

## Two-Minute

# **Bike Safety Check**

Here's an easy procedure all riders should know and follow weekly.

\*Check the starred items (the first three) before every ride.

It is particularly important to perform these checks if the bicycle has been disassembled for travel, or if it has been crashed, jostled or roughly handled.

This is not a comprehensive bike inspection procedure.



Here's a pneumonic I use to remember the items:

This	*Tires
way	*Wheels
bicyclists	*Brakes
have	Handlebars
safety	Stem
habits.	Headset
See	Seat
definite	Drive train
benefits	Bottom bracket
preventing	Pedals
flats &	Fastenings
falls.	Frame
Нарру	Helmet
cycling!	Cleats

Table 1. Bike safety check pneumonic. Read down the column. Check starred items every ride.

## \*Tires, Wheels, and Brakes

## \*Check the Front Wheel

Press on the tire to check inflation.

Check the tire for wear—flat spots or exposed casing threads. The tire treads and side walls should be free of cuts, bulges, cracks, and foreign material such as thorns or glass.

Check that the quick-release skewer is levered closed.

Spin the wheel. The wheel should be true. The wheel should turn freely, without play. If the wheel appears at all out of true, check for a loose spoke by squeezing adjacent spokes on the same side of the wheel in pairs.

### \*Check the Front Brake

Check that the brake pads are properly positioned relative to the rim: that they are equidistant from the rim, do not rub the rim unless engaged, that they engage squarely along their length, and that they do not hit the tire.

Check the brake pads for wear.

Check the cable end, visible cable length, and cable housing for fraying, rust, or kinks.

Check that the brake lever will not bottom out.

Check for the free return of the brake and cable.

## \*Check the Rear Wheel

Press on the tire to check inflation.

Check the tire for wear—flat spots or exposed casing threads. The tire treads and side walls should be free of cuts, bulges, cracks, and foreign material such as thorns or glass.

Check that the quick-release skewer is levered closed.

Spin the wheel forward. The wheel should be true. The wheel should turn freely, without play. If the wheel appears at all out of true, check for a loose spoke by squeezing adjacent spokes on the same side of the wheel in pairs.

#### \*Check the Rear Brake

Check that the brake pads are properly positioned relative to the rim: that they are equidistant from the rim, do not rub the rim unless engaged, that they engage squarely along their length, and that they do not hit the tire.

Check the brake pads for wear.

Check the cable end, visible cable length, and cable housing for fraying, rust, or kinks.

Check that the brake lever will not bottom out. Check for the free return of the brake and cable.

Continued



## Handlebars/Stem

Check the position of the brake lever hoods for slippage from your correct position.

Check that the stem is tight on the steerer tube. Face the front of the bicycle. Holding the front wheel between your knees, with your left hand on the right handlebar and your right hand on the left handlebar, apply moderate pressure back and forth with your hands.

Check that the handlebar plugs are present and set at the bar ends.

Check the handlebar tape for wear or unraveling.

#### Headset

Check for free movement. Holding the frame off the ground with one hand, gently turn the handlebars to the left and right. It should feel smooth without binding or roughness.

Check for a loose headset. Assuming the front brake lever is on the left side of the bicycle, stand on the left side of the bicycle, facing forward, behind the handlebar. Apply the front brake with the left hand. Place the fingers of the right hand lightly at the junction of the top of the head tube and headset top cap (part just below any headset spacers that may be present). Rock the bike forward and backward on the ground. There should be no movement between the head tube and the headset cap. Movement is often better appreciated if the front wheel is turned 45 degrees from straight ahead.

#### Saddle

Check that the seat is aligned straight ahead. Check that the seat is angled level, up, or down to your preference.

## **Drive Train**

Check for stiff links or a bent chain: In the small ring and third hardest cog, rotate the chain backwards, looking at the jockey pulleys for jumps

Check the gear cable ends, visible cable length, and cable housing for fraying, rust, or kinks.

Check that all the gears are working and that shifting is crisp and accurate. Run through the gears on a bike stand or while riding easily.

Check the gross alignment of the front and rear derailleurs. The outer cage of the front derailleur should be parallel to the chainrings.

## **Bottom Bracket**

Check for free movement. Holding each crank end with one hand, and stabilizing the frame against your body, check for play.

Check for binding. With chain in the small ring and third hardest cog, check for free rotation turning the crank backwards.

## **Pedals**

Check that they are securely attached.

Check for wear.

Check for free movement.

Check that they are clear of debris.

## **Fastenings**

Check that waterbottle screws, pump, seat bag, and other fastenings are secure.

#### Frame

Check for cracks or dents.

#### Helmet

Check for cracks or dents.

Check that straps are not worn and that they fit snugly.

#### Cleats

Check that all screws are present. Check that the cleats are not overly worn.

## **Final Words**

A two-minute bicycle safety check is simple to perform.

Initially, follow the steps outlined with this list beside you. After several trials, the practiced procedure will, I hope, become second-nature for you.

