

# Instructions for Using the Toe Strength Dynamometer

Your toe strength dynamometer has been sent to you tested and ready-to-go. After a few months of regular use, you will need to replace the CR-2032 battery, which is located on the underside of the handle. Occasionally, you have to reset the device so that “peak hold” appears. This allows the device to retain the highest measurement, which is essential when taking strength measurements. To reset to peak hold, press the power button, then repeatedly press the unit button, until you see peak hold appear on the left side of the screen. It is also possible to choose between pounds and kilograms when pressing the unit button. Once the device is turned off, it will retain the applied settings.

## Measuring toe strength:

1. The patient should be seated comfortably with their legs tilted back about 5° from vertical (Fig. 1).

2. Place the card under the lesser toes so that the longest part of the card is positioned beneath the fifth toe (Fig. 2). It is important the card not contact the forefoot, as it should be placed beneath the toes only.

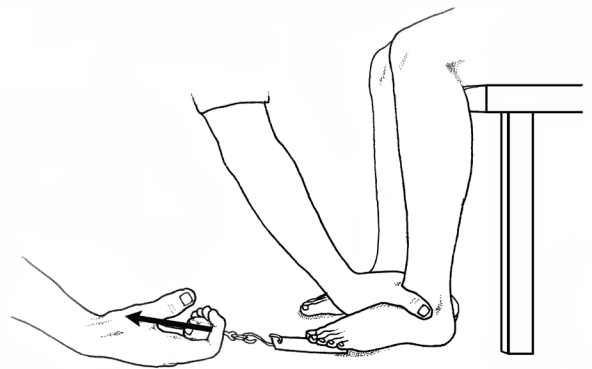


Fig. 1

3. The practitioner then places their hand on top of the patient's foot to keep it stable and detect if the patient attempts to lift their heel from the ground.

4. To perform the test, say “Keep your heel on the ground, keep your forefoot on the ground, and try to stop me from pulling this card out.” The patient is then instructed to grip the card as firmly as possible while you slowly pull the card out from beneath their toes. If the patient lifts his or her heel, the test must be repeated.

5. Repeat the test until a consistent measurement is achieved, usually 2 to 3 times. Pressing the power button resets the peak score to zero after each measurement.

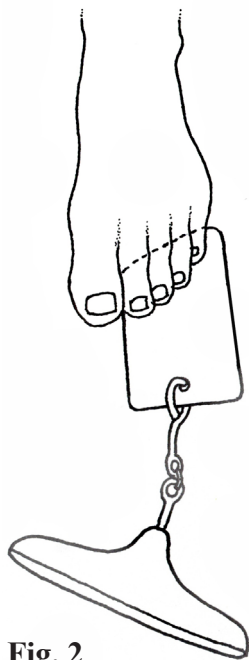


Fig. 2

6. Flip the card over and place the long end of the card beneath the big toe of the same foot (Fig. 3). Record the measurement and repeat the strength test on the patient's other foot.

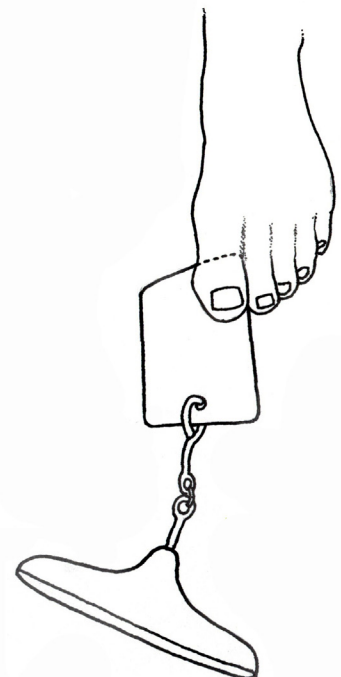


Fig. 3

## Normal and abnormal results for the toe strength dynamometer:

As a general rule, adults can produce about 10% of their body weight in force with their great toe, and 7% of their body weight in force beneath the lesser toes. Athletes should be able to achieve 15 to 20% of their body weight beneath the big toe, and 10 to 15% of their body weight beneath the lesser toes. Repeat measurements should be performed on the same surface as the initial test. Go to [HumanLocomotion.com](http://HumanLocomotion.com) to watch the video of how to set the dynamometer, the toe strength test, and the hip strength test with the optional strap.