

# 1 Bike Check

This is an “M” check. Start at the front of the bike and systematically work towards the back. Put a cross beside anything that is faulty. Note any faults you find.

		X	FAULT
<b>Front tyre</b>	Good tread, no splits, cracks or holes, properly inflated		
<b>Front wheel</b>	True, no missing or broken spokes, good rim		
<b>Front quick release</b>	Secure, facing in right direction		
<b>Front hub</b>	No wobbles, turns smoothly		
<b>Front brake</b>	Firmly fixed, correctly positioned, pads or blocks not worn out		
<b>Headset</b>	No wobble or judder		
<b>Handlebars</b>	Not damaged, ends are protected		
<b>Brake levers</b>	Comfortable position, firmly fixed, travel is not excessive		
<b>Frame/forks</b>	Appears undamaged		
<b>Bottom bracket</b>	No wobble, turns freely		
<b>Chain set</b>	Cranks are not bent, chain rings are not buckled		
<b>Seat post</b>	Undamaged, not extended beyond minimum insertion point		

		<b>X</b>	<b>FAULT</b>
<b>Pedals</b>	Turn freely, undamaged		
<b>Saddle</b>	Firmly fixed, if damaged will injure rider		
<b>Rear tyre</b>	Good tread, no splits, cracks or holes, properly inflated		
<b>Rear wheel</b>	True, no missing or broken spokes, good rim		
<b>Rear quick release</b>	Secure, facing in right direction		
<b>Rear hub</b>	No wobbles, turns smoothly		
<b>Rear brake</b>	Firmly fixed, correctly adjusted, pads or blocks not worn out		
<b>Gears</b>	Mechanisms securely fixed, correctly adjusted		
<b>Chain</b>	Lightly oiled, not rusty, worn or damaged		
<b>Cables</b>	Not frayed or rusty, ends are capped		
<b>Mudguards</b>	If fitted, are secure		
<b>Lights</b>	If fitted are secure and operational if night use is planned		
<b>Other fittings</b>	Pump, bottle cage, spares bag are all secure		

# 2 Puncture Repair

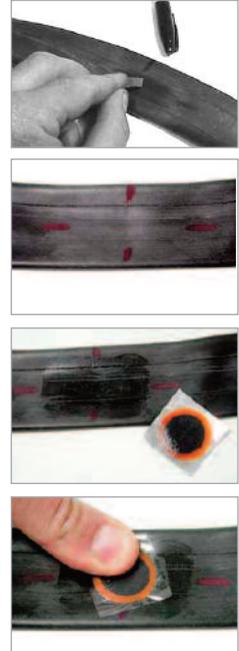
## Replacing a punctured inner tube:

- Change the rear gear into the smallest sprocket.
- Open the brake quick release.
- Open the quick release skewer at the hub.
- Lift the bike up and slap down on the wheel.
- The wheel should now be clear of the bike.
- If necessary, use tyre levers to release one side of the tyre.
- Remove the inner tube.
- Use your nails to check the inside of the tyre for anything sharp.
- Remove the cause of the puncture (if found).
- Put a little air into your spare inner tube.
- Locate the valve hole (usually opposite the maker's label)
- Place the valve through the hole and feed the inner tube into the tyre.
- Replace the free side of the tyre, starting at the valve (push gently on the valve so that only a small amount shows and ensure the tyre is well seated in the wheel rim.)
- Working away from the valve in both directions, feed the tyre back into the rim.
- Use tyre levers if necessary to make the final fitting, taking care not to pinch the inner tube between lever and rim.
- Lift up the bike whilst standing on the left side of it. Lean over and hold the seat tube just above the chain set with your left hand.
- Place the rear wheel so that the upper section of the chain is lying on top of the smallest sprocket and the sprocket is just in front of the rear gear.
- Ensuring the wheel is fitting between the rear brake shoes, pull the wheel back and slightly up.
- Check that each side of the axle is fitted into the rear drop-out.
- Refit the brake noodle and whilst applying the rear brake, close the quick release skewer.
- Pump up the tyre.



### Repairing a punctured inner tube:

- Blow up the inner tube and determine where the puncture is.
- Listen, use your upper lip or if these fail, immerse the inner tube in water, if practicable.
- Use the abrasive to rub down an area big enough to contain the patch you will use.
- Ensure the area round the puncture is dry and clean and apply a thin layer of adhesive.
- Take the backing off the patch and when the adhesive becomes very tacky, apply the patch. Press it firmly between thumb and fingers.
- Many patches have a thin plastic membrane that is slightly larger than the patch. This ensures that any surplus adhesive will not stick to the inside of the tyre if the tube is used immediately. Leave it in place.
- Patches without this membrane should be dusted with the chalk supplied.



