

TECHNICAL SOURCE GUIDE

LOCKING HARDWARE

By Mark Shanda, Ohio State University, Columbus, OH

In an attempt to join pieces of scenery together in a quick and efficient manner, many varieties of hardware have been used over the years. Most of us who work in theatre technology are familiar with the Simmons Roto Lock. Commonly referred to as a "coffin lock", this unique locking hardware is often used in joining individual platform decks together. With the simple twist of a 5/16" hex wrench, the male latch rotates into the female receptacle, providing a very positive joint. The Roto Lock was originally designed for the commercial display market and other related areas. Its quick latching and secure holding capabilities have made it an ideal piece of hardware for theatre.

The standard Roto Lock latch, part number 2-67-0055-02, is 1.72" x 3.38". The standard receptacle, part number 2-67-0002-02, is 1.25" x 3.38". Both halves are .63" thick. Convenient mounting holes are provided for either bolting through the face of the hardware or through the rear of each part. Roto Locks can be used in both a side-mount and a right-angle position, making them not only useful for joining platform decks but also for joining flats and stud walls. Simmons has recently introduced two other versions of this lock: the Shallow Tab and the Deep Tab version. With the addition of winged mounting tabs, there is even more flexibility in how the Roto Lock can be used.

Although the Roto Lock is commonly used in many theatre shops across the country, its size may preclude its use in smaller applications. The Link-Lock, a smaller locking hardware device, has been a Simmons product for years. Its original use was in the case manufacturing market for companies such as CCN (Case Component Network), and for the military. While Roto Locks address a variety of theatrical joining problems, the two halves of the device do require careful alignment for positive locking. The Link-Lock offers many of the same benefits of the Roto Lock without the need for precise alignment. The Link-Lock is an over-center cam-actuated tension latch that is available in a variety of sizes and styles. The style and size we use most is model number 2-56-1796-07 lock and 2-56-0371-07 keeper. With a 180° twist of the large wing nut, the hook engages the keeper plate for a firm closure. Due to the unique design, misalignment and irregularities in surfaces can be compensated for. The Link-Lock 2-10 can hold up to 1,000 pounds of tension, the 2-5 up to 550 pounds of tension, and the 3-10 up to 300 pounds of tension, compared with the 1,200 pounds held by the Roto Lock.

We have seen these unique latches on road boxes for years, but their application on theatrical scenery should not be overlooked. Link-Locks have been used to join parallel and angled flat stiles together, to anchor rolling Platforms in place, and even to secure a turntable on spike. (One note of caution: the cam action of the Link-Lock is powerful enough to shift an 8' diameter turntable off its center point.)

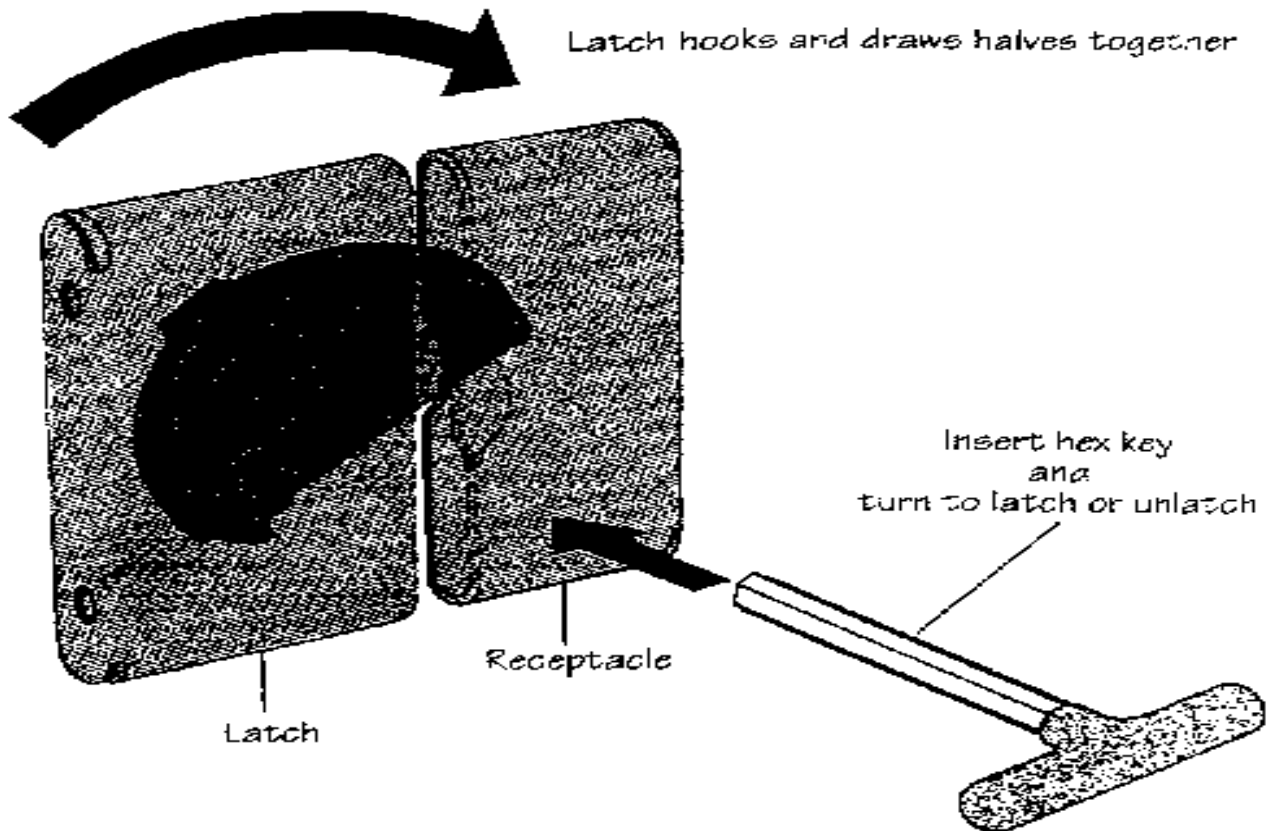
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For additional information about these and other Simmons products, contact:

