wire-Stripper-Crimper-1019SEN/305303655>
- **Screwdriver Set:** Slotted and Philips, #1, #2 and #3 sizes with magnetic tips.
<https://www.homedepot.com/p/Husky-Diamond-Tip-Magnetic-Screwdriver-Set-6-Piece-H6PCMDTSSD/302346933>
- **Hammer Soft Faced - Dual Sided:** Do not use hard metal hammer on BodyCraft equipment.
<https://www.homedepot.com/p/Powerbuilt-16-oz-Soft-Face-Hammer-648335/204505145>
- **Pick and Hook Pick Set:** Small pick tool set to help with dust cover removal for cranks and clean allen heads. <https://www.homedepot.com/p/Husky-Precision-Pick-and-Probe-Set-4-Piece-60004H/302435929>
- **Shop Vacuum** Dual action, to pick up and blow out corners and inside motor for PM cleaning.
<https://www.homedepot.com/p/Stinger-2-5-Gal-1-75-Peak-HP-Compact-Wet-Dry-Vac-WD2025/100021998>
- **Flashlight:** With work light & magnetic base.
<https://www.homedepot.com/p/Klein-Tools-Flashlight-with-Work-Light-56028/301405722>
- **Tape Measure:** Minimum 16' long with locking knob.
<https://www.homedepot.com/p/Stanley-16-ft-x-3-4-in-Tape-Measure-30-495S/203893326>



INDOOR TRAINING & EXERCISE BIKE SPECIFIC TOOLS:

- Pedal Wrench & Torque Wrench : PARK TOOL PW-4 3/8 in. Drive Click Torque Wrench (10-80 ft.-lb.)
<https://www.parktool.com/product/professional-pedal-wrench-pw-4>
<https://www.homedepot.com/p/TEKTON-3-8-in-Drive-Click-Torque-Wrench-10-80-ft-lb-24330/205539234>
- Crank Arm Puller Tool: (such as PARK TOOL CWP-7 or CCP-22) NOTE: ensure fine threads are always in 100% good condition, otherwise crank will strip and is not covered under warranty.
<https://www.amazon.com/Park-Tool-CCP-22-Crank-Puller/>
- 30mm 6 Point Deep Socket: For removal of the Bottom Bracket M30 Nut.
<https://www.homedepot.com/p/TEKTON-1-2-in-Drive-30-mm-6-Point-Deep-Impact-Socket-4930/207096568?>
- Cell Phone: Preferability a smartphone to access owner's manuals, websites and send pictures, videos or skype to tech support if needed.



Installation Checklist

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Assembly and Set-Up

Confirmed

- Confirm all parts are assembled
- Confirm there are no pinched console/upright wires
- Confirm all hardware is tightened down
- Check Base Assembly is level (no movement)
- Check if Running Belt is tensioned (no slipping)
- Check if Running Belt is centered
- Confirm space requirements are met:
 - 2 ft. front and sides of treadmill
 - 6 1/2 ft. rear of treadmill (emergency exit)
- Confirm power requirements are met:
 - 120v/15amp dedicated per TM (home unit)
 - 120v/20amp dedicated per TM (com. unit)
 - Any extension cords max 6' long w/ 12 gauge wire
 - Electrical outlet is non-GFCI w/ confirmed ground
- Confirm Power Cord location is protected from damage

Calibration:

Confirmed

- Calibration was completed & confirmed good

Console:

- Console has newest software updates
- Touch Screen 10" or 16" has updated Apps

Final Checks:

Confirmed

- Treadmill has been tested & fully functioning
- Gave Owner's Manual to the customer
- Answered any & all customer's questions

Service Policy:

Confirmed

- How to contact Customer Support
- Warranty length & coverage
- What warranty does not cover
- How to find the serial number
- How to find an error code (if applicable)

Important Safety Information:

NOTE: Never leave unattended children around a treadmill when plugged into the Wall Outlet & the Safety Key Inserted.

Recommended Maintenance (refer to owner's manual)*

Confirmed

- Cleaning products for use on Base & Upright Assembly
- Cleaning products for use on Dashboard Assembly
- Cleaning products for use on Console
- Running Belt and Deck is cleaned & lubricated as needed
- Under Treadmill & Side Rails are cleaned as needed
- Under Motor Hood is cleaned as needed:
 - All dirt is vacumed and surfaces cleaned
 - Motor vents and electronics are cleaned
 - DC Motor brushes and commutator are cleaned (T400/T800)

* Maintenance must be performed when needed, to maintain warranty

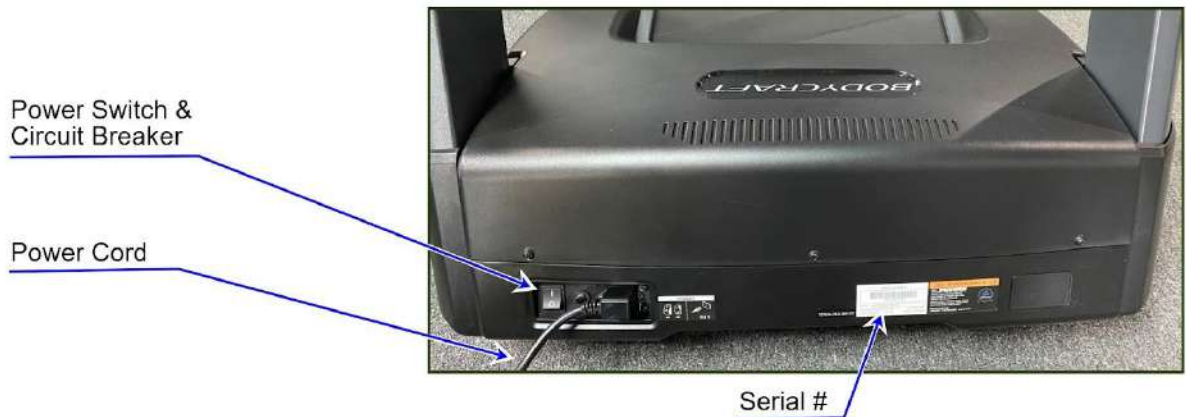
BODYCRAFT		
7699 Green Meadows Dr North		
Lewis Center, OH 43035		
Product Support - Treadmills: 1-800-990-5556 x 406		
Email questions or parts ordering: service@bodycraft.com		
Customer's Name:		
(Point of Contact for Commercial Facility):		
Address:		
Address Line 2:		
City:		
State:	Zip:	Phone:
Email:		
Type of Facility:		
Location of Equipment:		
Dealer Name:		
Point of Contact:		
Address:		
Address Line 2:		
City:		
State:	Zip:	Phone:
Email:		
Model & Serial Numbers Installed:		
Model #	Serial #	
Model #	Serial #	
Model #	Serial #	

Installer's Name:	Notes:
Installer's Signature:	Date:
Customer's Signature:	Date:

EXP SERIES TREADMILLS v1.5

Picture of Unit w/ Callouts

EXP-Series Treadmill T1000



Part #	Description	Qty
T1K2-001	Main Base Frame (DIAMOND GRAY)	1
T1K2-002	Elastomer Shock Absorbers - 2nd & 3rd Rows - Mid	4
T1K2-003	Elastomer Shock Absorbers - 1st Row - Front	2
T1K2-004	Elastomer Shock Absorbers - 4th Row - Rear	2
T1K2-005	Running Deck - 673mm W x 1,403mm L x 25.4mm T	1
T1K2-006	Bolt M8 x 30mm L x 1.25P	8
T1K2-007	Bolt M8 x 120mm L	8
T1K2-008	Side Step Rails - Support Locking Piece to Running Deck/Frame	16
T1K2-009	Flat Washer M8 x 16mm x 1.2mm	21
T1K2-010	Nylon Locknut M8	21
T1K2-011	Bolt M8 x 90mm L x 1.25P	3
T1K2-012	Mounting Plate for Motor Cover - Front Left & Right	2
T1K2-013	Mounting Plate for Motor Cover - Front Center	1
T1K2-014	Nylon Locknut M8	1
T1K2-015	Flat Washer M8.3 x O15mm x 0.8mm T	1
T1K2-016	Front Roller Assembly - 70mm D x 673mm L w/ 100mm Pulley	1
T1K2-017	Rear Roller Assembly - 70mm D x 673mm L	1
T1K2-018	Running Belt - 550mm W x 3,275mm L x 2.5mm T (TF)	1
T1K2-019	Stabilizer Feet - Self Leveling - Rear	2
T1K2-020	U Shape Clip for Cover Screws (M5)	7
T1K2-021	Lower Control Board / Inverter #RM6T3-1002B1 (RB)	1
T1K2-022	START/STOP Control Board w/ Buttons - Dashboard	1
T1K2-023	Quick Keys Speed/Incline Control Board w/ Buttons - Dashboard	1
T1K2-024	Line Filter - EMI	1
T1K2-025	Screw M4 x 8mm L	2
T1K2-026	Screw M5 x 10mm L	15
T1K2-027	Sticker - Grounding Screw Location - Single Sided	3
T1K2-028	Power Supply Mounting Plate	1
T1K2-029	AC Socket / Input Power - IEC 60320 C20, Black, 16A	1
T1K2-030	Circuit Breaker - Reset Switch (15 amp)	1
T1K2-031	On/Off AC Rocker Switch	1
T1K2-032	Screw M4 x 12mm L	2
T1K2-033	Power Cord - Locking Screw-in Clip	1
T1K2-034	Bolt M6 x 10mm	2
T1K2-035	Cable - Inverter to Break-Out Board - Lower (8 PIN)	1
T1K2-036	Bolt M8 x 60mm L	8
T1K2-037	Drive Motor Pulley Belt - Ribbed 635J (HS)	1
T1K2-038	Drive Motor - AC 5hp (KS)	1
T1K2-039	Bolt M10 x 30mm L	4
T1K2-040	Flat Washer M10 x 25mm D x 2.5mm T	5
T1K2-041	Bolt M10 x 50mm L	1
T1K2-042	Insulation Spacer - Upper	4
T1K2-043	Insulation Spacer - Down	5
T1K2-044	Nylon Locknut M10	7
T1K2-045	Incline Motor - J25A (JS)	1

Part #	Description	Qty
T1K2-046	Front Incline Frame (DIAMOND GRAY)	1
T1K2-047	Bolt M10 x 50mm L	1
T1K2-048	Bolt M10 x 70mm L	1
T1K2-049	Flat Washer M10 x 21mm D x 2.0mm T	4
T1K2-050	Flat Washer M18.6 x 24mm x 0.3mm T	4
T1K2-051	Transportation / Incline Wheel	2
T1K2-052	Flat Washer M8 x 28mm D x 1.5mm T	2
T1K2-053	Flat Washer M8	4
T1K2-054	Bolt M8 x 15mm L	2
T1K2-055	Bushing	4
T1K2-056	Incline Frame Bushing	2
T1K2-057	Flat Washer M12 x 24mm D x 2.5mm T	4
T1K2-058	Nylon Locknut (M12)	2
T1K2-059	Bolt M12 x 80mm L	2
T1K2-060	Handrail Support Frame - Left and Right Arms	2
T1K2-061	Handrail Left Arm - Molded Soft-Touch Top	1
T1K2-062	Handrail Right Arm - Molded Soft-Touch Top	1
T1K2-063	Handrail Left Arm - Upper Cover w/ Incline Controls Mounts	1
T1K2-064	Handrail Right Arm - Upper Cover w/ Speed Controls Mounts	1
T1K2-065	Handrail Left Arm - Lower Cover	1
T1K2-066	Handrail Right Arm - Lower Cover	1
T1K2-067	Handrail Left Arm - Quick Key/Incline Overlay - Single Sided	1
T1K2-068	Handrail Right Arm - Quick Key/Speed Overlay - Single Sided	1
T1K2-069	Cable - Handrail Left Arm - Incline Control Board to Dashboard (3PIN)	1
T1K2-070	Cable - Handrail Right Arm - Speed Control Board to Dashboard (3PIN)	1
T1K2-071	Handrail Left Arm - Decoration Ring	1
T1K2-072	Handrail Right Arm - Decoration Ring	1
T1K2-073	Handrail Arms - Quick Key Speed/Incline - Control Board w/ Buttons	2
T1K2-074	Screw M2.3 x 6mm L	4
T1K2-075	Bolt M6 x 8mm L	6
T1K2-076	Screw M4 x 15mm L	11
T1K2-077	Screw M5 x 12mm L	6
T1K2-078	Bolt M6 x 35mm L	4
T1K2-079	Screw M5 x 12mm L	6
T1K2-080	Dashboard Cover - Lower	1
T1K2-081	Dashboard Support & Front Handlebar	1
T1K2-082	Handlebar - Rubber Sleeve	2
T1K2-083	Handgrip Heart-Rate - Sensor (Assembly)	2
T1K2-084	Handlebar - Aluminum Ring	2
T1K2-085	Handlebar - End Plug	2
T1K2-086	Sticker - Handlebar on End Plug - Single Sided	2
T1K2-087	Handgrip Heart-Rate - Sensor Wire	1

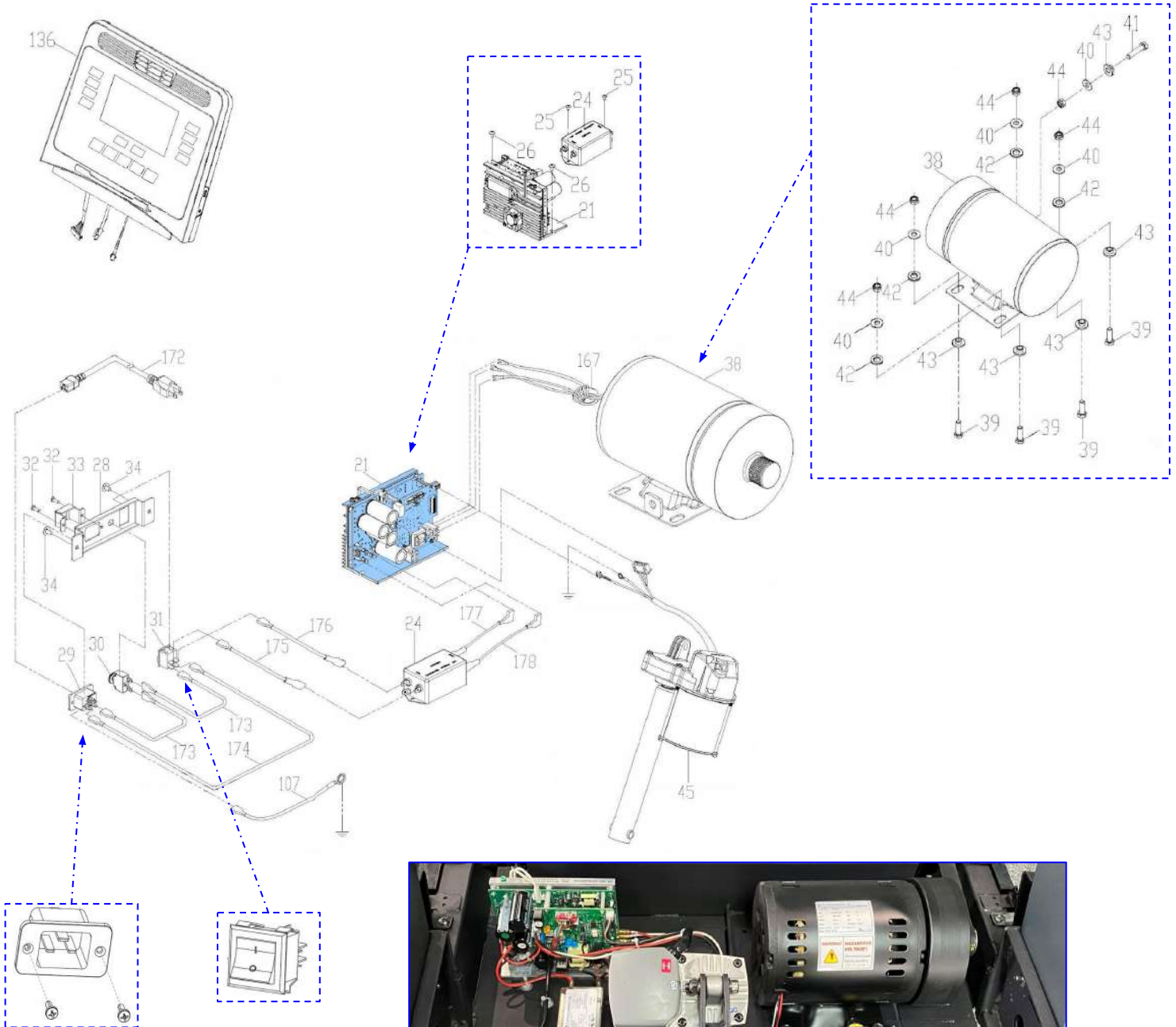
Part #	Description	Qty
T1K2-088	Bolt Ø M8 x 6mm x 18.5mm L	4
T1K2-089	Cable - Quick Keys Speed/Incline - Dashboard to Break-Out Board (8PIN)	1
T1K2-090	Cable - START/STOP Keys - Dashboard to Break-Out Board (3PIN)	1
T1K2-091	Screw M2.6 x 8mm L	20
T1K2-092	Break-Out Board #AC00450	1
T1K2-093	Cable - Break-Out Board to Console - Lower (9 PIN)	1
T1K2-094	Cable - Inverter to Break-Out Board - Upper (8 PIN)	1
T1K2-095	Bolt M8 x 100mm L	2
T1K2-096	Wireless-5K Heart-Rate Receiver	1
T1K2-097	Dashboard Cover - Upper	1
T1K2-098	Mechanical Safe Key	1
T1K2-099	Water Bottle Holder	2
T1K2-100	Sticker - Safety Key - Single Sided	1
T1K2-101	Cable - Break-Out Board to Console - Lower (2 PIN)	1
T1K2-102	Dashboard - Quick Keys Speed/Incline Overlay - Single Sided	1
T1K2-103	Dashboard - START/STOP Overlay - Single Sided	1
T1K2-104	Anti Slip Rubber - Single Side Sticker	1
T1K2-105	Safety Key Rack	1
T1K2-106	Screw M3 x 8mm L	2
T1K2-107	Ground Wire - Power Input - Green 220mm	1
T1K2-108	Ground Wire - Frame to Front Roller - Green 60mm	1
T1K2-109	Foam Double Sided - Safety Switch	2
T1K2-110	Safety Key Assembly	1
T1K2-111	Safety Key - Upper (Yellow)	1
T1K2-112	Safety Key - Top (Red)	1
T1K2-113	Safety Key - Bottom (Yellow)	1
T1K2-114	Safety Key Clip + Cotton String	1
T1K2-115	Screw M2 x 5mm L	4
T1K2-116	Screw M4 x 12mm L	12
T1K2-117	Foam Single Sided - Running Deck - Front	2
T1K2-118	Motor Cover - Lower Left	1
T1K2-119	Motor Cover - Lower Right	1
T1K2-120	Motor Cover - Lower Front	1
T1K2-121	Bolt M6 x 12mm L	20
T1K2-122	Pop-In Cover - Motor Cover Front	1
T1K2-123	Motor Cover - Top	1
T1K2-124	Screw M5 x 25mm L	7
T1K2-125	Upright Post - Left (DIAMOND GRAY)	1
T1K2-126	Upright Post - Right (DIAMOND GRAY)	1
T1K2-127	Dashboard Base Cover - Left	1
T1K2-128	Dashboard Base Cover - Right	1
T1K2-129	Dashboard Base Inside Cover - Left	1
T1K2-130	Dashboard Base Inside Cover - Right	1
T1K2-131	Upright Post Left Cover - Lower	1
T1K2-132	Upright Post Right Cover - Lower	1
T1K2-133	Cable - Inverter to Break-Out Board - Mid (8 PIN)	1

Part #	Description	Qty
T1K2-134	Sticker - BODYCRAFT for Side Step Rail - Left & Right - Single Sided	2
T1K2-135	Sticker - Motor Cover Top - Single Sided	1
T1K2-136	Console	1
T1K2-137	Dashboard - Lower Maintenance Cover to Break-Out Board	1
T1K2-138	Screw M4 x 12mm L	4
T1K2-139	Ground Wire - Handgrip Heart-Rate - Green 250mm	1
T1K2-140	PVC Strip	1
T1K2-141	Side Foot Rail - End Cap- Left	1
T1K2-142	Side Foot Rail - End Cap - Right	1
T1K2-143	Side Foot Rail - Rear Side Panel - Left	1
T1K2-144	Side Foot Rail - Rear Side Panel - Right	1
T1K2-145	Side Step Rail - Rear Ring - Left	1
T1K2-146	Side Foot Rail - Rear Ring - Right	1
T1K2-147	Side Step Rail - Top Side - Left	1
T1K2-148	Side Foot Rail - Top Side - Right	1
T1K2-149	Aluminum Rail - into Side Step Rails - Left & Right	4
T1K2-150	Sticker - Warning Label on Motor Cover Front - Single Sided	1
T1K2-151	Bolt M8 x 16mm L	2
T1K2-152	Bolt M8 x 15mm L	8
T1K2-153	Bolt M8 x 70mm L	4
T1K2-154	Screw M5 x 12mm L	6
T1K2-155	Foam - Strengthen Base Plate for Rear End Caps - Single Sided	2
T1K2-156	Bolt M8 x 20mm L	8
T1K2-157	Bolt M6 x 35mm L	2
T1K2-158	Safety Key Limit Switch	1
T1K2-159	Cable - Safety Key Limit Switch to Break-Out Board (3PIN)	1
T1K2-160	Screw M3 x 16mm L	2
T1K2-161	Handgrip Heart-Rate - Antistatic Board	1
T1K2-162	Label - Warning - Single Sided	1
T1K2-163	Foot Side Rail - Upper Side - Left	1
T1K2-164	Foot Side Rail - Upper Side - Left	1
T1K2-165	Sticker - Left Rail Cover - Rear - Single Sided	1
T1K2-166	Sticker - Right Rail Cover - Rear - Single Sided	1
T1K2-167	Ferrite Core - AC Motor Wires	1
T1K2-168	End Cap - Front Incline Frame	4
T1K2-169	Bolt 8mm x 25mm L	2
T1K2-170	Drive Motor Alignment Bushing	2
T1K2-171	Strengthen Base Plate for Rear End Caps	2
T1K2-172	Power Cord - 120V/15A (NEMA 5-15) - IEC 60320 C20 - 2,997mm L	1
T1K2-173	Wire - Power Input - Black 100mm	2
T1K2-174	Wire - Power Input - Red 150mm	1
T1K2-175	Wire - Switch to Filter - Black 210mm	1
T1K2-176	Wire - Switch to Filter - Red 180mm	1

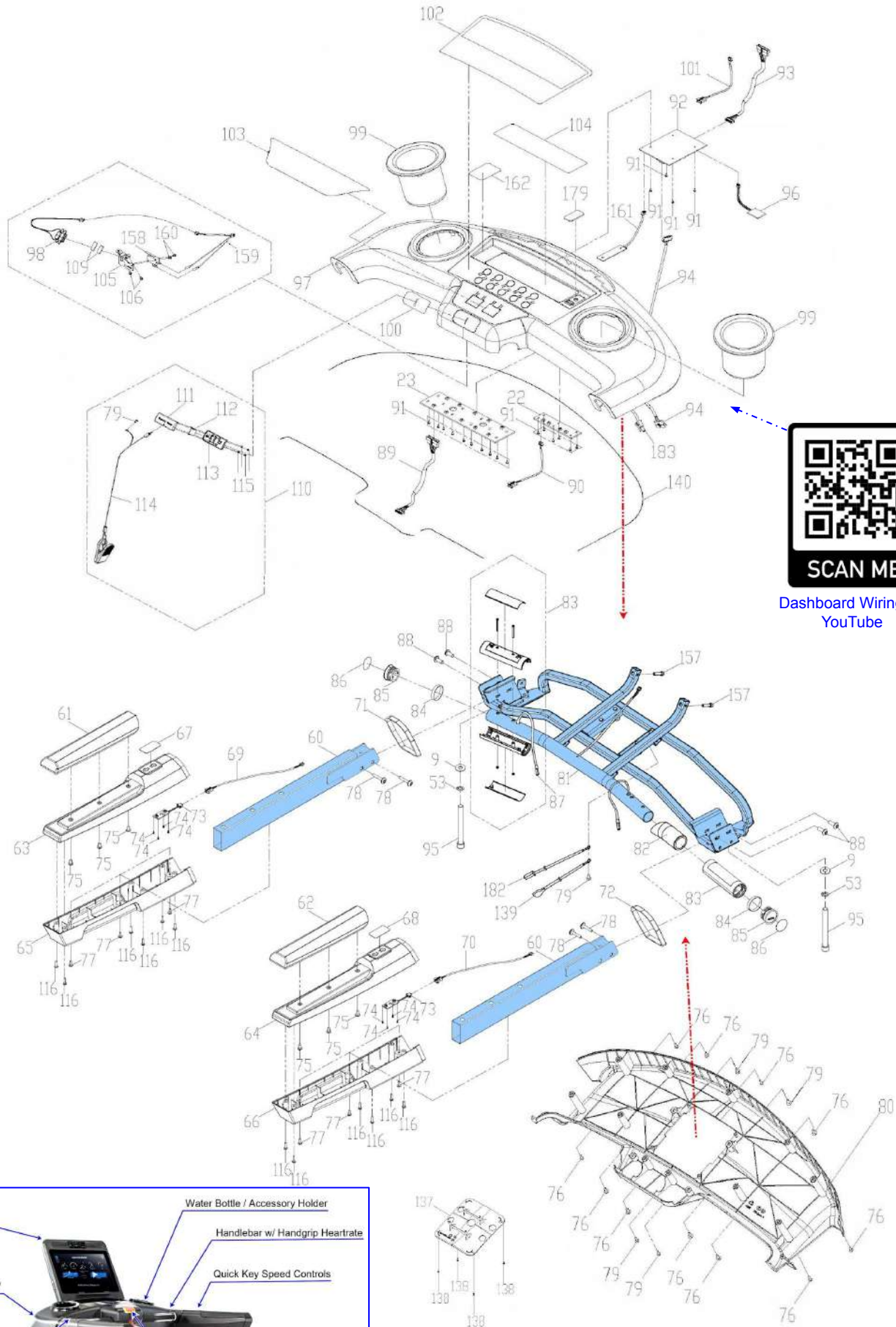
Part #	Description	Qty
T1K2-177	Wire - Filter to Inverter - Red 220mm	1
T1K2-178	Wire - Filter to Inverter - Black 250mm	1
T1K2-179	USB Cover - Dashboard Upper Cover	1
T1K2-180	Ground Wire Female - Upright Post - Mid 1,200mm	1

Part #	Description	Qty
T1K2-181	Ground Wire Male - Base to Upright - Lower 300mm	1
T1K2-182	Ground Wire Female - Dashboard - Up 300mm	1
T1K2-183	Ground Wire Female - Dashboard - Down 600mm	1
T1K2-184	Sticker - EXP Series for Upright Post	2

Product Parts Exploded View - Drive System - T1000 (T1K1 & T1K2)



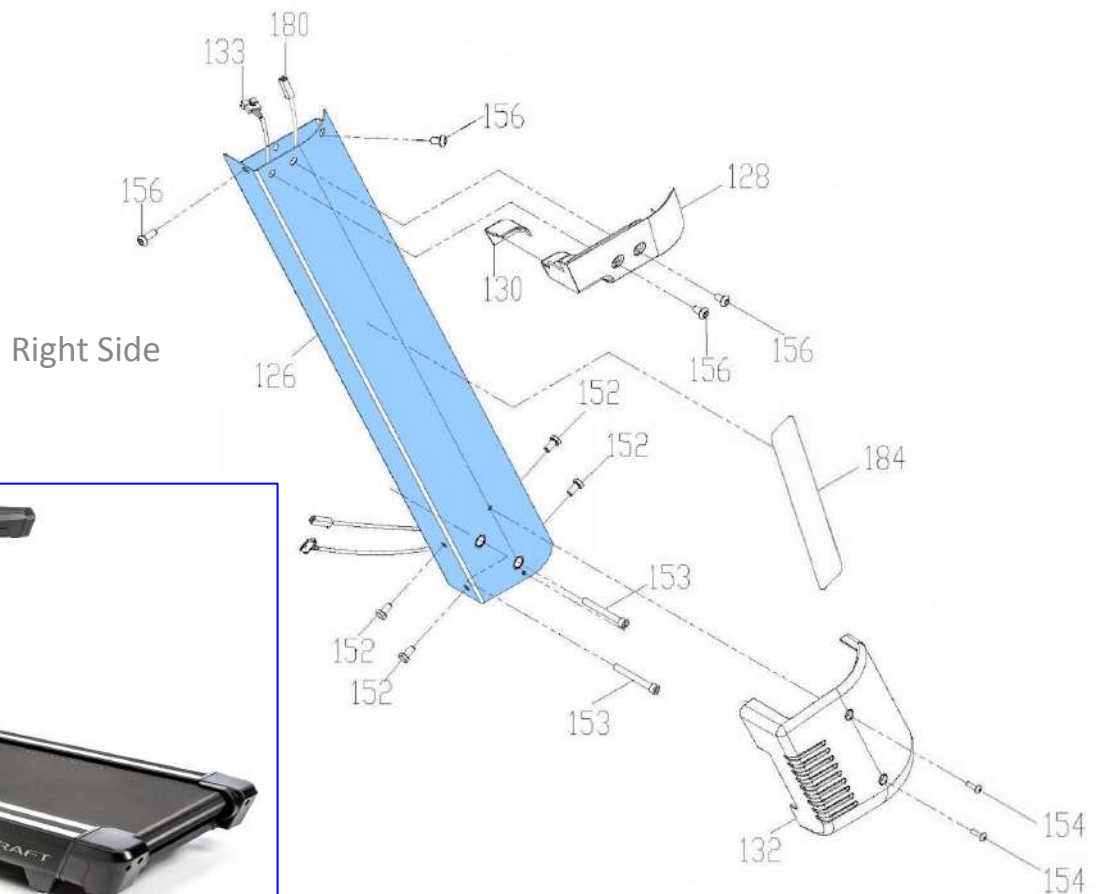
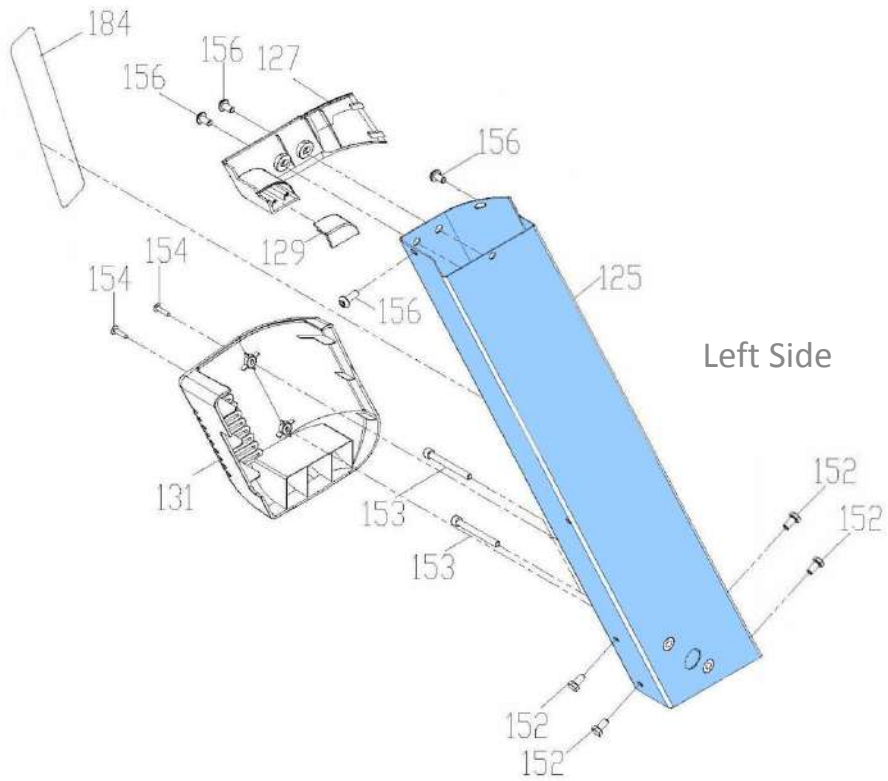
Product Parts Exploded View - Dashboard Assembly - T1000 (T1K1 & T1K2)



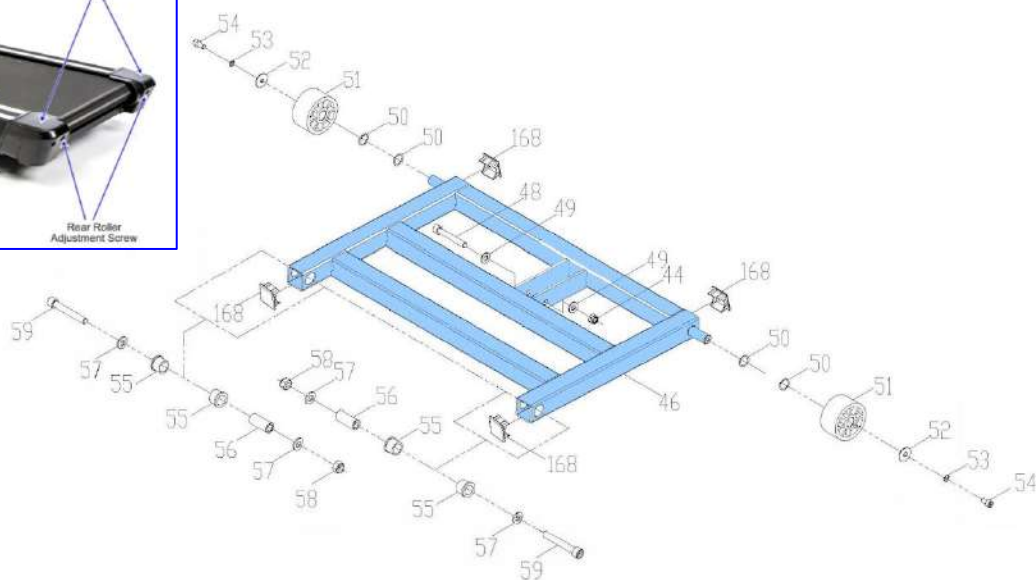
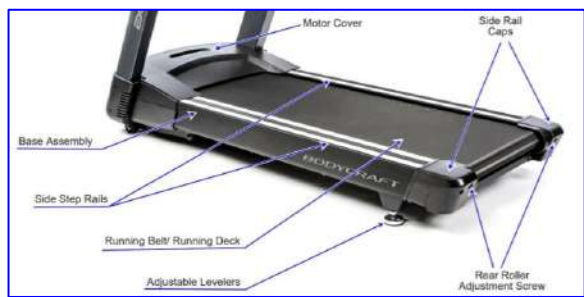
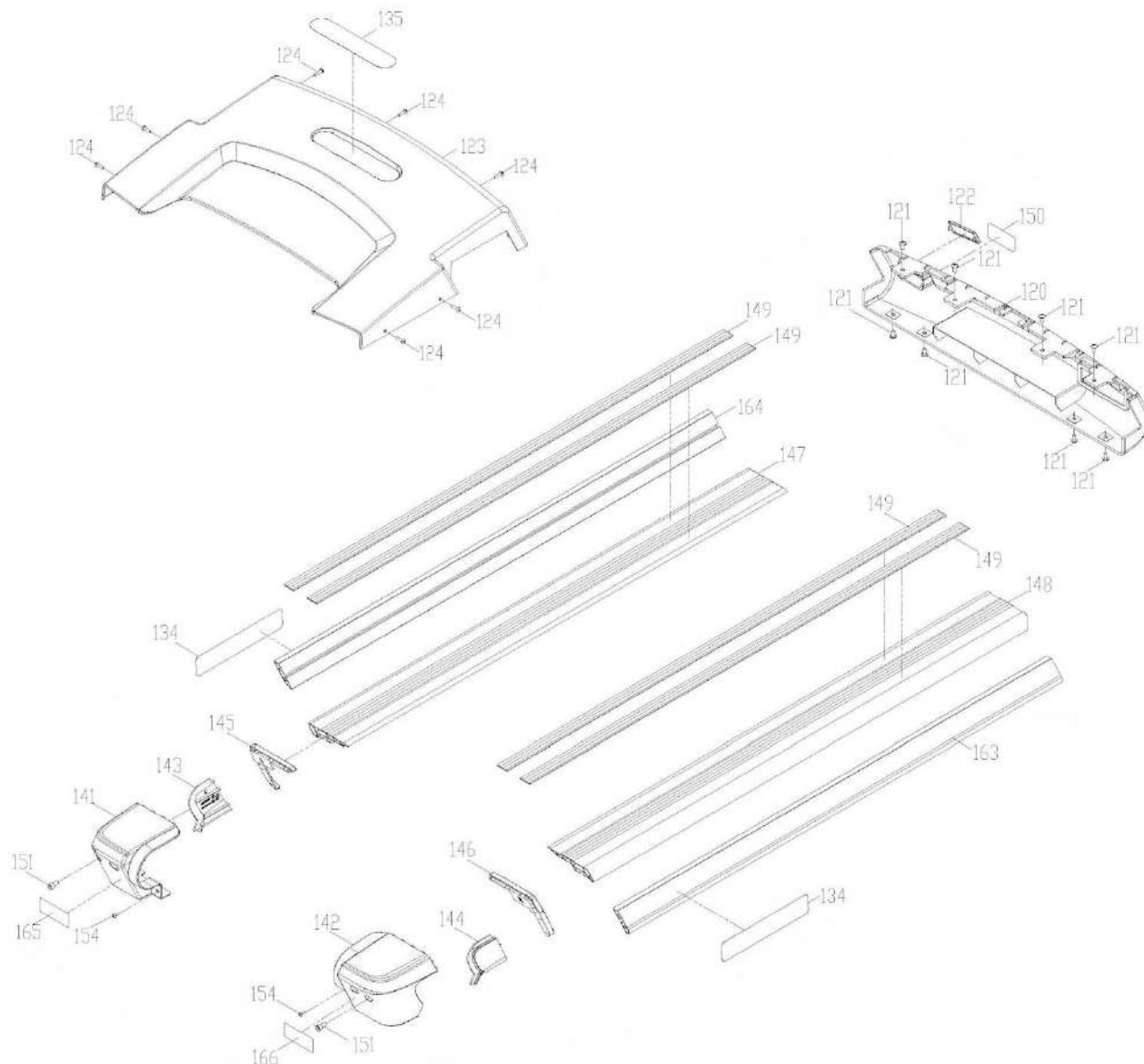
Dashboard Wiring on YouTube



