

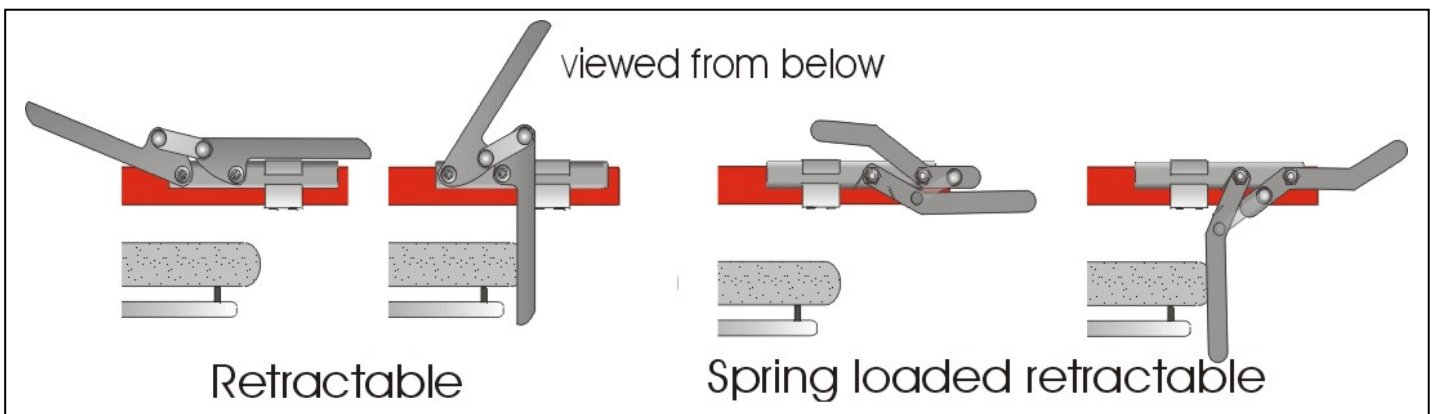
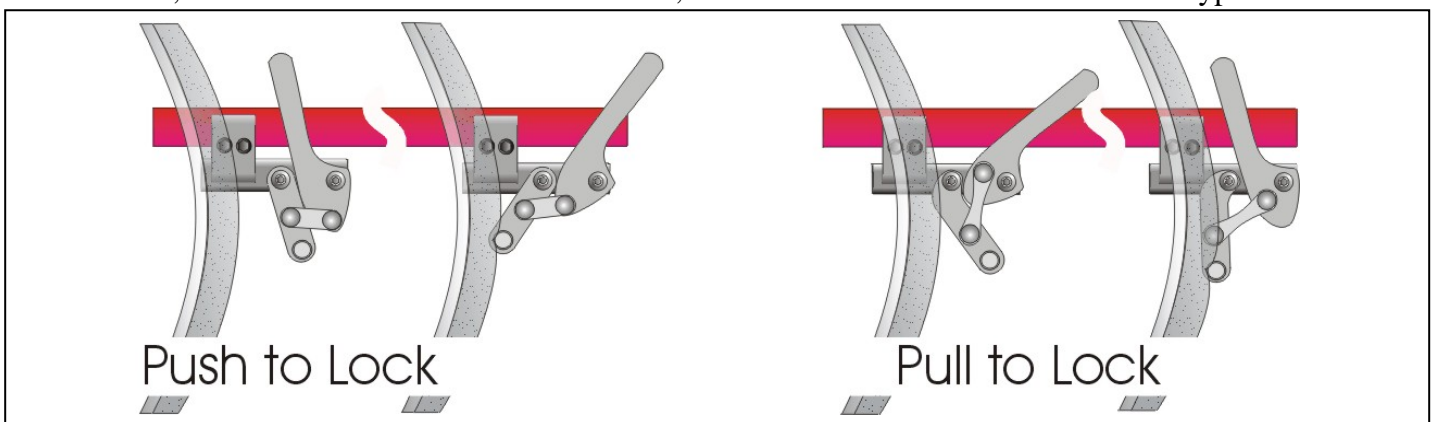
Wheel Lock Adjustment

Wheel Locks used to be called brakes until a lawsuit was launched by someone who used the device to slow themselves down and fell out of their chair. They could have been called parking brakes but wheel locks won.

