

Riding a tandem with a cooperative Stoker: some hopefully helpful notes

Martin Johnson, 24th June 2012

Riding a tandem should be an enjoyable experience, enabling two people to share the pleasure of riding a bike without one being left behind, or one feeling held back, because of different abilities or fitness levels. A tandem enables those with special needs to enjoy cycling, experience a sense of freedom and take exercise outdoors, where otherwise they might not.

Riding a tandem is a little different from riding a solo bike, but it takes only a short time to become used to tandem riding. To help those new to tandem riding here are a few notes and comments:

Terms used for the notes:

Captain. This is the front rider or pilot or steersman, but not the actually the boss! The captain should be a confident experienced rider of solo bikes. The captain will need reasonable body strength for good control of the loaded bike.

Stoker. This is the rear rider or engine or navigator (depending on your preference) but is never 'the passenger' and is in fact the leader of the pair in terms of distance, speed and stopping points. The stoker should keep sudden movements to a minimum, and not change balance (having a drink, putting a hat on, etc) without a warning to the captain.

1. For the first ride on the bike, the captain should ride alone. Tandems are not really much heavier than solo bikes and getting used to the controls and handling is much easier on your own.
2. When mounting the bike, the captain should be standing over the frame of the bike and holding it upright, stationary, and steady before the stoker climbs on to the rear saddle. Once the stoker is settled and comfortable, then you are ready to move off.
3. Moving off on a tandem is the hard bit. Both riders should have the right pedal at about 2 o'clock when viewed from the right, to give maximum power on the first push. You cannot start a tandem by 'scooting' with one foot until the bike is moving, nor can you stand on the left pedal and push off with the right foot then swing your leg over the saddle... When the captain is ready use your agreed start words – count down 3,2,1, go; ready, steady, go or whatever you agree on, and then GO with a firm push. A tandem has rubbish handling at low speed, so the trick is to get moving quickly and smoothly, in a straight line if possible. This is where the stoker's contribution is really important. If you can, practise this as a team somewhere safe (school playground, local car park or quiet side-streets) and get used to starting off and stopping safely before moving to the main roads or into traffic.
4. While riding along, keep the pace steady at first, and make any gear changes carefully, after letting the stoker know in advance. After a while, this becomes more natural and you don't need to announce them, but it usually helps to ease pedalling pressure but keep the pedals moving when changing gear. Tandems have long cable runs between gear lever and the gears, and can be slow to change. Again, this is something that the initial ride alone will have hopefully helped with.
5. Agree between you on an 'Emergency stop' signal that the stoker can give to the captain – something like two firm slaps on the back. That way even in noisy traffic, windy conditions etc, the message gets through! It can be surprisingly hard for the captain to hear the stoker, and vice versa.
6. When stopping at lights or a junction, the captain should put one foot down, as on a solo, but be prepared for the heavier load that he will have to support. Depending on what you agree as a team, the stoker can also put a foot down to help steady the bike.

7. Once stopped, if you are going to both dismount rather than move off straight away, then the stoker should climb off first while the captain holds the bike steady and still again.
8. The one I learned the hard way – if there are overhanging branches, or other obstacles that require you to duck; if you are the captain do not just duck your head – SHOUT a warning to the stoker! If you duck and do not shout, the stoker gets a face-full, and the captain an earful.

Captain's job.

1. The captain is responsible for controlling the bike while riding (steering, braking, gear selection) and so needs to be an experienced and confident rider of solo bikes.
2. The captain is responsible for controlling the bike when stopped (keeping a brake on, holding the bike upright) so that the stoker can mount and dismount safely.
3. The captain is responsible for making sure the stoker is happy, comfortable and enjoying the ride. He must stop when the stoker wants or needs to, he must slow down if the stoker wants to, and he should keep the stoker (who cannot see the road ahead) warned about bumps, potholes and overhanging branches ahead so that the stoker is ready for them.

Stoker's job.

1. The stoker should provide a good burst of smooth power when setting off, to help get the tandem up to speed (and therefore improve stability and handling) as quickly as possible.
2. The stoker should make every effort to move smoothly and keep balanced – sudden lurches or shifting in the saddle make handling of the bike more difficult for the captain.

General.

1. The tyres need to be inflated to the highest pressure marked by the manufacturer on the side of the tyre. The tyres must safely support the load of two riders and their luggage, and if they are too soft there will be a loss of control on corners and whilst braking, as well as an increased risk of punctures. Tyres should be checked before each ride, and if they are worn or damaged should be replaced.
2. Brakes should be in good condition, correctly adjusted and effective at stopping the bike. Brakes should be checked before each ride, and if there is any doubt or concern take the bike to a local bike shop or experienced repairer. Stopping a tandem requires much more braking force than a solo bike, and effective brakes are needed.
3. If your ride might involve riding after lighting up time, the bike will need working front and rear lights to comply with the law, and to ensure you are visible to other road users for your safety.
4. Any luggage must be secured before setting off. The captain cannot see the rear panniers while riding, and loose straps or buckles will eventually get amongst the spokes if they can.
5. Quick saddle height guide: Wear the shoes you will ride in. Sit on the saddle with both feet on the pedals (someone else holding the bike up!) Put your heel on the pedal, and have the crank in line with the seat tube. The saddle is about right if you can just straighten your leg fully. Make small adjustments from here once you have ridden a bit and see what feels right.