Product Parts Exploded View - Upright Posts Assembly - T1000 (T1K1 & T1K2)



Product Parts Exploded View - Base Covers & Incline Frame - T1000 (T1K1 & T1K2)



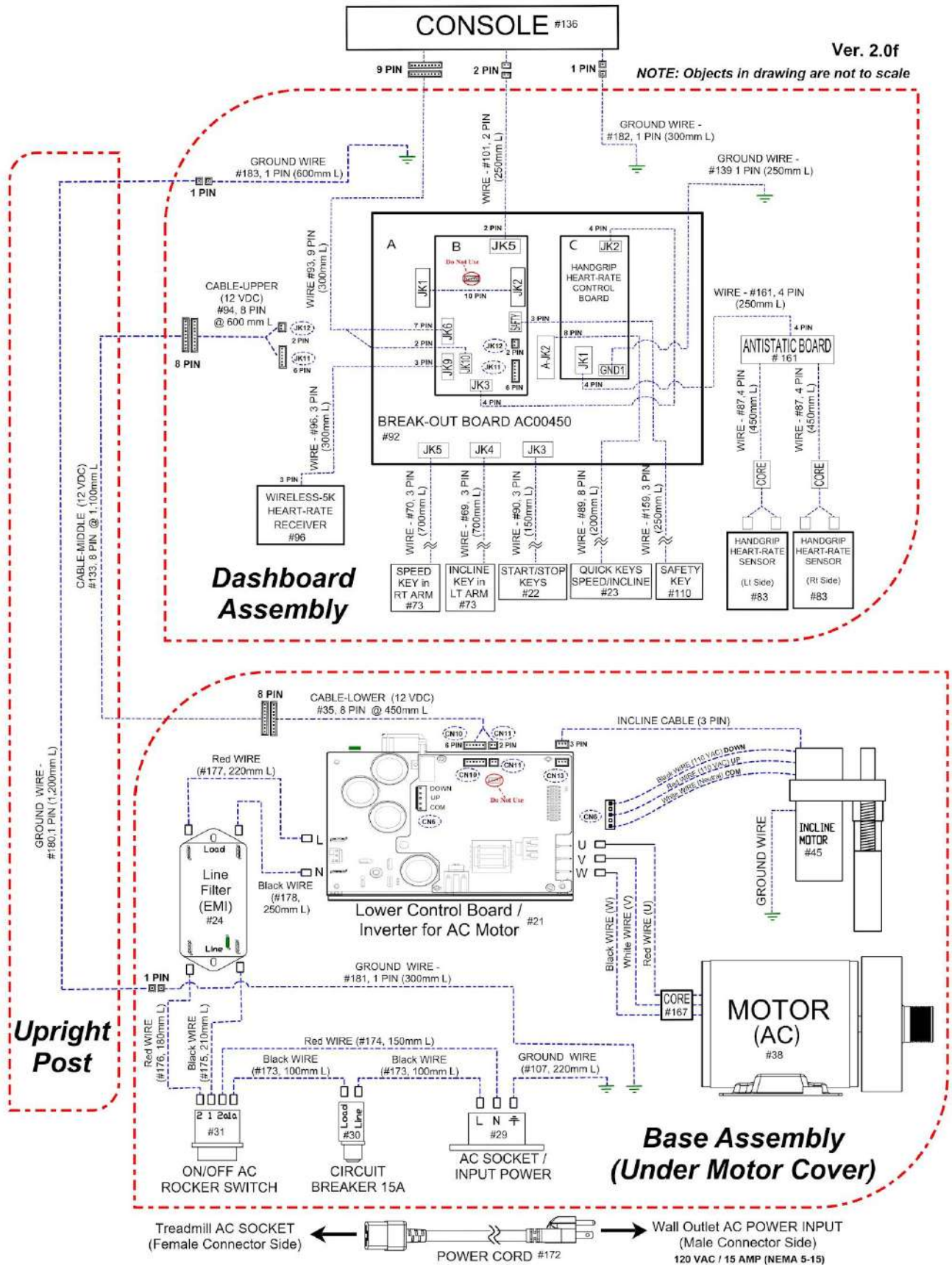
Circuit Diagram - T1000 (T1K1 & T1K2)

Treadmill Circuit Diagram

T1000 (T1K1 & T1K2)



Ver. 2.0f

NOTE: Objects in drawing are not to scale



Error Codes E1 - E7 (Ver. 1.5)

EXP-Series Treadmill T1000 (T1K1)

Error Codes		EXP- Series Treadmills T1000(T1K1) AC Motor Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E1	Low AC input Voltage	Not a good wall outlet with proper voltage and grounding.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Too many treadmills or other electrical products units using same breaker.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application).	
		Bad wiring harness, wire connections, bad in-line filter, bad motor controller.	Inspect all wiring harness, wire connections for color and full tight connections. Then check in-line filter for input voltage to output voltage & heat of metal frame.	If loose connections, take pliers and squeeze the connector with little pressure to close the gap then reconnect wire harness. If connectors or wires are discolored or burnt, then replace wires & connectors. If in-line filter is defective, then proceed to replace with new. If all above is correct and unit is new, then proceed to replace the motor controller.	
E2	Inverter Temperature Anomaly	The Inverter has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E4	Over Current	Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Needs preventive maintenance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean front rollers, drive motor, electronics, & cooling fan area.	
		Belt/Deck high amp due to PM needed	Check belt/deck wear and amp draw at 2/4/8 mph under load.	Clean running belt/deck area and lube under running belt. Then perform amp tests at 2/4/8 mph under load.	
		Belt/Deck high amp draw due to wear.	Check belt/deck wear and amp draw	Run amp tests at 2/4/8 mph under load after PM performed. If still too high, replace running belt and flip deck.	
		The Inverter has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E6	Inverter over-voltage	AC Power going into the Lower Board/Inverter from house current is too high. This can be caused by using a generator to power the treadmill.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Call electrician if needed for correct wiring. If AC power checks out, then replace Lower Board/Inverter	
E7	PFC abnormal	The Inverter has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	

Error Codes E8 - E17 (Ver. 1.5)

EXP-Series Treadmill T1000 (T1K1) v1.5

Error Codes		EXP-Series Treadmills T1000(T1K1) AC Motor Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E8	THREE PHASE MOTOR CURRENT UNBALANCE	Trapped Cables	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Drive Motor / Replace Lower Board/Inverter	
E9	Invertor over-heating	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.	
		Too many treadmills or other units using same breaker	Check line voltatge. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need to correct.	
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.	
		The Lower Board/Inverter is Over heating.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E16	Drive Motor Overload	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.	
		Too many treadmills or other units using same breaker	Check line voltatge. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need to correct.	
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.	
		Bad Drive Motor	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on. If same error code, check Drive Motor Wires	If wires are ok and all other checks are complete including PM, then replace Drive Motor	
E17	Inverter Overload	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.	
		Too many treadmills or other units using same breaker	Check line voltatge. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need not correct.	



Error Codes E18 - E33 (Ver. 1.5)


EXP-Series Treadmill T1000 (T1K1)

Error Codes		EXP- Series Treadmills T1000(T1K1) AC Motor Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.	
		Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E18	System Overload	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.	
		Too many treadmills or other units using same breaker	Check line voltatge. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need not correct.	
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.	
		Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E22	No communication between breakout board and lower board/Inverter	Bad cable connection	Check cable connection and replace the cable if necessary to double check	Replace the cable to double check	
		The breakout board is damaged	Replace breakout board to check.	Replace breakout board.	
		The controller is damaged.	Replace the controller to check.	Replace Lower Board/ Inverter	
E23	No communication between console and breakout board	Failed communicate between breakout board and inverter.	Inspect the wire harness that runs from the console to the lower board. check for pinched/severed wires. Unplug each connector and inspect pins and them reconnect.	Replace bad section of wire harness/plug.	
E33	Bad Inverter Flash Program	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	




Error Codes E34 - E65 (Ver. 1.5)

EXP-Series Treadmill T1000 (T1K1)

Error Codes		<i>EXP- Series Treadmills T1000(T1K1) AC Motor Ver. 1.5</i>		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E34	Bad Inverter EEPROM	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E35	Low Voltage	Unstable Voltage input. Too many machines are on the same line	Turn off all machines that may share the line and retest. Try another outlet. Check for unapproved extension cords and power strips	Discontinue using any unapproved extension cords for power strips. Plug treadmill power cord directly into a dedicated 120v/20amp outlet/breaker. Call electrician if needed for correct wiring.	
E37	Emergency stop display	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E38	Driver setting error	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E39	Low voltage	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E40	High voltage	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E41	Over-heating warning	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.	
		Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if needed for correct wiring.	
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.	
		Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E65	System overlaid warning	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	

Error Codes E66 - E88 (Ver. 1.5)

EXP-Series Treadmill T1000 (T1K1)

Error Codes		EXP- Series Treadmills T1000(T1K1) AC Motor Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E66	High temperature warning	Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Needs preventive maintenance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean front rollers, drive motor, electronics, & cooling fan area.	
		Belt/Deck high amp due to PM needed	Check belt/deck wear and amp draw at 2/4/8 mph under load.	Clean running belt/deck area and lube under running belt. Then perform amp tests at 2/4/8 mph under load.	
		Belt/Deck high amp draw due to wear.	Check belt/deck wear and amp draw	Run amp tests at 2/4/8 mph under load after PM performed. If still too high, replace running belt and flip deck.	
		The motor is overloaded and the system enters a protective state.	ONLY after all the five (5) above items are confirmed then turn off main power for 2 minutes and switch back on.	If you turn the power back on and error code returns, then proceed to replace the Motor Inverter.	
E82	Incline Calibration Error	Abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	Check for abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	If found abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments then take off or reassemble loose bolts/nuts. Retest if corrected or if now need new Incline Motor.	
		Bad Incline Motor/Bad incline motor wire harness.	Inspect Incline Motor and incline motor wire harness. Turn off machine and unplug and reconnect Incline motor. Turn back on and recheck	If wire harness is ok, then replace Incline Motor	
E83	Incline Error	Abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	Check for abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	If found abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments then take off or reassemble loose bolts/nuts. Retest if corrected or if now needs next check of new Incline Motor.	
		Bad connection, Defective Incline Motor/Bad incline motor or wire harness.	Inspect Incline Motor and Incline Motor Wire Harness. Turn off machine and unplug and reconnect Incline motor. Turn back on and recheck	Replace Incline Motor	
E88	Console EEPROM failure	Console display is damaged.	After the power is turned on, the error message is displayed after 5 seconds, and the error information is exited, and the parameters set by the user cannot be saved.	Replace console. (Please be repaired by maintenance personnel)	
<p>Note on No Error Code: There will be malfunctions that do not produce an Error Code. Refer to Troubleshooting Foundations 101 document for basic procedures. After reviewing, document all inspection & testing process taken with Model # and Serial # of unit when at customers location, then contract BODYCRAFT Customer Support (800) 990-5556 for further actions to be taken.</p>					

Error Codes (Ver. 1.5)

Conditions to Consider

EXP-Series Treadmill T1000 (T1K1)

Error Codes		<i>EXP-Series Treadmills T1000(T1K1) AC Motor Ver. 1.5</i>		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
<p>Note on preventive maintenance: JUST LIKE CHANGING THE OIL IN YOUR CAR, PREVENTIVE MAINTENANCE (PM) IS REQUIRED AND RESPONSIBILITY OF OWNER TO PERFORM. A treadmill in home application needs PM once a year and commercial application every 6 months under normal use. Extensive use or dirty environments clean quarterly. This includes cleaning under treadmill, rollers area, motor area including drive motor, electronics, cooling fan and all touch areas. Clean with vacuum cleaner and surfaces only with mild soap/water and soft cloth. Proceed to clean under belt/deck area with dry soft cloth then lube with 100% pure silicone (Dow Chemical XIAMETER™ PMX-200 Silicone Fluid), 30ml (about 1oz) under center area under running belt. See Owners Manual and PM Checklist for further details.</p>					
<p>Note on panel breakers and wall outlets: Treadmills in home application needs a 120 volt / 15 amp dedicated Non-GFCI outlet (per treadmill). In a commercial application, the T800 DC Drive treadmill needs a 120 volt / 20 amp dedicated Non-GFCI outlet (per treadmill). New Arc Fault breaker(s) (AFCI) or wall outlet(s) vary per manufacture and could possibly need additional surge protector at EMI / RFI Filtering 40-80 dB to not trip the same frequency of a treadmill motor. Recommend for Arc Fault breakers (AFCI) due to new 2017 NEC code: Isobar 2-Outlet Surge Protector # ISOBAR 2-6</p>					
<p>Typical AFCI Circuit Breaker Installation</p> 				<p>Eaton Engineering Director Andy Foerster said arc fault detection is challenging, in part because so many common household devices — such as vacuum cleaners and power tools that use motors with brushes — create arcing. In information provided to ARRL Eaton engineer Lanson Relyea said that because AFCIs rely on HF emission detection to verify arcing, “any signal that conducts or radiates a signal within the detection band of the AFCI can cause interference and cause the device to trip without the presence of a true arcing condition.”</p>	
				 Tripp Lite Isobar 2 Outlet Surge Protector Power Strip	
UPDATE SOFTWARE!!		What is the first step when troubleshooting ANY failure?		UPDATE SOFTWARE!!	
Need help from our Customer Support Team? Call us at (800) 990-5556 . We're available Monday through Friday, 10:00 AM – 5:00 PM Eastern Time. Or email us anytime: support@bodycraft.com					
				Additional service videos, parts orders, software update files, and contact information scan this QR code. Or go to: https://www.bodycraft.com/customer-support.html	

Version 1.5

Error Codes E1 - E8 (Ver. 1.7)

EXP-Series Treadmill T1000 (T1K2)

Error Codes		EXP-Series Treadmills T1000(T1K2) AC Motor		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E1	Low AC input Voltage	Not a good wall outlet with proper voltage and grounding.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Too many treadmills or other electrical products units using same breaker.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application).	
		Bad wiring harness, wire connections, bad in-line filter, bad motor controller.	Inspect all wiring harness, wire connections for color and full tight connections. Then check in-line filter for input voltage to output voltage & heat of metal frame.	If loose connections, take pliers and squeeze the connector with little pressure to close the gap then reconnect wire harness. If connectors or wires are discolored or burnt, then replace wires & connectors. If in-line filter is defective, then proceed to replace with new. If all above is correct and unit is new, then proceed to replace the motor controller.	
E2	Inverter Temperature Anomaly	The Inverter has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E4	Over Current	Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Needs preventive maintenance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean front rollers, drive motor, electronics, & cooling fan area.	
		Belt/Deck high amp due to PM needed	Check belt/deck wear and amp draw at 2/4/8 mph under load.	Clean running belt/deck area and lube under running belt. Then perform amp tests at 2/4/8 mph under load.	
		Belt/Deck high amp draw due to wear.	Check belt/deck wear and amp draw	Run amp tests at 2/4/8 mph under load after PM performed. If still too high, replace running belt and flip deck.	
		The Inverter has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E6	Inverter over-voltage	AC Power going into the Lower Board/Inverter from house current is too high. This can be caused by using a generator to power the treadmill.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Call electrician if needed for correct wiring. If AC power checks out, then replace Lower Board/Inverter	
E7	PFC abnormal	The Inverter has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E8	THREE PHASE MOTOR CURRENT UNBALANCE	Trapped Cables	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Drive Motor / Replace Lower Board/Inverter	

(Ver. 1.7)



Error Codes E9 - E11 (Ver. 1.7)

EXP-Series Treadmill T1000 (T1K2)

Error Codes		<i>EXP- Series Treadmills T1000(T1K2) AC Motor</i>		BODYCRAFT
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix
E9	Inverter over-heating	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.
		Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need to correct.
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.
		The Lower Board/Inveter is Over heating.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter
E10	Drive Motor Overload	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.
		Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need to correct.
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.
		Bad Drive Motor	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on. If same error code, check Drive Motor Wires	If wires are ok and all other checks are complete including PM, then replace Drive Motor
E11	Inverter Overload	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.
		Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need not correct.
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.

[Ver. 1.7]



Error Codes E11 - E35 (Ver. 1.7)

EXP-Series Treadmill T1000 (T1K2)

Error Codes		EXP- Series Treadmills T1000(T1K2) AC Motor		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E11		Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E12	System Overload	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.	
		Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if need not correct.	
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.	
		Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E22	No communication between breakout board and lower board/Inverter	Bad cable connection	Check cable connection and replace the cable if necessary to double check	Replace the cable to double check	
		The breakout board is damaged	Replace breakout board to check.	Replace breakout board.	
		The controller is damaged.	Replace the controller to check.	Replace Lower Board/ Inverter	
E23	No communication between console and breakout board	Failed communicate between breakout board and inverter.	Inspect the wire harness that runs from the console to the lower board. check for pinched/severed wires. Unplug each connector and inspect pins and them reconnect.	Replace bad section of wire harness/plug.	
E33	Bad Inverter Flash Program	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E34	Bad Inverter EEPROM	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E35	Low Voltage	Unstable Voltage input. Too many machines are on the same line	Turn off all machines that may share the line and retest. Try another outlet. Check for unapproved extension cords and power strips	Discontinue using any unapproved extension cords for power strips. Plug treadmill power cord directly into a dedicated 120v/20amp outlet/breaker. Call electrician if needed for correct wiring.	

(Ver. 1.7)



Error Codes E37 - E83 (Ver. 1.7)

EXP-Series Treadmill T1000 (T1K2)

Error Codes		EXP-Series Treadmills T1000(T1K2) AC Motor		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E37	Communication issue between circuit boards	Bad inverter, Miscommunication on 2 pin of Power Cable to Console from Breakout-Board.	Check connections at Lower Board/Inverter, Cable Harness and Breakout-Board/ check continuity for damaged Cable or Bent Pins then Power Cycle (Restart Unit).	Reseat Connectors / Replace Communication Cable(s) / Replace Lower Board/Inverter	
	Emergency stop display	Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E41	Over-heating warning	Belt/Deck high amp draw	Check belt/deck wear and amp draw	Clean belt/deck area, drive motor, electronics, cooling fan, and lube running belt. If amps still too high during 4mph-8mph test replace running belt and flip deck.	
		Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 20amp per treadmill	Use only one treadmill per Dedicated 120v/20amp outlet/breaker. Call electrician if needed for correct wiring.	
		Needs Preventive Mantance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean motor, electronics, cooling fan, belt/deck area and lube running belt.	
		Bad Inverter	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	Replace Lower Board/Inverter	
E82	Incline Calibration Error	Abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	Check for abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	If found abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments then take off or reassemble loose bolts/nuts. Retest if corrected or if now need new Incline Motor.	
		Bad Incline Motor/Bad incline motor wire harness.	Inspect Incline Motor and incline motor wire harness. Turn off machine and unplug and reconnect Incline motor. Turn back on and recheck	If wire harness is ok, then replace Incline Motor	
E83	Incline Error	Abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	Check for abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments.	If found abstruction in elevation lift assembly, elevation motor gears, elevation system bolts/nuts attachments then take off or reassemble loose bolts/nuts. Retest if corrected or if now needs next check of new Incline Motor.	
		Bad connection, Defective Incline Motor/Bad incline motor or wire harness.	Inspect Incline Motor and Incline Motor Wire Harness. Turn off machine and unplug and reconnect Incline motor. Turn back on and recheck	Replace Incline Motor	
E88	Conosle EEPROM failure	Console display is damaged.	After the power is turned on, the error message is displayed after 5 seconds, and the error information is exited, and the parameters set by the user cannot be saved.	Replace console.(Please be repaired by maintenance personnel)	
<p>Note on No Error Code: There will be malfunctions that do not produce an Error Code. Refer to Troubleshooting Foundations 101 document for basic procedures. After reviewing, document all inspection & testing process taken with Model # and Serial # of unit when at customers location, then contract BODYCRAFT Customer Support (800) 990-5556 for further actions to be taken.</p>					

(Ver. 1.7)

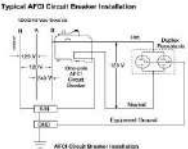




Error Codes (Ver. 1.7)

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Conditions to Consider

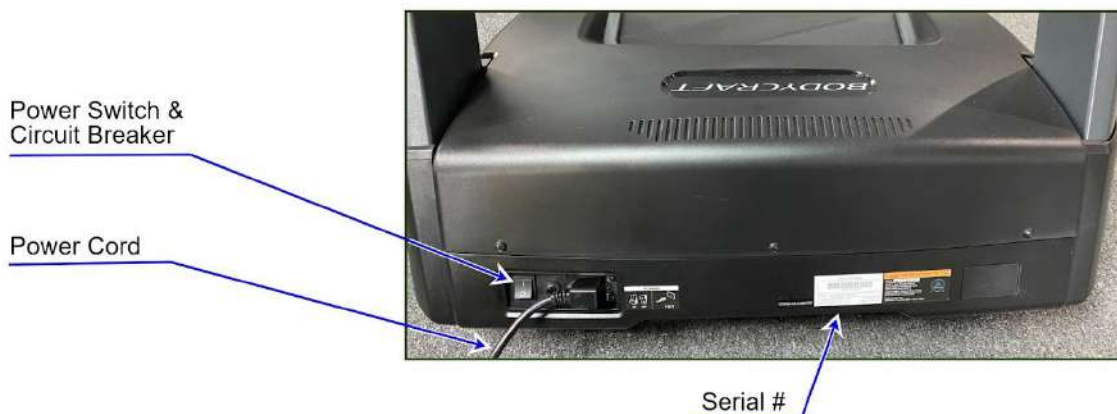
EXP-Series Treadmill T1000 (T1K2)

Error Codes		<i>EXP- Series Treadmills T1000(T1K2) AC Motor</i>		BODYCRAFT
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix
<small>(Ver. 1.7)</small> 				
<p>Note on preventive maintenance: JUST LIKE CHANGING THE OIL IN YOUR CAR, PREVENTIVE MAINTENANCE (PM) IS REQUIRED AND RESPONSIBILITY OF OWNER TO PERFORM. A treadmill in home application needs PM once a year and commercial application every 6 months under normal use. Extensive use or dirty environments clean quarterly. This includes cleaning under treadmill, rollers area, motor area including drive motor, electronics, cooling fan and all touch areas. Clean with vacuum cleaner and surfaces only with mild soap/water and soft cloth. Proceed to clean under belt/deck area with dry soft cloth then lube with 100% pure silicone (Dow Chemical XIAMETER™PMX-200 Silicone Fluid), 30ml (about 1oz) under center area under running belt. See Owners Manual and PM Checklist for further details.</p>				
<p>Note on panel breakers and wall outlets: Treadmills in home application needs a 120 volt / 15 amp dedicated Non-GFCI outlet (per treadmill). In a commercial application, the T800 DC Drive treadmill needs a 120 volt / 20 amp dedicated Non-GFCI outlet (per treadmill). New Arc Fault breaker(s) (AFCI) or wall outlet(s) vary per manufacture and could possibly need additional surge protector at EMI / RFI Filtering 40-80 dB to not trip the same frequency of a treadmill motor. Recommend for Arc Fault breakers (AFCI) due to new 2017 NEC code: Isobar 2-Outlet Surge Protector # ISOBAR 2-6</p>				
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  <p style="font-size: 8px;">Typical AFCI Circuit Breaker Installation</p> </div> <div style="width: 40%; text-align: center;">  </div> <div style="width: 30%;"> <p style="font-size: 8px;">Eaton Engineering Director Andy Foerster said arc fault detection is challenging, in part because so many common household devices — such as vacuum cleaners and power tools that use motors with brushes — create arcing. In information provided to ARRL Eaton engineer Lanson Relyea said that because AFCIs rely on HF emission detection to verify arcing, “any signal that conducts or radiates a signal within the detection band of the AFCI can cause interference and cause the device to trip without the presence of a true arcing condition.”</p> </div> <div style="width: 15%; text-align: right;">  <p style="font-size: 8px;">Tripp Lite Isobar 2 Outlet Surge Protector Power Strip</p> </div> </div>				
<p>Note on panel breakers and wall outlets: Treadmills in home application needs a 120 volt / 15 amp dedicated Non-GFCI outlet (per treadmill). In a commercial application, the T800 DC Drive treadmill needs a 120 volt / 20 amp dedicated Non-GFCI outlet (per treadmill). New Arc Fault breaker(s) (AFCI) or wall outlet(s) vary per manufacture and could possibly need additional surge protector at EMI / RFI Filtering 40-80 dB to not trip the same frequency of a treadmill motor. Recommend for Arc Fault breakers (AFCI) due to new 2017 NEC code: Isobar 2-Outlet Surge Protector # ISOBAR 2-6</p>				
UPDATE SOFTWARE!!		What is the first step when troubleshooting ANY failure?		UPDATE SOFTWARE!!
Need help from our Customer Support Team? Call us at (800) 990-5556. We're available Monday through Friday, 10:00 AM – 5:00 PM Eastern Time. Or email us anytime: support@bodycraft.com				
<div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: left; font-size: 8px;"> <p>Additional service videos, parts orders, software update files, and contact information scan this QR code.</p> <p>Or go to: https://www.bodycraft.com/customer-support.html</p> </div> </div>				

Version 1.7

Picture of Unit w/ Callouts

EXP-Series Treadmill T800



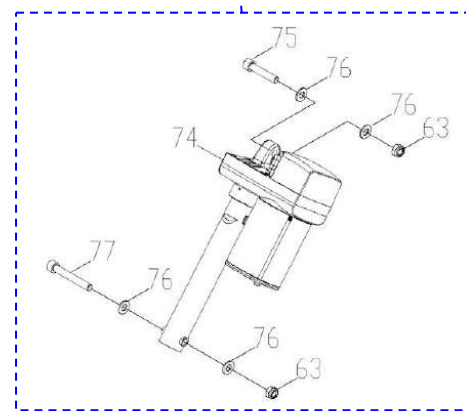
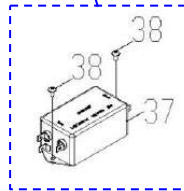
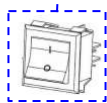
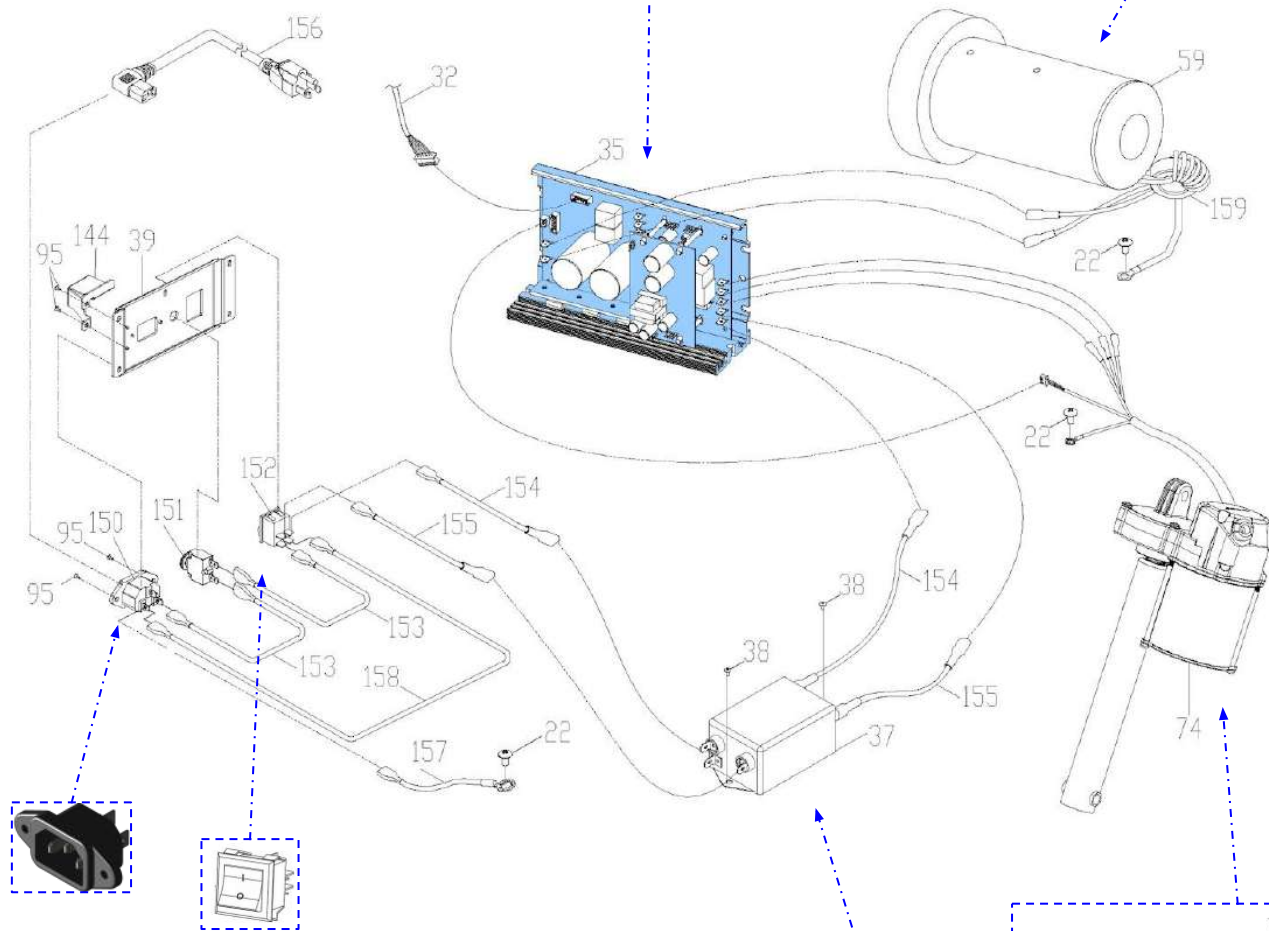
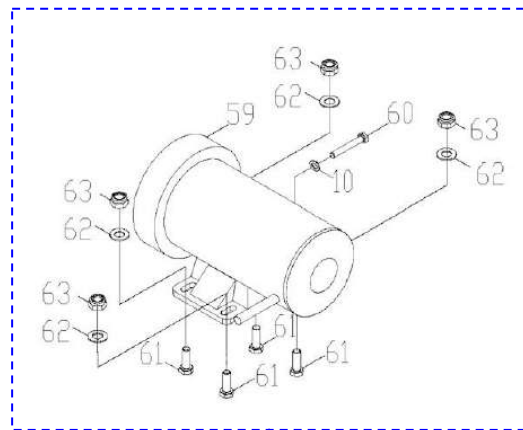
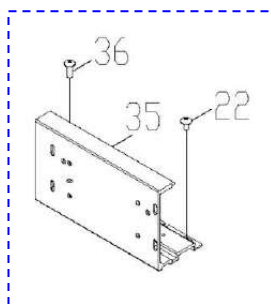
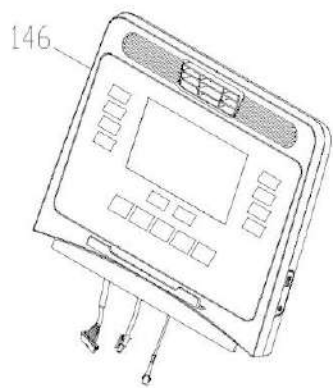
Part #	Description	Qty
T802:001	Main Base Frame (DIAMOND GRAY)	1
T802:002	Elastomer Shock Absorbers - 1st Row - Front	2
T802:003	Elastomer Shock Absorbers - 2nd & 3rd Rows - Mid	4
T802:004	Elastomer Shock Absorbers - 4th Row - Rear	2
T802:005	Running Deck - 699mm W x 1,384mm L x 25.4mm T	1
T802:006	Bolt M6 x 3mm L	8
T802:007	Side Step Rails - Support Locking Piece to Running Deck	6
T802:008	Side Step Rails - Support Plate	6
T802:009	Side Step Rails - Support Sleeves	6
T802:010	Flat Washer M8 x 18mm x 2.0mm	10
T802:011	Spring Flat Washer M8	12
T802:012	Bolt M8 x 123mm L	6
T802:013	Foam Single Sided - Running Deck - Front	2
T802:014	Bolt M8 x 50mm L	8
T802:015	Side Step Rails - Support Locking Piece to Frame	8
T802:016	Flat Washer 8mm x 16mm x 1.2mm	8
T802:017	Nylon Locknut M8	11
T802:018	Stabilizer Feet - Self Leveling - Rear	2
T802:019	Left Rear Cover Support Seat	1
T802:020	Right Rear Cover Support Seat	1
T802:021	Bolt M6 x 12mm L	16
T802:022	Screw M5 x 10mm L	5
T802:023	Speed Sensor Bracket	1
T802:024	Snap Bushing SB-14	2
T802:025	Snap Bushing SB-25	1
T802:026	Motor Cover - Lower Left	1
T802:027	Motor Cover - Lower Right	1
T802:028	Screw M5 x 12mm L	14
T802:029	Sensing Line 850mm L	1
T802:030	Screw M4 x 12mm L	4
T802:031	Sticker - Grounding Screw Location - Single Sided	1
T802:032	Cable - Lower Control Board to Break-Out Board - Lower (6 PIN)	1
T802:033	Screw M6 x 20mm L	2
T802:034	Drive Motor Alignment Bushing	2
T802:035	Lower Control Board #A512-170731012 (SR)	1
T802:036	Screw M5 x 16mm L	1
T802:037	Line Filter - EMI	1
T802:038	Screw M4 x 8mm L	2
T802:039	Power Supply Mounting Plate	1
T802:040	Screw M4 x 12mm L	5
T802:041	Pop-In Cover - Motor Cover Front	1
T802:042	Motor Cover - Lower Front	1
T802:043	Sticker - Electrical Labeling - Single Sided	1
T802:044	Motor Cover - Top	1
T802:045	Sticker - Model Number - Motor Cover - Top - Single Sided	1

Part #	Description	Qty
T802:046	Screw M5 x 25mm L	7
T802:047	Upright Post - Left Cover - Upper	1
T802:048	Upright Post - Right Cover - Upper	1
T802:049	Upright Post - Left (DIAMOND GRAY)	1
T802:050	Upright Post - Right (DIAMOND GRAY)	1
T802:051	Bolt M8 x 70mm L	4
T802:052	Bolt M8 x 15mm L	4
T802:053	Bolt M8 x 20mm L	8
T802:054	Dashboard Base Cover - Left	1
T802:055	Dashboard Base Cover - Right	1
T802:056	Cable - Lower Control Board to Break-Out Board - Mid (6 PIN)	1
T802:057	Drive Motor Pulley Belt - Ribbed 635J (HS)	1
T802:058	Front Roller Assembly - 64mm D x 699mm L w/ 115mm Pulley	1
T802:059	Drive Motor - DC 4.0hp (TR)	1
T802:060	Bolt M8 x 55mm L	1
T802:061	Bolt M10 x 30mm L	4
T802:062	Flat Washer M10 x 25mm x 2.5mm	4
T802:063	Nylon Locknut M10	6
T802:064	Running Belt - 508mm W x 3,230mm L x 2.0mm T (TF)	1
T802:065	Rear Roller Assembly - 64mm D x 699mm L	1
T802:066	Bolt M8 x 70mm L	3
T802:067	Side Step Rail - Left	1
T802:068	Side Foot Rail - Right	1
T802:069	Aluminum Rail - into Side Step Rails - Left & Right	4
T802:070	Sticker - BODYCRAFT for Side Step Rail - Left & Right	2
T802:071	End Cap - Foot Side Rail - Left Rear	1
T802:072	End Cap - Foot Side Rail - Right Rear	1
T802:073	Bolt M8 x 16mm L	6
T802:074	Incline Motor - J25A (JS)	1
T802:075	Bolt M10 x 50mm L	1
T802:076	Flat Washer M10 x 21mm x 2.0mm	6
T802:077	Bolt M10 x 70mm L	1
T802:078	Incline Lifting Frame (DIAMOND GRAY)	1
T802:079	Flat Washer M8 x 28mm x 1.5mm	2
T802:080	Transportation / Incline Wheel	2
T802:081	Wave Washer M18.6 x 24mm x 0.3mm T	4
T802:082	Bolt M12 x 62mm L	2
T802:083	Powder Metallurgy 25mm x 19mm x 11mm L (SAE)	2
T802:084	Incline Frame - Lock Shaft Bushing	2
T802:085	Flat Washer M12 x 30mm x 3.0mm T	2
T802:086	Nylon Locknut M12	2
T802:087	Dashboard Cover - Bottom	1
T802:088	Screw M4 x 15mm L	11
T802:089	Screw M5 x 12mm L	6
T802:090	Dashboard Support & Front Handlebar	1