This information only covers wheel locks that work by putting pressure directly on the tire but since that covers about 98% of the wheelchairs you are likely to see it should be enough. Other wheel locks are available that act on the hub either directly or via a cable and or disc. They are uncommon and not covered here.

Types of Wheel Lock

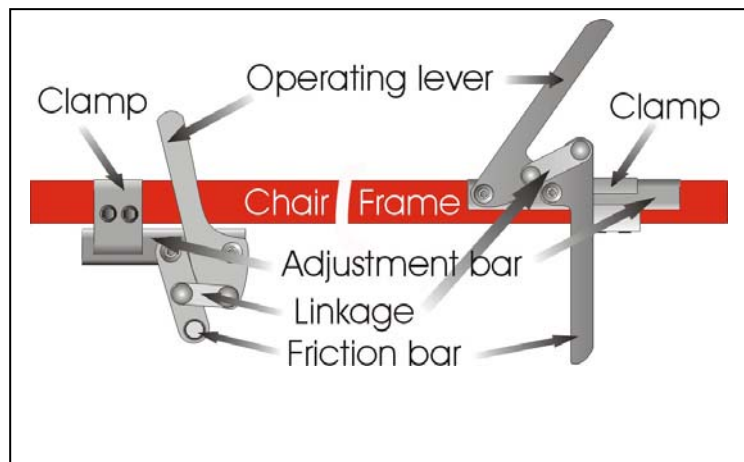
In this class, while there are a number of variations, it boils down to two main and two sub types:-



Reasons for wheel locks not working	Solution
Pneumatic tires deflated	Inflate tires
Worn down solid tires	Replace tires and /or adjust wheel lock position
Worn friction bar on lock	Adjust wheel lock position
Axle position was adjusted	Adjust wheel lock position
New wheels and / or tires	Adjust wheel lock position
Wheel lock linkage sloppy	Adjust linkage tension

With pneumatic tires always check inflation. Recommended pressure is marked on the tire wall.

Adjusting wheel lock position

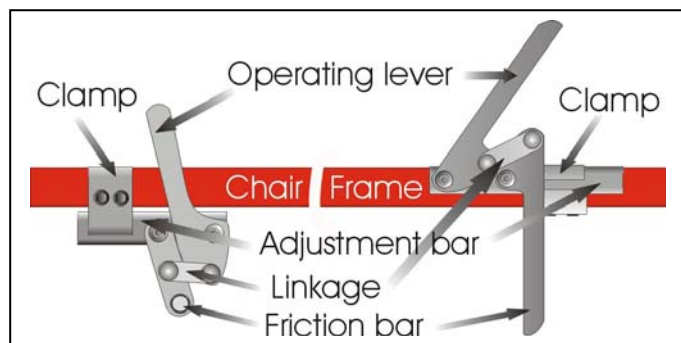


1. Apply the wheel lock using the operating lever and determine how far the friction bar needs to move.
2. Release the wheel lock.
3. Loosen both bolts securing the clamp to the chair frame.
4. Slide the adjustment bar the appropriate amount.
5. Tighten the bolts
6. Apply the wheel lock.
7. Check to make sure the wheel doesn't rotate and the chair user can operate it.

Adjusting the Linkage Tension

Most wheel locks have four pivot points. There are two on the adjustment bar and two on the linkage that connects the operating lever to the arm that applies friction to the tire. All pivot points have to allow free movement in one plane only. On better wheelchairs a low friction washer is used between each metal component. As the components wear they can either seize up or get sloppy depending on circumstances. In either case cleaning, lubrication, and adjustment will help.

The two pivot points on the adjustment bar are generally bolts and nylock nuts. The two pivot points on the linkage can be either bolts and nylock nuts, or rivets. If they are rivets they cannot be adjusted. If they are bolts they can.



1. Loosen bolts.
2. Spray anti-friction washers with a Teflon™ lubricant and wipe off the over spray.
3. Tighten bolts until snug.
4. Back off a little at a time until the mechanism moves with minimal resistance.
5. Adjust the wheel lock as described earlier.

If the wheel locks become sloppy quickly, replace the nylock nuts and / or use Loctite on the bolt threads.