

BICYCLE RETAILER ASSEMBLY

The illustration below calls out common concerns for proper bicycle assembly. Bicycles can be purchased from Independent Bicycle Dealers (IBDs) or from mass market retailers (big box stores). Both types of retailers have the same responsibilities regarding the safety of the product, but often have differing standards for the employees doing the assembly. The experts at Robson Forensic commonly investigate serious bicycle crash related injuries caused by improper assembly including brake failure, drive train failure and insufficient connecting hardware torque.

Other standards not shown in this illustration include: 1) When the hand lever is pushed down with 10 pounds or more applied 1" from the end of the lever, the brake pads must contact the braking surface of the wheel. 2) The ends of the handlebars must be capped or covered. 3) When the handlebar/stem assembly is twisted with a torque of 35 ft-lb, it must not move or show any signs of damage. 4) A bicycle must be able to tilt 25 degrees to either side with the pedals in their lowest position without the pedal or any other part of the bicycle (other than the tires) hitting the ground.