**Apex:** The sharpest part of a turn where the transition from entering to exiting takes place.

**Bottle Cage:** A bottle cage is device used to affix a water bottle to a bicycle.

**Bottom Bracket:** The bottom bracket on a bicycle connects the crankset to the bicycle and allows the crankset to rotate freely.

**Brake pads:** The rubber blocks that attach to your brake cantilever arms and make your bike stop or slow down.

**Bridge, bridge a gap:** To catch a rider or group that has opened a gap.

**Cadence:** The number of times during one minute that a pedal stroke is completed. Also called pedal rpm (revolution per minute).

**Cassette:** The set of gear cogs on the rear hub. Also called a freewheel, cluster or block.

**Chainrings:** The gears on the front of the bike, attached to the cranks. There may be one, two or three.

**Chainstay:** The thin frame tube that extends from the rear dropout to the bottom bracket, where the bike's crankset is located. There is a chainstay on each side of the rear wheel.

**Cleat:** A metal or plastic fitting on the sole of a cycling shoe that locks into the pedal.

**Clip-in/Clipless:** Pedals that allow rider's wearing compatible shoes to lock into the pedal via a quick release mechanism.

**Clip out:** Disengage the cycling shoe from the pedal.

**Cog:** A sprocket on the rear wheel's cassette.

**Crank:** The metal arm to which the pedals attach.

**Downshift:** To shift to a lower gear, i.e. a larger cog or smaller chainring.

**Downstroke:** When the rider is pushing down on the pedal.

**Draft:** Riding closely behind another rider to take advantage of the windbreak (slipstream) and use about 20 percent less energy.

**Drivetrain:** The components directly involved with making the rear wheel turn, i.e. the chain, crankset and cassette.

**Dropout:** On a bike frame, the slots into which the front and rear wheel axles fit.

**Drops:** The lower part of a down-turned handlebar typically found on a road bike.

**Echelon:** A form of paceline in which the riders angle off behind each other to get maximum draft in a crosswind.

**Flats:** Pedals with no attaching of the shoe.

**Fork:** What holds the front wheel.

**Gears:** One of a set of toothed wheels that work together to alter the speed of a driving mechanism.

**Gear Shifter:** The lever that activates the derailleurs.

**Granny gear:** The lowest gear ratio, combining the small chainring with the largest cassette cog. It's mainly used for very steep climbs.

**Granny ring:** The smallest of the three chainrings on a triple crankset.

**Headset:** The parts at the top and bottom of the frame's head tube, into which the handlebar stem and fork are fitted.

**Hybrid:** A bike that combines features of road and mountain bikes.

**Off the back:** Describes one or more riders who have failed to keep pace with the main group.

**Overgear:** Using a gear ratio too big for the terrain or level of fitness.

**Paceline:** A single file of riders, each of which takes his/her turn battling the wind at the front.

**Panniers:** Large bike bags used by touring cyclists or commuters. Panniers attach to racks that place them low on each side of the rear wheel, and sometimes the front wheel.

**Presta valve:** The narrow European-style valve found on some inner tubes. A small metal cap on its end must be unscrewed before air can enter or exit.

**Quick Release:** Bolts with levers attached, for easy adjustment and removal of wheels and seat height.

**Schrader valve:** An inner tube valve identical to those found on car tires. A tiny plunger in the center of its opening must be depressed for air to enter or exit.

**Seatpost:** The post that attaches your seat to the frame at the seat tube.

**Seatstay:** The thin frame tube that extends from the rear dropout to the top of the seat tube. There is a seatstay on each side of the rear wheel.

**Seat Tube:** The part of the frame that accepts the seat post, and attaches the top tube to the bottom bracket.

**Spokes:** Each of the bars connecting the center of a wheel to its outer edge.

**Stem:** The piece of metal that attaches the handlebars to the headset.

**Toe Clips:** A clip-and-strap system that connects a rider's feet and toes to her pedals. Toe clips usually don't require special shoes.

**Top Tube:** The part of the frame that attaches the head tube to the seat tube.

**UCI:** Union Cycliste Internationale, the world governing body of bicycle racing, headquartered in Geneva, Switzerland.

**Upshift:** To shift to a higher gear, i.e. a smaller cog or larger chainring.

**Upstroke:** When the rider pulls up on the pedal

# Bike Diagram

