# THE "M" BIKE SAFETY CHECK.

The "M" check is a quick methodical way to do a safety check on your bike following its shape. These checks can also be used to detect potential issues on a bike you may be wanting to purchase. Any problems encountered should be remedied by a bike mechanic or suitably experienced person.

But we would encourage you to gain the required skills yourself if you are game!



### 1. Front wheel

Should be tightly fitted with the quick-release lever secure in the closed position. For non quick-release wheels, check that the nuts on both sides of the wheel axle are tight. Wheels should spin freely with no buckles. Check there is no sideway bearing wobble (play) by gripping the wheel with both hands and trying to move sideways.

## 2. Frame

Look for any cracks or damage, including on joins and welds. Check also for twists & bends and that the forks are straight and parallel. Check all nuts and bolts attached to the frame are tight.

# 3. Brakes

Ensure that the front and rear brakes are working properly by slowly wheeling the bike alongside you and applying one brake at a time. Squeezing the left (rear) brake lever should lock the back wheel and then applying the right (front) brake should stop the bike.

In addition, check brake blocks/pads don't rub the rim/rotors when the levers are at rest, there is no stiffness when pulling the levers and that brake lever does not pull against the handlebar.

If the brake lever touches the handlebar grip when pulled, tighten the brake cable using the barrel adjuster on the levers or calipers.

Other brake adjustments should be done by a bike mechanic or experienced person.





#### 4. Headset

Check for play in the headset by firstly grasping the head tube firmly with one hand while applying the front brake with the other hand. Check the headset by moving the front of the bike back and forth. Then release the brake and move the handle bars side to side; check for grinding or stiffness. Play or stiffness should be remedied (see the next section for a-head stems and sideways movement).

### 5. Handlebars and stem

Check that the front wheel and stem do not move independently by standing in front of the bike, holding the front wheel between your knees, then try to twist the handlebars sideways. Check also that the handlebars do not rotate.

Sideways movement can be fixed by tightening the a-head star and stem clamp bolts (this also adjusts the headset) or for older bikes tighten the quill stem bolt. Handlebar rotation can be rectified by tightening the handlebar clamp bolts.

#### 6. **Pedals and Crankset**

Pedals and cranks should spin smoothly and attached tightly to the crank arms. Check also for creaks and play in the pedal and bottom bracket bearings.

## 7. Chain

Should be clean, free from rust and oiled for the smooth running of your bike. Don't use too much oil as this will pick up dirt and help wear the chain out. A correctly oiled chain will glisten slightly and no more.

Stiff links will create gear changing problems and can be detected by pedalling backwards by hand and seeing if the jockey mechanism moves in response to the chain tight spots.

## 8. Saddle

Check the seat post isn't loose and doesn't exceed the limit marked on the seat post. Adjust using the clamp using the quick release skewer or allen (hex) bolt.

# 9. Tyres

Tyres should be inflated to the pressure written on the tyre wall. This will ensure a safe and pleasant ride! Never ride with under inflated tyres or punctures will occur.

Note: There are two types of valves – Presta (long and thin), and Schrader (thicker and short).

## 10. Spokes

Should be of similar tension and not loose or broken. Relative tension can be checked by plucking each spoke (They sound similar), or by squeezing pairs of spokes. Note: the spokes on a rear wheel are tighter on the drive (gear) side, but still have similar tension on each side.

### 11. Rear wheel

See Front Wheel section above

# 12. Gears

If you are satisfied the bike is safe to ride, take it for a ride and check the gears change correctly and no noises or crunches occur while pedalling and changing gear. Check the gears and cables for rust and excessive grime.



