

# Calibrating the Grade System

This procedure assumes the starting point is with the grade arm bearings removed (actuator is free at the actuator nut). If this is not the case, perform steps 1 through 4 of the procedure for Replacing the Grade Actuator.

1. Position the grade actuator in such a way that if the screw turns, no harm will come. Plug the treadmill in, turn the circuit breaker on, and use the Up or Down keys on the controller to set the grade at 0%. If an E201 error is encountered, this indicates the grade pot is reporting an out of range error and pressing the appropriate key to move the actuator back in range will clear the error. Turn off the circuit breaker and unplug the treadmill. Allow 2 minutes for the voltage on the VSD board to bleed down before resuming work on the treadmill.
2. Level the treadmill by placing suitable blocking under the headframe. Use either a level on the side rail, by measuring the distance to the bottom of the side rails at both ends, or by placing a pair of 3/8-inch thick spacers under the large grade swingarm bearing mounts under the treadmill.
3. Screw the grade nut block assembly onto the screw until the holes in the block line up with the holes in the grade arm. Install the grade arm shoulder bushings, bearings, and M8 hex bolts, flat, and lock washers. Torque to 180-220 in-lb.

Warning



**High voltage is present when the treadmill is plugged into a power source. Secure loose hair, clothing, and jewelry before working near rotating machinery.**

Verify that:

- a. it operates over the full range of 0-15% (0-12% for ClubTrack 510).
- b. there is no binding when it moves up or down.

## Field Functional Test

To verify that the treadmill is operating properly, perform Field Test No. 4. See Appendix D, Field Functional Tests, for specific instructions.