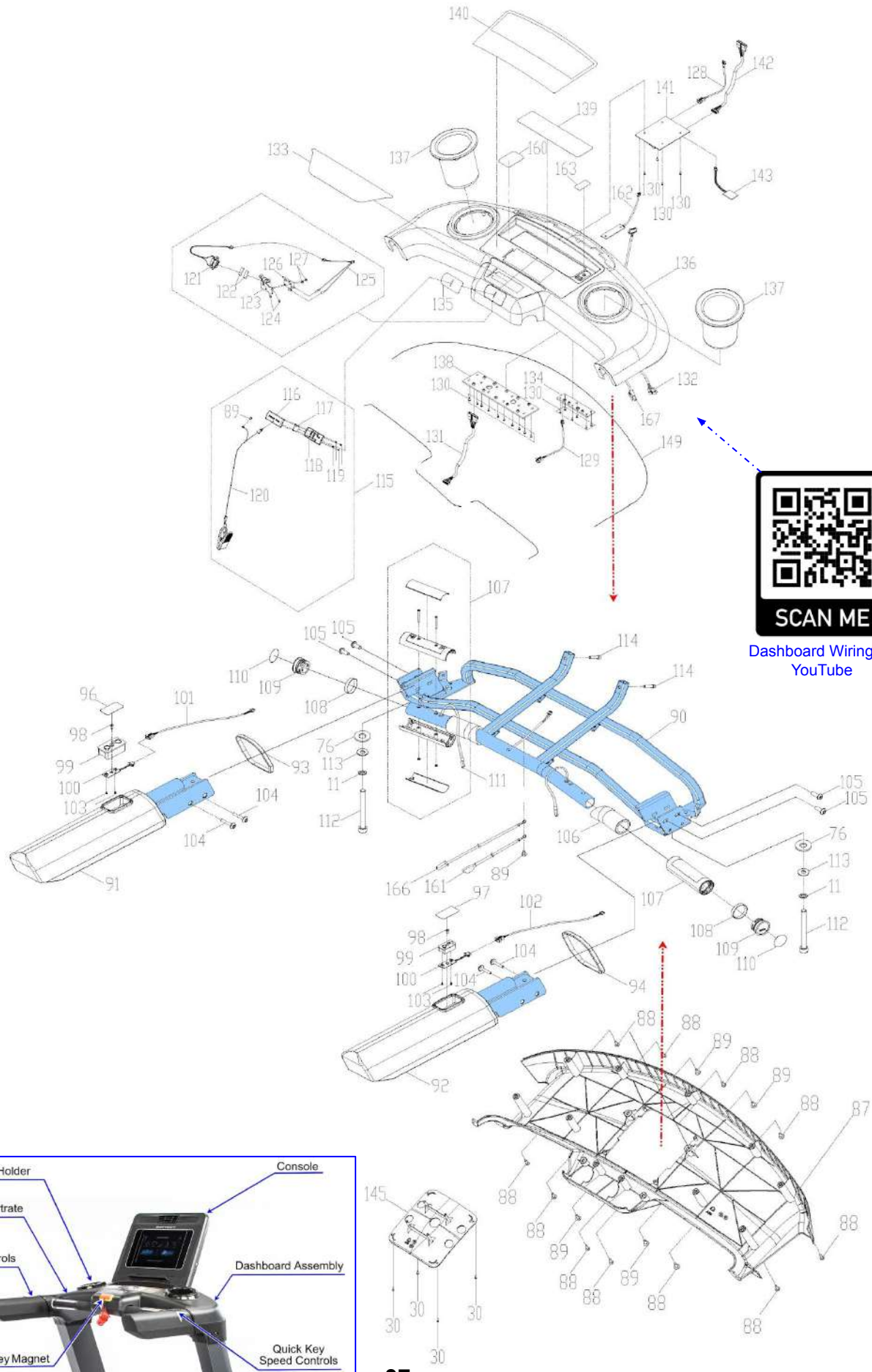
Part #	Description	Qty
T802:091	Handrail - Left Arm w/ Quick Incline Control Mount	1
T802:092	Handrail - Right Arm w/ Quick Speed Control Mount	1
T802:093	Handrail Left Arm - Decoration Ring	1
T802:094	Handrail Right Arm - Decoration Ring	1
T802:095	Screw M4 x 12mm L	4
T802:096	Handrail Left Arm - Quick Key/Incline Overlay - Single Sided	1
T802:097	Handrail Right Arm - Quick Key/Speed Overlay - Single Sided	1
T802:098	Screw M4 x 20mm L	2
T802:099	Handrail Arms - Quick Key Button Shell - Left & Right	2
T802:100	Handrail Arms - Quick Key Speed/Incline - Control Board w/ Buttons	2
T802:101	Cable - Handrail Left Arm - Incline Control Board to Dashboard (3PIN)	1
T802:102	Cable - Handrail Right Arm - Speed Control Board to Dashboard (3PIN)	1
T802:103	Screw M2.3 x 6mm L	4
T802:104	Bolt M6 x 35mm L	4
T802:105	Bolt M8 x 6mm x 18.5mm L	4
T802:106	Handlebar - Rubber Sleeve	2
T802:107	Handgrip Heart-Rate - Sensor (Assembly)	2
T802:108	Handlebar - Aluminum Ring	2
T802:109	Handlebar - End Plug	2
T802:110	Sticker - Handbar on End Plug - Single Sided	2
T802:111	Handgrip Heart-Rate - Sensor Wire	1
T802:112	Bolt M8 x 100mm L	2
T802:113	Washer ΦM8 x Φ16mm	4
T802:114	Bolt M6 x 35mm L	2
T802:115	Safety Key	1
T802:116	Safety Key - Top (Red)	1
T802:117	Safety Key Board	1
T802:118	Safety Key - Upper (Yellow)	1
T802:119	Screw M2 x 5mm L	4
T802:120	Safety key Clip + Cotton String	1
T802:121	Machanical Safe Key	1
T802:122	Foam Double Sided - Safety Switch	2
T802:123	Safety Key Rack	1
T802:124	Screw M3 x 8mm L	2
T802:125	Cable - Safety Key Limit Switch to Break-Out Board (3PIN)	1
T802:126	Safety Key Limit Switch	1
T802:127	Screw M3 x 16mm L	2
T802:128	Cable - Break-Out Board to Console - Lower (2 PIN)	1
T802:129	Cable - START/STOP Keys - Dashboard to Break-Out Board (3PIN)	1
T802:130	Screw M2.6 x 8mm L	20
T802:131	Cable - Quick Keys Speed/Incline - Dashboard to Break-Out Board (8PIN)	1

Part #	Description	Qty
T802:132	Cable - Lower Control Board to Break-Out Board - Upper (6 PIN)	1
T802:133	START/STOP Overlay - Dashboard - Single Sided	1
T802:134	START/STOP Control Board w/ Buttons - Dashboard	1
T802:135	Sticker - Safety Key - Single Sided	1
T802:136	Dashboard Cover - Top	1
T802:137	Water Bottle Holder	2
T802:138	Quick Keys Speed/Incline Control Board w/ Buttons - Dashboard	1
T802:139	Accessory Tray - Anti-Slip Rubber Sticker - Dashboard - Single Sided	1
T802:140	Quick Keys Speed/Incline Overlay - Dashboard - Single Sided	1
T802:141	Break-Out Board #AC00410	1
T802:142	Cable - Break-Out Board to Console - Lower (9 PIN)	1
T802:143	Wireless-5K Heart-Rate Receiver	1
T802:144	Power Cord - Locking Screw-in Clip	1
T802:145	Dashboard - Lower Maintenance Cover to Break-Out Board	1
T802:146	Console	1
T802:147	Sticker - Left Rail Cover - Rear - Single Sided	1
T802:148	Sticker - Right Rail Cover - Rear - Single Sided	1
T802:149	PVC Strip	1
T802:150	AC Socket / Input Power - IEC 320 C14, Black, 15A	1
T802:151	Circuit Breaker - Reset Switch (15 amp)	1
T802:152	On/Off AC Rocker Switch	1
T802:153	Wire - Power Input - Black 100mm	2
T802:154	Wire - Switch to Filter/LCB - Red 180mm	2
T802:155	Wire - Switch to Filter/LCB - Black 210mm	2
T802:156	Power Cord - 120V/15A (NEMA 5-15) - IEC 320 C14 - 1,829mm L	1
T802:157	Ground Wire - Power Input - Green 120mm	1
T802:158	Wire - Power Input - Red 150mm	1
T802:159	Ferrite Core - DC Motor Wires	1
T802:160	Label - Warning - Single Sided	1
T802:161	Ground Wire - Handgrip Heart-Rate - Green 250mm	1
T802:162	Handgrip Heart-Rate - Antistatic Board	1
T802:163	USB Cover - Dashboard Upper Cover	1
T802:164	Ground Wire Female - Upright Post - Mid 1,200mm	1
T802:165	Ground Wire Male - Lower 300mm	1
T802:166	Ground Wire Female - Dashboard - Up 300mm	1
T802:167	Ground Wire Female - Dashboard - Down 600mm	1
T802:168	Sticker - EXP Series for Upright Post	2

Product Parts Exploded View - Drive System - T800 (T801 & T802)



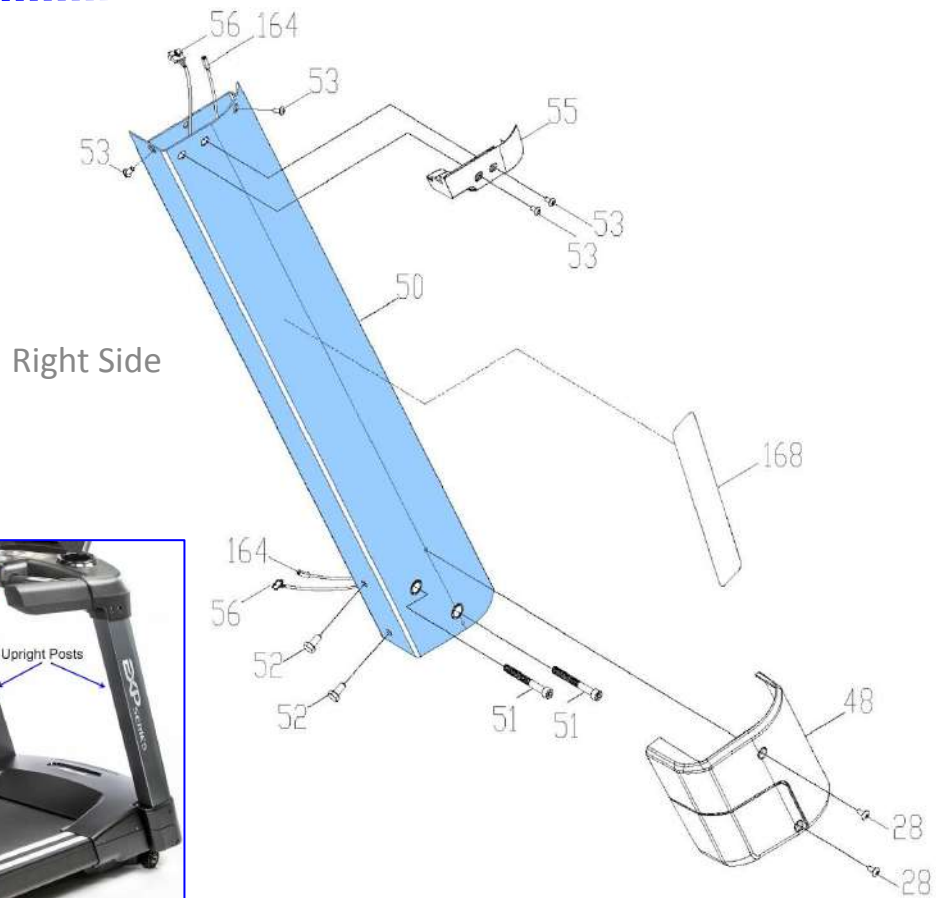
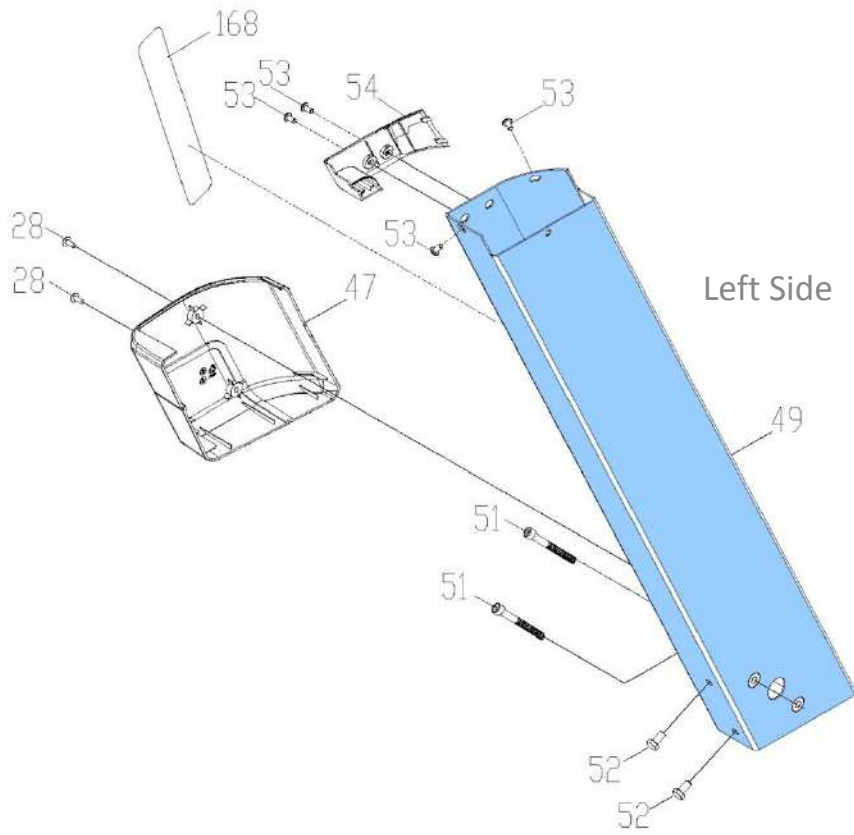
Product Parts Exploded View - Dashboard Assembly - T800 (T801 & T802)



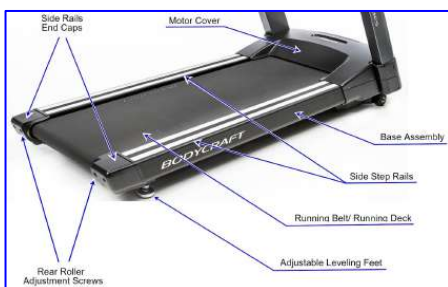
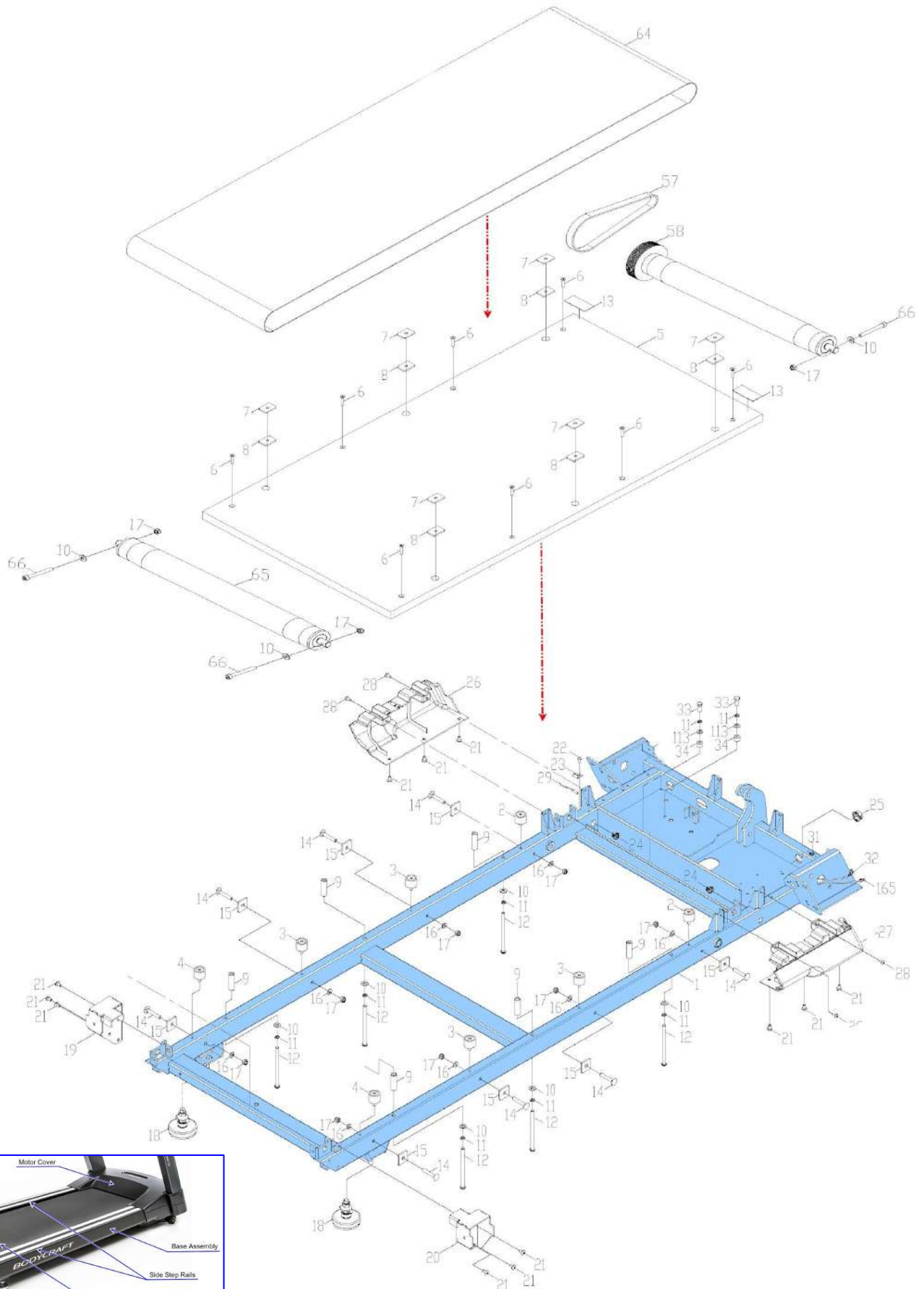
[Dashboard Wiring on YouTube](#)



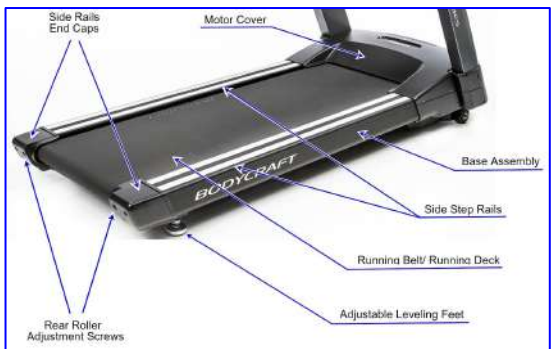
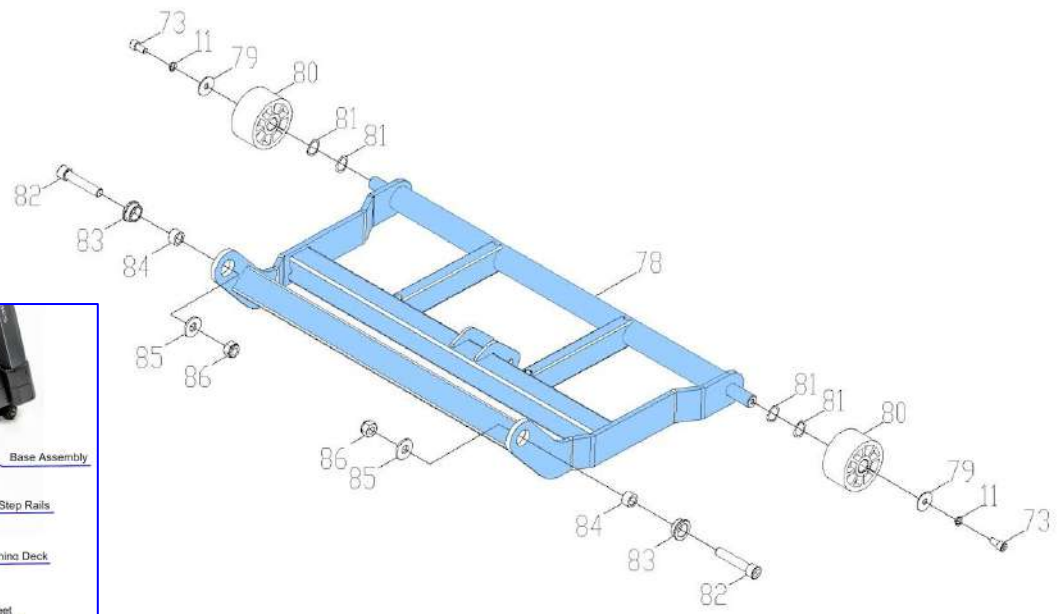
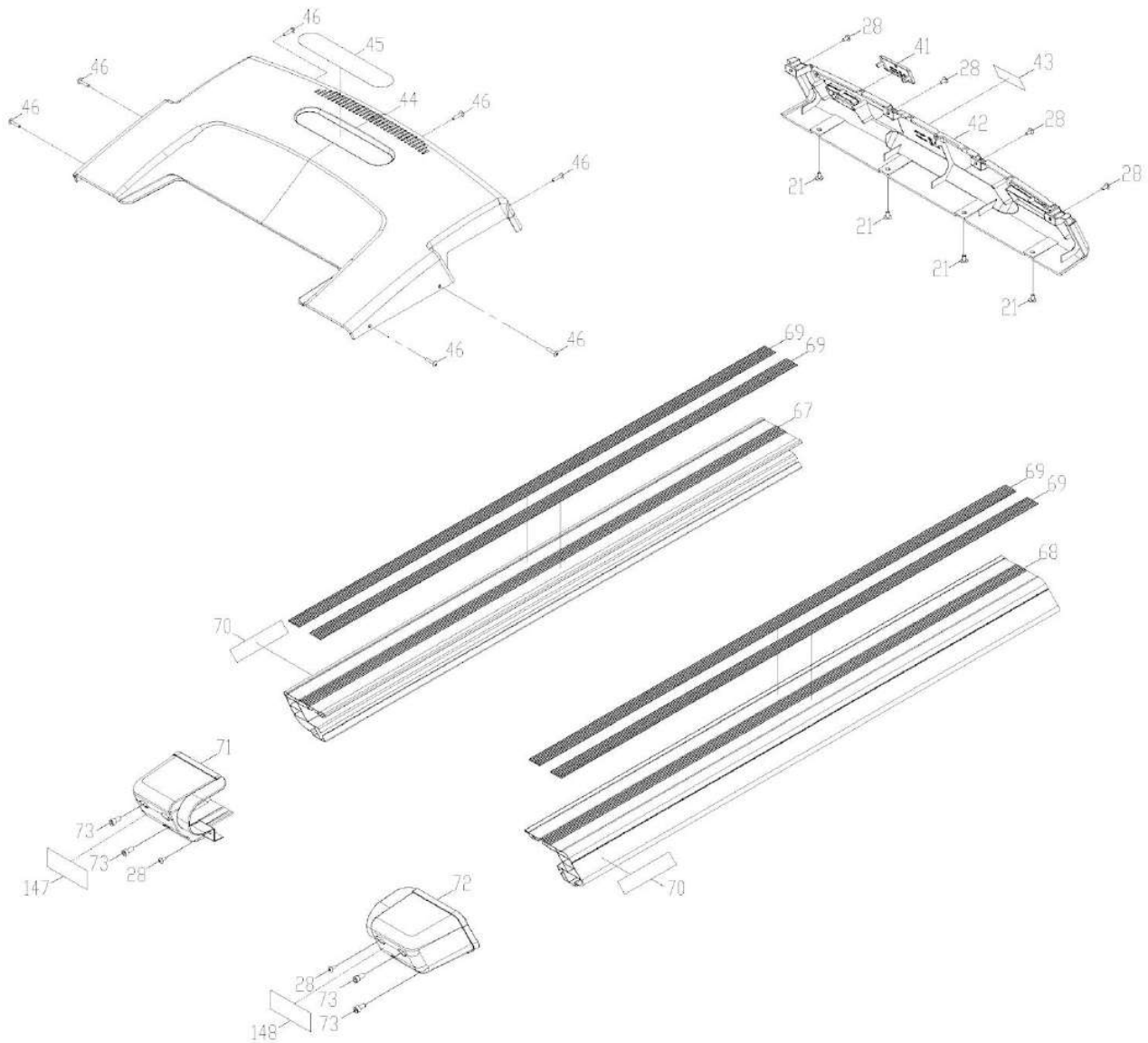
Product Parts Exploded View - Upright Posts Assembly - T800 (T801 & T802)



Product Parts Exploded View - Base Assembly - T800 (T801 & T802)

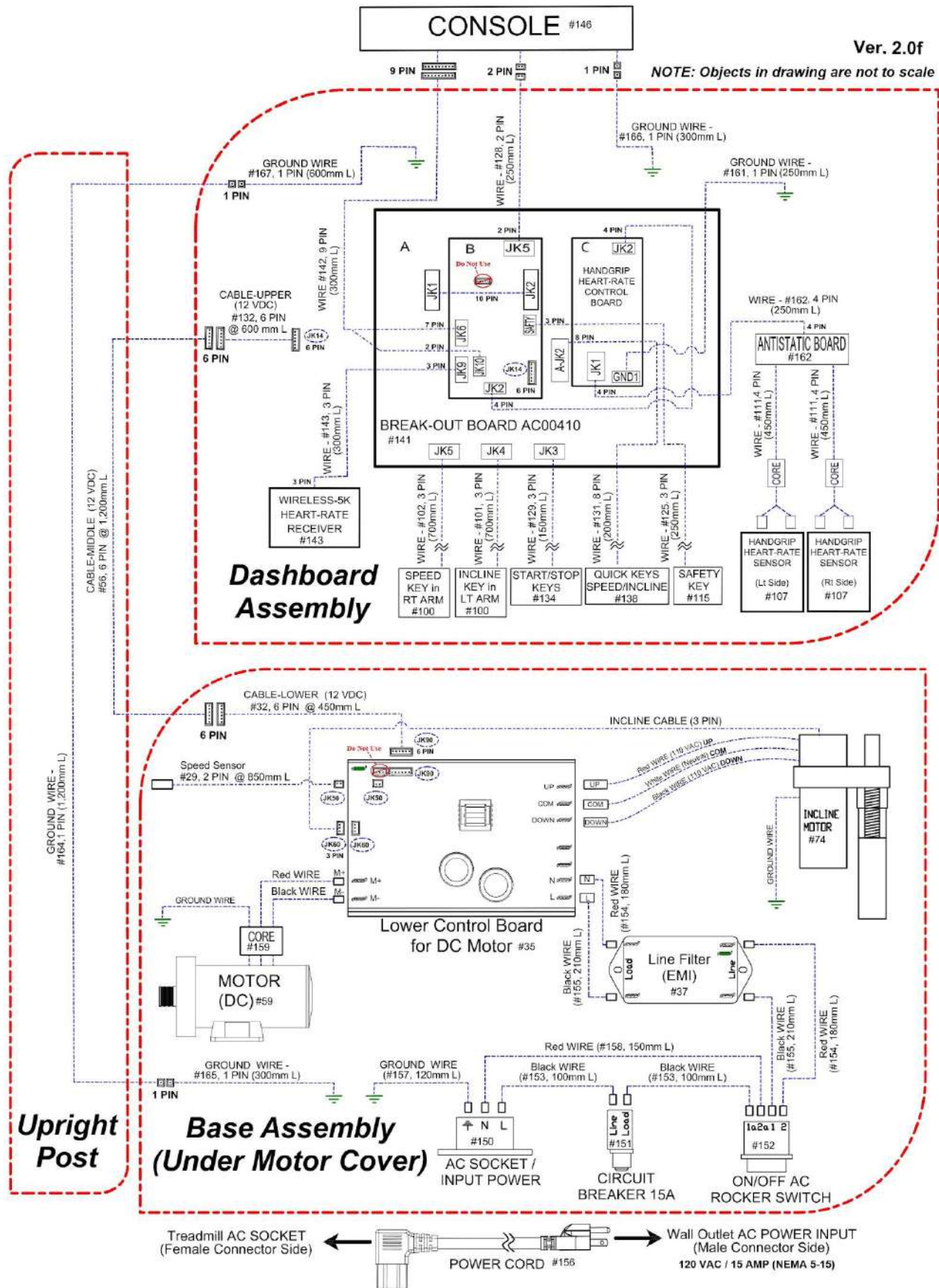


Product Parts Exploded View - Base Covers & Incline Frame - T800 (T801 & T802)





Treadmill Circuit Diagram T800 (T801 & T802)

Ver. 2.0f




Error Codes E1 - E4 (Ver. 1.5)

EXP-Series Treadmill T800 (T801)

Error Codes		EXP-Series Treadmills T400 (T401) & T800 (T801) DC Motors Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E1	Motor overcurrent	Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Needs preventive maintenance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean front rollers, drive motor, electronics, & cooling fan area.	
		Bad or dirty motor brushes & commutator.	Check drive motor commutator for cleanliness and condition of the motor brushes.	Clean commutator & brushes. If needed replace brushes. Confirm motor is functioning by testing with external 9vdc - 12vdc power source ie. drill battery.	
		Belt/Deck high amp due to PM needed	Check belt/deck wear and amp draw at 2/4/8 mph under load.	Clean running belt/deck area and lube under running belt. Then perform amp tests at 2/4/8 mph under load.	
		Belt/Deck high amp draw due to wear.	Check belt/deck wear and amp draw	Run amp tests at 2/4/8 mph under load after PM performed. If still too high, replace running belt and flip deck.	
		The motor is overloaded and the system enters a protective state.	ONLY after all the five (5) above items are confirmed then turn off main power for 2 minutes and switch back on.	If you turn the power back on and error code returns, then proceed to replace the motor controller.	
E2	No speed signal (During Calibration Mode ONLY)	The motor controller is not receiving the speed signal due to reading of magnet to sensor	The controller will only detect the speed when it is calibrating.	Check the placement and reading of magnet to the speed sensor. Use Ohm meter to confirm correct reading.	
		The motor controller is not receiving the speed signal due to defective speed sensor.	The controller will only detect the speed when it is calibrating.	Replace speed sensor wire.	
		The motor controller is not receiving the speed signal due to faulty motor controller.	The controller will only detect the speed when it is calibrating.	Replace motor controller.	
E3	FET circuit shorted	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 5 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, proceed to replace the motor controller.	
E4	Detect motor misconnection	The drive motor is not connected to the controller.	Check the connection between the motor and the controller to see if it is good or not. If the connection is good, please replace the controller and the motor respectively to check.	Make sure the wire connection between the motor and controller is good. Confirm the connector and wire(s) are not burnt or discolored and securely tight on post. If not, install new wire connectors or proceed to replace motor.	
		Bad or dirty motor brushes & commutator.	Check motor commutator & brushes.	Clean motor commutator & brushes. If needed replace brushes.	
		The drive motor has malfunctioned.	Disconnect motor wires from motor controller. Apply 9vdc to 12vdc with battery, drill battery for external power supply. If motor moves then proceed to replace motor controller. If not, then replace defective motor	Replace motor if external voltage is applied to motor after commutator & brushes were inspected or replaced and still no movement.	
		The motor controller has malfunctioned.	If all the above has been confirmed connected and working, then replace the motor controller	Replace the motor controller.	

Error Codes E5 - E21 (Ver. 1.5)

EXP-Series Treadmill T800 (T801)


Error Codes		EXP-Series Treadmills T400 (T401) & T800 (T801) DC Motors Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E5	Main power supply voltage too low	Not a good wall outlet with proper voltage and grounding.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Too many treadmills or other electrical products units using same breaker.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application).	
		Bad wiring harness, wire connections, bad in-line filter, bad motor controller.	Inspect all wiring harness, wire connections for color and full tight connections. Then check in-line filter for input voltage to output voltage & heat of metal frame.	If loose connections, take pliers and squeeze the connector with little pressure to close the gap then reconnect wire harness. If connectors or wires are discolored or burnt, then replace wires & connectors. If in-line filter is defective, then proceed to replace with new. If all above is correct and unit is new, then proceed to replace the motor controller.	
E6	Main power supply voltage too high	The input voltage from the wall outlet is unstable.	Please check the stability of power supply in this area.	If confirmed that wall outlet power is correct with a dedicated 120v/15a and it is new equipment, proceed to replace the motor controller.	
E7	Main power supply is abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn power switch back on and can not troubleshoot, proceed to replace motor controller.	
E8	MCU abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E9	FET drive abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E16	Incline error	The lift motor is blocked, or the wire connection is not good.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E17 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E17	
		Motor controller has malfunctioned.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E17 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E17	
E17	Incline calibration error	The lift motor is not functioning and the machine is stuck in elevation. Wire harness not connected.	First, check if the wire connection to the incline motor is good or not.	Confirm the elevation motor connectors on correctly wired and secure to motor controller.	
		The lift motor is defective and the machine is stuck in elevation. Faulty incline motor.	If the motor rotates normally and the error code is still persistent, then replace the incline motor.	Replace the incline motor.	
		The lift motor is not functioning and the machine is stuck in elevation. Faulty motor controller.	After incline motor replacement, the problem is still there, then replace the motor controller.	Replace the motor controller.	
E21	Controller EEPROM error	EEPROM is defective or physically damaged	Motor controller is not working.	Replace the motor controller.	

Error Codes E22 - E88 (Ver. 1.5)

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Conditions to Consider

EXP-Series Treadmill T800 (T801)

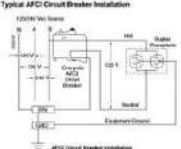
Error Codes		EXP-Series Treadmills T400 (T401) & T800 (T801) DC Motors Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E22 / E23	No communication between breakout board and motor controller	Bad cable connection.	Check cable connection and replace the cable if necessary to double check.	Replace the cable to double check. If same error code, then replace the breakout board.	
		The breakout board is defective or physical damaged	Replace breakout board then check to confirm repaired error code and functioning.	Replace breakout board. If same error code, then replace the motor controller.	
		The motor controller is defective or physically damaged.	Replace motor controller then check to confirm repaired error code and functioning.	Replace the motor controller.	
E88	Console EEPROM malfunction	Console display has malfunctioned.	The error code appears after turning power switch back on, then disappears in 5 seconds. The user setting can't be saved.	Replace console.	

Note on No Error Code: There will be malfunctions that do not produce an Error Code. Refer to Troubleshooting Foundations 101 document for basic procedures. After reviewing, document all inspection & testing process taken with Model # and Serial # of unit when at customers location, then contract BODYCRAFT Customer Support (800) 990-5556 for further actions to be taken.


Note on preventive maintenance: **JUST LIKE CHANGING THE OIL IN YOUR CAR, PREVENTIVE MAINTENANCE (PM) IS REQUIRED AND RESPONSIBILITY OF OWNER TO PERFORM.** A treadmill in home application needs PM once a year and commercial application every 6 months under normal use. Extensive use or dirty environments clean quarterly. This includes cleaning under treadmill, rollers area, motor area including drive motor, electronics, cooling fan and all touch areas. Clean with vacuum cleaner and surfaces only with mild soap/water and soft cloth. Proceed to clean under belt/deck area with dry soft cloth then lube with 100% pure silicone (Dow Chemical XIAMETER™ PMX-200 Silicone Fluid), 30ml (about 1oz) under center area under running belt. See Owners Manual and PM Checklist for further details.

Note on panel breakers and wall outlets: Treadmills in home application needs a 120 volt / 15 amp dedicated Non-GFCI outlet (per treadmill). In a commercial application, the T800 DC Drive treadmill needs a 120 volt / 20 amp dedicated Non-GFCI outlet (per treadmill). New Arc Fault breaker(s) (AFCI) or wall outlet(s) vary per manufacture and could possibly need additional surge protector at EMI / RFI Filtering 40-80 dB to not trip the same frequency of a treadmill motor. Recommend for Arc Fault breakers (AFCI) due to new 2017 NEC code: Isobar 2-Outlet Surge Protector # ISOBAR 2-6

Typical AFCI Circuit Breaker Installation



Eaton Engineering Director Andy Foerster said arc fault detection is challenging, in part because so many common household devices — such as vacuum cleaners and power tools that use motors with brushes — create arcing. In information provided to ARRL Eaton engineer Lanson Relyea said that because AFCIs rely on HF emission detection to verify arcing, "any signal that conducts or radiates a signal within the detection band of the AFCI can cause interference and cause the device to trip without the presence of a true arcing condition."




Tripp Lite Isobar 2 Outlet Surge Protector Power Strip

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What is the first step when troubleshooting ANY failure?

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Additional service videos, parts orders, software update files, and contact information scan this QR code.
Or go to: <https://www.bodycraft.com/customer-support.html>

Version 1.5

Error Codes E1 - E4 (Ver. 1.7)

EXP-Series Treadmill T800 (T802)

Error Codes		EXP-Series Treadmills T400 (T402) & T800 (T802) DC Motors		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E1	Motor overcurrent	Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Needs preventive maintenance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean front rollers, drive motor, electronics, & cooling fan area.	
		Bad or dirty motor brushes & commutator.	Check drive motor commutator for cleanliness and condition of the motor brushes.	Clean commutator & brushes. If needed replace brushes. Confirm motor is functioning by testing with external 9vdc - 12vdc power source i.e. drill battery.	
		Belt/Deck high amp due to PM needed	Check belt/deck wear and amp draw at 2/4/8 mph under load.	Clean running belt/deck area and lube under running belt. Then perform amp tests at 2/4/8 mph under load.	
		Belt/Deck high amp draw due to wear.	Check belt/deck wear and amp draw	Run amp tests at 2/4/8 mph under load after PM performed. If still too high, replace running belt and flip deck.	
		The motor is overloaded and the system enters a protective state.	ONLY after all the five (5) above items are confirmed then turn off main power for 2 minutes and switch back on.	If you turn the power back on and error code returns, then proceed to replace the motor controller.	
E2	No speed signal (During Calibration Mode ONLY)	The motor controller is not receiving the speed signal due to reading of magnet to sensor	The controller will only detect the speed when it is calibrating.	Check the placement and reading of magnet to the speed sensor. Use Ohm meter to confirm correct reading.	
		The motor controller is not receiving the speed signal due to defective speed sensor.	The controller will only detect the speed when it is calibrating.	Replace speed sensor wire.	
		The motor controller is not receiving the speed signal due to faulty motor controller.	The controller will only detect the speed when it is calibrating.	Replace motor controller.	
E3	FET circuit shorted	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 5 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, proceed to replace the motor controller.	
E4	Detect motor misconnection	The drive motor is not connected to the controller.	Check the connection between the motor and the controller to see if it is good or not. If the connection is good, please replace the controller and the motor respectively to check.	Make sure the wire connection between the motor and controller is good. Confirm the connector and wire(s) are not burnt or discolored and securely tight on post. If not, install new wire connectors or proceed to replace motor.	
		Bad or dirty motor brushes & commutator.	Check motor commutator & brushes.	Clean motor commutator & brushes. If needed replace brushes.	
		The drive motor has malfunctioned.	Disconnect motor wires from motor controller. Apply 9vdc to 12vdc with battery, drill battery for external power supply. If motor moves then proceed to replace motor controller. If not, then replace defective motor	Replace motor if external voltage is applied to motor after commutator & brushes were inspected or replaced and still no movement.	
		The motor controller has malfunctioned.	If all the above has been confirmed connected and working, then replace the motor controller	Replace the motor controller.	

