

Motor Control Board Replacement

Tools Required:

- Phillips Screwdriver

Procedure:

IMPORTANT Due to continuous improvements, the new Motor Control Board may not look like the old one.

- 1) Turn off power to the treadmill and unplug power cord from wall outlet.
- 2) Remove the motor cover.
- 3) Verify that the 'MTR' LED on the Motor Control Board has turned off.

IMPORTANT If this LED is still lit, please wait approximately 1 minute until the light goes out. This is an indication that the stored power has finally left the board.

- 4) Unplug motor, optic sensor, elevation, speed sensor, and AC wires from the Motor Control Board (Figure 1). If replacing a non-digital Motor Control Board, unplug motor, elevation, speed sensor, and AC wires from the Motor Control Board (Figure 2).
- 5) Detach and remove the old Motor Control Board, and replace it with the new one.
- 6) Reconnect all the wires to the Motor Control Board (Figure 1). For non-digital motor control boards use Figure 2.
- 7) Calibrate unit per instructions. If no instructions were included please call Customer Tech Support at 1-800-244-4192.

Figure 1
Digital Motor Control Board

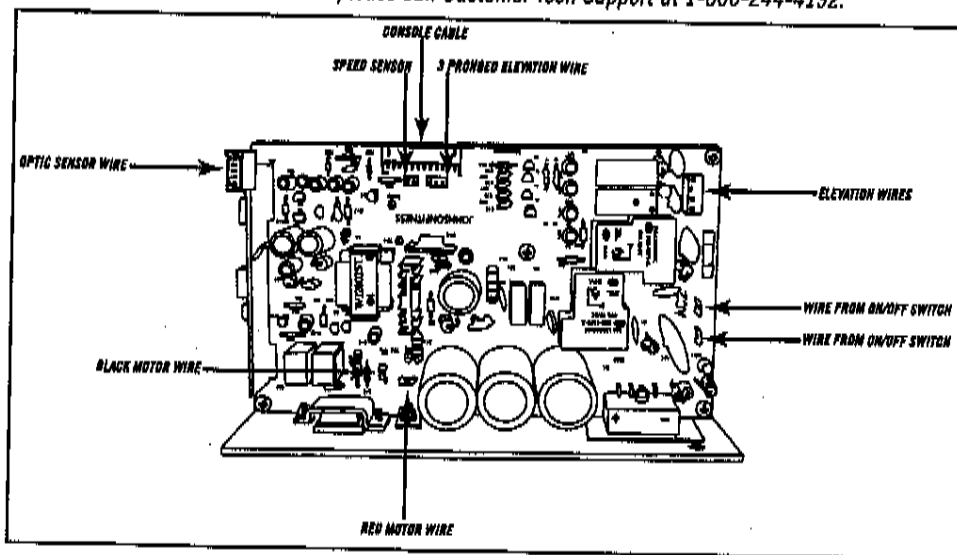
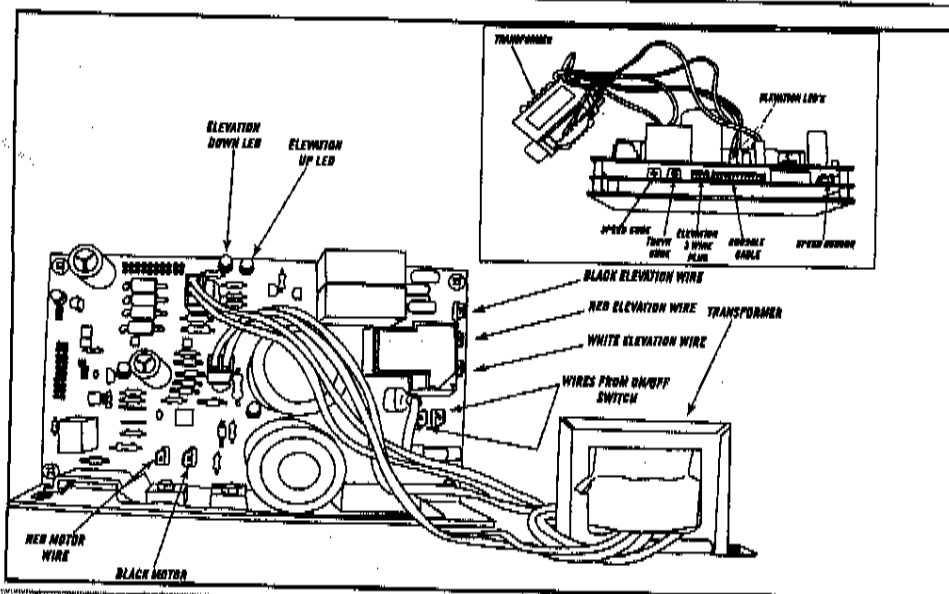


