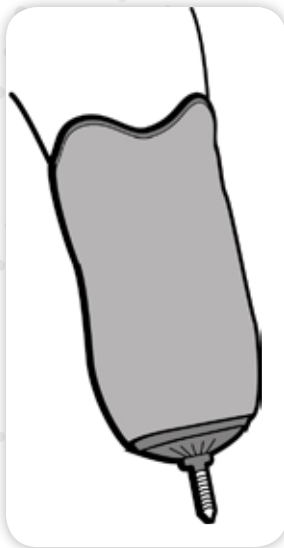




Cycling Aids for Leg Amputees

Once spring arrives, many leg amputees begin gearing up for the cycling season. This activity provides a good cardiovascular workout while placing minimal stress on the residual limb(s). Special adaptations have been designed to make cycling a safe and pleasurable experience for leg amputees. Sometimes a little ingenuity is enough, but in other cases changes to the bike itself are necessary.



The method of suspension used can play a large part in comfortably riding a bike. Locking liners for leg amputees lock the liner in place, holding the artificial limb securely during the repetitive action of cycling. Above knee amputees who wear a suction socket may need auxiliary suspension to ensure their artificial leg stays firmly in place. The Ottobock and Power Short suspension belts are good options.

A hinged crank arm was specially developed to aid amputees with a Van Nes rotationplasty who find it impossible to use a normal pedal due to limited rotation ability. To create a hinged arm, a single crank arm was cut in half and reconnected to form a free-moving axle. This allows the amputee to complete a rotation: the pedal reaches half a rotation and the hinge pushes the pedal across to complete the action, which generates power on the amputated side.



This device can also be swapped between bicycles and is easy to mount.

Velcro fasteners are a simple solution that can help keep an artificial foot on a pedal. As pictured here, the Velcro “loop” is attached to the shoe on the artificial leg and the Velcro “hook” is attached to the pedal. An artificial foot should never be secured to a pedal in such a way that it cannot easily and quickly be pulled from the pedal if the cyclist falls.