[Ver. 1.7]



Error Codes E5 - E21 (Ver. 1.7)

EXP-Series Treadmill T800 (T802)

Error Codes		EXP-Series Treadmills T400 (T402) & T800 (T802) DC Motors		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E5	Main power supply voltage too low	Not a good wall outlet with proper voltage and grounding.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Too many treadmills or other electrical products units using same breaker.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120v/20 amp commercial application).	
		Bad wiring harness, wire connections, bad in-line filter, bad motor controller.	Inspect all wiring harness, wire connections for color and full tight connections. Then check in-line filter for input voltage to output voltage & heat of metal frame.	If loose connections, take pliers and squeeze the connector with little pressure to close the gap then reconnect wire harness. If connectors or wires are discolored or burnt, then replace wires & connectors. If in-line filter is defective, then proceed to replace with new. If all above is correct and unit is new, then proceed to replace the motor controller.	
E6	Main power supply voltage too high	The input voltage from the wall outlet is unstable.	Please check the stability of power supply in this area.	If confirmed that wall outlet power is correct with a dedicated 120v/15a and it is new equipment, proceed to replace the motor controller.	
E7	Main power supply is abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn power switch back on and can not troubleshoot, proceed to replace motor controller.	
E8	MCU abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E9	FET drive abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E10	Incline error	The lift motor is blocked, or the wire connection is not good.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E11 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E11	
		Motor controller has malfunctioned.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E11 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E11	
E11	Incline calibration error	The lift motor is not functioning and the machine is stuck in elevation. Wire harness not connected.	First, check if the wire connection to the incline motor is good or not.	Confirm the elevation motor connectors on correctly wired and secure to motor controller.	
		The lift motor is defective and the machine is stuck in elevation. Faulty incline motor.	If the motor rotates normally and the error code is still persistent, then replace the incline motor.	Replace the incline motor.	
		The lift motor is not functioning and the machine is stuck in elevation. Faulty motor controller.	After incline motor replacement, the problem is still there, then replace the motor controller.	Replace the motor controller.	
E21	Controller EEPROM error	EEPROM is defective or physically damaged	Motor controller is not working.	Replace the motor controller.	

(Ver. 1.7)



Error Codes E22 - E88 (Ver. 1.7)

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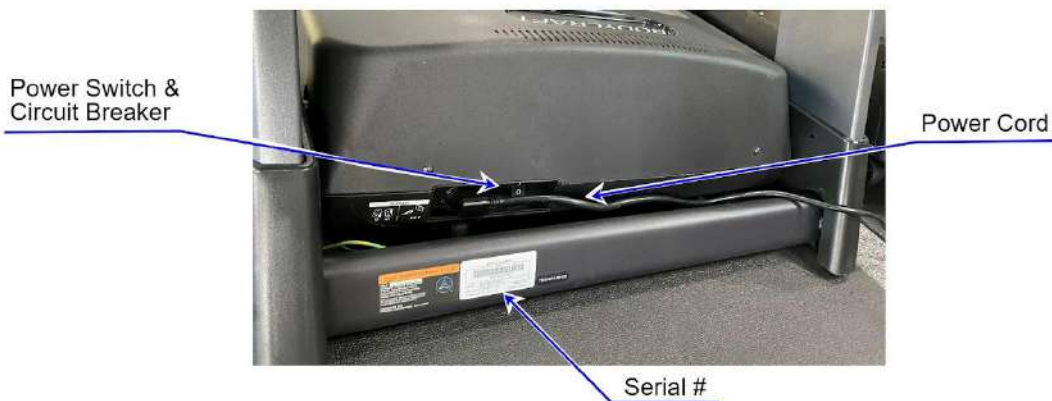
Conditions to Consider

EXP-Series Treadmill T800 (T802)

Error Codes		EXP-Series Treadmills T400 (T402) & T800 (T802) DC Motors		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E22 / E23	No communication between breakout board and motor controller	Bad cable connection.	Check cable connection and replace the cable if necessary to double check.	Replace the cable to double check. If same error code, then replace the breakout board.	
		The breakout board is defective or physical damaged	Replace breakout board then check to confirm repaired error code and functioning.	Replace breakout board. If same error code, then replace the motor controller.	
		The motor controller is defective or physically damaged.	Replace motor controller then check to confirm repaired error code and functioning.	Replace the motor controller.	
E37	Communication issue between circuit boards	Bad inverter, Miscommunication on 2 pin of Power Cable to Console from Breakout-Board.	Check connections at Lower Board, Cable Harness and Breakout-Board/ check continuity for damaged Cable or Bent Pins then Power Cycle (Restart Unit).	Reseat Connectors / Replace Communication Cable(s) / Replace Lower Board	
E88	Console EEPROM malfunction	Console display has malfunctioned.	The error code appears after turning power switch back on, then disappears in 5 seconds. The user setting can't be saved.	Replace console.	
<p>Note on No Error Code: There will be malfunctions that do not produce an Error Code. Refer to Troubleshooting Foundations 101 document for basic procedures. After reviewing, document all inspection & testing process taken with Model # and Serial # of unit when at customers location, then contract BODYCRAFT Customer Support (800) 990-5556 for further actions to be taken.</p>					
<p>Note on preventive maintenance: JUST LIKE CHANGING THE OIL IN YOUR CAR, PREVENTIVE MAINTENANCE (PM) IS REQUIRED AND RESPONSIBILITY OF OWNER TO PERFORM. A treadmill in home application needs PM once a year and commercial application every 6 months under normal use. Extensive use or dirty environments clean quarterly. This includes cleaning under treadmill, rollers area, motor area including drive motor, electronics, cooling fan and all touch areas. Clean with vacuum cleaner and surfaces only with mild soap/water and soft cloth. Proceed to clean under belt/deck area with dry soft cloth then lube with 100% pure silicone (Dow Chemical XIAMETER™ PMX-200 Silicone Fluid), 30ml (about 1oz) under center area under running belt. See Owners Manual and PM Checklist for further details.</p>					
<p>Typical AFCI Circuit Breaker Installation</p>		<p>15 Amp 1-Pole AFCI Breaker, 20 Amp 1-Pole AFCI Breaker, 20 Amp 2-Pole AFCI Breaker</p>		<p>Eaton Engineering Director Andy Foerster said arc fault detection is challenging, in part because so many common household devices — such as vacuum cleaners and power tools that use motors with brushes — create arcing. In information provided to ARRL Eaton engineer Lanson Relyea said that because AFCIs rely on HF emission detection to verify arcing, "any signal that conducts or radiates a signal within the detection band of the AFCI can cause interference and cause the device to trip without the presence of a true arcing condition."</p>	
				<p>Tripp Lite Isobar 2 Outlet Surge Protector Power Strip</p>	
<p>Note on panel breakers and wall outlets: Treadmills in home application needs a 120 volt / 15 amp dedicated Non-GFCI outlet (per treadmill). In a commercial application, the T800 DC Drive treadmill needs a 120 volt / 20 amp dedicated Non-GFCI outlet (per treadmill). New Arc Fault breaker(s) (AFCI) or wall outlet(s) vary per manufacture and could possibly need additional surge protector at EMI / RFI Filtering 40-80 dB to not trip the same frequency of a treadmill motor. Recommend for Arc Fault breakers (AFCI) due to new 2017 NEC code: Isobar 2-Outlet Surge Protector # ISOBAR 2-6</p>					
UPDATE SOFTWARE!!		What is the first step when troubleshooting ANY failure?		UPDATE SOFTWARE!!	
Need help from our Customer Support Team? Call us at (800) 990-5556. We're available Monday through Friday, 10:00 AM – 5:00 PM Eastern Time. Or email us anytime: support@bodycraft.com					
		Additional service videos, parts orders, software update files, and contact information scan this QR code. Or go to: https://www.bodycraft.com/customer-support.html			

Picture of Unit w/ Callouts

EXP-Series Treadmill T400



Part #	Description	Qty
T402:001	Main Base Frame (DIAMOND GRAY)	1
T402:002	Elastomer Shock Absorbers - 1st Row - Front	2
T402:003	Elastomer Shock Absorbers - 2nd & 3rd Rows - Mid	4
T402:004	Elastomer Shock Absorbers - 4th Row - Rear	2
T402:005	Running Deck - 673mm W x 1,384mm L x 25.4mm T	1
T402:006	Side Step Rails - Securing Bracket to Running Deck	8
T402:007	Screw M6 x 35mm L	8
T402:008	Nylon Locknut (M6)	8
T402:009	Flat Washer M6 x 16 x 1.2mm	8
T402:010	Screw M6 x 30mm L	8
T402:011	Front Roller Assembly - 64mm D x 699mm L w/ 105mm Pulley	1
T402:012	Rear Roller Assembly - 64mm D x 699mm L	1
T402:013	Screw M8 x 70mm L	3
T402:014	Spring Flat Washer (M8)	5
T402:015	Running Belt - 508mm W x 3,230mm L x 2.0mm T (TF)	1
T402:016	Inductor Bracket	1
T402:017	Line Filter - EMI	1
T402:018	Washer M5 x 15 x 1.2mm	2
T402:019	Handgrip Heart-Rate Sensor Wire	1
T402:020	Screw M4 x 8mm L	2
T402:021	Lower Control Board # AE001112ELT-002 (SR)	1
T402:022	Screw M4 x 20mm L	2
T402:023	On/Off AC Rocker Switch	1
T402:024	Circuit Breaker - Reset Switch (15 amp)	1
T402:025	AC Socket / Input Power - IEC 320 C14, Black, 15A	1
T402:026	Screw M4 x 12mm L	4
T402:027	Drive Motor - DC 3.0hp (TR)	1
T402:028	Ferrite Core - DC Motor Wires	1
T402:029	Drive Motor Bracket	1
T402:030	Screw M8 x 16mm L	2
T402:031	Flat Washer M8 x16 x 1.2mm	2
T402:032	Wire - Switch to Filter - Black 210mm	1
T402:033	Nylon Locknut M8	6
T402:034	Screw M8 x 25mm L	2
T402:035	Drive Motor Pulley Belt- Ribbed #508J (HS)	1
T402:036	Incline Motor - J18 (JS)	1
T402:037	Screw M10 x 60mm L	1
T402:038	Flat Washer M10 x 21 x 2.0mm T	4
T402:039	Nylon Locknut M10 x P1.5mm	2
T402:040	Screw M10 x 45mm L	1
T402:041	Screw #6-32 x 12mm L	1
T402:042	Transportation / Incline Wheel	6
T402:043	Screw M8 x 45mm L	1
T402:044	Nylon Locknut M8 x 1.25mm	8
T402:045	Flat Washer M8 x 16 x 1.2mm	14
T402:046	Screw M5 x 12mm L	4

Part #	Description	Qty
T402:047	Base Folding Frame (DIAMOND GRAY)	1
T402:048	Foot Cover	2
T402:049	Gas Cylinder Assembly	1
T402:050	Gas Cylinder Clip Spring	1
T402:051	Gas Cylinder Outer Tube	1
T402:052	Screw M8 x 30mm L	1
T402:053	Screw M5 x 25mm L	4
T402:054	Adjust Foot Pad	2
T402:055	Incline Frame (DIAMOND GRAY)	1
T402:056	Incline Frame Bushing (Small)	2
T402:057	Incline Frame Bushing (Large)	2
T402:058	Screw Ø 12 x 25L x M10	2
T402:059	Bolt Ø 15 x 61.9mm L	2
T402:060	Flat Washer M8 x 28 x 1.5mm T	2
T402:061	Cylinder Outer Plastic Cover	1
T402:062	Rubber Pad For Incline Motor	2
T402:063	Upright Post - Left (DIAMOND GRAY)	1
T402:064	Upright Post - Right (DIAMOND GRAY)	1
T402:065	Handrail - Left Arm w/ Quick Incline Control Mount	1
T402:066	Handrail - Right Arm w/ Quick Speed Control Mount	1
T402:067	Handrail Left Arm - Decoration Ring	1
T402:068	Handrail Right Arm - Decoration Ring	1
T402:069	Foam Single Sided - Running Deck - Front	2
T402:070	Foam Double Sided - Safety Switch	2
T402:071	Handgrip Heart-Rate - Antistatic Board	1
T402:072	Screw M8 x 16mm L	16
T402:073	Ground Wire - Handgrip Heart-Rate - Green 250mm	1
T402:074	Warning Label - Dashboard Cover - Upper - Single Sided	1
T402:075	Warning Label - Motor Cover Top - Right & Left - Single Sided	2
T402:076	Nut 3/8"-16	2
T402:077	Dashboard Support & Front Handlebar	1
T402:078	Handlebar - Rubber Sleeve	2
T402:079	Handgrip Heart-Rate - Sensor (Assembly)	2
T402:080	Handlebar - Aluminum Ring	2
T402:081	Handlebar - End Plug	2
T402:082	Sticker - Handlebar on End Plug - Single Sided	2
T402:083	Mechanical Safety Key	1
T402:084	Safety Key Bracket	1
T402:085	Screw M3 x 8mm L	2
T402:086	Screw M6 x 35mm L (#175)	4
T402:087	Screw M2.6 x 8mm L	20
T402:088	Break-Out Board #AC00410	1
T402:089	Dashboard Cover - Upper	1
T402:090	Dashboard Cover - Bottom	1
T402:091	Water Bottle Holder	2

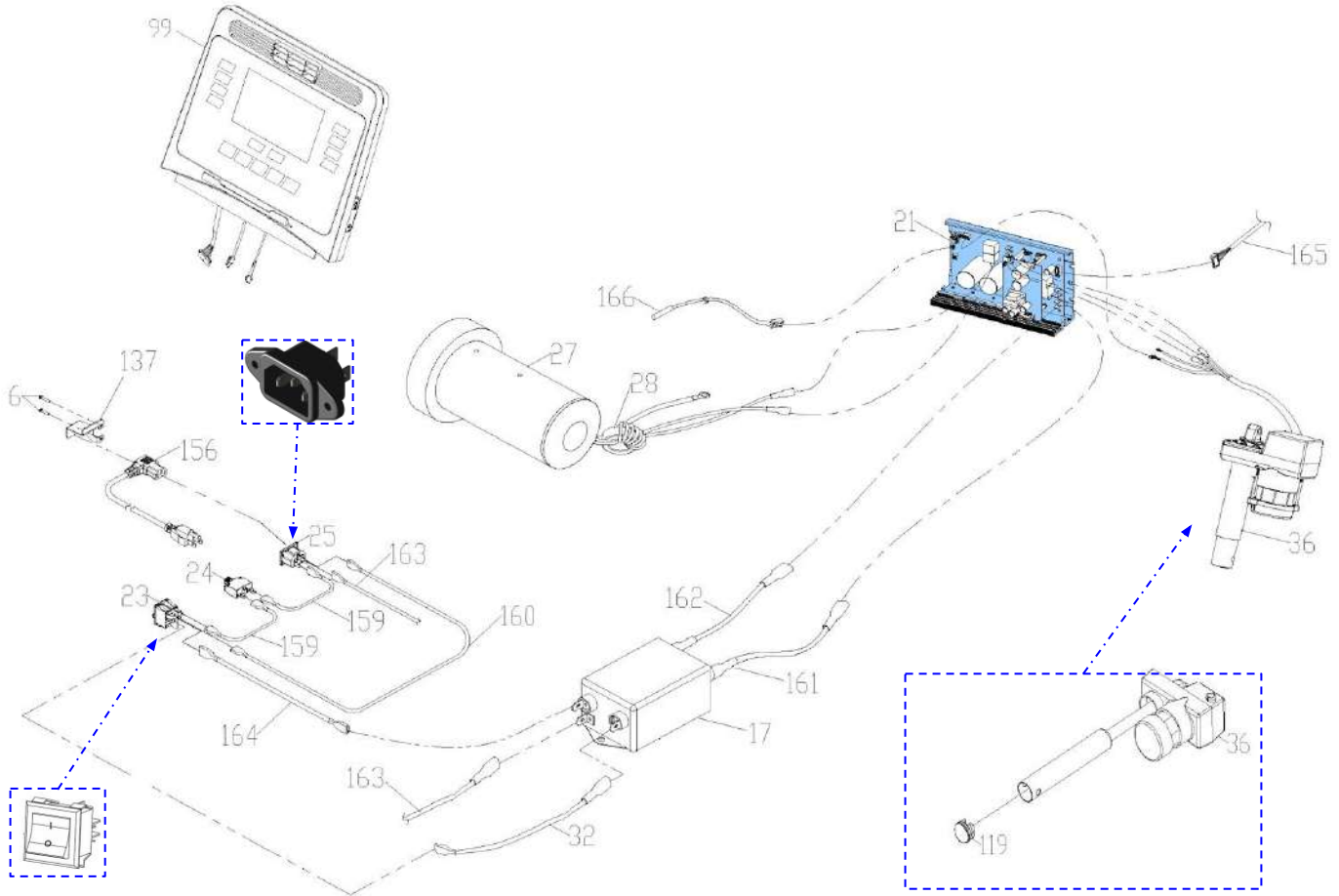
Part #	Description	Qty
T402:092	Sticker - Safety Key - Single Sided	1
T402:093	Cable - Quick Keys Speed/Incline - Dashboard to Break-out Board (8PIN)	1
T402:094	Quick Keys Speed/Incline Overlay - Dashboard - Single Sided	1
T402:095	START/STOP Overlay - Dashboard - Single Sided	1
T402:096	Accessory Tray - Anti-Slip Rubber Sticker - Dashboard - Single Sided	1
T402:097	Screw M4 x 15mm L	11
T402:098	Screw M5 x 12mm L	6
T402:099	Console	1
T402:100	Wireless-5K Heart-Rate Receiver	1
T402:101	Nut M10	1
T402:102	Belt Adjustment Bracket	1
T402:103	Label - Electric Warning	1
T402:104	Sticker - Drop Warning Label - Left Rail Cover (Rear)	1
T402:105	Sticker - Drop Instruction Label - Right Rail Cover (Rear)	1
T402:106	Label - Warning	2
T402:107	Cable - Break-Out Board to Console - Lower (2 PIN)	1
T402:108	Cable - START/STOP Keys - Dashboard to Break-out Board (3PIN)	1
T402:109	Safety Key Limit Switch	1
T402:110	Cable - Safety Key Limit Switch to Break-Out Board (3PIN)	1
T402:111	Screw M8 x 100mm L	2
T402:112	Spring Washer M8	2
T402:113	PVC Strip	1
T402:114	Quick Keys Speed/Incline Control Board w/ Buttons - Dashboard	1
T402:115	START/STOP Control Board w/ Buttons - Dashboard	1
T402:116	Side Step Rail - Left	1
T402:117	Side Foot Rail - Right	1
T402:118	Aluminum Rail - into Side Step Rails - Left & Right	2
T402:119	End Plug Cover - Incline Motor Tube	1
T402:120	Sticker - BODYCRAFT for Side Step Rails - Left & Right - Single Sided	2
T402:121	Side Step Rail - Rear Ring - Left	1
T402:122	Side Foot Rail - Rear Ring - Right	1
T402:123	Side Step Rail - Front Ring - Left	1
T402:124	Side Foot Rail - Front Ring - Right	1
T402:125	End Cap - Foot Side Rail - Left Rear	1
T402:126	End Cap - Foot Side Rail - Right Rear	1
T402:127	Screw M4 x 16mm L	4
T402:128	Screw M8 x 16mm L	2
T402:129	Motor Cover - Top	1
T402:130	Motor Cover - Bottom	1
T402:131	Motor Cover - Lower Left	1
T402:132	Motor Cover - Lower Right	1
T402:133	Screw Ø 8 x M6 x 18.5mm L	4

Part #	Description	Qty
T402:134	Sticker - Motor Cover - Top - Single Sided	1
T402:135	Strain Relief Grommet for Cables- Lower Base Frame	1
T402:136	Screw M5 x 10mm L	12
T402:137	Power Cord - Locking Screw-in Clip	1
T402:138	U Shape Clip	8
T402:139	Upright Post Cover - Lower - Left	1
T402:140	Upright Post Cover - Lower - Right	1
T402:141	Dashboard Base Cover - Left	1
T402:142	Dashboard Base Cover - Right	1
T402:143	Safety Key Assembly	1
T402:144	Screw M4 x 12mm L	4
T402:145	Screw M8 x 50mm L	1
T402:146	Nut M10 x P1.5	1
T402:147	Screw M8 s 40L	6
T402:148	Flat Washer M10 s 21 x 2.0mm	2
T402:149	Screw M6 x 35mm L	2
T402:150	Screw M5 x 0.8 x 20mm L	4
T402:151	Screw M8 x 15mm L	2
T402:152	Cylinder Lock & Release Sticker	1
T402:153	Sensor Bracket	1
T402:154	Handlebar Left - Quick Key/Incline Overlay - Single Sided	1
T402:155	Handlebar Right - Quick Key/Speed Overlay - Single Sided	1
T402:156	Power Cord - 120V/15A (NEMA 5-15) - IEC 320 C14 - 1,829mm L	1
T402:157	Cable Grommet	2
T402:158	Screw M5 x 16mm L	2
T402:159	Wire - Power Input - Black 80mm	2
T402:160	Wire - Power Input - Red 100mm	1
T402:161	Wire - Filter to LCB - Red 310mm	1
T402:162	Wire - Filter to LCB - Black 280mm	1
T402:163	Ground Wire - Power Input to Frame/Line Filter - Green 80mm	2
T402:164	Wire - Switch to Filter - Red 210mm	1
T402:165	Cable - Lower Control Board to Break-Out Board - Lower (6 PIN)	1
T402:166	Speed Sensor Wire	1
T402:167	Cable - Lower Control Board to Break-Out-Board - Mid (6 PIN)	1
T402:168	Cable - Lower Control Board to Break-Out Board - Upper (6 PIN)	1
T402:169	Screw M2 x 5L	4
T402:170	Cable - Break-Out Board to Console - Lower (9 PIN)	1
T402:171	Safety Key Assembly	1
T402:172	Safety Key-Upper (Yellow)	1
T402:173	Safety Key - Top (Red)	1
T402:174	Safety Key Board	1
T402:175	Safety Key Clip + Cotton String	1

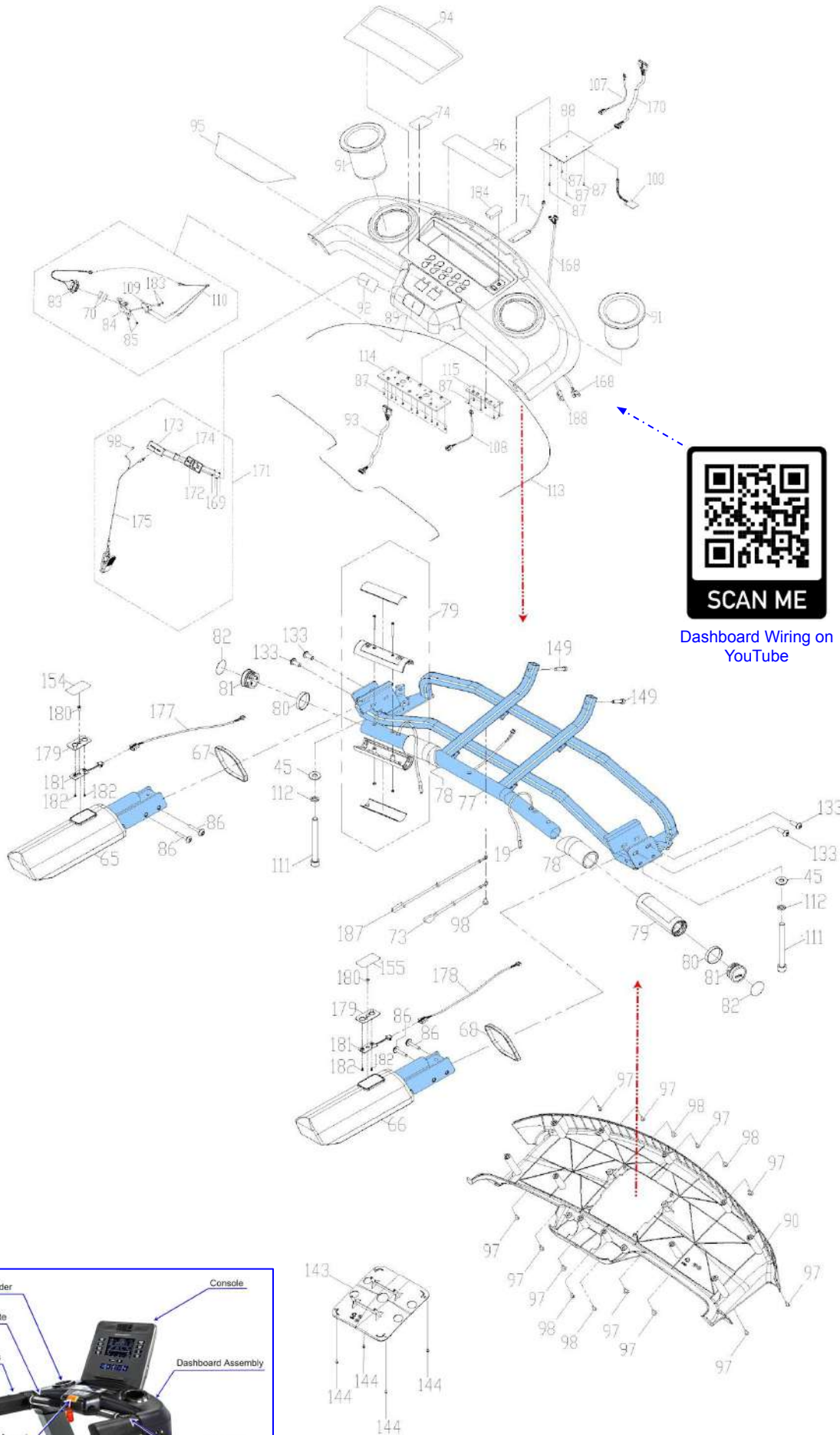
Part #	Description	Qty
T402:176	Sticker - Grounding Screw Location - Single Sided	2
T402:177	Cable - Handlebar Left - Incline Control Board to Dashboard (3PIN)	1
T402:178	Cable - Handlebar Right - Speed Control Board to Dashboard (3PIN)	1
T402:179	Handrail Arms - Quick Key Button Shell - Left & Right	2
T402:180	Screw M4 x 10mm L	2
T402:181	Handrail Arms - Quick Key Speed/Incline - Control Board w/ buttons	2

Part #	Description	Qty
T402:182	Screw M2.3 x 6mm L	4
T402:183	Screw M3 x 16mm L	2
T402:184	USB Cover - Dashboard Upper Cover	1
T402:185	Ground Wire Female - Upright Post - Mid 1,200mm	1
T402:186	Ground Wire Male - Lower 700mm	1
T402:187	Ground Wire Female - Dashboard - Up 300mm	1
T402:188	Ground Wire Female - Dashboard - Down 600mm	1
T402:189	Sticker - EXP Series for Upright Post	2

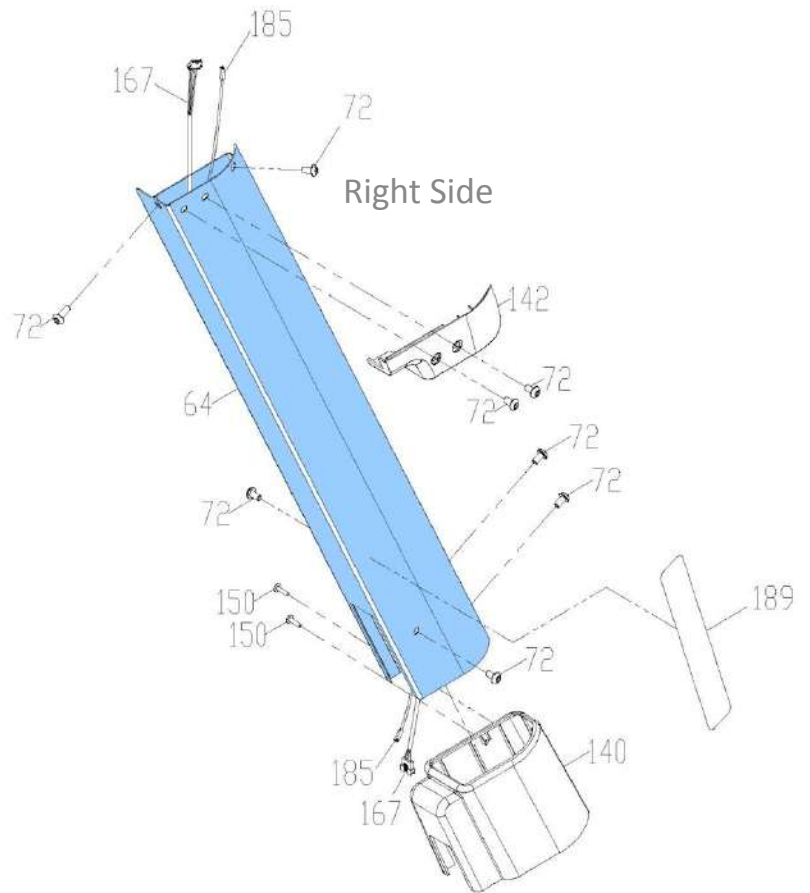
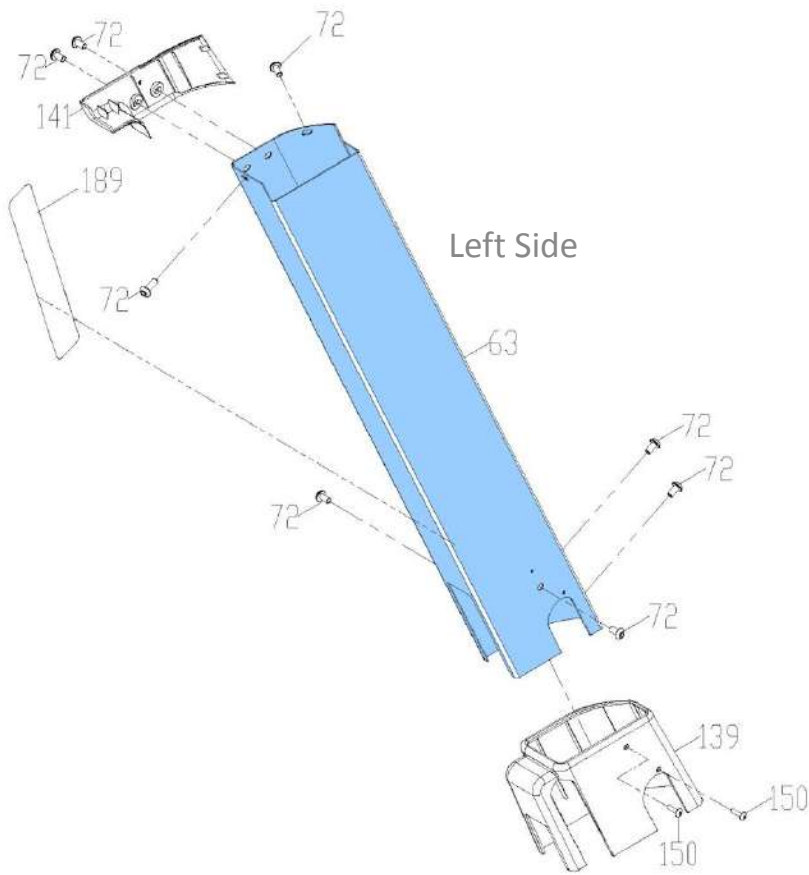
Product Parts Exploded View - Drive System - T400 (T401 & T402)



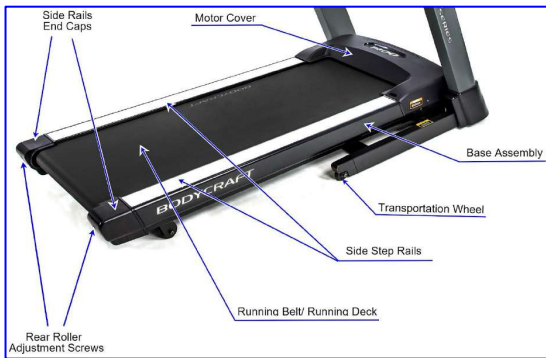
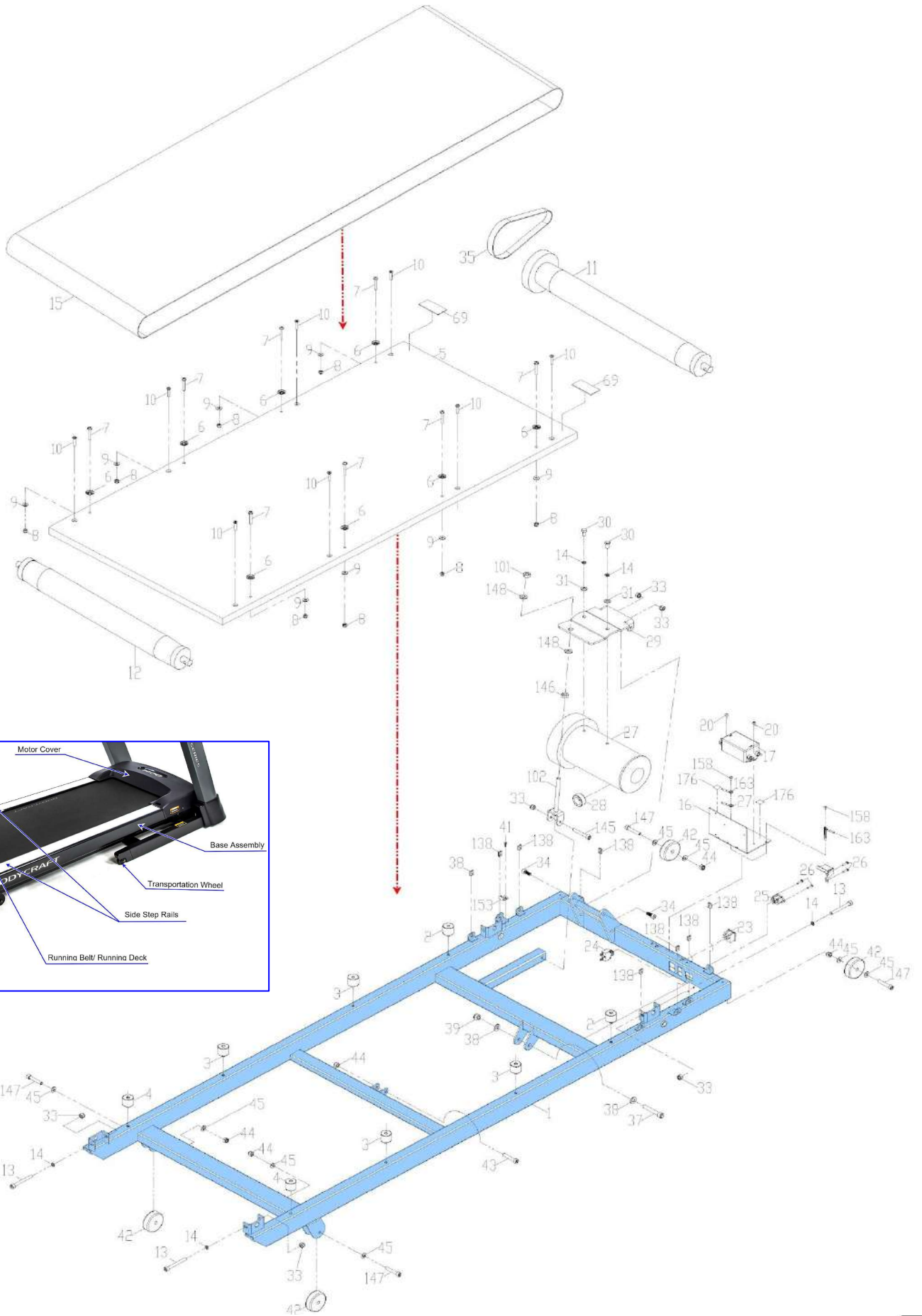
Product Parts Exploded View - Dashboard Assembly - T400 (T401 & T402)