Figure 2
Non-Digital Motor Control Board



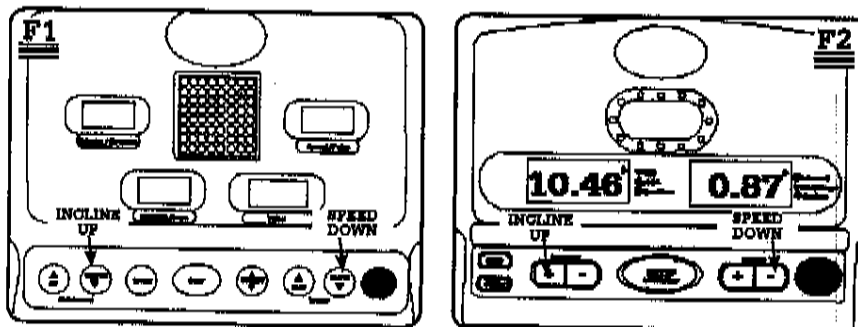
IMPORTANT

A recalled board will look different than its replacement board. When replacing Recalled Boards make sure to remove all transformers and the smaller sub-board (if present). Make sure to calibrate unit after installing new board.

Manual Calibration Instructions

For Models: Omega | Quantum | Paragon | Omega II | Quantum II | Paragon II | Alpine | Advance 200 | Advance 300 | Advance 400 | Advance 500 | TSC2 | TSC3 | TSC4 | TSC5

If the unit has a "Select" button and not the "Enter" button use the select to select the engineering mode on the screen.



Entering Diagnostics Mode

- 1 Turn the treadmill power to ON.
- 2 Place the safety key in position on the console.
- 3 Simultaneously press and hold the incline "+" (▲) and speed "-" (▼) buttons for about five seconds. (F1 & F2)
- 4 The console will beep and display the software version in the one of the two following windows;
For Models Omega II | Advance 300: in the Time window.
All other Models: in the Calories/Elevation window.

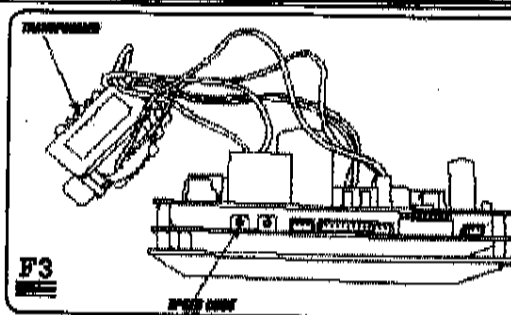


WARNING Do NOT stand on the running belt when calibrating. Use the guide rails instead.

- 5 Press Start. The running belt should begin moving.
- 6 The Speed or Speed Pulse window will display the actual speed of the running belt. This should be 0.5mph.
- 7 This should be 0.5mph (+ or - .05). If the speed is not within the proper start range, adjust the speed cube located on the lower control board. (F3)

Note: When adjusting the speed cube, turn the screw right to increase the speed and left to decrease the speed. Use small increments as the speed cube is sensitive and will respond to each change.

DO NOT PUSH DOWN HARD ON THE SCREW.

