

Figure 13-10. *Nomenclature of a main landing gear bogie truck.*

Shock Absorbing and Non-Shock Absorbing Landing Gear

In addition to supporting the aircraft for taxi, the forces of impact on an aircraft during landing must be controlled by the landing gear. This is done in two ways: 1) the shock energy is altered and transferred throughout the airframe at a different rate and time than the single strong pulse of impact, and 2) the shock is absorbed by converting the energy into heat energy.

Leaf-Type Spring Gear

Many aircraft utilize flexible spring steel, aluminum, or composite struts that receive the impact of landing and return it to the airframe to dissipate at a rate that is not harmful. The gear flexes initially and forces are transferred as it returns to its original position. [Figure 13-13] The most common example of this type of non-shock absorbing landing gear are the thousands of single-engine Cessna aircraft that use