1. Formula to check the speedometer accuracy

    A. Measure walking belt length (in both feet and inches)

    B. Divide the length into 5,280; then divide the result by 60. The final
        result equals revolutions per minute (R. P. M.) of the walking belt
        per mile.

    Example (7-foot walking belt)

    $$\begin{array}{r} 754.286 \\ 7\overline{)5280.000} \\ 49 \\ \hline 38 \\ 35 \\ \hline 30 \\ 28 \\ \hline 2. \end{array}$$ $$\begin{array}{r} 12.57 \ (R.\,P.\,M.) \\ 60\overline{)754.286} \\ 60 \\ \hline 154 \\ 120 \\ \hline 34. \end{array}$$

    C. Adjust speed control knob on control box so that speedometer indicates
        2 m. p. h.

    D. The walking belt should now be moving at approximately 25 R. P. M.
        revolutions per minute.

2. Procedure for setting or adjusting the treadmill speed using the above example

    A. With the speed control knob on the control box in the extreme counter-
        clockwise position, check to see if the white dot and line on the speed
        control knob point to the reset white dot on the control box. If not,
        loosen set screw in speed control knob and adjust the knob so that the
        dot on the knob and the reset dot on the face of the control box align.

    B. With the treadmill at zero elevation, if possible, set speed control
        knob on control box to maximum clockwise position.

    C. Tape a piece of white paper to walking belt so that R. P. M. can be
        counted.

    D. With motor cover plate off, adjust MAX SPEED potentiometer R12
        on magnapak so that walking belt is moving at 10 m. p. h., which is
        approximately 126 R. P. M. using the above example of a 7-foot
        walking belt. Count for one-half minute only, or 63 instead of 126
        revolutions. This now means the walking belt is traveling at 10 m. p. h.

E. Turn speed control knob on the control box to maximum counterclock-wise position but do not click switch to RESET position; then turn speed control knob clockwise so that white dot and line on speed control knob is at the left facing power switch.

F. Adjust low-speed potentiometer R6 on printed circuit board inside control box until walking belt just starts to move; then back of potentiometer R6 adjustment until walking belt just stops.

G. Gradually turn speed control knob clockwise until walking belt just starts to move. The walking belt should start to move before the white dot on the speed control knob points to "T" in the word "TURN" on the face of the control box.

H. Connect a V.O.M. to terminal E10 (positive side of VOM) on printed circuit board in control box, and negative side of VOM to R4-R5 junction on same printed circuit board.

I. Turn speed control knob on control box to maximum clockwise position (10 M.P.H.). The VOM should indicate 2.0 volts; if not, adjust overspeed potentiometer R2 on printed circuit board in control box until VOM indicates 2.0 volts.

J. Adjust motor controller TORQUE REG potentiometer R9 on magnapak for a constant speedometer reading of 4 M.P.H. as the treadmill is changed from no load to normal load (person walking on treadmill).

K. Check belt speed at 5 M.P.H. using formula for checking speedometer accuracy. For example, 7-foot belt would revolve at 63 R.P.M.

L. When belt is traveling at proper R.P.M. for 5 M.P.H., adjust poten-tiometer R104 (this potentiometer is connected to the rear of the speedometer) until speedometer indicates 5 M.P.H.

M. Turn speed control knob clockwise and counter-clockwise. When knob is rotated at normal speed, the treadmill shall not shut down. The treadmill should only shut down when the speed control knob is rapidly ratated in the clockwise direction.

N. As a double check, adjust speed control knob so that speedometer indicates 2 M.P.H. and count R.P.M. one minute (using the 7-foot belt example). The R.P.M. for one minute should be at approximately 25 R.P.M.

O. Replace motor cover plate.