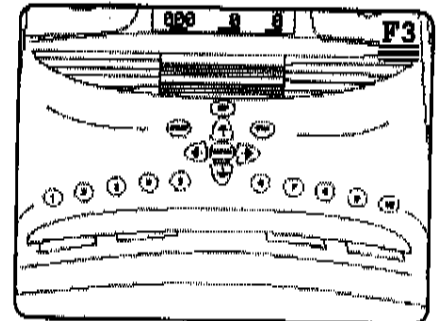
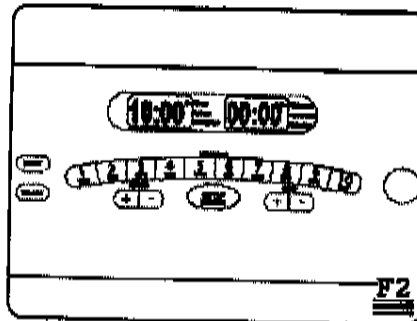
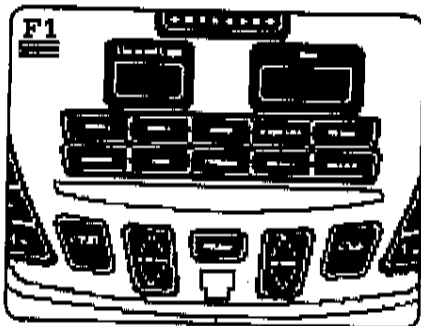


Tip: Another way to verify the speed is set correctly: Count the running belt revolutions per minute. At 0.5mph the running belt should make 4 revolutions per minute for the Alpine and Advance 500 and 4.5 revolutions per minute for all other units.

To exit the Engineering menu, press and hold "Stop" for three seconds.

Auto Calibration Instructions

For Models: RT1 | T51 | T52 | T53 | T54 | T605 | T805 | CST3 | CST4 | CST5 | 1.2T | 2.2T | 3.2T | 4.2T | 5.2T | 30518 | T61 | T62 | T63 | T64 | T50 | T70 | CST3.5 | CST4.5 | PST6 | PST8 | T650 | T805 | 30517 | T10K | 30518 | T95 | CST3.5x | CST3.6 | CST4.8 | PST Pro | PST6 | PST8 | T71 | T72 | T73 | T74 | 1.3T | 2.3T | 5.3T | T4 | T6 | DT680 | LS926T | RST5.6 | RCT7.6 | 30519 | 30516 | 30517 | WT751 | WT951 | 620T | 700T | 720T | 730T | 820T | 830T | 930T



Entering the Engineering Mode

- 1 Turn the treadmill power to ON.
- 2 Place the safety key in position on the console.
- 3 Simultaneously press and hold (for about five seconds) the incline "+" (▲) and speed "-" (▼) buttons. (F1 & F2)
For Model RT1: Simultaneously press and hold the 1 and 10 quick speed buttons for about three seconds. (F3)
- 4 The console should beep three times and ENG0 (EN90) should be displayed. This indicates you are in the engineering menu.

Note: if ENG0 (EN90) is not displayed, but ENG (EN9) is displayed with another number at the end, you are still in the engineering menu. Use the "+" (▲) or "-" (▼) buttons to navigate to the correct menu. See following instructions.

Auto Calibration

WARNING Do NOT stand on the running belt when calibrating. Use the guide rails instead.

After following the steps above you will have three steps left to complete the calibration process.

- 1 Press the speed "+" (▲) or "-" (▼) buttons until ENG2 (EN92) is displayed.
For Model RT1: Press the "Enter" button until the display reads "Auto Set".
- 2 Press and hold the "Enter" button for about three seconds to select.
For Models 1.2T | 2.2T | 3.2T: Press and hold the "Select" button for about three seconds to select.
For Model RT1: Press the "Start" button to select Auto Set mode. (F3)
For Model 620T: Press and hold the blue "change displays" button above the fan.
- 3 Press the "Start" button to begin.
For Models 1.2T | 2.2T | 3.2T: Press the "Select" button to begin.

The running belt will begin moving and will automatically begin the auto-calibration sequence to properly set and store the speed values. Upon successful calibration there will be four beeps and it will automatically exit the Engineering Mode and will return to the original screen. The whole process will typically take about two minutes.