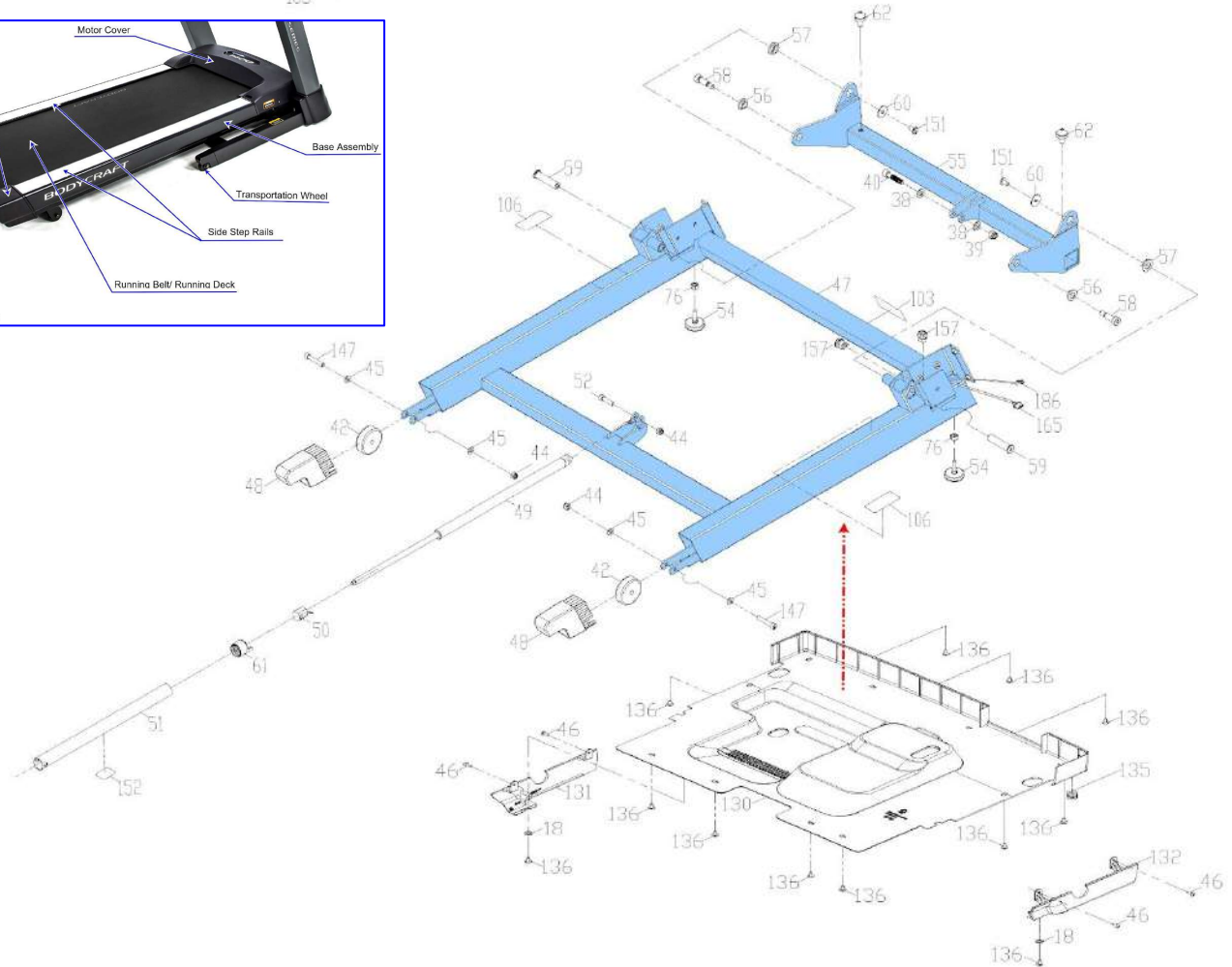
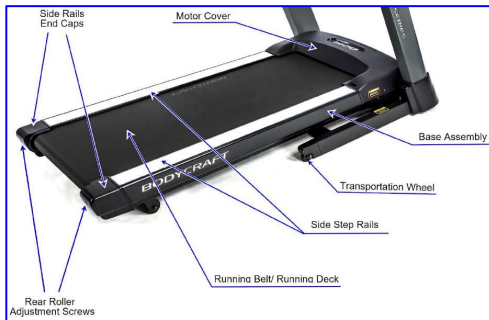
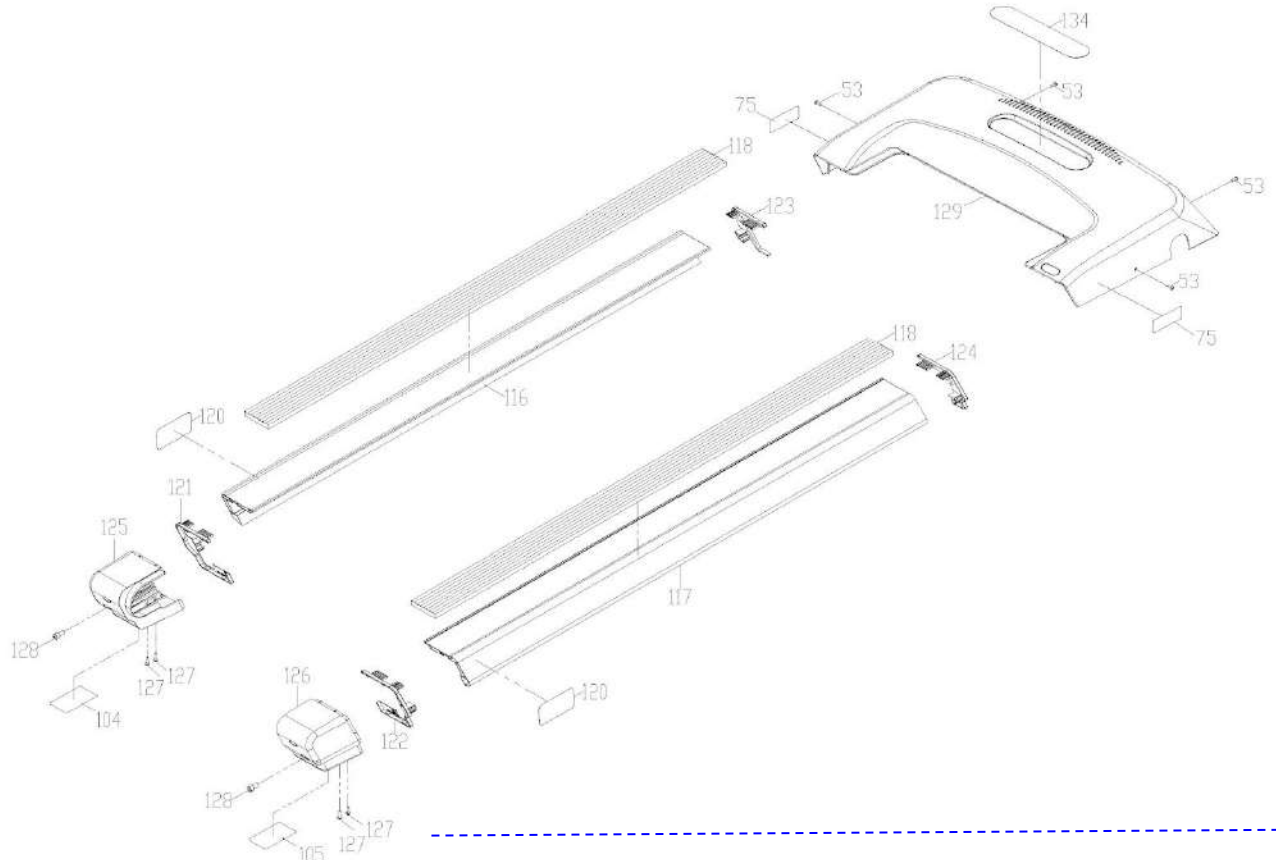
Product Parts Exploded View - Upright Posts Assembly - T400 (T401 & T402)



Product Parts Exploded View - Base Assembly - T400 (T401 & T402)



Product Parts Exploded View - Base Covers & Incline Frame - T400 (T401 & T402)



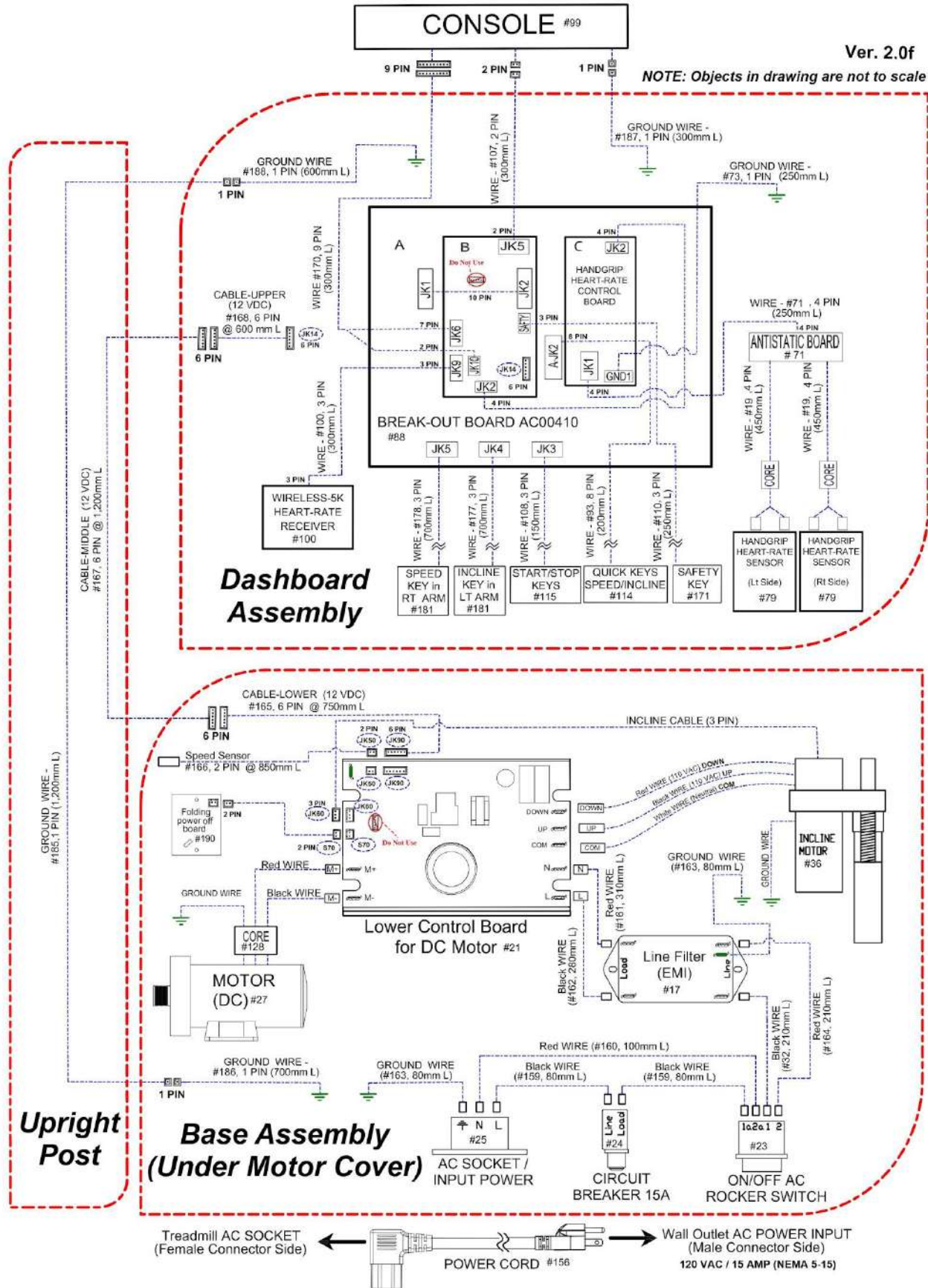
Circuit Diagram - T400 (T401 & T402)

Treadmill Circuit Diagram

T400 (T401 & T402)



Ver. 2.0f

NOTE: Objects in drawing are not to scale




Error Codes E1 - E4 (Ver. 1.5)

EXP-Series Treadmill T400 (T401)

Error Codes		EXP-Series Treadmills T400 (T401) & T800 (T801) DC Motors Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E1	Motor overcurrent	Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Needs preventive maintenance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean front rollers, drive motor, electronics, & cooling fan area.	
		Bad or dirty motor brushes & commutator.	Check drive motor commutator for cleanliness and condition of the motor brushes.	Clean commutator & brushes. If needed replace brushes. Confirm motor is functioning by testing with external 9vdc - 12vdc power source ie. drill battery.	
		Belt/Deck high amp due to PM needed	Check belt/deck wear and amp draw at 2/4/8 mph under load.	Clean running belt/deck area and lube under running belt. Then perform amp tests at 2/4/8 mph under load.	
		Belt/Deck high amp draw due to wear.	Check belt/deck wear and amp draw	Run amp tests at 2/4/8 mph under load after PM performed. If still too high, replace running belt and flip deck.	
		The motor is overloaded and the system enters a protective state.	ONLY after all the five (5) above items are confirmed then turn off main power for 2 minutes and switch back on.	If you turn the power back on and error code returns, then proceed to replace the motor controller.	
E2	No speed signal (During Calibration Mode ONLY)	The motor controller is not receiving the speed signal due to reading of magnet to sensor	The controller will only detect the speed when it is calibrating.	Check the placement and reading of magnet to the speed sensor. Use Ohm meter to confirm correct reading.	
		The motor controller is not receiving the speed signal due to defective speed sensor.	The controller will only detect the speed when it is calibrating.	Replace speed sensor wire.	
		The motor controller is not receiving the speed signal due to faulty motor controller.	The controller will only detect the speed when it is calibrating.	Replace motor controller.	
E3	FET circuit shorted	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 5 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, proceed to replace the motor controller.	
E4	Detect motor misconnection	The drive motor is not connected to the controller.	Check the connection between the motor and the controller to see if it is good or not. If the connection is good, please replace the controller and the motor respectively to check.	Make sure the wire connection between the motor and controller is good. Confirm the connector and wire(s) are not burnt or discolored and securely tight on post. If not, install new wire connectors or proceed to replace motor.	
		Bad or dirty motor brushes & commutator.	Check motor commutator & brushes.	Clean motor commutator & brushes. If needed replace brushes.	
		The drive motor has malfunctioned.	Disconnect motor wires from motor controller. Apply 9vdc to 12vdc with battery, drill battery for external power supply. If motor moves then proceed to replace motor controller. If not, then replace defective motor	Replace motor if external voltage is applied to motor after commutator & brushes were inspected or replaced and still no movement.	
		The motor controller has malfunctioned.	If all the above has been confirmed connected and working, then replace the motor controller	Replace the motor controller.	

Error Codes E5 - E21 (Ver. 1.5)

EXP-Series Treadmill T400 (T401)


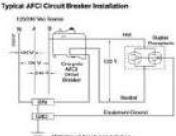



Error Codes		EXP-Series Treadmills T400 (T401) & T800 (T801) DC Motors Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E5	Main power supply voltage too low	Not a good wall outlet with proper voltage and grounding.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Too many treadmills or other electrical products units using same breaker.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application).	
		Bad wiring harness, wire connections, bad in-line filter, bad motor controller.	Inspect all wiring harness, wire connections for color and full tight connections. Then check in-line filter for input voltage to output voltage & heat of metal frame.	If loose connections, take pliers and squeeze the connector with little pressure to close the gap then reconnect wire harness. If connectors or wires are discolored or burnt, then replace wires & connectors. If in-line filter is defective, then proceed to replace with new. If all above is correct and unit is new, then proceed to replace the motor controller.	
E6	Main power supply voltage too high	The input voltage from the wall outlet is unstable.	Please check the stability of power supply in this area.	If confirmed that wall outlet power is correct with a dedicated 120v/15a and it is new equipment, proceed to replace the motor controller.	
E7	Main power supply is abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn power switch back on and can not troubleshoot, proceed to replace motor controller.	
E8	MCU abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E9	FET drive abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E16	Incline error	The lift motor is blocked, or the wire connection is not good.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E17 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E17	
		Motor controller has malfunctioned.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E17 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E17	
E17	Incline calibration error	The lift motor is not functioning and the machine is stuck in elevation. Wire harness not connected.	First, check if the wire connection to the incline motor is good or not.	Confirm the elevation motor connectors on correctly wired and secure to motor controller.	
		The lift motor is defective and the machine is stuck in elevation. Faulty incline motor.	If the motor rotates normally and the error code is still persistent, then replace the incline motor.	Replace the incline motor.	
		The lift motor is not functioning and the machine is stuck in elevation. Faulty motor controller.	After incline motor replacement, the problem is still there, then replace the motor controller.	Replace the motor controller.	
E21	Controller EEPROM error	EEPROM is defective or physically damaged	Motor controller is not working.	Replace the motor controller.	

Error Codes E22 - E88 (Ver. 1.5)

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Conditions to Consider

EXP-Series Treadmill T400 (T401)

Error Codes		EXP-Series Treadmills T400 (T401) & T800 (T801) DC Motors Ver. 1.5		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E22 / E23	No communication between breakout board and motor controller	Bad cable connection.	Check cable connection and replace the cable if necessary to double check.	Replace the cable to double check. If same error code, then replace the breakout board.	
		The breakout board is defective or physical damaged	Replace breakout board then check to confirm repaired error code and functioning.	Replace breakout board. If same error code, then replace the motor controller.	
		The motor controller is defective or physically damaged.	Replace motor controller then check to confirm repaired error code and functioning.	Replace the motor controller.	
E88	Console EEPROM malfunction	Console display has malfunctioned.	The error code appears after turning power switch back on, then disappears in 5 seconds. The user setting can't be saved.	Replace console.	
<p>Note on No Error Code: There will be malfunctions that do not produce an Error Code. Refer to Troubleshooting Foundations 101 document for basic procedures. After reviewing, document all inspection & testing process taken with Model # and Serial # of unit when at customers location, then contract BODYCRAFT Customer Support (800) 990-5556 for further actions to be taken.</p>					
<p>Note on preventive maintenance: JUST LIKE CHANGING THE OIL IN YOUR CAR, PREVENTIVE MAINTENANCE (PM) IS REQUIRED AND RESPONSIBILITY OF OWNER TO PERFORM. A treadmill in home application needs PM once a year and commercial application every 6 months under normal use. Extensive use or dirty environments clean quarterly. This includes cleaning under treadmill, rollers area, motor area including drive motor, electronics, cooling fan and all touch areas. Clean with vacuum cleaner and surfaces only with mild soap/water and soft cloth. Proceed to clean under belt/deck area with dry soft cloth then lube with 100% pure silicone (Dow Chemical XIAMETER™ PMX-200 Silicone Fluid), 30ml (about 1oz) under center area under running belt. See Owners Manual and PM Checklist for further details.</p>					
<p>Note on panel breakers and wall outlets: Treadmills in home application needs a 120 volt / 15 amp dedicated Non-GFCI outlet (per treadmill). In a commercial application, the T800 DC Drive treadmill needs a 120 volt / 20 amp dedicated Non-GFCI outlet (per treadmill). New Arc Fault breaker(s) (AFCI) or wall outlet(s) vary per manufacture and could possibly need additional surge protector at EMI / RFI Filtering 40-80 dB to not trip the same frequency of a treadmill motor. Recommend for Arc Fault breakers (AFCI) due to new 2017 NEC code: Isobar 2-Outlet Surge Protector # ISOBAR 2-6</p>					
				<p>Eaton Engineering Director Andy Foerster said arc fault detection is challenging, in part because so many common household devices — such as vacuum cleaners and power tools that use motors with brushes — create arcing. In information provided to ARRL Eaton engineer Lanson Relyea said that because AFCIs rely on HF emission detection to verify arcing, "any signal that conducts or radiates a signal within the detection band of the AFCI can cause interference and cause the device to trip without the presence of a true arcing condition."</p>	
				 <p>Tripp Lite Isobar 2 Outlet Surge Protector Power Strip</p>	
UPDATE SOFTWARE!!		What is the first step when troubleshooting ANY failure?		UPDATE SOFTWARE!!	
<p>Need help from our Customer Support Team? Call us at (800) 990-5556. We're available Monday through Friday, 10:00 AM – 5:00 PM Eastern Time. Or email us anytime: support@bodycraft.com</p>					
		 <p>Additional service videos, parts orders, software update files, and contact information scan this QR code.</p> <p>Or go to: https://www.bodycraft.com/customer-support.html</p>			

Version 1.5

Error Codes E1 - E4 (Ver. 1.7)

EXP-Series Treadmill T400 (T402)

Error Codes		EXP-Series Treadmills T400 (T402) & T800 (T802) DC Motors		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E1	Motor overcurrent	Too many treadmills or other units using same breaker	Check line voltage. Need dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Needs preventive maintenance under hood	Check electronics & drive motor for dirt build-up and cooling fan working properly	Clean front rollers, drive motor, electronics, & cooling fan area.	
		Bad or dirty motor brushes & commutator.	Check drive motor commutator for cleanliness and condition of the motor brushes.	Clean commutator & brushes. If needed replace brushes. Confirm motor is functioning by testing with external 9vdc - 12vdc power source i.e. drill battery.	
		Belt/Deck high amp due to PM needed	Check belt/deck wear and amp draw at 2/4/8 mph under load.	Clean running belt/deck area and lube under running belt. Then perform amp tests at 2/4/8 mph under load.	
		Belt/Deck high amp draw due to wear.	Check belt/deck wear and amp draw	Run amp tests at 2/4/8 mph under load after PM performed. If still too high, replace running belt and flip deck.	
		The motor is overloaded and the system enters a protective state.	ONLY after all the five (5) above items are confirmed then turn off main power for 2 minutes and switch back on.	If you turn the power back on and error code returns, then proceed to replace the motor controller.	
E2	No speed signal (During Calibration Mode ONLY)	The motor controller is not receiving the speed signal due to reading of magnet to sensor	The controller will only detect the speed when it is calibrating.	Check the placement and reading of magnet to the speed sensor. Use Ohm meter to confirm correct reading.	
		The motor controller is not receiving the speed signal due to defective speed sensor.	The controller will only detect the speed when it is calibrating.	Replace speed sensor wire.	
		The motor controller is not receiving the speed signal due to faulty motor controller.	The controller will only detect the speed when it is calibrating.	Replace motor controller.	
E3	FET circuit shorted	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 5 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, proceed to replace the motor controller.	
E4	Detect motor misconnection	The drive motor is not connected to the controller.	Check the connection between the motor and the controller to see if it is good or not. If the connection is good, please replace the controller and the motor respectively to check.	Make sure the wire connection between the motor and controller is good. Confirm the connector and wire(s) are not burnt or discolored and securely tight on post. If not, install new wire connectors or proceed to replace motor.	
		Bad or dirty motor brushes & commutator.	Check motor commutator & brushes.	Clean motor commutator & brushes. If needed replace brushes.	
		The drive motor has malfunctioned.	Disconnect motor wires from motor controller. Apply 9vdc to 12vdc with battery, drill battery for external power supply. If motor moves then proceed to replace motor controller. If not, then replace defective motor	Replace motor if external voltage is applied to motor after commutator & brushes were inspected or replaced and still no movement.	
		The motor controller has malfunctioned.	If all the above has been confirmed connected and working, then replace the motor controller	Replace the motor controller.	

[Ver. 1.7]



Error Codes E5 - E21 (Ver. 1.7)

EXP-Series Treadmill T400 (T402)

Error Codes		EXP-Series Treadmills T400 (T402) & T800 (T802) DC Motors		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E5	Main power supply voltage too low	Not a good wall outlet with proper voltage and grounding.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120/20 amp commercial application). Call electrician if needed for correct wiring to be installed.	
		Too many treadmills or other electrical products units using same breaker.	Check line voltage at 120vac with proper grounding per NEC code. Then confirm it is dedicated 15 amp (20 amp Commercial Application) per treadmill.	Use only one treadmill per Dedicated 120v/15 amp outlet/breaker (120v/20 amp commercial application).	
		Bad wiring harness, wire connections, bad in-line filter, bad motor controller.	Inspect all wiring harness, wire connections for color and full tight connections. Then check in-line filter for input voltage to output voltage & heat of metal frame.	If loose connections, take pliers and squeeze the connector with little pressure to close the gap then reconnect wire harness. If connectors or wires are discolored or burnt, then replace wires & connectors. If in-line filter is defective, then proceed to replace with new. If all above is correct and unit is new, then proceed to replace the motor controller.	
E6	Main power supply voltage too high	The input voltage from the wall outlet is unstable.	Please check the stability of power supply in this area.	If confirmed that wall outlet power is correct with a dedicated 120v/15a and it is new equipment, proceed to replace the motor controller.	
E7	Main power supply is abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn power switch back on and can not troubleshoot, proceed to replace motor controller.	
E8	MCU abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E9	FET drive abnormal	The motor controller has malfunctioned.	Turn power off to treadmill at power switch for 2 mins. Then turn power switch back on.	If turn the power back on and still can't clear the error code, then proceed to replace motor controller.	
E10	Incline error	The lift motor is blocked, or the wire connection is not good.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E11 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E11	
		Motor controller has malfunctioned.	It requires re-calibration. If the calibration is normal, but the error code still persistent, please refer to the E11 processing method.	Please start calibration procedure to clear the code. If not cleared, then proceed to E11	
E11	Incline calibration error	The lift motor is not functioning and the machine is stuck in elevation. Wire harness not connected.	First, check if the wire connection to the incline motor is good or not.	Confirm the elevation motor connectors on correctly wired and secure to motor controller.	
		The lift motor is defective and the machine is stuck in elevation. Faulty incline motor.	If the motor rotates normally and the error code is still persistent, then replace the incline motor.	Replace the incline motor.	
		The lift motor is not functioning and the machine is stuck in elevation. Faulty motor controller.	After incline motor replacement, the problem is still there, then replace the motor controller.	Replace the motor controller.	
E21	Controller EEPROM error	EEPROM is defective or physically damaged	Motor controller is not working.	Replace the motor controller.	

(Ver. 1.7)



Error Codes E22 - E88 (Ver. 1.6)

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Conditions to Consider

EXP-Series Treadmill T400 (T402)

Error Codes		EXP-Series Treadmills T400 (T402) & T800 (T802) DC Motors		BODYCRAFT	
Error Code	Description	Possible Root Cause	Inspection/Testing Procedure	Suggested Fix	
E22 / E23	No communication between breakout board and motor controller	Bad cable connection.	Check cable connection and replace the cable if necessary to double check.	Replace the cable to double check. If same error code, then replace the breakout board.	
		The breakout board is defective or physical damaged	Replace breakout board then check to confirm repaired error code and functioning.	Replace breakout board. If same error code, then replace the motor controller.	
		The motor controller is defective or physically damaged.	Replace motor controller then check to confirm repaired error code and functioning.	Replace the motor controller.	
E37	Communication issue between circuit boards	Bad inverter, Miscommunication on 2 pin of Power Cable to Console from Breakout-Board.	Check connections at Lower Board, Cable Harness and Breakout-Board/ check continuity for damaged Cable or Bent Pins then Power Cycle (Restart Unit).	Reseat Connectors / Replace Communication Cable(s) / Replace Lower Board	
E88	Console EEPROM malfunction	Console display has malfunctioned.	The error code appears after turning power switch back on, then disappears in 5 seconds. The user setting can't be saved.	Replace console.	
<p>Note on No Error Code: There will be malfunctions that do not produce an Error Code. Refer to Troubleshooting Foundations 101 document for basic procedures. After reviewing, document all inspection & testing process taken with Model # and Serial # of unit when at customers location, then contract BODYCRAFT Customer Support (800) 990-5556 for further actions to be taken.</p>					
<p>Note on preventive maintenance: JUST LIKE CHANGING THE OIL IN YOUR CAR, PREVENTIVE MAINTENANCE (PM) IS REQUIRED AND RESPONSIBILITY OF OWNER TO PERFORM. A treadmill in home application needs PM once a year and commercial application every 6 months under normal use. Extensive use or dirty environments clean quarterly. This includes cleaning under treadmill, rollers area, motor area including drive motor, electronics, cooling fan and all touch areas. Clean with vacuum cleaner and surfaces only with mild soap/water and soft cloth. Proceed to clean under belt/deck area with dry soft cloth then lube with 100% pure silicone (Dow Chemical XIAMETER™ PMX-200 Silicone Fluid), 30ml (about 1oz) under center area under running belt. See Owners Manual and PM Checklist for further details.</p>					
<p>Typical AFCI Circuit Breaker Installation</p>		<p>15 Amp 1-Pole AFCI Breaker, 20 Amp 1-Pole AFCI Breaker, 20 Amp 2-Pole AFCI Breaker</p>		<p>Eaton Engineering Director Andy Foerster said arc fault detection is challenging, in part because so many common household devices — such as vacuum cleaners and power tools that use motors with brushes — create arcing. In information provided to ARRL Eaton engineer Lanson Relyea said that because AFCIs rely on HF emission detection to verify arcing, "any signal that conducts or radiates a signal within the detection band of the AFCI can cause interference and cause the device to trip without the presence of a true arcing condition."</p>	
				<p>Tripp Lite Isobar 2 Outlet Surge Protector Power Strip</p>	
<p>Note on panel breakers and wall outlets: Treadmills in home application needs a 120 volt / 15 amp dedicated Non-GFCI outlet (per treadmill). In a commercial application, the T800 DC Drive treadmill needs a 120 volt / 20 amp dedicated Non-GFCI outlet (per treadmill). New Arc Fault breaker(s) (AFCI) or wall outlet(s) vary per manufacture and could possibly need additional surge protector at EMI / RFI Filtering 40-80 dB to not trip the same frequency of a treadmill motor. Recommend for Arc Fault breakers (AFCI) due to new 2017 NEC code: Isobar 2-Outlet Surge Protector # ISOBAR 2-6</p>					
UPDATE SOFTWARE!!		What is the first step when troubleshooting ANY failure?		UPDATE SOFTWARE!!	
Need help from our Customer Support Team? Call us at (800) 990-5556. We're available Monday through Friday, 10:00 AM – 5:00 PM Eastern Time. Or email us anytime: support@bodycraft.com					
		Additional service videos, parts orders, software update files, and contact information scan this QR code. Or go to: https://www.bodycraft.com/customer-support.html			

Frequently Asked Questions (FAQ's)

EXP-Series Treadmills 16TS & 10TS Touch Screens

How do I download apps to my console?

Additional apps cannot be downloaded. Since our top priority must be the safe and proper function of the treadmill, we cannot allow additional apps to be installed. We do however, include the Chrome browser for added flexibility. Many apps (i.e. Peloton) are browser based, so they will function.

Also, you can add a device such as Apple TV, FireStick, Roku, Satellite/Cable Box, Game Console, etc. that can plug into the HDMI port. This is a great way to add additional media features.

Why can't I log into my google account upon first use of the Chrome app?

The software on our consoles use the Android platform, but this Android feature was designed specifically for personal tablets and smartphones. This feature is not available on our consoles due to security reasons.

How do you Cast from your phone, tablet, computer or compatible TV?

See Guide - ([How To Cast](#))

How do you connect a phone or tablet to the HDMI port on the console?

Many phones and tablets use the charging port with an HDMI adapter to allow this connection. Check with the manufacturer of your device to see if it supports this feature. (Please note that if the phone/tablet has a USB-C port, it does not mean it can feed video, some do and some don't)

See Guide - ([Connect Using HDMI](#))

How do I update the Console & Apps?

Check the serial number of your console. Older versions begin with "10TS" or "16TS" If it's an older version, you will need to download the update file from our website and install it. If you have already updated to a newer version, the updates will be installed via wifi or ethernet connection.

See Video or Guide - ([How to Video](#)) ([WIFI Update](#)) ([USB Update](#)) ([App Update](#))

How do I connect to apps?

Apps that are preinstalled on the console require you to log in to your account. To connect to other apps on your phone or tablet such as Zwift or Kinomap see guide - ([Console Apps](#)) ([External Apps](#))

Frequently Asked Questions (FAQ's)

EXP-Series Treadmills 16TS & 10TS Touch Screens

How do I adjust the volume while in my workout?

You can adjust the volume in settings (gear icon, top right on home screen) You can also adjust the sound after you started a workout by touching the speaker icon top left of your workout screen. A vertical slider should appear. Adjust the slider up or down to the volume of your choosing. - ([PDF LINK](#))

Why is my display reading “incline down”?

For safety reasons, if your console is displaying this message you need to manually lower the incline all the way down to the original starting position using either the decline buttons on the console or on the handlebars. The message should go away after this is done. If that does not clear the message, try recalibrating the treadmill. ([PDF LINK](#))

Why isn't my Why isn't my Bluetooth/ANT+ heart monitor displaying my pulse on screen?

From the home screen, prior to beginning your workout, tap the blue circle (Fitness App + BT Pulse) located in the upper left corner from the home screen, it will begin to blink. Then follow the heart rate monitors manufacturer's instructions for proper placement. Begin your workout and the treadmill will display your pulse after a few seconds. ([PDF LINK](#))

Why can't I pair my Bluetooth Headphones or other Bluetooth Speaker?

From the home screen, tap the settings button (gear icon located in the top right corner), then press the bluetooth button. If another device is connected, tap the gear icon to the right and select “forget this device”. All bluetooth headphones or speakers must be paired to console before it will transmit the bluetooth signal. See your bluetooth product's manual on how to pair. The headphones or speaker should now appear in the bluetooth device list on the console. Select your device and you should see “connected” under the device name. If you are still having trouble connecting, turn off the bluetooth and then back on again by pressing the toggle button on the top right of screen. ([PDF LINK](#))

What internet speed do I need for the console to work correctly?

You need a **minimum download speed** of 3 Megabits per second to watch a single **video stream** in clear, standard definition. The **best Internet speed** for **HD streaming** is 5Mbps or more. For the best experience we recommend 10mbps or faster.

Frequently Asked Questions (FAQ's)

EXP-Series Treadmills 16TS & 10TS Touch Screens

Why can't I connect to Wifi?

Your WIFI router is too far away from your treadmill.

Your WIFI Signal or speed is too low to connect.

Contact your internet service provider.

NOTE: There is a CAT5/6 port located on the back of the console for a direct connection.

When I connect to WIFI it says SAVED under the network but wont connect.

“Saved” simply means that the password is saved, if the connection were successful, it would display “Connected”. Double check your password. If you have poor or no WIFI signal, you can try a Wifi booster or extender.

NOTE: If possible, you can also connect the console directly with a Cat 5e or Cat 6e cable.

How do I calibrate my treadmill?

On the homepage hold between the “Y” and “C” on the Bodycraft Logo. A screen will pop up, select “Calibration”. After calibration is selected another screen will appear. Select your treadmill base model. Allow the treadmill to complete the process.

Follow the instructions below.

[\(PDF LINK\)](#)

Is there a sleep mode for the console?

Yes. On the homepage hold between the “Y” and “C” on the Bodycraft Logo. A screen will pop up, select “Manager”. Tap on “Display Mode” under the systems tab.

Follow the instructions below.

[\(PDF LINK\)](#)

How do I set custom keys?

On the homepage hold between the “Y” and “C” on the Bodycraft Logo. A screen will pop up, select “Manager”. Make sure the custom keys option is on. Start your workout and adjust your speed and/or incline to your preferred settings. Press and hold down either of the custom buttons located on the lower console. You should get a confirmation that your custom keys are now set.

Follow the instructions below. [\(PDF LINK\)](#)

Frequently Asked Questions (FAQ's)

EXP-Series Treadmills 16TS & 10TS Touch Screens

How do I reset the user profiles?

On the homepage hold between the “Y” and “C” on the Bodycraft Logo. A screen will pop up, select “Manager”. On the left side of the screen you will see a user profiles “reset” button.

Follow the instructions below.

[\(PDF LINK\)](#)

Can I turn off the button beep sound?

Yes. On the homepage hold between the “Y” and “C” on the Bodycraft Logo. A screen will pop up, select “Manager”. Toggle the button beep sound selection to off.

Follow the instructions below.

[\(PDF LINK\)](#)

When should I lube my treadmill?

Bodycraft provides a Lube Indicator on your console indicating when the running belt lubrication is required. If you see this indicator pop up on the screen, follow the lubrication instruction below or call a Bodycraft certified service provider.

[\(PDF LINK\)](#)

How do I turn off “Learn about me?”

On the homepage hold between the “Y” and “C” on the Bodycraft Logo. A screen will pop up, select “Manager”. On the bottom far right select “Sales”. Turn off sales mode.

Follow the instructions below.

[\(PDF LINK\)](#)

How do I cast from the treadmill console to a TV?

Please call customer service.

Why does my treadmill pause after 20 seconds?

When the user is off the treadmill for 20 seconds, the treadmill will go into pause mode in case kids/pets get on the treadmill without adult supervision. When necessary, you can turn this feature off under settings on the home screen.

What is the USB port for?

The USB port is used for Mp3/Mp4 play function. You can also update console software as well as mobile devices charging up to 1A.

Frequently Asked Questions (FAQ's)

EXP-Series Treadmills 16TS & 10TS Touch Screens

How can I get sound out of my console?

You can use a headphone jack or Bluetooth speakers/headphones. Check our bluetooth connection guide. ([PDF LINK](#))

Will my personal App account be logged out after the console power off?

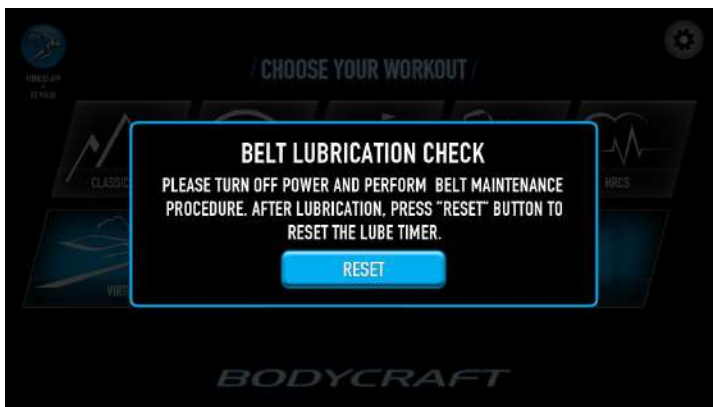
The Apps work the same way as on your mobile devices, the user information will be stored even when you turn off the devices. In a public facility, for your privacy, it is better to log out of your personal account before leaving the treadmill.

Lube Icon (Indicator) lighting up?

When the lube icon comes on, means the treadmill is due for lubrication maintenance.

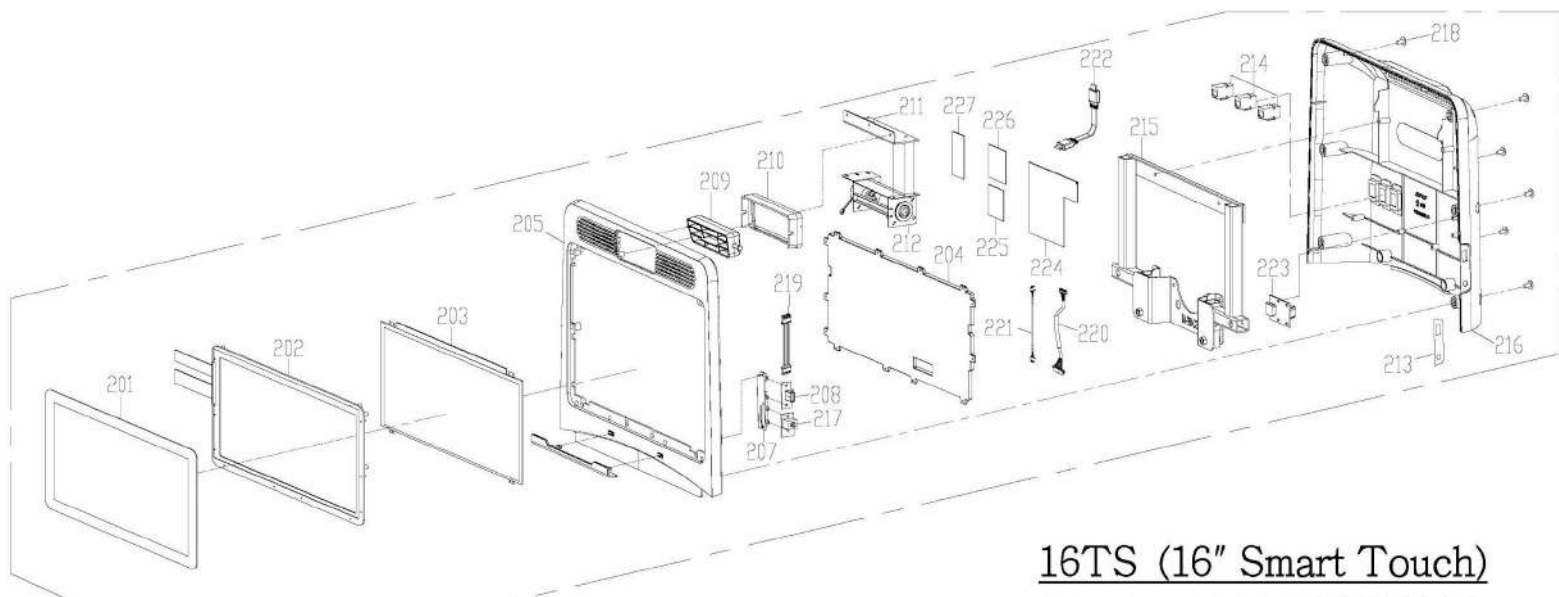
Please follow the owner's manual lubrication procedure to lubricate the tread/deck. AFTER the lubrication procedure is complete:

- **16" & 10" Touch Screen:** Follow the Reset prompts on the console.



