

Treadmill Specifications: 29715 Expanse 550
Hoodless Spacesaver
0-10 MPH
Rear Ratchet Incline 3-10%
2.25 HP Motor
120 VAC
60 Hz
12 Amp UL Rating
15 Amp Circuit Breaker

Tech Sheet Part # 131867

## MC-60 Motor Controller LEDs

The MC-60 motor controller has four LEDs that can be used to help troubleshoot electrical problems with this treadmill. Each LED, and its meaning, is described below:

- D6- Labeled "SCR." It indicates that the SCR is triggering on the controller. If this light is out, no voltage will be sent to the motor. This LED will vary in brightness depending on the speed setting. If this LED does not light when the safety key is inserted **and** D7 is lit, the controller will need to be replaced.
- D7- Labeled "SPD CTRL." It indicates a speed control signal is being received from the console. The LED will light solidly, but the intensity will vary depending on the speed setting. If this LED does not light, but D11 does, it indicates a problem with the speed pot or pot wire.
- D11- Labeled "+12V." This LED indicates the controller is outputting 12 VDC to the speed pot. If this LED does not light when voltage is applied, replace the controller.
- D16- Labeled "CUR LIM." This LED lights only when the amperage draw of the treadmill is near the current limit setting. If this LED lights frequently, it indicates a worn walking belt or board, or a tight walking or drive belt.

## **Thermal Protection Switch**

The motor on this treadmill contains a thermal protection switch. This switch is located inside the motor. It is wired in series with the AC voltage line to the motor controller.

The thermal switch is designed to cut the AC voltage to the motor controller in the event the motor becomes too hot. This has the effect of turning off the treadmill until the temperature of the motor drops enough to allow the thermal switch to close again.

High motor temperatures can be caused by an over-tightened walking belt or drive belt, or a worn out walking belt or board, which increases drag and increases the amperage needed to maintain the set speed.

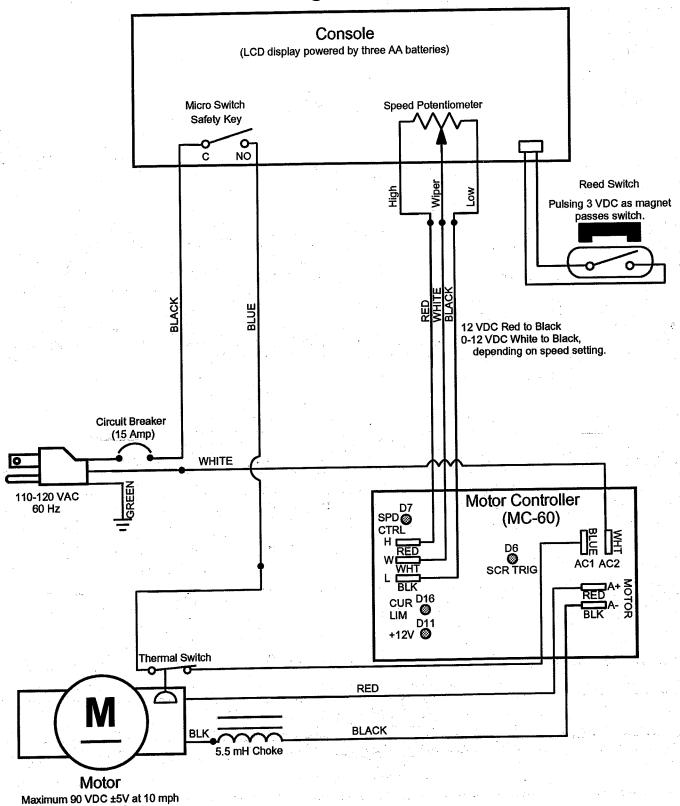
## **Units of Measurement**

Two versions of the console may be used on this treadmill. On the first version, it is necessary to clip resistor "R3" on the back of the console to change from English units to Metric. The resistor must be resoldered to change back to English units. On the other, the *On/Reset* button is pressed for 3-5 seconds to toggle between units.

To determine which console is being used, press and hold the *On/Reset* button for five seconds. If the units of measurement do not change, the resistor "R3" will need to be clipped to change units.

	SERVICE HISTORY	<u> </u>
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## 29715 Expanse 550 Voltage Diagram



Part # 131867 8/96 © Icon Health & Fitness, Inc. Drawing # F02745-A