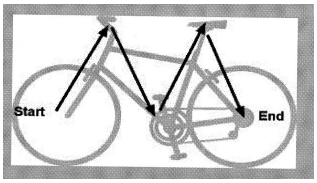
M- shape bike safety check



Please check the following safety points before each training session. These checks *do not* guarantee that the bike is in good condition or that it is not in need of further attention, only that it is probably acceptable for a single short ride. *The bike must pass all the safety checks.* If you are not able to carry out the checks and adjustments yourself, we recommend that you take the bike to a reputable cycle shop.

Key: ● Must be able to identify and adjust. ○ Identify only. Usually not possible to fix.	**Does the bike pass / fail?**
Sizing and set up	
Frame size: Can you stand over your bike (just in front of the saddle), with your heels flat on the ground and with a least 30mm clearance between top tube and crotch?	
Reach: When seated on the saddle can you reach the handle bars and brakes without feeling overstretched?	
Saddle height: Sit on the saddle. Can you reach the ground (with your heels flat on the ground if you're a pre-rider, or on tip-toe for novice riders and skill builders)? Sit on the saddle and put your right heel on the pedal. When the pedal is at its lowest point you should have just a slight bend at the knee.	
Brake lever alignment: Hands should not bend up or down to reach lever.	
Brake lever reach: Can you reach and apply both brakes comfortably? Excessive effort should not be required. Are levers too far from handlebar to reach?	
M-shape bike check	
Front wheel **Quick releases and wheel nuts:** Quick-releases must be firmly closed and the lever not exposed. Are the wheel nuts tight? Wheels should be centralised in the fork and the frame.	
Bearings: Grasp each rim and rock it from side to side. Play at the rim must not exceed 3mm (2mm for small wheeled bikes).	
Rims out of true: Spin the wheels. The rims should not touch the brake blocks or the tyre touch the frame.	
Defects: Check wheel rims for defects (dents etc.) that might cause the brakes to grab.	
Spokes: Spokes should not be corroded or loose. Missing spokes need to be replaced.	
Tyres **Inflation:** Is the tyre pumped up? You should barely be able to squeeze the tyre's side-walls between your finger and thumb. If you can noticeably squeeze the side walls they are too soft.	
Condition: The tyres should have a reasonable amount of tread and should not be cracked or split, bulging or gashed.	
Front brake **Cables:** Apply the brakes, pulling the levers back hard ten times making sure nothing 'gives'.	
Adjustment: Brakes must make contact with the rim before the lever is pulled back more than one third of its travel.	

Alignment: Ensure that the brake blocks are not rubbing against the tyre or sticking out under the wheel rims.	
Action: Push the bike backwards and forwards, applying the brakes and checking that they work.	
Attachment: The brake units should be attached firmly to the frame or fork.	
Wear: Check that the brake blocks are not excessively or unevenly worn. The metal shoe must not touch the rim.	
Cables. Cables must not be frayed, corroded, broken etc,.	
Forks & headset **Condition:** There should be no signs of accident damage such as wrinkled paint near the top of the forks.	
Alignment: The forks should follow the same line or appear to travel forwards of the head tube.	
Headset: There should be no more than a hint of rocking movement between the headset parts. Lift the front end of the bike and turn the bars slowly. There should be no more than the merest hint of 'notching'.	
Handlebars & stem The handlebars should be firmly clamped to the stem and should not move independently of the front wheel.	
The end plugs should not be missing.	
The brake and gear levers should be firmly attached.	
Stem: Check that the maximum extension height mark has not been exceeded (the mark should not be visible). Stand in front of the bike, lock the front wheel between your legs and turn the bars side to side. The stem should be firmly tightened and stay aligned with the front wheel.	
Drive system **Bottom bracket:** Try to rock the cranks from side to side. Any play at the ends of the cranks should not exceed 4 mm.	
Cranks and chainrings: They should be tight on the bottom bracket axle.	
Pedals: Check that the pedals are complete: no missing rubbers, no excessive wear. Check they are fastened tightly to the cranks.	
Front gears: Check that the chain will not come off the front chain ring(s). Check that the gears shift correctly. Look for defective cables, or defective or incompatible components.	
Chain lubrication: The chain should be lightly lubricated. A very dry or dusty chain or one with stiff links is likely to break.	
Frame & saddle **Frame:** Look for obvious defects including wrinkled paint around where the top tube and down tube meet the head tube. On folding bikes make sure the clamps are firmly closed.	
Seat post: Check that the maximum height mark on the seat post has not been exceeded.	
Saddle: Grasp each end of the saddle and try and rock it. It should not move, either up and down or side to side. The saddle should be level or point slightly down.	
To finish off **Rear brake:** 7 checks, as per front brake.	
Rear wheel/tyre: 7 checks, as per front wheel and tyre.	
Rear gears: Go through the gears and ensure the derailleur does not foul the wheel. Check that the gears do not slip, and that the chain does not come off and jam between the smallest rear sprocket and the frame.	
Finally, check for and adjust any unsafe accessories. They should all be firmly attached and not jump off or swing into a wheel or other moving part: mudguards, racks, locks, reflectors, chain guards and kick stands etc.	