Console Exploded View

EXP-Series Treadmill 16" Smart Touch



16TS (16" Smart Touch)

10" or 16" High Definition, Full Color, Interactive Touch Screen Computer Display

User Defined Multi-View Data Feedback:
Elevation Gain, Pace, Distance, Time, Pulse, Mets, Calories, Laps, Incline, Speed, Workout Summary

6 Fully Customizable User Profiles - 10 Favorite/Custom Programs Each - Stores Comprehensive Data

30+ Pre-Loaded Programs: Quick Start, 3 Goals (Time, Distance, Calories), Classics (Hill, Random Incline, Walk, Run, Sprint), Intervals (Incline Interval, Speed Interval, HIIT Intervals, Custom Interval), Races (5K, 10K, Half Marathon), HRC's (Target HRC, HR Interval, Fat Burn HRC, Cardio HRC), 19 Fitness Tests, 10 Favorite/Custom Per User

4 Virtual Scenes - Forests, Beaches, Tropics, Mountains

9 Pre-Loaded Media Apps, Use Bluetooth to Connect to Apps on Smartphone or Tablet

BT & ANT+ Wireless Heart Rate Receiver, GEMConnect Module for Connecting Apps on Smart Phone or Tablet

BT & ANT+ Wireless Heart Rate Receiver, 5kHz Wireless Receiver

3.5mm Audio Jack & Wireless Bluetooth Audio

Power Charging, Software Updates, MP3/MP4 Player

3 Speed Tilting Fan

Wired (Ethernet) and Wireless (Wifi) Internet

Chrome, YouTube, Facebook, Instagram, Hulu, Netflix, Spotify, USB Music MP3 and Video MP4, HDMI Input

HDMI Input to Expand Your Entertainment Experience

2 C-Safe Ports, Charging Port and Communication Port for 3rd Party Devices

Change Parameters, Add Own Logo, Error Code Feedback, Software Updates, Diagnostic History Log, Amp Draw and More.

Choose from 4 Languages, English, French, Spanish, or Chinese

Residential: Display: 3 Years / Labor: 2 Years (Headphone Jack, CSAFE, USB Port, HDMI, 90 Days, No Labor)

Commercial: Display: 3 Years / Labor: 1 Years (Headphone Jack, CSAFE, USB Port, HDMI, 90 Days, No Labor)

16" SMART TOUCH



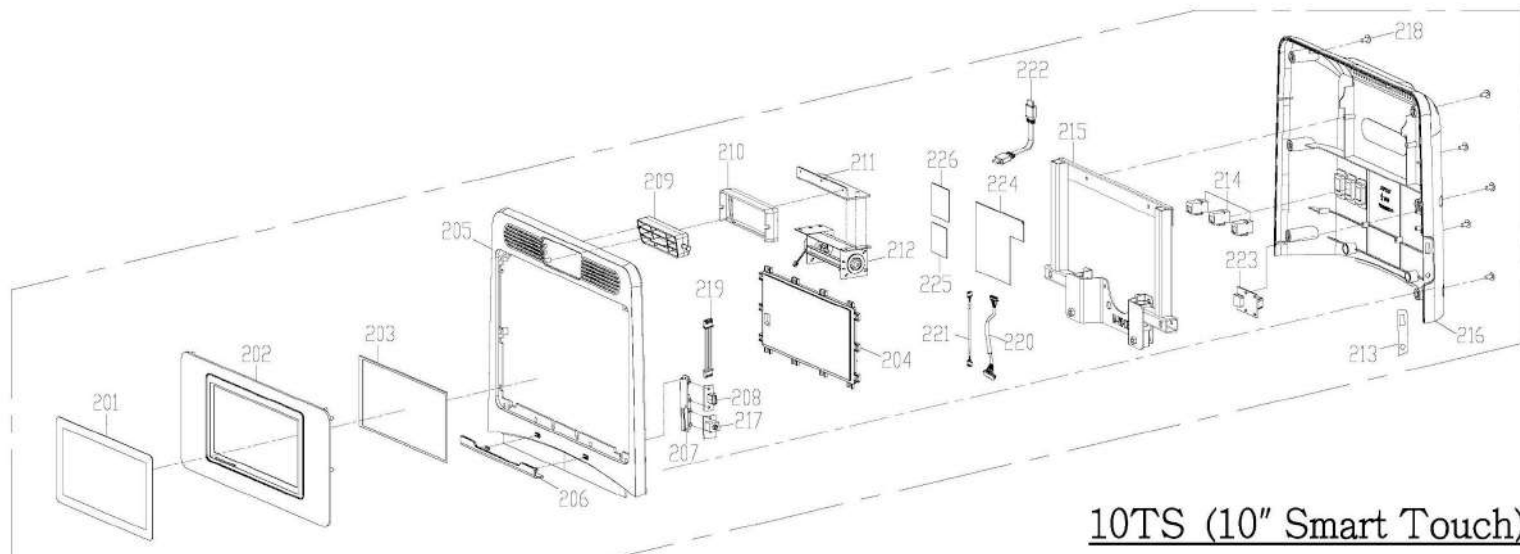
Console Exploded View Part Numbers

EXP-Series Treadmill 16" Smart Touch #16TS

<u>Exploded View #</u>	<u>Description(Quantity)</u>
16TS-205	Console front cover
16TS-207	USB mount
16TS-212	Fan-12V/0.15A
16TS-205	Console holder
16TS-210	Fan holder
16TS-209	Wind direction adjustment blade
16TS-211	Fan fixed iron piece
16TS-216	Console back cover
16TS-214	Network connector (3pcs)
16TS-213	USB audio sticker
16TS-208 & 16TS-217 & 16TS-212	Screw (8pcs)
16TS-202 & 16TS-204 & 16TS-224	Self-tapping screws (27pcs)
16TS-218	Self-tapping screws (11pcs)
16TS-219	Color cable-4P double female 20cm
16TS-224	10.1"/15.6" Tablet module (WIFI plug-in) HDMI IN module Bluetooth/WIFI Receive antenna FB00000(WIFI-2.4G/5G+BT)
16TS-224	Color cable-4P double female P2.0-15cm
16TS-208	PA-AA00991-K2 USB transfer board
16TS-225	PA-AC00289-USB-01 USB charger board
16TS-224 to 214	phone cable-8P femaleP2.0+RJ45-45cm
16TS-223	PA-AC00260-K6 HDMI IN transfer board
16TS-217	PA-AA00991-K1-01 sound board
16TS-226	PA-AC00460_C-Safe
16TS-224 to 16TS-217	Color cable-double female 4P2.5+3P2.54-20cm
16TS-224 to 16TS-212	Cable-2P male/8P female2.0+9Pin-30cm
16TS-226 to 16TS-214	Cable-5P female+RJ45-35cm (2pcs)
16TS-221	Cable-2P female-30cm
16TS-224	Memory card + VR video file
16TS-224 to 16TS-226	Color cable-4P double female P2.5+P2.0-25cm
16TS-210 & 16TS-202	Self-tapping screws (14pcs)
16TS-206	book shelf
16TS-216	Small oval sticker BODYCRAFT(black bottom+sliver typeface)
16TS-202	CTP(15.6")Capacitive touch panel
16TS-227	USB CTP control board
16TS-224 to 16TS-203	30pin FFC EDP interface cable
16TS-224	Color cable-6P double female P2.0
16TS-201	TFT console overlay 15.6"
16TS-202	Conaole inner frame
16TS-224 to 16TS-206	Color cable-double female5P2.5+3P2.5-20cm
16TS-224 to WAHOO bluetooth	Cable-female+10P2.0+6P2.5-30cm PA-AC00460-BTM-01WAHOO Bluetooth board
16TS-222	HDMI cable AM TO AM -500L
16TS-224	TFT LVDS to EDP driver board 15.6" _1920*1080
16TS-203	TFT panel (15.6" digits)
16TS-224 to 16TS-227	18.5 console cable

Console Exploded View

EXP-Series Treadmill 10" Smart Touch



10TS (10" Smart Touch)

10" or 16" High Definition, Full Color, Interactive Touch Screen Computer Display

User Defined Multi-View Data Feedback:

Elevation Gain, Pace, Distance, Time, Pulse, Mets, Calories, Laps, Incline, Speed, Workout Summary

6 Fully Customizable User Profiles - 10 Favorite/Custom Programs Each - Stores Comprehensive Data

30+ Pre-Loaded Programs- Quick Start, 3 Goals (Time, Distance, Calories), Classics (Hill, Random Incline, Walk, Run, Sprint), Intervals (Incline Interval, Speed Interval, HIIT Intervals, Custom Interval), Races (5K, 10K, Half Marathon), HRC's (Target HRC, HR Interval, Fat Burn HRC, Cardio HRC), 19 Fitness Tests, 10 Favorite/Custom Per User

4 Virtual Scenes - Forests, Beaches, Tropics, Mountains

9 Pre-Loaded Media Apps, Use Bluetooth to Connect to Apps on Smartphone or Tablet

BT & ANT+ Wireless Heart Rate Receiver, GEMConnect Module for Connecting Apps on Smart Phone or Tablet

BT & ANT+ Wireless Heart Rate Receiver, 5kHz Wireless Receiver

3.5mm Audio Jack & Wireless Bluetooth Audio

Power Charging, Software Updates, MP3/MP4 Player

3 Speed Tilting Fan

Wired (Ethernet) and Wireless (Wifi) Internet

Chrome, YouTube, Facebook, Instagram, Hulu, Netflix, Spotify, USB Music MP3 and Video MP4, HDMI Input

HDMI Input to Expand Your Entertainment Experience

2 C-Safe Ports, Charging Port and Communication Port for 3rd Party Devices

Change Parameters, Add Own Logo, Error Code Feedback, Software Updates, Diagnostic History Log, Amp Draw and More.

Choose from 4 Languages, English, French, Spanish, or Chinese

Residential: Display: 3 Years / Labor: 2 Years (Headphone Jack, CSafe, USB Port, HDMI, 90 Days, No Labor)

Commercial: Display: 3 Years / Labor: 1 Year (Headphone Jack, CSafe, USB Port, HDMI, 90 Days, No Labor)



Console Exploded View Part Numbers

EXP-Series Treadmill 10" Smart Touch #10TS

<u>Exploded View #</u>	<u>Description(Quantity)</u>
10TS-205	Console front cover
10TS-204	TFT PCB fixed board 10"
10TS-207	USB mount
10TS-212	Fan-12V/0.15A
10TS-202	TFT console plastic 10"
10TS-205	Console holder
10TS-210	Fan holder
10TS-209	Wind direction adjustment blade
10TS-211	Fan fixed iron piece
10TS-216	Console back cover
10TS-214	Network connector (3pcs)
10TS-213	USB audio sticker
10TS-208 & 10TS-217 & 10TS-212	Screw (8pcs)
10TS-205 & 10TS-204 & 10TS-224 &	Self-tapping screws (27pcs)
10TS-218	Self-tapping screws (11pcs)
10TS-219	Color cable-4P double female-20cm
10TS-224	10.1"/15.6" Tablet module (WIFI plug-in) HDMI Bluetooth/WIFI Receive antenna FB000005(WIFI-2.4G/5G+BT)
10TS-203	10.1" CTP FFC cable
10TS-224	Color cable-4P double female P2.0-15cm
10TS-208	PA-AA00991-K2 USB transfer board
10TS-225	PA-AC00289-USB-01 USB Charger board
10TS-224 to 10TS-214	phone cable-8P femaleP2.0+RJ45-45cm
10TS-224 to 10TS-203	10" MIPI TFT LCD FPC cable
10TS-223	PA-AC00260-K6 HDMI IN transfer board
10TS-201	10" CTP(G+G)
10TS-203	TFT panel (10.1" digits)
10TS-217	PA-AA00991-K1-01 sound board
10TS-226	PA-AC00460 C-Safe
10TS-224 to 10TS-212	Cable-2P male/8P female2.0+9Pin-30cm
10TS-226 to 10TS-214	Cable-5P female+RJ45-35cm (2pcs)
10TS-221	Cable-2P female-30cm
10TS-224	Memory card + VR video file Micro SD 32G
10TS-224 to 10TS-226	Color cable-4P double female P2.5+P2.0-25cm
10TS-210 & 10TS-202	Self-tapping screws (14pcs)
10TS-202	TFT console overlay 10.1"
10TS-206	book shelf
10TS-216	Small oval sticker BODYCRAFT(black
10TS-224 to 10TS-206	Color cable-double female5P2.5+3P2.5-20cm
10TS-224 to 10TS-WAHOO bluetooth board	Cable-female+10P2.0+6P2.5-30cm PA-AC00460-BTM-01 WAHOO bluetooth board
10TS-219	Color cable-double female4P2.0+3P2.54-20cm
10TS-222	HDMI cable AM TO AM -500L

Frequently Asked Questions (FAQ's)

EXP-Series Treadmills #9LCD LCD Screens

1. How to get into the basic Engineering Mode Settings?

A: During idle mode, press "ENTER & SPEED+" KEYS together for a few seconds to get into Engineering mode. Once you have changed any settings, press ENTER to confirm. You may press the STOP key for a few seconds to go back to idle mode.

2. How to switch from modes of English or Metric?

A: During idle mode, press "ENTER & SPEED+" KEYS together for a few seconds to get into Engineering mode. 1st selection is UNITS: ENGLISH or METRIC. Press UP/DOWN key to switch from one another and press ENTER to confirm. You may press the STOP key for a few seconds to go back to idle mode.

3. How to turn the 20 second no-step counter off?

A: During idle mode, press "ENTER & INC+" keys for a few seconds to get into 20 second timer mode. The display will show "20 S TIMER: ON", press UP/DOWN key to turn this off and ENTER key to confirm.

4. Why does my console go into Pause mode after 20 second?

A: There is a 20 second no-step count timer safety feature built into this console in case any children or pets jump on the treadmill when adults step away. To turn this feature off, see #2.

5. How to turn the Sleep/power save mode off?

A: The console is built with 10-minute power save mode. You may turn this feature on/off by going to Engineering mode. Press "ENTER & SPEED+" keys for a few seconds during idle mode and bypass 1st prompt by pressing the ENTER key. It will display "DISPLAY OFF", press UP/DOWN key to turn it ON. The display will not go into power save mode and it will stay on unless you turn the power off.

6. How to calibrate the console?

A: Press "INC-" key for a few seconds during idle mode to start the calibration mode. Press UP/DOWN key to select the right treadmill frame model to calibrate.

7. Why does my max speed not match with product specification?

A: this could be the console didn't calibrate to the right product model. T400DC's max speed is 11mph; T800DC max speed is 12mph and T1000AC max speed is 13mph. Selecting the correct model no. during calibration will ensure the max speed matches the product specification.

8. Why does it mean when the LUBE icon lights up?

A: That means the treadmill is due for lubrication maintenance. Please follow the owners manual lubrication procedure to lubricate the tread/deck.

9. How to turn off the LUBE icon?

A: After the lubrication procedure is completed, press & hold "STOP" key during idle mode for a few seconds to turn the LUBE icon off.

10. How to get the AMP reading?

A: Press "SPEED+ & SPEED-" keys together during idle mode for a few seconds to enter AMP draw reading mode. The treadmill will start running, adjust the speed to get the amp reading on the display. Press the STOP key for a few seconds to end the AMP draw mode and get back to idle mode.

11. How to check the software version?

A: press & hold "HRC & USER2" keys together during idle mode for a few seconds, the software version will be displayed: the top one will be the display software and the scrolling message will be the breakout board version.

12. Why are there min and sec next to the TIME display?

A: When the program time entered is less than 60 minutes, the display will show XX(min): XX(sec) with "sec" light up; if it is over 60 minutes, then the display will switch XX(hr): XX(min) with "min" light up.

13. Does the goal program end when the goal is reached?

A: No, the goal setting is for reference only and will let you know once you reached the goal. Once the goal is reached, the goal display will count up instead of counting down. You may press STOP anytime to end this program.

14. Can I set more than 1 goal?

A: yes, you may set more than 1 goal during Manual program setting. When the goal value input is > 0, then this goal is set.

15. Does this console come with a Pause function?

A: yes, during exercise, press the STOP/PAUSE button to enter Pause mode. The console will pause for 10 minutes. No activities in Pause mode for more than 10 minutes, the console will reset and go back to idle mode or power save mode if this mode is activated.

16. How to resume the exercise when it is on PAUSE mode?

A: Press the START button during pause to resume the exercise.

17. What is the distance for one lap?

A: 400m or 1 / 4 mile.

18. What is the min program time allowed?

A: To better program performance, the min program time allowed is 10 minutes.

19. Why is 5K/10k lap counter not counting?

A: It is because with a 5K/10K program, the whole track is a 5K/10K goal; one lap = 5K or 10K.

20. What is the max allowed repetition during HIIT program?

A: Due to this program being designed to alternate short periods of high intensity work and rest intervals, it is recommended not to exceed 20 repetitions per workout.

21. What is the User program?

A: User profile will be saved into User programs after you enter your user information for the first time. You can also build the custom program profile by adjusting speed and press ENTER for each segment or press & hold ENTER key for a few seconds to bypass the remaining of the profile. After speed profile, you will enter Incline profile the same way as speed profile. The profile will be saved in this User unless it is overwritten.

22. How to save a program into a USER program?

A: In the end of the program, during program summary review, you may press & hold the desired USER 1 / 2 button to save current program into the User. User profile as well as speed/incline profile will be saved.

23. How to recall a USER program to start?

A: During idle mode, press the USER program to recall the user information and program profile, simply press the START button to start the program or you may adjust the setting before you start.

24. Can I delete the User program?

A: yes, press & hold USER 1 key during idle more for a few seconds will delete both USER programs and back to factory default.

25. Why are the default age & weight different after I used a program?

A: The factory defaults are 35 years old and 150lbs; but for your convenience, the age and weight default settings are updated each time there is a new entry. With this said, if there is only one user for this product, he/she doesn't have to change the age and weight every time. You may still adjust it during the program setting.

26. Why does the PACE display show --:--?

A: Before the speed reaches 1mph, there are not enough digits to display the MPM, therefore it displays --: --.

27. How do you set up the Custom speed & incline keys?

A: During the program, press & hold the CUSTOM speed down to save the current desired speed into the custom key. Same as incline custom key.

28. How to use BLUETOOTH/ANT+ wireless heart rate strap?

A: During idle more, press the BLUETOOTH button to turn on Bluetooth function, then follow the display to connect the BLUETOOTH/ANT+ strap first.

29. HOW to connect the APP?

A: press BLUETOOTH button to turn on Bluetooth function and follow the display to connect the App. You must connect the App before you start exercise to properly track the usage data. Please note, there are only a few apps directly compatible with the console to be able to sync directly.

30. Can I use other non-direct compatible apps to track my workout?

A: Yes, it is possible. You can download the Runfit App FOR free and use this app to track your workout. Then Runfit App will sync your workout data to its compatible Apps. Please check out the Runfit App website for more details.

31. Why does the time display not match the App display?

A: Apps are developed by third parties and various companies. The app used their own algorithms to track hours. Some of the apps count-up and our display do both count-up and count-down depending on the program.

32. How does the Apps track my workout?

A: When you sync a compatible App, the app will receive the signal from the console when the speed starts, to start timer and display speed. With this said, the timer will not exactly reflect the warm up/cool down mode because our programs are more sophisticated.

33. Can I use a USB port for charging?

A: yes, you can use USB for phone charging up to 1A; not recommended for tablet charging.

34. How do I use the USB port to do a program update?

A: Download the appropriate program code with proper program name to the USB thumb drive, then insert into the port. Press "INC+ & INC-" for a few seconds and follow the prompts to update the software.

35. What does the CSAFE port use for?

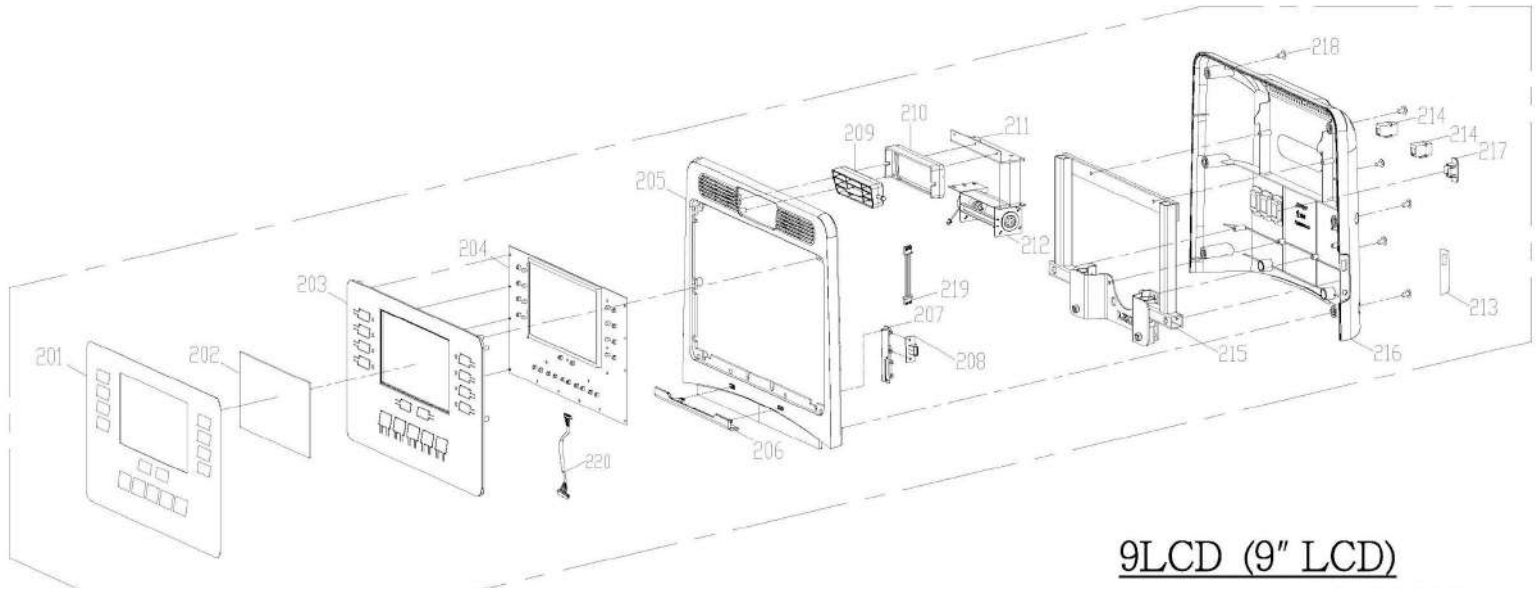
A: the CSAE ports are used for compatible third party applications for commercial environments.

36. Does this console track the treadmill odometer?

A: Yes, inside the engineering mode, the total odometer and hours are tracked.

Console Exploded View

EXP-Series Treadmill 9" LCD



9LCD (9" LCD)

DISPLAY	9" Black Mask LCD Interactive Computer Display
DATA FEEDBACK	All-In-One Continuous Feedback with Message Center Calories, Steps, Pulse, Distance, Speed, Incline, Time, Laps
USER PROFILES	2 User Profiles
PROGRAMS	16 Pre-Loaded Programs: Quick Start, Manual (Time Distance Calories), Incline (Hill, Mountain, Random Hill), Speed (Easy, Jog, Sprint) Interval (Speed Interval, HIIT) Races (5K, 10K) HRC (Target, HR Interval)
VIRTUAL SCENES	None
APPS	Use Bluetooth to Connect to Apps on Smartphone or Tablet
BLUETOOTH / ANT+	BT & ANT+ Wireless Heart Rate Receiver, GEMConnect Module for Connecting Apps on Smart Phone or Tablet
HEART RATE	BT & ANT+ Wireless Heart Rate Receiver, 5kHz Wireless Receiver
AUDIO	3.5mm Audio Jack
USB	Power Charging, Software Updates
FAN	3 Speed Tilting Fan
INTERNET	None
MEDIA	None
HDMI	None
C-SAFE	2 C-Safe Ports, Charging Port and Communication Port for 3rd Party Devices
MANAGER MODE	Change Parameters, Software Update, 20 Sec Timer, and More
LANGUAGE	English
WARRANTY	Residential: Display: 3 Years / Labor: 2 Years (Headphone Jack, CSAFE, USB Port, 90 Days, No Labor) Commercial: Display: 3 Years / Labor: 1 Year (Headphone Jack, CSAFE, USB Port, 90 Days, No Labor)



Console Exploded View Part Numbers

EXP-Series Treadmill 9" LCD #9LCD

<u>Exploded View #</u>	<u>SR Description(Quantity)</u>
9LCD-201	Console overlay 9"
9LCD-203	LCD small panel cover
9LCD-204	PA-AA01770 9" LCD+LED display panel
9LCD-204 & 9LCD-211	Self-tapping screws(black) (24pcs)
9LCD-204 to 9LCD-214	Cable-5P female+RJ45-35cm (2pcs)
9LCD-205	Console front cover
9LCD-206	book shelf
9LCD-207	USB mount
9LCD-208	PA-AA00991-K2 USB transfer board
9LCD-208 & 9LCD-211	Screw (6pcs)
9LCD-209	Wind direction adjustment blade
9LCD-210	Fan holder
9LCD-210	Self-tapping screws(black) (4pcs)
9LCD-211	Fan fixed iron piece
9LCD-212	Fan-12V/0.15A
9LCD-213	USB audio sticker
9LCD-214	Network connector (2pcs)
9LCD-215	Console holder
9LCD-215	Self-tapping screws(black) (2pcs)
9LCD-215 & 9LCD-218	Self-tapping screws(black) (19pcs)
9LCD-216	Console back cover
9LCD-216	Small oval sticker BODYCRAFT(black bottom+sliver typeface)
9LCD-217	RJ45 modified cover (blue black)
9LCD-219	Color cable-4P double female-20cm
9LCD-220	Cable-2/7 female+9pin-30cm

EXP-Series Touch Displays

For Home Customers:

What internet speed do I need for the console to work correctly?

You need a **minimum download speed** of 3 Megabits per second to watch a single **video stream** in clear, standard definition. The **best Internet speed** for **HD streaming** is 5Mbps or more. For the best experience we recommend 10mbps or faster.

Why can't I connect to Wifi?

Your WIFI router is too far away from your treadmill.

Your WIFI Signal or speed is too low to connect.

Contact your internet service provider.

NOTE: There is a CAT5/6 port located on the back of the console for a direct connection.

For Commercial Customers with Multiple Treadmills:

Wireless Installation Steps:

1. Prepare site for local server and internet connection
 - a. Find a secure location (like an AV closet or a server room) for the gateway and related network equipment.
 - b. Make sure the location has power and internet access, as well as a rack or 19" shelf for the gateway.
 - c. Contract an ISP (Internet Service Provider) to bring internet connectivity to the closet.
 - d. Make sure that the internet has sufficient bandwidth for the Gateway.
 - i. The minimum bandwidth is 3Mbps down.
 - ii. Recommended is a bandwidth of 1Mbps down for every 4 Touchscreens.

BANDWITH REQUIREMENTS CHART		
1-20 UNITS	1 WAP	3-5 Mbps
21-40 UNITS	2 WAP	5.25-10 Mbps
41-60 UNITS	3 WAP	10.25-15 Mbps
61-80 UNITS	4 WAP	15.25-20 Mbps
81-100 UNITS	5 WAP	20.25-25 Mbps
101-120 UNITS	6 WAP	25.25-30 Mbps
121-140 UNITS	7 WAP	30.25-35 Mbps
141-160 UNITS	8 WAP	35.25-37.5 Mbps

Explanation of the Console and Break-Out-Board

(EXP-Series & T-Series ONLY)



The Console and Break-Out-Board are two completely different circuit boards located in two different areas. Both are mounted on the Treadmill Dash Assembly:

- Console is mounted on top of the dash.
- Break-Out-Board is mounted under the dash via an access port with 4 screws.

All the different models of Consoles (9LCD/10TS/16TS) are interchangeable on either the T400, T800 or T1000 treadmills. There is no need to update software, nor calibrate when replacing just the Upper Console because no memory is stored.

Located under the Dash Assembly (access by removing the bottom cover access port) is the Break-Out-Board. This is where the software, memory and calibration info is stored.

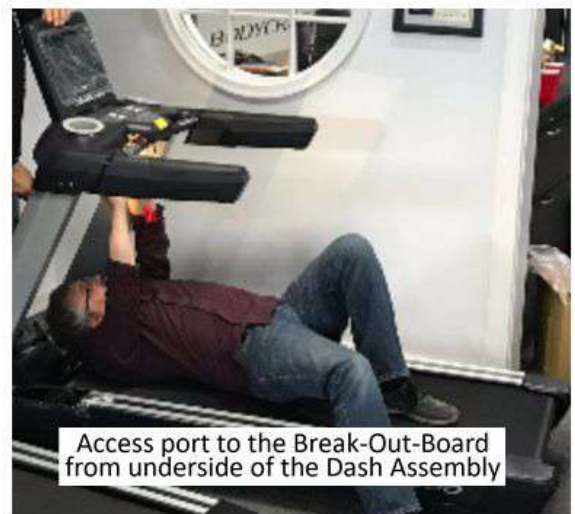
The T400 and T800 breakout boards (both are DC Motor systems) are interchangeable. The T1000 breakout board (AC Motor System) is unique and is not compatible with the T400 and T800 breakout boards.

When replacing any of the three Break-Out-Boards, a software update and recalibration must be performed or the treadmill may not function correctly.

Note: The T1000 may function without the software update, but it may not have the latest version. It still requires calibration.

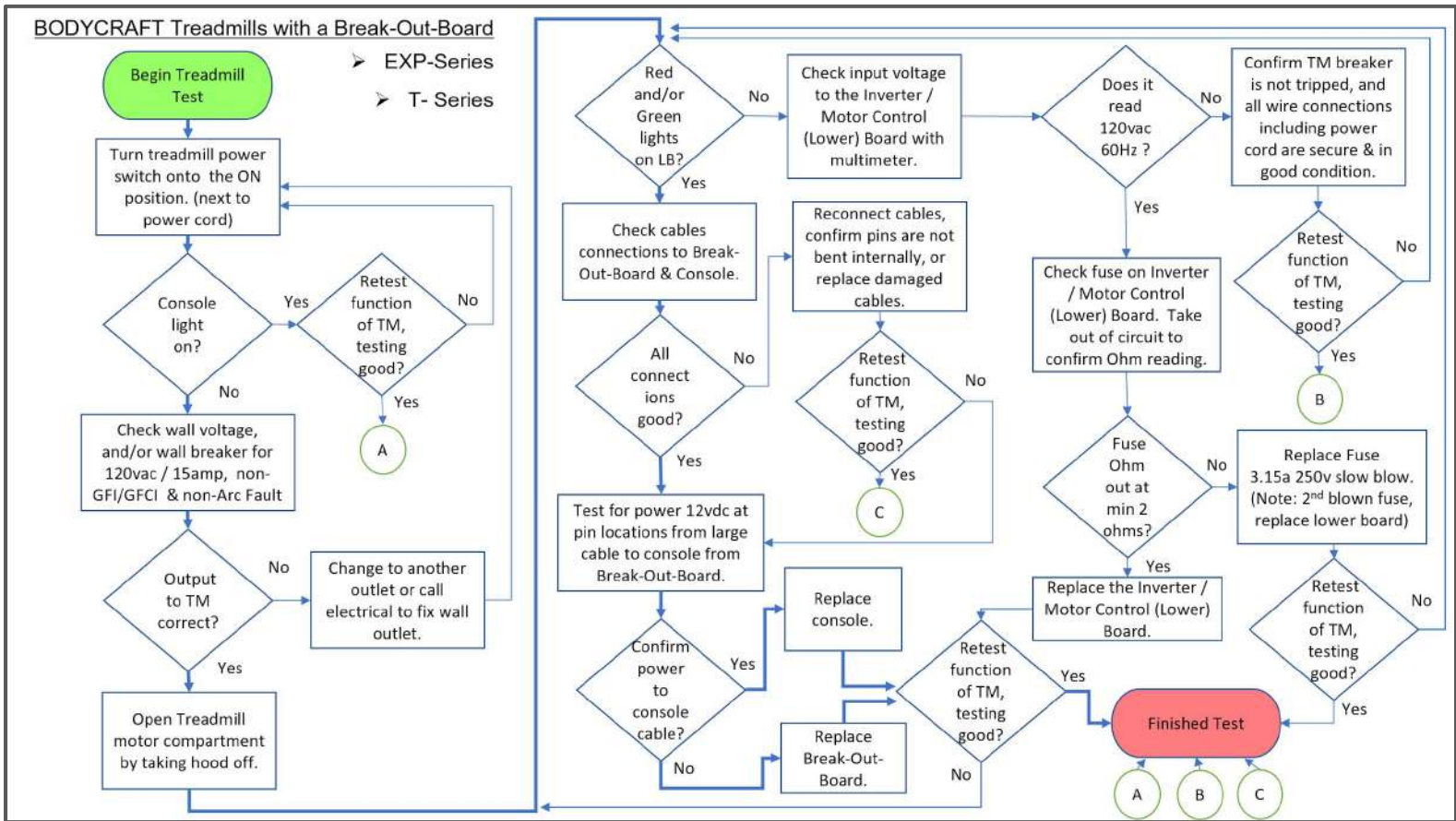
NOTE: The T1000 only calibrates the incline, not speed.

To get the latest software go to: <https://www.bodycraft.com/customer-support.html>
Scroll down to the Eprom update section. Software will need to be downloaded to a USB flash drive. It is important that the file name stays just as you downloaded it. This is explained in the software update section.