*Simmons Fastener
1750 N. Broadway
Albany, NY. 12201
Phone: (518) 463-4234
Fax: (518) 463-0360*

They are happy to send out product information and to put you in touch with a local distributor. Roto Locks are available from a variety of theatre supply houses. Link- Locks may be ordered in minimum orders of 50 from most distributors.

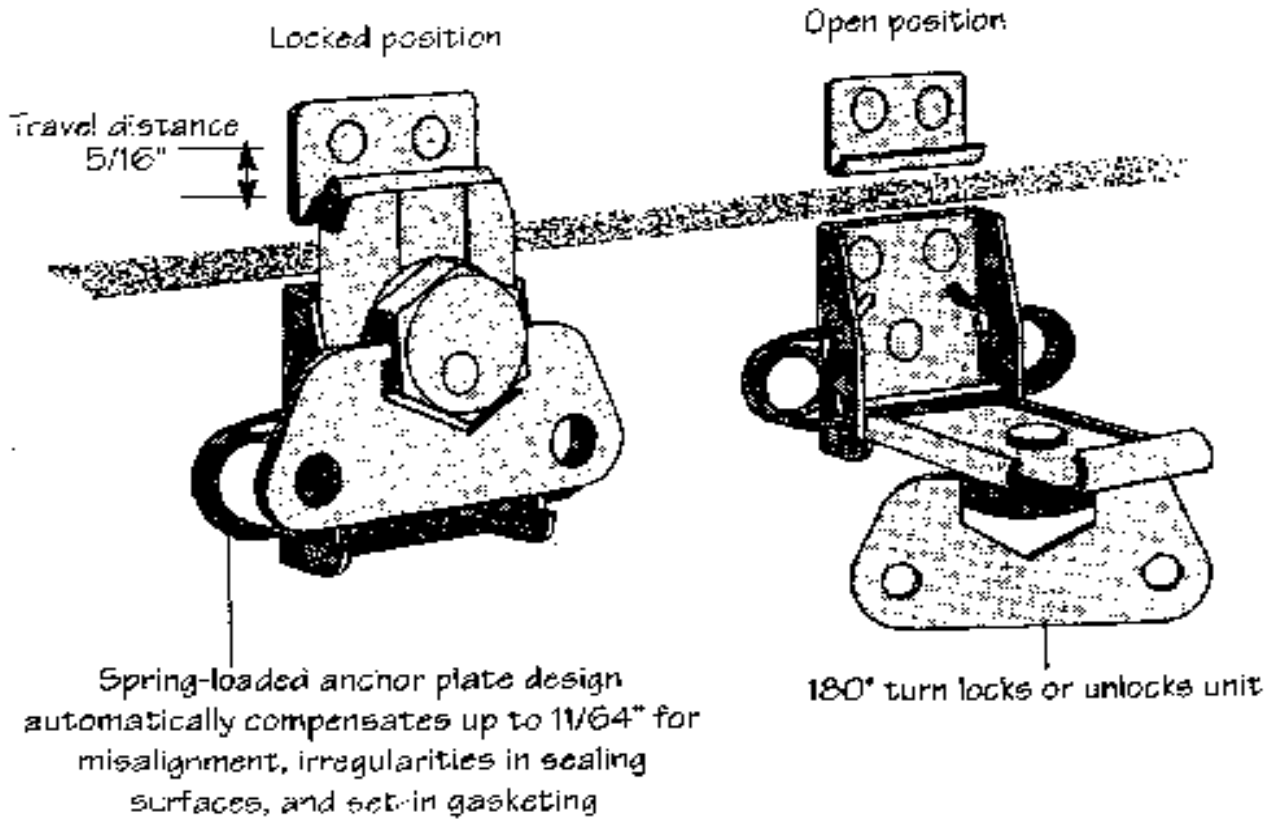


Typical Roto Lock

Unit is also available with deep and shallow tabs to secure during installation

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2-5 Link-Lock Fastener

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