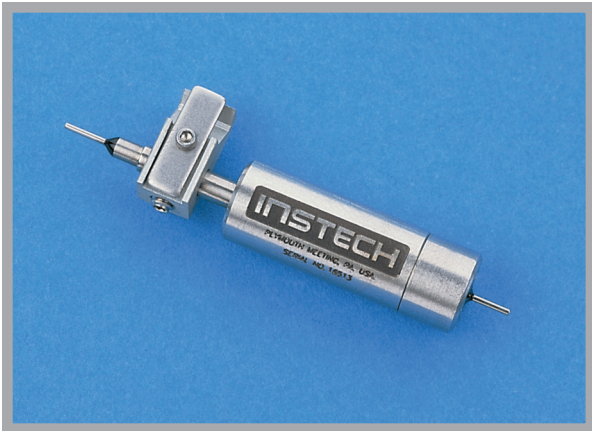


Instructions for Use: Single Channel Stainless Steel Swivels

375/25
375/22
375/20
375/18TW



Intended Use

Prevents tangling of IV line during laboratory animal infusion or sampling. To be used in combination with a [spring tether](#).

Warnings

- Pull water then air through swivel after every use.
- Sterilize by heat, EtO or cold sterilant.
- If bearings get wet, disassemble and oil.
- Most swivels built before 2012 have stainless steel bearings and are not recommended for self-administration studies involving cocaine or other narcotics. 22, 20 and 25ga swivels built in 2012 and after have torlon bearings and may be used in self-administration studies without voiding the limited lifetime warranty. Swivels with torlon bearings have a cream-colored identification card in the box which does not include a warning against use in self-administration studies; older models have a white card that does contain this warning.

Use

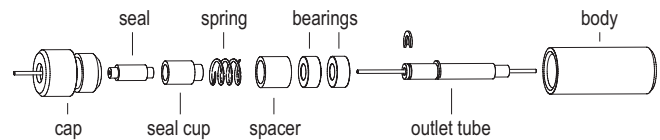
1. Sterilize fluid path prior to use.
2. Set up mount above the cage to give animal the greatest range of movement. [CM375BS](#) counter-balance recommended for most shoebox cages. Use [MCLA](#) for microdialysis; [SMCLA](#) for mice. Tighten mount to swivel body (with logo) not cap.



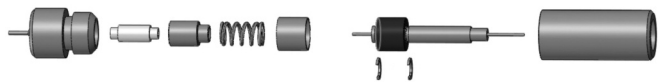
3. Attach spring tether to V-block of universal clamp using included 0.050" allen wrench.
4. Attach IV lines. See [Guide to Tubing Fit](#) for compatible tubing choices.
5. Clean after every use to prevent built up of salt crystals or particulate that can clog swivel. Use a syringe to suck water back through the swivel to dissolve salts. Avoid forcing fluids through a swivel with a syringe or pump as the pressures this generates can damage the seal. Next, dry the insides by using the syringe to pull air through the swivel.

Troubleshooting

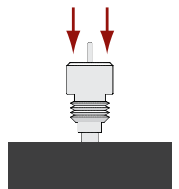
Swivel with s.s. bearings



Swivel with torlon bearings



Swivel leaks. Swivel seals can leak if fluids are forced through it with high pressure from a syringe, either manually or via a syringe pump. The seals are under pressure from a spring and should reseal immediately; however, the swivel should be disassembled, cleaned and oiled (see below) so that the bearings do not rust. Continuous leaks indicate a damaged seal. To tighten the seal: disassemble swivel, place the white Teflon seal in the cap, place seal cup over seal, then press down on a flat surface to reshape the seal. Flip seal over and repeat. If the swivel continues to leak, return for factory service or order replacement seals.



Swivel does not turn freely. [Note: this section applies only to swivels with stainless steel bearings, generally those built before 2012.] Most frequently due to rusted bearings as a result of a leak or spillage of fluids. Disassemble and wash parts with hot water and detergent or a short dunk in an ultrasonic bath. Rinse and dry all parts. Lubricate bearings with a light machine oil such as 3-in-One®. Blow dry again then reassemble.

Swivel clogged. A swivel can become plugged if it is not cleaned and dried after use or if it is dropped and cores out flooring. Dis-

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assemble and determine which part is clogged. Take care not to deform white Teflon seal. Place clogged part in a short ultrasonic bath. Clear hole with wire, if required. Blow dry. If stainless steel bearings have been washed, apply light machine oil then blow dry again. Reassemble.

Tube bent. Try to straighten with needle nose pliers. If the tube breaks, return to factory for repair.

Repair

Factory repair of single channel stainless steel swivels, other than for clogs or damage from mishandling, is typically covered by the Limited Lifetime Warranty. In no case will repair charges exceed the cost of a new swivel. Visit our website to [request an RA number](#) before returning any equipment.

Alternatively, [repair tool and part kits](#) are available for users that prefer to do it themselves.

Specifications

See <http://www.instechlabs.com/downloads/swivels.pdf>.