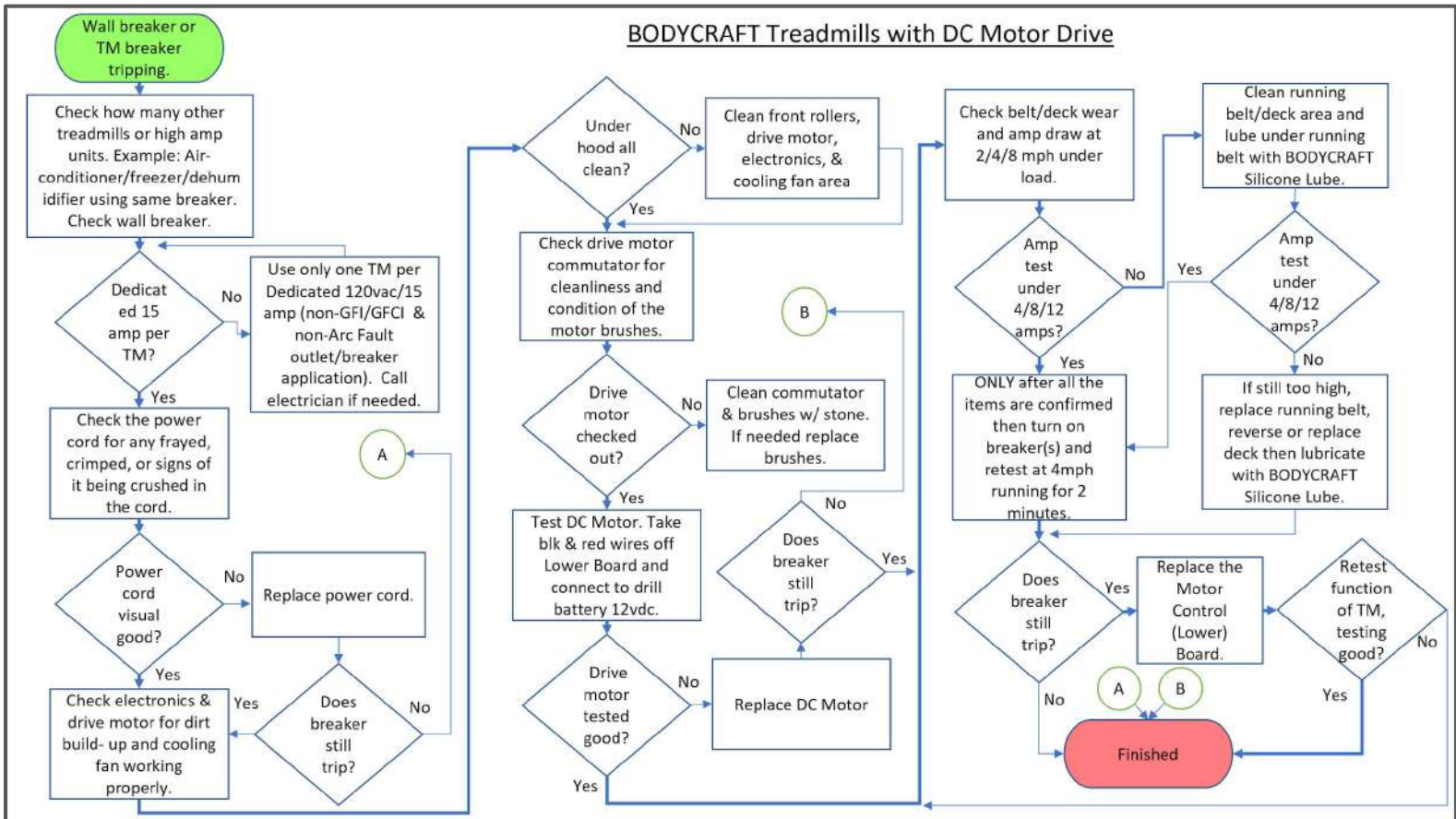
Troubleshooting Chart

Treadmill Test with a Breakout-Board



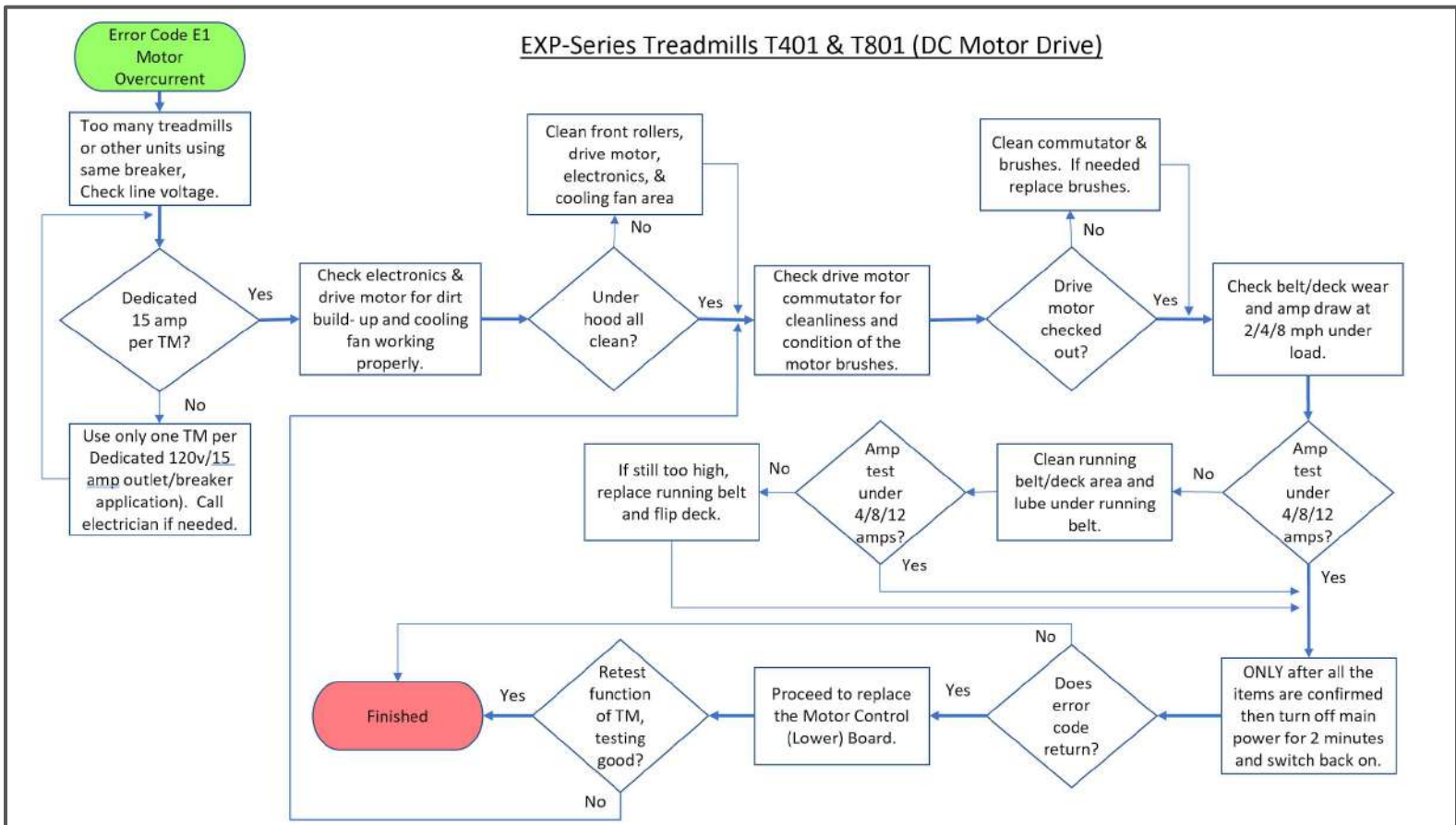
Troubleshooting Chart

Wall breaker or Treadmill breaker tripping



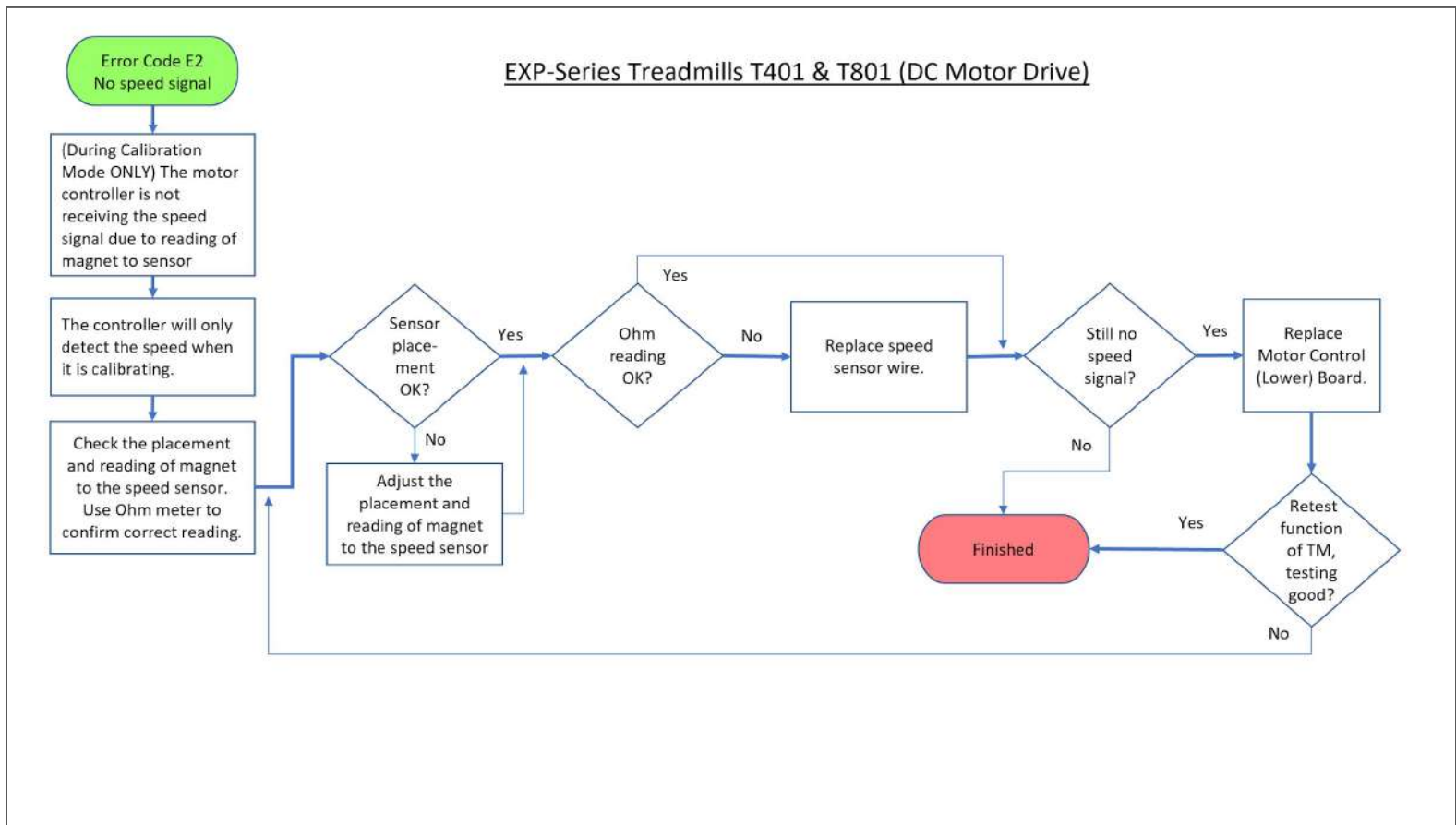
Troubleshooting Chart

Error Code E1 with Motor Overcurrent



Troubleshooting Chart

Error Code E2 with No Speed Signal

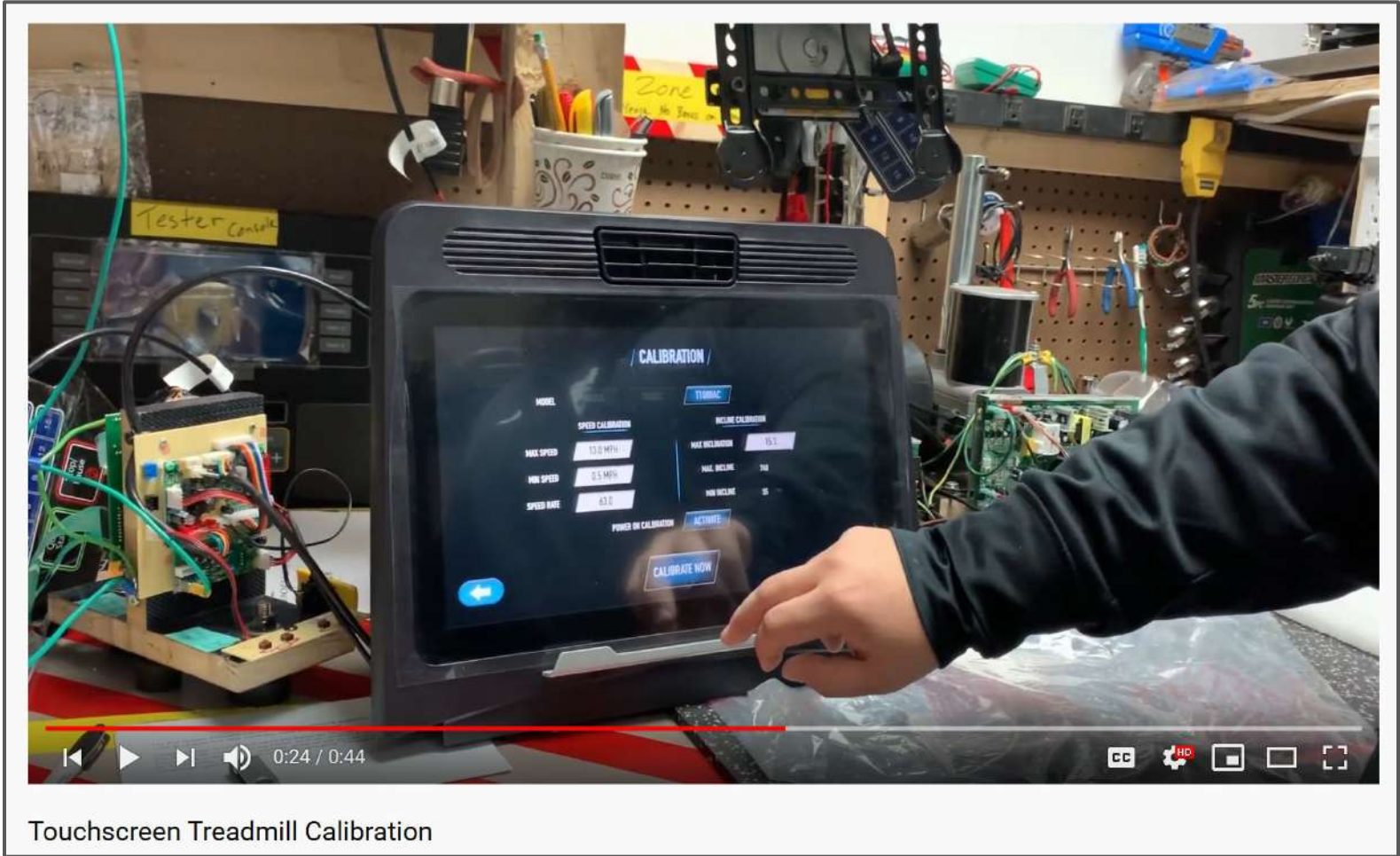


Click on picture to link directly to YouTube Service Video.



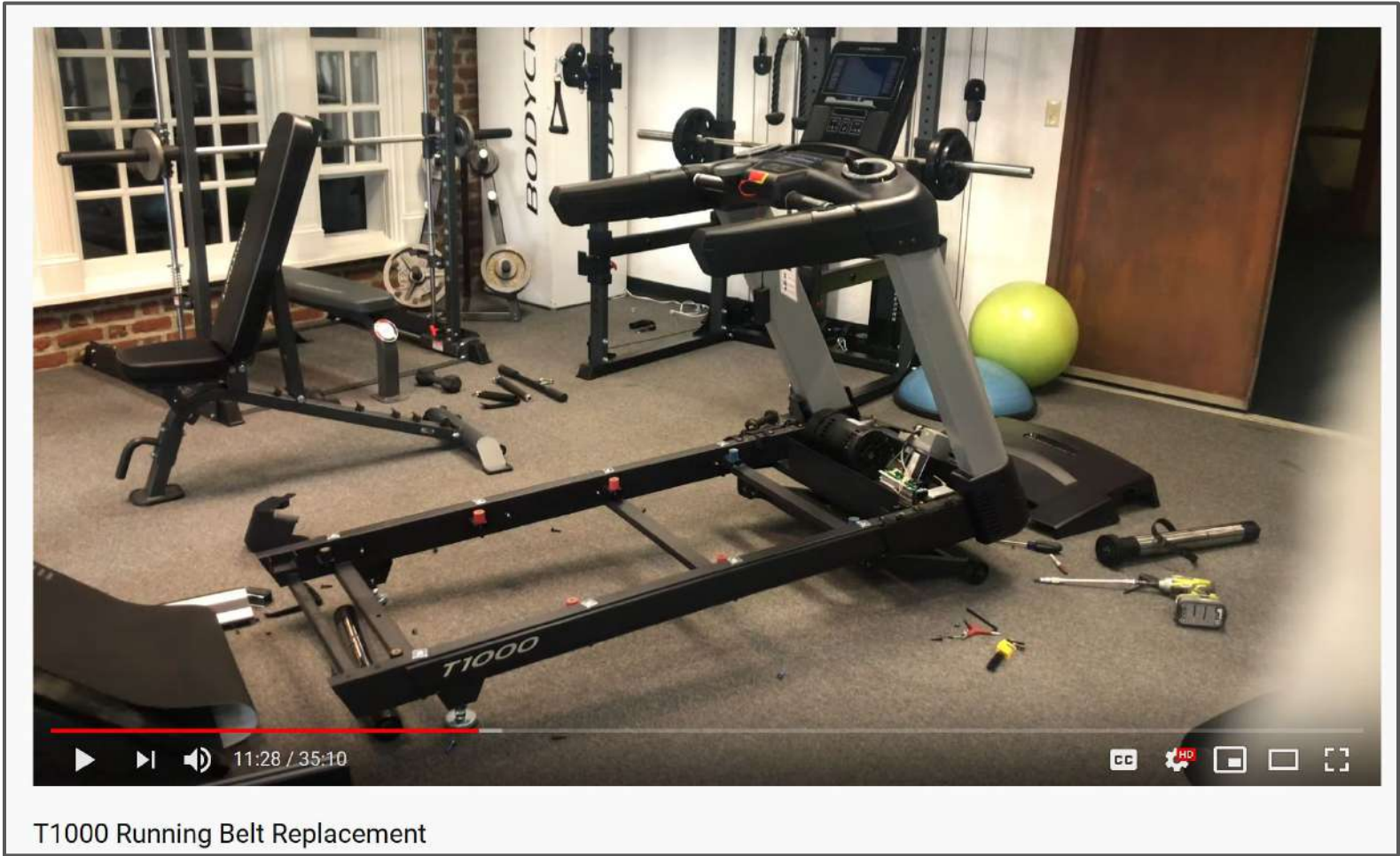
Touchscreen Console Sales Mode

Click on picture to link directly to YouTube Service Video.



Touchscreen Treadmill Calibration

Click on picture to link directly to YouTube Service Video.



1) Is there Power to the unit? Verify the unit is plugged into the wall , reset machine circuit breaker, plug unit into another outlet, check building circuit breaker, plug another appliance into outlet.

Yes- No lights on Motor Controller/Inverter or display does not light up or there is no power.

- Check if a dedicated circuit and have them tested and suggest a new power cord.

2) Does the display light up or light on the Motor Controller/Inverter? If not check wiring to the unit, verify plugged into machine, check building breaker, plug another appliance into outlet, plug unit into different outlet, use meter to check voltage...?

No- it this the power source not the actual machine

Yes- another issue possible board is out

3) Is the display working? Verify cabling from lower to upper board, use meter to check voltage output from lower board, swap display with another unit?

Yes- check for a pinched wire or board

No- possible console/ control issue

4) Is there an Error code(s)? What code(s) is it displaying?

- Look up error code(s) in the service manual and make recommendations per machine's diagnostics.

6.) If Machine has Error codes or symptoms of bad wall voltage/ampage, what is it all plugged into the outlet with the equipment?

- Make sure a/c, refrig, water cooler or any type of unit with a compressor not plugged in with the unit. Plug into a different circuit outlet.

5) Is this on a dedicated circuit? Verify with circuit breaker, two hair dryers running at maximum or electrician, also verify ground.

- Test with dual hair dryers on two different wall outlets. If not on proper dedicated circuit equipment will continue to malfunction.

6) What is the AMP draws? Use a kilowatt meter and not an amp clamp. Too many fluxuations with Amp Clamps readings for testing a treadmill when under load.

- Walking at 2-4mph should read less than average 6-8 amps. If higher go to belt/deck servicing.

7) Is the machine making any noises? Verify by using a cup or glass. Record sound on video if applicable

- What kind of noises and from the wheel, the belt, the motor- depending on equipment?
- If yes, where is the noise coming from and is it a squeak or rubbing sound? Grinding bearing, squeal belt,dirt under running belt.

8) What is it not doing correctly? What function is unit not performing, what is unit doing abnormally and how long has it been making these sounds.

9) Is anything loose?

- Loose frame parts, rails, due to bolts not fully torqued or wires connections in machine?

10) Has the equipment been regularly serviced?

- If so when, how often and by whom?

11) Have you checked to see if there is any debris in the belt? Example: stability ball or power cords?

- Check underneath the unit and motor hood for foreign objects.

12) The motor control board error, have you checked the battery?

- Unplug battery for three or four mins and recheck, also check resistance motor and cables [power and resistance cables].

13) Display not functioning, after you tried to repower it, checked the wiring does it light up or give an error code?

- (Recommend replacing the control panel) –swap control panel with another unit if applicable

14) Is this a software issue? Help tech or customer find on BC website the newest software with downloadable link. If needed send them the software updates via email.

- Verify software version in engineering mode is the newest version.

15) Fluctuation in running speed. Possible motor board error rarely speed sensor error.

- If DC Motor Drive then service with checking brushes & cleaning commutator, lubricate belt/deck & flip deck if needed, also can adjust potentiometer on board a bit.
- If AC Motor Drive then service with cleaning motor vents & lubricate belt/deck & flip deck if needed.

17) Display lights up but no function on DC motors drive systems. Possible replacement of board, check motor brushes, possible armature stone.

- Check fuse on lower board, check power output of board to motor

16) Safety key error? Take out the safety key and clean where sweat may have dripped and check for any cracks in the console or anywhere that may need replaced due to sweat getting in the unit.

- Check for foreign object in safety key slot or if magnet missing in safety key

18) How is the motor working? Claims motor seized up- try manually moving with hand (recommend replacing)

- Check brushes and armature or if the drive belt is broken and wrapped around pulley.

Power Requirements, Power Strips and Extension cords

While we do not recommend the use of power strips or extension cords on any treadmill, we realize that on occasion you may not have a choice for a longer cord.



- 1) Never use a power strip as an extension cord or for more than one treadmill per dedicated wall circuit. Because of the wide variety of quality ranges, we just cannot recommend these.
- 2) Use a min. 14 gauge (14/3) or 12 gauge (12/3) appliance/air conditioner rated extension cord. Use only the length needed and never exceed 12ft. Common sizes are 3ft, 6ft, 9ft and 12ft. They are readily available at most hardware stores and online. Cord Sources (as of 5/21/2019) Menards

Menards

- 3ft Smart Electrician Model #: EHCEXTC140303A Menards® SKU: 3702582
- 6ft Smart Electrician Model #: EHCEXTC140306A Menards® SKU: 3702583

Home Depot

- 6ft. Woods Model #0044 / Internet #203434873
- 9ft Woods Model # 45 / Internet #301132731

Amazon.com (Enter the ASIN # in the Amazon search bar

- Multiple Sizes ASIN B013Q5DP0W



In an ideal situation, a dedicated line is always suggested, and for commercial environments, it is required. It should be a 120volt / 20 amp line.

- 3) Never plug more than one treadmill on one circuit. Remember that multiple outlets can be on one circuit (breaker).
- 4) While it may be ok to plug a lamp or energy efficient TV on the same circuit, you should never plug items that use motors or heating elements (or simply draw a lot of amps). Examples of this would be space heaters, dehumidifiers, sump pumps and refrigerators/freezers, etc.

BODYCRAFT

The Art and Science of Movement

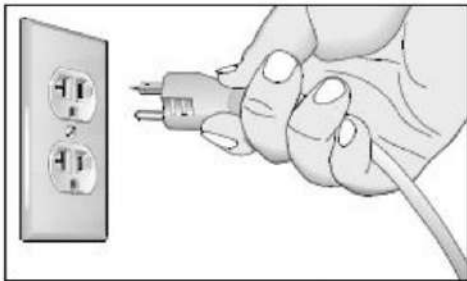


Figure 1: North American 120-volt, 20-amp power receptacle

COMMERCIAL TREADMILL ELECTRICAL REQUIREMENTS

(One treadmill per 20-amp dedicated outlet)

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



DEDICATED CIRCUIT AND ELECTRICAL INFO

All BODYCRAFT commercial treadmills units require the use of a **20 amp "dedicated circuit,"** with a non-looped (isolated) neutral/ground, for the power requirement. (ONE TREADMILL PER 20 AMP DEDICATED OUTLET). Quite simply this means that each outlet you plug into should not have anything else running on that same circuit. The easiest way to verify this is to locate the main circuit breaker box and turn off the breaker(s) one at a time. Once a breaker has been turned off, the only thing that should not have power to it are the units in question. No lamps, vending machines, fans, sound systems, or any other item should lose power when you perform this test. Non-looped (isolated) neutral/grounding means that each circuit must have an individual neutral/ground connection coming from it and terminating at an approved earth ground. You cannot "jumper" a single neutral/ground from one circuit to the next. In addition to the dedicated circuit requirement, the proper gauge wire must be used from the circuit breaker box, to each outlet that will have the maximum number of units running off of it. If the distance from the circuit breaker box, to each outlet, is 100 ft or less, then 12-gauge wire may be used. For any distance greater than 100 ft from the circuit breaker box to the outlet, 10-gauge wire must be used.

Breakers - Tripped

Imperative: First, define whether the unit breaker is being tripped or the wall outlet breaker is being tripped.

Next, define when it is being tripped – powering up, after the belt begins to move prior to walking on it, or after the belt begins to move and someone is walking or running on it.

If the wall breaker is tripped, proceed as follows:

1. Check the wall voltage. If there is zero voltage coming from the wall, most likely the wall breaker has tripped.
2. Check the line cord and replace it if necessary. Proceed with troubleshooting if no damage is indicated.
3. Check that all connections are correct. The AC line cord must be securely attached (clamped down) to the treadmill.
4. Check to see if there is more than one treadmill on the same wall breaker.
 - a. Turn off the wall breaker manually.
 - b. Treadmills are on the same breaker if more than one loses power.
 - c. If this occurs, notify the customer that their wiring needs modified.
 - d. If it does not occur, proceed below.
5. Check the wall outlets and make certain that every outlet is on an individual branch circuit with its own load, neutral & ground lines. *An electrician will need to confirm if neutrals are shared. Customers will need to modify wiring if they are shared. If not, proceed below.
6. Check the AC input voltage with the treadmill unloaded and loaded -- with belt moving and no one on it AND with belt moving while someone is on it walking or running. Note that the variance should be approximately less than 6 volts RMS.
 - a. If the change in voltage is greater than 6 volts RMS, notify the customer that the branch circuit wire may need modified. (It may be too long or too narrow in diameter.) *An electrician will need to confirm.
 - b. If voltage is acceptable, proceed below.

If the treadmill breaker is tripped at the power switch, proceed as follows:

1. Check that the wall outlets are all on individual branch circuits with their own load, neutral & ground lines. They CANNOT share neutral wiring. *An electrician will need to confirm.
 - a. If they share wiring, notify the customer that the wiring needs modified.
 - b. If the outlets are on individual circuits, proceed below.
2. Check that their longest run of electrical from breaker to outlet has proper gauge wire per NEC code.
 - a. If not, notify the customer that the wiring needs modified.
 - b. If it is acceptable, proceed below.
3. Check line voltage. Please note the following U.S. and international specs as indicated.
 - a. U.S. low line voltage is below 108VAC (with the treadmill circuit breaker ON and belt idle).
 - b. International low line voltage is below 200VAC (with the treadmill circuit breaker ON and belt idle).
 - c. Measure and record the line voltage (with the treadmill circuit breaker ON and the running belt idle).
 - d. Record the voltage while running at 6 MPH or more. (Refer to the Belt Speed Test in the Diagnostics menu.)
4. If any voltage is below the U.S. or international specs noted above (108VAC US or 200VAC International), notify the customer that the wiring may need modified and needs inspected by an electrician.
5. If the voltages are adequate, proceed below.
6. Check if the treadmill trips its breaker immediately on power-up.
 - a. If it does, there is probably a short in the wiring or a component (controller, etc.).
 - b. If it does not trip immediately upon power-up, proceed below.
7. Check if the treadmill powers up but trips the breaker after the motor is started.
 - a. If it does, there is probably a bad drive motor or bad roller.
 - b. If it does not, proceed below.
8. Check if the drive motor starts up but trips the breaker after a user walks/runs on the running belt. If so, the treadmill is likely shutting down due to overloading. This can happen with heavier runners and worse with certain line voltage conditions. Also note that 10 or more hours of use a day will cause decks and belts to wear out much faster.

Don't Choose the Wrong Circuit Breaker

To help you understand which electrical protection goes where, consider what each type of breaker was designed to do and make sure to follow the national electric code. Very critical for treadmill operation with your local code.

Standard circuit breaker- Used in older homes and commercial applications. (Perfect for dedicated Treadmill wall outlet)

Circuit breakers protect home electrical wiring and equipment like furnaces, air conditioners, dryers and stoves. Standard circuit breakers are better at protecting wiring and equipment than preventing fires and protecting people. That's why they have largely been replaced by GFCIs and AFCIs. There are only a few places left where standard circuit breakers can be used, typically for large home electrical appliances.

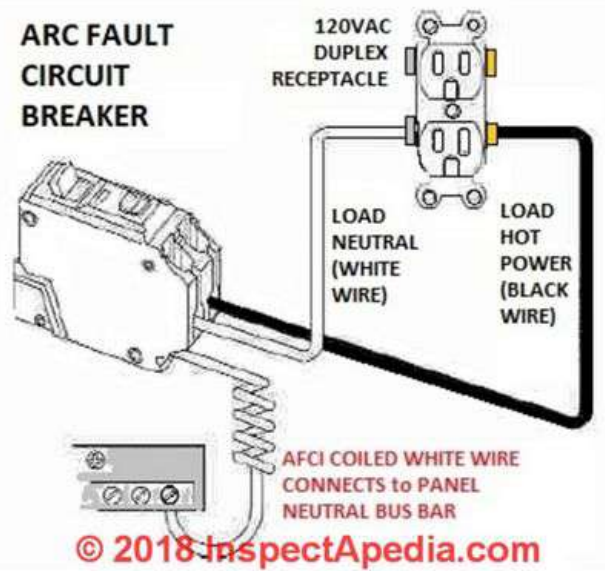
Ground fault circuit interrupter- New NEC codes for the last 20 years in homes and commercial applications. (DOES NOT WORK FOR TREADMILLS)



Ground fault circuit interrupters (GFCIs) protect people in areas where they are likely to be using small appliances and where water is present. GFCI breakers and outlets have been around for a while, and most people know they're required in bathrooms, kitchens and outdoors, but our experts are still finding home electrical violations, especially in these areas: garages, crawl spaces, storage/work areas in unfinished basements, wet bars (within 6 ft. of a sink), and sump pumps. And don't forget that GFCIs need to be readily accessible in order to be reset. This means they shouldn't be installed on the ceiling or buried under a hydro massage tub without an access panel.

Arc fault circuit interrupter- New NEC codes for the last 15 years in homes and commercial applications.

Arc fault circuit interrupters (AFCIs) prevent fires in all living areas where appliance cords are prone to be pinched or crimped or chewed by pets. They used to be required only on bedroom circuits, but the National Electrical Code now requires AFCI protection in all living areas. They're equipped with sophisticated electronics that can detect an arcing condition (like in a frayed lamp cord), which may not be detected by a standard circuit breaker until after a fire has started. AFCI protection is not just required for new construction; it's now also required where branch-circuit wiring is modified, replaced or extended into existing homes.

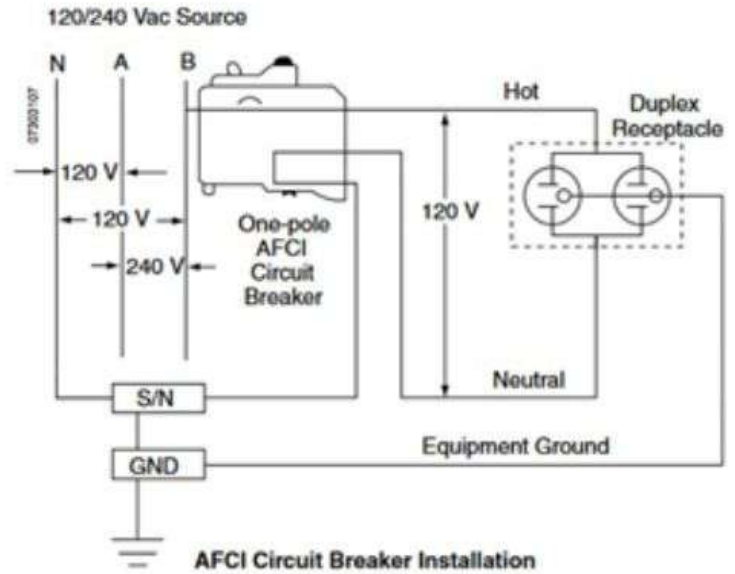


State Adoption of the National Electrical Code As of: August 2017



Source: Electrical Safety Foundation International (ESFI)

Typical AFCI Circuit Breaker Installation



QO Arc-Fault Circuit Interrupter Circuit Breakers

QO arc-fault circuit interrupters (AFCI) quickly detects a wide range of arc-fault conditions, recognizes the nature and specific wave-form of an arc fault and trips the circuit breaker. Traditional circuit breakers and fuses are designed to detect overloads and short circuits. Arc-fault circuit breakers are designed to detect overloads, short circuits and arc faults.

An arc-fault circuit breaker opens the circuit and stops the arcing and high intensity heat before a fire is likely to ignite. It is designed with the same quick-open and Visi-Trip® features and reliability of other QO circuit breaker products, fits into most existing Square D load centers, and can generally be used as a direct replacement for a standard Square D circuit breakers. The AFCI overall size is larger than an equivalent QO circuit breaker.

Arc-fault circuit breakers:

- Have special microprocessor-based arc identification to differentiate necessary operational arcs (associated with loads such as electric motors, switches and receptacles) from actual arc faults which can cause damage and fires.
- Differentiate true arc faults from chopped wave-forms associated with switched-mode power supplies on electrical appliances, computers and lamp dimmers.

QO AFCI's are available as Branch Feeder Type and Combination Type. Branch AFCI circuit breakers provide arc-fault protection of the branch circuit wiring. Combination AFCI circuit breakers provide arc-fault protection for the branch circuit and also provides protection of cord sets and power-supply cords.

The AFCI type required for an installation is generally governed by the installation codes which are adopted by local inspection authorities. Consult local building codes and inspection authorities to determine which type is required in your area.



Console – No Power

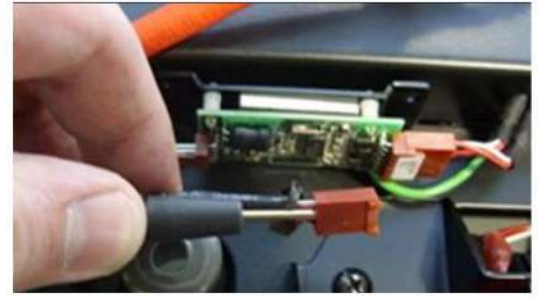
- 1) Check the outlet voltage using a multimeter with AC volts settings, and ensure it is acceptable.
 - a. If not, notify the customer that their wiring needs to be corrected by a licenced electrician.
 - b. If it is acceptable, proceed below.



- 2) Check the AC voltage at the input side of the line filter using multimeter with AC volts settings (remove the treadmill hood). Confirm that when the breaker switch is ON, there is line voltage present.
 - a. If not, replace the breaker switch.
 - b. If there is line voltage present, proceed below.
- 3) Check the AC voltage at the output side of the breaker with a multimeter. Confirm that when the breaker switch is ON, there is line voltage present.
 - a. If not, replace the 15amp breaker
 - b. If there is line voltage present, proceed below.
- 4) Check the Motor Controller. **At this step, unplug the treadmill from the wall and wait 2-3 mins.**
 - a. Pull the fuse from the Motor Controller/Inverter.
 - b. With an multimeter set to ohms, does it ohm less than 1?
 - c. If it does not replace the fuse and plug the treadmill back into the wall outlet. Turn on the breaker and see if the console lights up., replace the Motor Controller/Inverter.
 - d. If it does not power up, proceed below.
- 5) Check all cables from Lower Board/Inverter to (Break-Out-Board for the EXP-Series & T-Series) then to console.
 - a. Disconnect, check all pin connections and reconnect. (replace any damaged cables if needed)
 - b. If it did not, troubleshoot the (Break-Out-Board for the EXP-Series & T-Series) and the console.

Wireless Heart Rate – Not Functioning

1. Check wireless heart rate using a good test transmitter or a chest strap transmitter. If the heart rate reading is erratic, incorrect, or absent, proceed below. (If you are not getting a reading, get closer to the console to attain a heart rate reading.)
2. Check that the Heart Rate board has the correct operating voltage. Connect a multimeter, using the DC Voltage settings, to VCC and Ground on the Power/Signal connector. It should read between 4.5 - 5.5VDC.
3. Check for nearby wireless interference signals such as the following:
 - Cordless Telephones
 - WI-FI Network Routers
 - Cell Phones
 - Electronic Dog Fences
 - Garage Door Remotes
 - Noisy AC feeds
 - Fluorescent light ballasts
4. Check that upper and lower cables have a satisfactory electrical path to chassis ground using a multimeter using the Ohm settings.
5. If none of the above procedures correct the issue, replace the heart rate board.



Hand Grip Heart Rate – Not Functioning

6. Use a multimeter set for DC Voltage, put one prong of the multimeter on each of the HR plates on the handlebars. This reading should have between 0.5 to 2.0 volts DC..
7. If the reading is not correct, remove the screws holding the 2 halves of the HR grip together and check the connection of the HR grip wiring to the grips. Replace the grips if any damage to the plates.
8. If there is no damage to plates, then remove the console (EXP-Series lower Break-Out-Board cover under front mass) to expose the HR board.
9. Check the connection of the HR grip wiring to the cable attached to one side of the HR board. Use a multimeter set for ohms to confirm the continuity of those wires. If the ohm reading is more than 1 or none at all, replace the HR grip wiring (this will require replacing the HR handlebar). If the ohm reading is correct, the problem is not with the HR grip / HR wire portion of the HR system.
10. **To perform a continuity test on the Heart Rate wiring system:**
 - a. Check the HR board ground wire with your multimeter using the Ohm settings.
 - b. With a multimeter set for ohms, put one prong on the HR board ground wire, and the other on the console ground screw. The resistance reading should be 1 ohms or less. If you get a reading over 1 ohms or none at all, replace the HR board.
 - c. If all wiring checks out acceptable and the unit is still having HR issues, replace the HR board.
 - d. If the HR board does not resolve the issue, replace the console.



Drive Belt – Tension Adjustment

1. Set the treadmill circuit breaker OFF and unplug the line cord from the wall outlet.
2. Remove the motor hood.
3. Place the drive belt Frequency Tester or use your Smart Phone with a Guitar Tuner APP on the drive belt which has already been installed.
4. Note that there is a different belt tension specification for a new belt replacement installation and a reinstall of an existing used belt.



Adjust drive belt to 125HZ to 135HZ with Frequency Gauge or Smart Phone Guitar APP.

5. Check and be sure that the drive belt tension is within the new or used belt tension range specification. When the belt tension is not within the range specification, proceed below:

Drive Belt Condition	Drive Belt Tension Specs
new	125HZ ~ 135HZ 95-115 lbs. (43-52 kgs)
used	110HZ ~ 115HZ 80-90 lbs. (36-41 kgs)

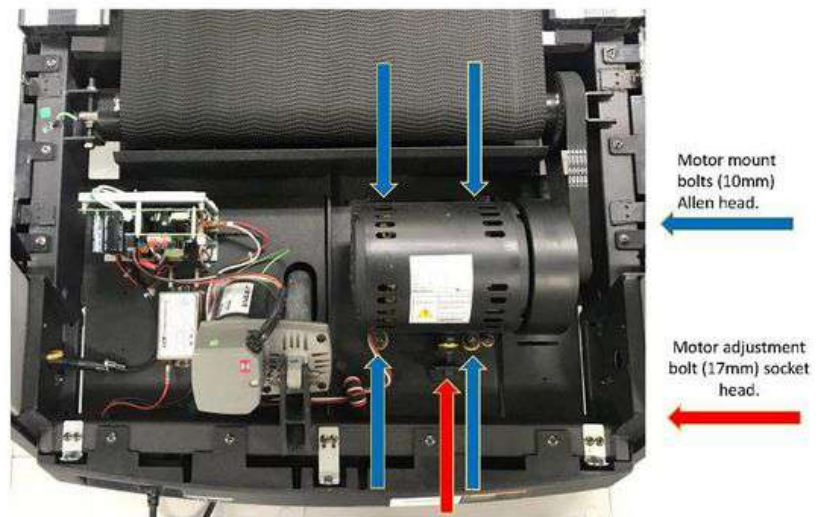
6. Walk the drive belt off the drive motor pulley and slightly loosen the four drive motor mount bolts. Move the drive motor (forward or backward) and adjust the belt tension.

7. Walk the drive belt onto the drive roller pulley by rotating the drive motor flywheel. Confirm that the belt is fully seated in the grooves of both pulleys and correctly aligned.

8. Run the treadmill at 4 MPH for 1 minute to allow the belt and pulley grooves to align.

9. Stop the treadmill, set the treadmill circuit breaker in the OFF position and unplug the line cord from the wall outlet.

10. Retest with 125HZ ~ 135HZ reading (110 lbs.) for belt tension. Confirm that the belt tension is within specification. If not within specification, repeat the steps above until the tension is within specification.



11. Torque the four drive motor mounting bolts to 20 ft lbs. (265.92 m kg) then reinstall the motor hood.

12. Plug the power cord into the wall outlet and set the treadmill circuit breaker in the ON position.

13. Check the treadmill operation. Once confirmed walking and running with no drive belt slippage, then have a wonderful day.

Running Belt and Deck - Worn

The condition of the running belt and running deck impacts the lifespan of the treadmill. The AC input current is directly correlated to the load being placed on the treadmill. The load fluctuates based on the speed of the treadmill, the user's weight, and condition of the running belt and running deck.

Every step creates friction, so the Motor Controller/Inverter counteracts that by adding current to the motor. That friction will increase progressively as the belt and deck become increasingly worn. This, in turn, creates the need for the Motor Controller/Inverter to supply even more current. (Note that the belt and deck friction will appear on the display as the Belt Rating as an approximate gauge as to when the belt and deck will need to be changed.)

