

# Foot pounds or pound feet

Foot pounds or pound feet

Tag Archives: Pound-Feet vs. Foot-Pounds Foot-Pounds and Pound-Feet--What's ...

"Torque measures the twisting force, or strength, of an engine or motor. That sensation of being pushed back into your seat when you stomp on the accelerator? That's torque. Illustrated using a non-automotive example, when opening a jar, torque is the effort with which you loosen the lid."

The MotorBiscuit Staff is a highly experienced and enthusiastic group of editors, writers, and contributors with decades of automotive experience. We're car fans and industry professionals bringing our unique driving, transportation, and transit insights and vehicle-based skillsets to MotorBiscuit content.

A pound-foot (lb·ft), abbreviated from pound-force foot (lbf · ft), is a unit of torque representing one pound of force acting at a perpendicular distance of one foot from a pivot point.<sup>1,2</sup> Conversely one foot pound-force (ft · lbf) is the moment about an axis that applies one pound-force at a radius of one foot.

The value in Systeme International (SI) units is given by multiplying the following exact factors:

This gives the exact conversion factor:

The name "pound-foot", intended to minimize confusion with the foot-pound as a unit of work, was apparently first proposed by British physicist Arthur Mason Worthington.<sup>3</sup>

Despite this, in practice torque units are commonly called the foot-pound (denoted as either lb-ft or ft-lb) or the inch-pound (denoted as in-lb).<sup>4,5</sup> Practitioners depend on context and the hyphenated abbreviations to know that these refer to neither energy nor moment of mass (as the symbol ft-lb rather than lbf-ft would imply).

Foot-pounds (ft-lb) measure force multiplied by distance, representing rotational force and engine torque. Pound-feet (lb-ft), on the other hand, measure energy, work done, and appliance energy consumption. Notably, ft-lb and lb-ft are not interchangeable units, with a conversion factor of 1 ft-lb = 1.356 lb-ft. These units are essential in various applications such as measuring engine and motor torque, appliance energy usage, and tool energy consumption. Understanding their distinction ensures accurate measurements and proper understanding of specifications.

In the realm of mechanics, understanding the intricacies of measurement is crucial for accuracy and efficiency. Two commonly encountered units, foot-pounds (ft-lb) and pound-feet (lb-ft), often leave people perplexed as to their precise meanings and applications. Join us on a journey to demystify these units and grasp their significance in everyday scenarios.

## Foot pounds or pound feet

Foot-pounds captures the concept of force acting over a specific distance. It is essentially a measure of torque, the rotational force that induces objects to spin. Think of it as the ‘oomph’ that makes your wrench loosen a rusty bolt.

Unlike foot-pounds, pound-feet delves into the realm of energy or work done. It measures the amount of energy expended or work accomplished when a force acts over a distance. This unit finds its home in gauging energy consumption of appliances and the power output of various tools.

Contact us for free full report

Web: <https://kary.com.pl/contact-us/>

Email: [energystorage2000@gmail.com](mailto:energystorage2000@gmail.com)

WhatsApp: 8613816583346