Tensioning the Running Belt

1. Remove the front cover and left/right side step covers.
2. Remove the motor drive belt off the motor drive roller pulley to correctly adjust the running belt tension.
3. Check to be sure that the take up roller keeper is properly installed.
4. Center the running belt and situate it squarely from the front drive roller to the rear take up roller.
5. Move the running belt so that the seam is under the treadmill (not visible).
6. Place a running belt tension gauge on each side of the running belt opposite each other. Do not allow them to touch the side step cover brackets.
7. Sliding the gauge head, set the dial needle to a coarse setting of 3. Rotate the gauge dial face to fine tune the needle to exactly 3.

Running Belt Tracking Adjustment

IMPORTANT: Tracking adjustments should **ONLY** be done with hand tools in 1/4 turn increments. **ONLY** use the right side take up roller mounting bolt to adjust tracking.

1. Replace the motor drive belt.
2. Start the treadmill and set the speed to 3 MPH (5 kph).
3. Watch and check that the running belt is tracking while confirming that the belt stays centered:
 - a. If the belt starts to move right, slowly turn the right side take up the roller mounting bolt clockwise in ¼ turn increments until the drifting stops.
 - b. If the belt starts to move to the left, slowly turn the right side take up the roller bolt counterclockwise in ¼ turn increments until the drifting stops.
4. Increase the speed to 10 MPH (16 kph) and then 12 MPH (19 kph), making small adjustments as necessary.
5. Check and confirm that the treadmill is level. Make adjustments if needed.
6. Check and confirm that the running belt and deck is clean.
7. Replace all the covers.
8. Check and confirm the treadmill's operation and return to service.



Perform the following services BEFORE ordering a new DC motor or Lower Motor Controller or installing a new Lower Motor Controller.

1. Turn OFF treadmill breaker located at the front of the machine.
2. Unplug the power cord from the wall and wait a minimum of 5 minutes with no voltage supplied to the treadmill. Treadmills will hold voltage in their lower boards and motor brushes for a few minutes and can injure the technician or damage the lower and upper circuit boards attached when not discharged correctly.
3. Heavily vacuum the treadmill motor compartment including the drive and elevation motors, lower board/motor controller, and front/rear roller areas. Then blow out completely the internal areas of the DC motor and vacuum the excess dirt and grime which came out from the motor.
4. Prior to the lower board/motor controller installation, check the motor brushes and armature. DC motors are susceptible to excessive arcing when the motor and/or running belt/deck get full of dirt. If the armature looks like shiny brass and very clean and the brushes look like brushed stainless steel with perfectly smooth edges then do not service the armature and the brushes. If they are not, then the following needs to be done to the armature and the brushes.
5. Remove the motor brushes and scrape the brushes with the armature stone or flat screwdriver. If there has been heavy arcing, then clean the armature with the armature stone or a number two pencil eraser.



Take plastic cover off motor brush area



With needle nose pliers take the connector off, then pull the spring straight back to remove brushes





Before: Needs cleaning & resurfacing with cleaning stone



Cleaning Stone for Armature & Brushes
www.martindaleco.com



Before:: Needs cleaning & resurfacing with cleaning stone



Then blow out area cleaned with stone and full internal of motor **BEFORE** reinstalling the brushes.



After: Brushes look like stainless steel surface and armature bright gold.

6. Re-install both brushes, then dry run the treadmill, by walking on the surface, for 30 seconds to set brushes to the armature surface. An easy test to determine if the DC motor will work properly is to apply 9VDC to 12VDC via a battery to the positive and negative terminal of the motor wires. Make sure you're not standing on the running belt when you do this test.

DO NOT PLUG IN THE POWER CORD OR SUPPLY 120AC POWER TO THE TREADMILL FOR THIS TEST.

7. Clean the surface between the belt and deck with a large clean towel. Clean the complete under side of the running belt.
8. Add **100% virgin pure silicone lubricant** between the belt/deck area.

Note: Do not use anything but 100% virgin pure silicone treadmill lubricant. Any other lubricant or wax applied will cause the running belt gum up and trip breakers. Labor warranty or parts warranty will be affected if any un-approved lubricants are used.



Ohio Carbon Industries

Brush Sliding Face Appearance



Burning Edge of the Leaving or Trailing Edge

Causes: Difficult commutation, heavy sparking, interruption of contact due to out of round commutator or insufficient brush holder spring pressure



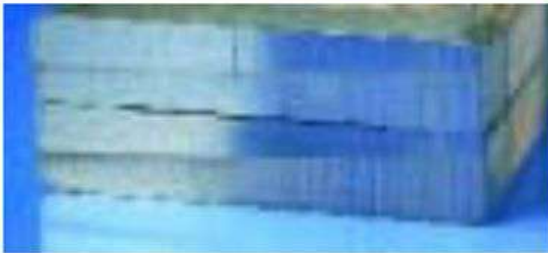
Eroded Brush Face

Causes: Electrical overload, interruption of contact



Lamination of Sliding Face

Causes: Burned segments of the sliding face caused by a winding fault giving a voltage surge during commutation



Double Facing—Twin Brush

Causes: Tilting of the brush in dual direction machine



Copper Nests

Causes: Pick up of copper particles, often following copper drag



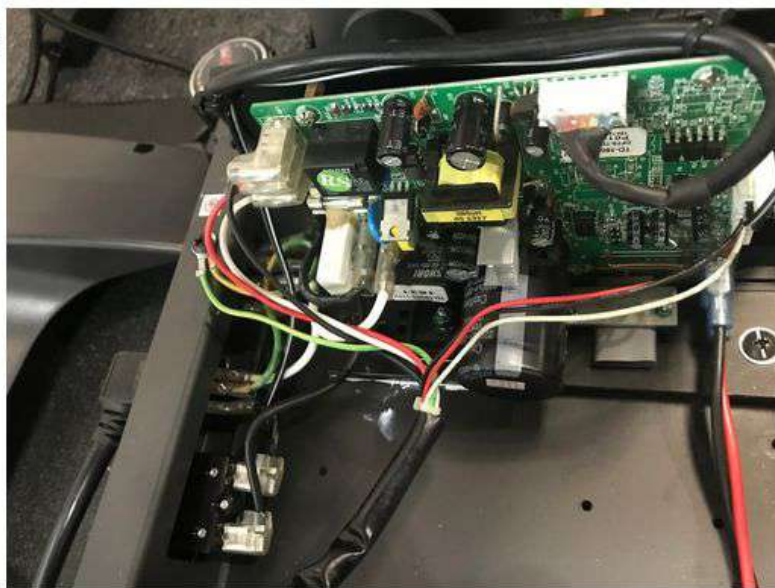
Broken Edges

Causes: High raised lamination, commutator seriously out of round, brush chatter by low load and idle running

9. Plug the power cord back into the wall outlet.
10. Turn the treadmill power circuit breaker to the **ON** position. The switch will illuminate if power is present.
11. Press **QUICK START** on the treadmill console and set the speed to **4 MPH** to begin the operation of the treadmill.
12. Walk in all areas of the treadmill walk belt surface to ensure that the lubricant is distributed evenly under the belt.
13. After approximately 5 minutes of operation and walking the belt, increase the speed to **8 MPH** for 5 minutes. It will not be necessary to walk the belt at this speed.

Perform the previous steps BEFORE a new DC lower board/motor controller is installed.

14. Turn OFF treadmill breaker located at the front of the machine.
15. Unplug the power cord from the wall and wait a minimum of 5 minutes with no voltage supplied to the treadmill. Treadmills will hold voltage in their lower boards and motor brushes for a few minutes and can injure the technician or damage the lower and upper circuit boards attached when not discharged correctly.
16. Disconnect the power and communication cables from the lower board/motor controller.
17. Remove the two (2) phillips head screws securing the lower board/motor controller to the steel frame of the treadmill.
18. Thoroughly clean the surface from where the lower board/motor controller had been located.
19. Secure the lower board/motor controller to the treadmill using the two (2) phillips head screws.
20. Reconnect the power and communication cables to the lower board/motor controller.
21. Plug the power cord back into the wall outlet.
22. Turn the treadmill power circuit breaker to the **ON** position. The switch will illuminate if power is present.





Clean motor compartment w/ freshly cleaned & resurfaced brushes/commutator & lubed running belt area.

Ensure that each treadmill has its own dedicated circuit (20 amp commercial treadmill, 15 amp home treadmill). Best way to test this is to take two 1500 watt hair dryers, or equivalent, and plug into each of two treadmill wall outlets and turn them on high heat for one minute. If a breaker is tripped at the service panel box or any dryer stops working then they are not on dedicated circuits.

Treadmills Are Like Cars

Cars need maintenance that is NOT COVERED UNDER WARRANTY but responsibility of owner:

- Oil changed with a new filter every 3-5k miles.
- Brake pads replaced when worn down.
- Tires rotated and replaced when worn down.

Just like a treadmill with a DC Motor:

- Motor, motor controller and belt/deck area need to be cleaned periodically.
- Motor brushes & commutator cleaned or replaced when worn down.
- Belt and deck replaced when worn down or pulling too high amps.

DC treadmills are more susceptible to bad wall voltage, unclean motors, dirty brushes, unclean electronics and dirty / dry running belt surface.

BODYCRAFT

Treadmill Preventive Maintenance



800.990.5556
SERVICE@BODYCRAFT.COM
WWW.BODYCRAFT.COM



BODYCRAFT
7699 GREEN MEADOWS DR.
LEWIS CENTER, OHIO 43035

A treadmill is an investment that will continue to last and function well if proper, simple maintenance is performed on a regular basis. You can perform the maintenance yourself or if you prefer, simply contact your local BodyCraft dealer or customer support to schedule an appointment with a qualified technician.

CLEANING

Always ensure that the treadmill is kept free of dust and debris. Premature wear or tearing of the walking belt can occur due to debris under the belt.

NOTE: It is essential *not to wear* outdoor shoes on the treadmill, due to potentially introducing dirt to the treadmill's high friction areas.

Likewise, check for debris, dust, hair, etc. under the motor hood. Components can be damaged or unrepairable by excessive heat caused by the accumulation of said debris. Unplug the unit, remove the hood by loosening the screws, and carefully vacuum or use an air compressor to clean under the hood. Be sure not to touch the electrical or computer components! Consult your owner's manual for detailed instructions.

LEVELING THE TREADMILL

Be sure that the treadmill running surface is level. (Most units have adjustable rear leveling feet.) If adjusting the rear feet does not correct an extremely uneven surface, it is recommended to move the treadmill to a different area. If the unit is not level, it can create belt misalignment, uneven belt wear, and potential injuries.

TENSIONING THE RUNNING BELT

If there is slipping or jerking when running, the running belt may need tightening from the initial setup of 1st use or stretching due to age of Running Belt..

1. In the rear end caps of the unit, locate the belt adjustment bolts.
2. Turn BOTH adjustment bolts clockwise 1/2 turn. (You will need an 6mm Allen wrench)
3. Turn on the treadmill, start the belt, and check to see if it still slips.
4. Repeat above steps if more adjustment is needed.

RUNNING BELT ALIGNMENT

Belt alignment ensures that the belt stays centered with a few easy adjustments.

Belt Runs to the Right Side:

1. In the rear end caps of the treadmill, locate belt adjustment bolts. Facing the display, determine left and right.
2. Turn the LEFT adjustment rear roller bolt counter-clockwise (You will need an 6mm Allen wrench.)
3. Turn on the treadmill and start the belt at 3mph keeping off the unit.
4. Run unit for 2 minutes for the belt to adjust itself.
5. Repeat above steps if more adjustment is needed.

Belt Runs to the Left Side:

1. In the rear end caps of the treadmill, locate the belt adjustment bolts. Facing the display, determine left and right.
2. Turn the RIGHT adjustment rear roller bolt counter-clockwise (You will need an 6mm Allen wrench.)
3. Turn on the treadmill and start the belt at 3mph keeping off the unit.
4. Run unit for 2 minutes for the belt to adjust itself.
5. Repeat above steps if more adjustment is necessary

TREADMILL LUBRICATION BY FREQUENCY OF USE:

Use these recommendations to schedule your treadmill lubrication:

WALKING

1 - 5 hours per week... Minimum every 12 Months / 6 - 10 hours per week ... Minimum every 6 Months

RUNNING

1 - 5 hours per week... Minimum every 6 Months / 6 - 10 hours per week... Minimum every 4 Months

10+ hours per week ... Minimum every 3 Months

TREADMILL LUBRICATION

LUBRICANT PROCEDURE:

100% Virgin Silicone lubricant is recommended for your BodyCraft treadmill.

1. Be certain the deck and under the walking belt are free of dust and debris.
2. Insert clean cloth towel under running surface and move forward then back cleaning the deck from all dirty or old dirty lubrication.
3. Apply the recommended amount of 30cc of 100% Virgin Silicone on the middle section of the running deck, under the running belt.
4. Generously apply the silicone lubricant to the FRONT HALF OF THE DECK THAT IS CLOSEST TO THE MOTOR so you do not get it on the rear roller (this will cause the belt to slip). After applying to the left side, do the same for the right side.
5. Make sure NOT to spill any excessive lube on the Side Rails or top of the Running Belt. If you do, clean with mild soap and water, then completely dry with soft clean cotton rag.
6. Walk on Running Belt for 2-3 mins from front to back and left to right sides. Make sure the Running Belt gets warmed up by this brisk and firm walk to get the lubricate into the fibers of the Running Belt.

FINAL POINTS OF INTEREST

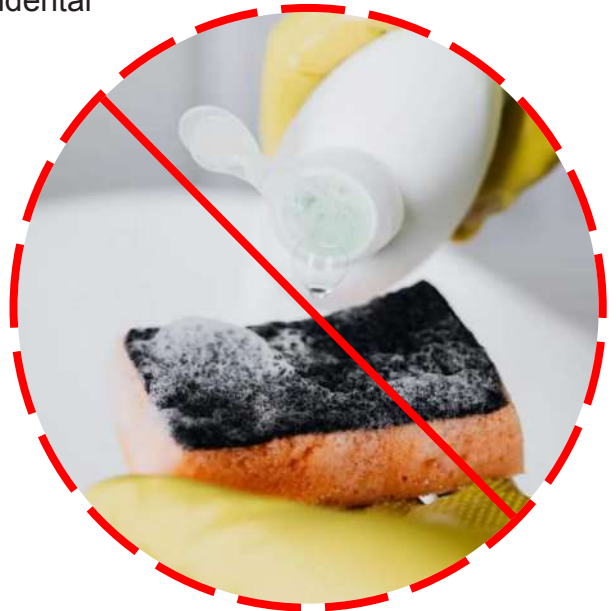
- Do not stand with your feet on the running belt when starting the treadmill. Doing so will cause premature wear on the motor and lower electronics.
- From the console, record time, distance, hours of usage and the error log.
- Vacuum under and around the treadmill often.
- Lubricate elevation pivot points annually. This includes the rear stabilizing feet and the lift motor screw.
- Perform inspection of all fasteners, electrical connections, and components for abnormal or signs of premature wear.

Cleaning your Treadmill

CAUTION: Do not use any acidic cleaners. Doing so will discolor the plastics, painted surfaces and powder coatings. Never pour water or spray liquids on any part of the item.

1. Turn off and unplug the treadmill power cord from the wall before using any cleaning product.
2. ONLY APPLY CLEANER ON A CLOTH then use cloth to clean the unit.
3. Do not spray cleaner directly on any surface of the treadmill
4. We recommend that you clean the treadmill **after** each exercise session. To remove sweat, dust and dirt, wipe all exposed surfaces with slightly damp soft cloth only, never use solvents.
5. Clean with mild soap and water based cleaners only.
6. Always keep console and electrical parts clean and dry.
7. Wipe or vacuum dust or other objects that may have accumulated underneath the treadmill.
8. Never apply cleaning solution under running belt.
9. Confirm running belt & siderails are dry from any accidental fluids spilling or overspray.

- DO NOT USE ABRASIVE CLEANING SCRUBBING PADS.
- DO NOT USE AMMONIA CLEANERS.
- DO NOT USE CITRUS CLEANERS



The following is **RECOMMENDED** for cleaning supplies:



MILD CLEANING SOLUTION



100% COTTON CLEANING CLOTHS

TIP ON FRAME ONLY: For extra protection from fingerprints, sweat stains or just plain dirt, apply an automotive grade cleaner wax at Installation and bi-annually. Also makes future cleaning easier.



(Do Not Use on Running Belt, Side Rails, Handlebar, HR Grips, any Plastic or Console Glass)

Preventive Maintenance - T1000

Preventive Maintenance is the responsibility of the owner and not covered under warranty.

(Example of changing oil and rotating tires on new car.)

To maximize the life of your treadmill, and minimize downtime, all BODYCRAFT equipment requires regular cleaning and maintenance performed on a scheduled basis. Always unplug the power cord from the wall before servicing near potential moving parts or under the hood. ONLY qualified service professionals or BODYCRAFT dealers should remove the motor hood.

Service icon on the display

- A service icon on the console will turn on the first time at 3,750 miles/6,000 km to remind the owner that maintenance is needed. After service is completed, press STOP for 5 seconds to return IDLE mode. Then 250 miles/400 km intervals for the remainder of the running belt / deck life.

Daily Maintenance Items

- Clean entire machine using water and mild detergent such as "Simple -Green" (cleaning agents should be alcohol and ammonia free), including console, handlebar / grip area and running belt.
- Check Emergency Stop Key and tether cord for proper operation.

Monthly Maintenance Items

- Vacuum under treadmill and wipe off all dirt around rollers & belt/deck areas.
- Inspect power cord for damage, inspect hand grip areas. and inspect the Emergency Stop tether cord.
- Check running belt for proper tension, adjust if needed. It is especially important to check the running belt for tension after the first 30 days of usage. All new belts will stretch, and belt slippage can be detected by users if the running belt does not have the proper tension.



Quarterly / Semi-Annual Maintenance Items

- Unplug the power cord from the wall, then remove the front plastic cover, and vacuum entire inside area of the machine - be careful when working around the lower PC board not to bump any wires or connections loose.
- Check drive belt for visible wear, i.e., cracking, tears, etc. The belt should be replaced if there are any visible signs of damage. Proper alignment of the pulley needs to be confirmed.

Annual Maintenance Items

- Unplug the power cord from the wall, inspect the underside of running belt for damage - checking /cracking, glazed surface.
- If the belt has damage or wear to it that warrants replacement. please note that the running deck must also be flipped when a new belt is installed. If the deck has previously been flipped and no longer has an unused side available. it needs to be replaced when the new belt is installed.
- Unplug the power cord from the wall, clean between belt and deck with a large towel, then lube with BODYCRAFT deck lube. Walk-in lube for 1 min, then run belt at 8 mph for 2 mins.
- Start the unit and raise incline settings to maximum height. Turn power switch off at front of the machine to prevent it from lowering accidentally. Lubricate incline motor screw (Recommends using Superlube brand grease with PTFE {Teflon} additive).
- During normal operating conditions. the running belt and deck replacement should be done every 20,000 miles.



Preventive Maintenance Checklist - Treadmills & Ellipticals

BODYCRAFT

Customer: _____
 Location Name: _____
 PM Contract #: _____
 Service Company: _____
 Technician: _____
 Date: _____

PREVENTIVE MAINTENANCE CHECKLIST

Treadmills

#1 #2 #3 #4

#1	#2	#3	#4	
				Confirm dedicated outlet per unit
				Inspect power cord
				Unplug unit & take hood off
				Vacuum inside & outside
				Clean roller & electronics
				Inspect & clean suspension
				Inspect belt & deck
				Clean under belt & deck
				Flip deck? Yes/No
				Lubricate deck w/ 100% virgin silicone
				Clean & lubricate elevation screws gear
				Inspect & align all sensors
				Inspect all wire harnesses, & connectors
				Inspect lower PC board & console board
				Perform full function test
				Amp test 3.0 mph no-load
				Amp test 3.0 mph load
				Amp test 8.0 mph no-load
				Amp test 8.0 mph load
				Total miles
				Total hours

Any condition that puts machine in a safety concern: Yes/No Why?

#1 _____
 #2 _____
 #3 _____
 #4 _____

Any condition that will need attention in the near future: Yes/No Why?

#1 _____
 #2 _____
 #3 _____
 #4 _____

Overall condition Bad/Fair/OK/Good/Great

#1 _____
 #2 _____
 #3 _____
 #4 _____

Ellipticals

#1 #2 #3 #4

#1	#2	#3	#4	
				Clean ramp & wheels (ECT Series)
				Take housing off
				Vacuum inside & outside unit
				Clean inside & outside unit
				Check for play level arms
				Check all bearings for wear & noise
				Tension drive belt(s)
				Check sensor & align if needed
				Inspect all wire harnesses, & connectors
				Inspect lower PC board & console board
				Test battery with self-generating units
				Full function test
				Test resistance brake
				Test generator system
				Test console functions
				Total wipe down cleaning
				Full function check
				Total miles
				Total hours

Any condition that puts machine in a safety concern: Yes/No Why?

#1 _____
 #2 _____
 #3 _____
 #4 _____

Any condition that will need attention in the near future: Yes/No Why?

#1 _____
 #2 _____
 #3 _____
 #4 _____

Overall condition Bad/Fair/OK/Good/Great

#1 _____
 #2 _____
 #3 _____
 #4 _____

Ver. 2.1c

Cleaning running belt/deck surface



T1000 (Full Commercial)



T800 (Light Commercial)



T400 (Home Fold-Up)



TD250 (Tread Desk)



LT100 (SpaceWalker)

BODYCRAFT

Spacewalker Treadmill Belt & Deck Cleaning / Lube

Preventive Maintenance

Preventative maintenance is a necessary and essential service that will lengthen the life of the equipment, improve the overall user experience with smooth running equipment, and keep maintenance issues and service calls to a minimum.

It is the recommendation of BODYCRAFT that the owner maintain equipment with regularly scheduled preventative maintenance service. Parts that are not approved by BODYCRAFT could void the warranty and may cause serious injury.

Maintenance Schedule

Preventative maintenance checks are set up daily, weekly, monthly, quarterly, and semiannually. All established checks should be performed for each specified time period. If at any time the equipment needs service, disconnect all power and remove the equipment from the space

Running Belt and Deck Cleaning

1. Check for proper operation of the safety **STOP** key.
 - a. Do not stand on the treadmill running belt during this procedure. Do not allow anyone to stand on or near the treadmill. Only stand to the side of the treadmill. Check and make sure that the stop key tether is hanging straight down and is not wrapped around the handlebars.
 - b. Select **Quick Start** and wait for the belt to start moving.
 - c. Once the running belt is moving, push the **SAFETY STOP** key.
 - d. Make sure the running belt stops moving, then reset the **SAFETY STOP** key.
 - e. Turn the power switch to **OFF**.



WARNING: If the running belt does not stop, turn off the power using the ON/OFF switch at the front of the treadmill and unplug the power cord. The treadmill must remain out of service until the stop switch is repaired.

2. Fold a clean, dry cotton towel (at least 36 inches long) in half lengthwise.
 - a. Lift the running belt and push the towel under it to the other side. An equal amount of the towel should extend out over the deck trim on both sides.
 - b. Push the towel toward the front of the treadmill below the **SAFETY STOP** key.
 - c. Turn the power switch to **ON**.

3. Mount the treadmill standing on the side rails with your feet firmly on top of the ends of the towel. Do not stand or place your feet on the running belt! Attach the stop key tether. Hold onto the handlebars or side handrails. Push the **Quick Start** button once in position.
4. **IMPORTANT:** You only have 3 seconds before the treadmill running belt begins to move after pressing Quick Start so be sure you are in position before pushing start.
5. **IMPORTANT:** If the towel gets loose, immediately press the safety stop key so it does not get pulled into the treadmill's rollers.
6. The treadmill will begin to run at 1 MPH. Allow the treadmill to run for one minute while keeping the towel firmly in place.



WARNING: Do not adjust the treadmill's speed or run it higher than 1 MPH.

7. After one minute, stop the treadmill by pressing the **STOP** button.

8. When the belt has completely stopped, remove the **STOP** key tether, get off the treadmill, and turn the power switch to **OFF**.

9. While the towel is still under the belt, take hold of both sides of the towel at the same time and run it up and down the length of the belt several times to clean the top of the deck.

10. Remove the towel.

11. Turn the power switch to **ON**.

12. Confirm that the treadmill is operational.



Running Belt and Deck Lube

Here is the video link on our Bodycraft Service YouTube Channel

- Lubricating the belt/deck on a Spacewalker Treadmill.
<https://youtu.be/CL3OEdokZRU>



For service videos, parts orders, software update files, and contact information scan this QR code.

Or go to: <https://www.bodycraft.com/customer-support.html>

A simple guide to building an effective Preventive Maintenance program



An introduction to creating a preventive maintenance program

Salt and pepper. Batman and Robin. Movies and popcorn. Some things just go together. In the world of asset management, preventive maintenance and planning is one duo that stands out. That's because in order for a preventive maintenance program to succeed, it requires a solid blueprint.

For facilities looking to break out of a reactive maintenance rut, a preventive maintenance plan can do wonders. Having a roadmap to preventive maintenance allows your operation to conquer unplanned downtime while staving off the temptation to fall back into a reactive approach.

A PM plan makes everything clearer so the path to reliability is obstacle-free. Goals and responsibilities are defined, timelines are understood and necessary resources are accounted for. Everyone knows what success looks like and how to sustain it.

What does preventive maintenance look like?

Preventive maintenance is maintenance that is regularly performed on a piece of equipment in working condition to prevent unplanned failure or breakdown maintenance. Preventive maintenance is triggered for an asset based on time or usage. For example, if an asset has operated for 100 hours, a preventive maintenance work order will be automatically triggered. The goal is to increase asset reliability, reduce downtime and maximize the impact of costs and labour.

For facilities looking to break out of a reactive maintenance rut, a preventive maintenance plan can do wonders. Having a roadmap allows your operation to conquer unplanned downtime while staving off the temptation to fall back into a reactive approach.

Transitioning from a predominantly reactive environment to a mostly preventive one takes time, dedication, resources and, most importantly, a plan. Achieving a successful preventive maintenance program means creating a schedule for maintenance and sticking to it. It means a reduction in unplanned downtime, backlog, miscommunication, accidents and the costs associated with each. At the end of the day, preventive maintenance will help you conquer inefficiency and improve your maintenance program from top to bottom.

How to build an effective preventive maintenance system

Each and every facility is different, with different goals, assets and resources. That's why there is no one-size-fits-all approach to creating a preventive maintenance program. However, by using these eight important elements, you can build an effective blueprint for success. Following this template for a preventive maintenance plan will go a long way to making your operation more efficient and sustainable.

Establish and prioritize goals

The first step in building a successful preventive maintenance program is to sit down and lay out what you want to achieve. Every facility has different goals and those goals influence all future decisions. Do you want to reduce downtime? Increase reliability? Cut costs? Think about the reasons for wanting to create a structured PM program and write them down.

Next, it's time to prioritize your goals. Let's face it, you're always busy, and implementing a preventive maintenance plan is another huge project to add to your to-do list. With everything that's going on, it's nearly impossible to go full steam ahead on all your goals. By prioritizing, you know where to focus your attention and resources first when establishing a blueprint for preventive maintenance. When those tasks are firmly underway, you can begin the next step in your plan.

Create KPIs and commit to measuring them

Now that your goals are organized, it's important to attach numbers to them. It's hard to know if a preventive maintenance program is working without establishing concrete targets. There are a variety of maintenance metrics out there that your operation can use to measure your performance. Some common ones are scheduled maintenance critical percent, planned maintenance percentage, preventive maintenance compliance, overall equipment effectiveness, and mean time between failure.

Once you know which KPIs you'll be using to define the success, the next step is to create a framework for consistently measuring these metrics. Stats are only valuable if you are consistently using them to improve the preventive maintenance plan. It's crucial to build processes and procedures that ensure data is collected, analyzed, understood and actioned on a regular basis. This way, you will know if you are meeting your goals and where your strengths and weaknesses lie.

Obtain buy-in from stakeholders

It doesn't matter how much time you've put into your preventive maintenance program if you don't have your entire team on board. Total buy-in is crucial as an effective PM strategy requires everyone to chip in, from a technician who must input data to a reliability engineer who reads that data and makes decisions based on it. What seem like small details add up to make a big difference. That's why establishing the concept of total productive maintenance is so important to creating a strategy that works.

Getting buy-in from all stakeholders for a preventive maintenance plan includes having discussions about goals, skill sets, needs, resources and more with each member of the team. This will give you a holistic view of how an increase in scheduled maintenance will affect each person and the team, how people might react to change and what is necessary to execute your strategy with fewer snags.

Leverage the right technology

Technology is one of the most important ingredients for an effective PM strategy. Leveraging a digital solution allows you to efficiently arrange all the smaller tasks required for your facility to embrace a PM mindset, such as scheduling, inventory management, reporting and organizing work orders. If your facility operates on a legacy system, such as pen and paper or Excel, now is the time to plan for a transition to a digital solution.

There are several factors that must be considered when choosing the right technology for a preventive maintenance program, including the skillset of your team, budget, asset capabilities, team preference, data security and more. One of the most important things to remember when looking for preventive maintenance technology, such as a CMMS, is ease of use. If a system is too hard to understand and use properly, it will not be used effectively and all the time and money invested in the solution will be for naught.

Make sure your PM triggers are accurate

Because all effective PMs are built on accurate triggers, this is a crucial step in building a preventive maintenance plan. Matching maintenance tasks with the right trigger will help your operation flow efficiently and will ensure assets are as reliable as possible. These triggers should also be known by all members of the maintenance team so no task falls through the cracks. Automated scheduling and mobile notifications are two tools that make this simple to do. It doesn't matter how much time you've put into your preventive maintenance program if you don't have your entire team on board. Total buy-in is crucial as an effective PM strategy requires everyone to chip in, from technicians to reliability engineers.

When defining a preventive maintenance trigger for an asset, it's important to look at a few variables. This includes the manufacturers recommended guidelines, the performance history of the asset, how critical the asset is to production, the cost of repair vs. maintenance and the projected future use of the asset. When you take all these elements into account, you should have a good idea of when to trigger maintenance for a particular piece of equipment. This number should be fine-tuned moving forward to optimize your preventive maintenance.

Train and implement

At this point in your quest for an effective preventive maintenance program, you probably know what needs to be done and how it needs to be done. Your team, on the other hand, probably does not. It's important to remember this and create a training strategy so everyone can get up to speed. Team members should be trained on any new technology as well as any processes and procedures that come with a shift to preventive maintenance, such as prioritizing work orders, creating failure codes, and accessing documents digitally.

The obvious next step is to implement your preventive maintenance plan. If preventive maintenance is something completely new for your team, you might consider a pilot program at one site, one section of your facility or a few particular assets. This way, you can help your team adjust to a new way of doing things while working out the kinks in your PM program.

Build a preventive maintenance checklist to analyze results

Once your preventive maintenance plan is in motion, it's important to keep an eye on the numbers. It is essential to have a preventive maintenance checklist that helps you to consistently track KPIs, such as mean time to repair, planned maintenance percentage and mean time between failures. Analyzing these stats and comparing them to pre-plan numbers should give you a good idea of how your program is impacting the efficiency of your maintenance operation.

Check these metrics against the benchmarks you established when you were first building your preventive maintenance processes. This will help you identify where you are hitting your goals and where you aren't so you can target issues in your program before they get out of hand. Take advantage of data capture tools to make tracking and analysis easy, quick and actionable. For example, there are many automated reporting templates you can use that are commonly available in maintenance management programs.

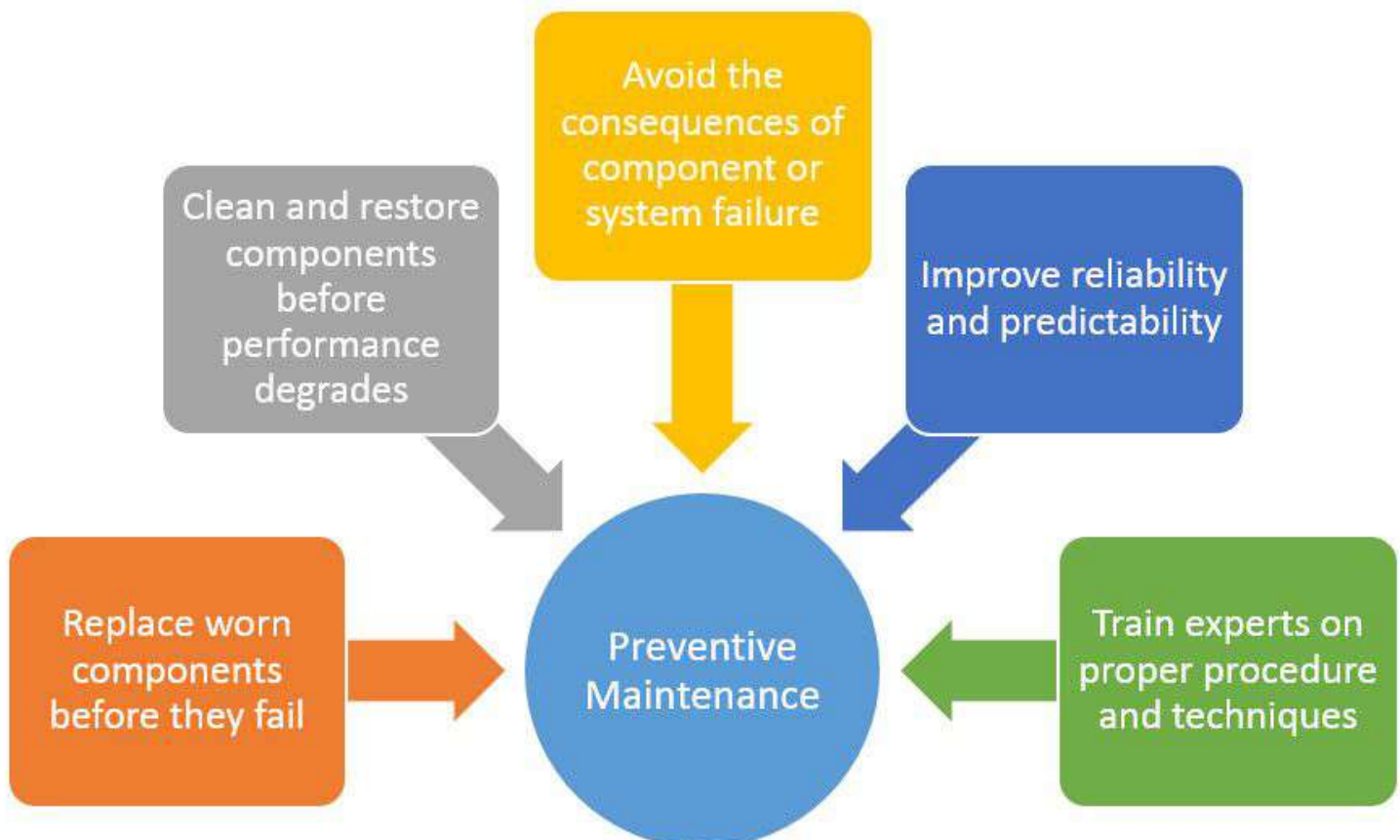
Fine-tune plan

This is one task you should never feel is complete. Your preventive maintenance program should always be under construction as you continually fine-tune, improve, fill in the gaps and fortify procedures that are working well. Use the data you capture through sensors, work order notes and digital reports to see where strengths and weaknesses lie. Uncover opportunities to improve and focus on embracing preventive maintenance wherever possible in your operation.

One crucial element in this phase is to include all stakeholders, such as technicians, operations, reliability engineers, etc., in the process of improvement. Digital profiles and forums for team members make it easy to schedule a time to get feedback, work through problems and review issues that have been flagged while you smooth out any wrinkles in your plan.

The bottom line on building a preventive maintenance program

Creating a successful, sustainable, and effective preventive maintenance program doesn't happen overnight. It takes a lot of planning, but it's worth it when you achieve the many benefits. It's important to build a sturdy strategy by identifying goals, creating proper KPIs and triggers, discussing the plan with stakeholders, leveraging the right technology and conducting training. It takes consistent analysis and fine-tuning to ensure all your careful planning doesn't go to waste. And just remember, a well-oiled preventive maintenance program is not an unattainable dream for maintenance operations; it's a viable option for all.



RMA Return Parts

A work order copy and FEDEX / UPS / USPS return label have been included in box with parts. The return of all parts as sent is required for processing of claim.

In order to process for payment you must perform the following:

- 1- Diagnose & repair unit using part as sent. If additional parts are required or unit still not working correctly, please contact us, **WHILE STILL ON JOB SITE**, at 800-990-5556 (during normal hours EST 8am - 5pm)
- 2- Return of all parts as sent is required for processing of this claim referencing RMA XXX.
- 3- Complete attached warranty labor claim form and return along with your invoice for processing of payment.
- 4- Before leaving job site, check all bolts and tighten as needed. Using Loctite [Blue 242] where applicable.
- 5- Perform check and verification of unit's full functionality, any loose components and level to floor.

CONTACT BODYCRAFT

BODYCRAFT Factory Outlet and Worldwide Headquarters

7699 Green Meadows Dr.

Lewis Center, Ohio 43035

Phone: 800-990-5556 – 740-965-2442

Fax: 740-965-2449

Invoice/Tracking Support: 1-800-990-5556 x412

Parts ordering: service@bodycraft.com or [CLICK HERE](#)



For service videos, parts orders, software update files, and contact information scan this QR code.

Or go to: <https://www.bodycraft.com/customer-support.html>

Customer Service Bulletin

Treadmill Motor Packaging Receiving and Packaging for Return Credit

A treadmill drive motor can cost up to \$800 and needs to be returned in an acceptable condition which will be inspected and repaired if necessary. Failure to repackage a motor correctly causing it to arrive to BodyCraft damaged, could result in loss of the return credit under RMA return process.



The following system will help ensure the drive motor arrives back to BodyCraft undamaged by shipping carriers:

1. Take new motor out of box and inspect mounting system.
2. Take nuts & washers off motor base and leave bolts in wood base.
3. Take new motor off wood base with bolts in place.

NOTE: For 200/400/800M models, take off old motor cooling fan with snap pliers. Reinstall once cleaned onto new motor. Confirm clip spins & secure.

4. Reinstall old motor on wood base plate with all washers & nuts.
5. Torque all bolts & nuts to 20 lbs. (+/- 2 lbs.)

Important Note: Each treadmill drive motor has different mounting holes and flywheels. **DO NOT** change mounting holes or flywheel mounts (rubber base) at any time. Failure to mount correctly will result in high potential of drive motor being damaged by shipping carriers back to BodyCraft.



Space Walker Motor



https://youtu.be/_5Z-G9UUZUQ



400M / 800M Motor



For service videos, parts orders, software update files, and contact information scan this QR code.

Or go to: <https://www.bodycraft.com/customer-support.html>

