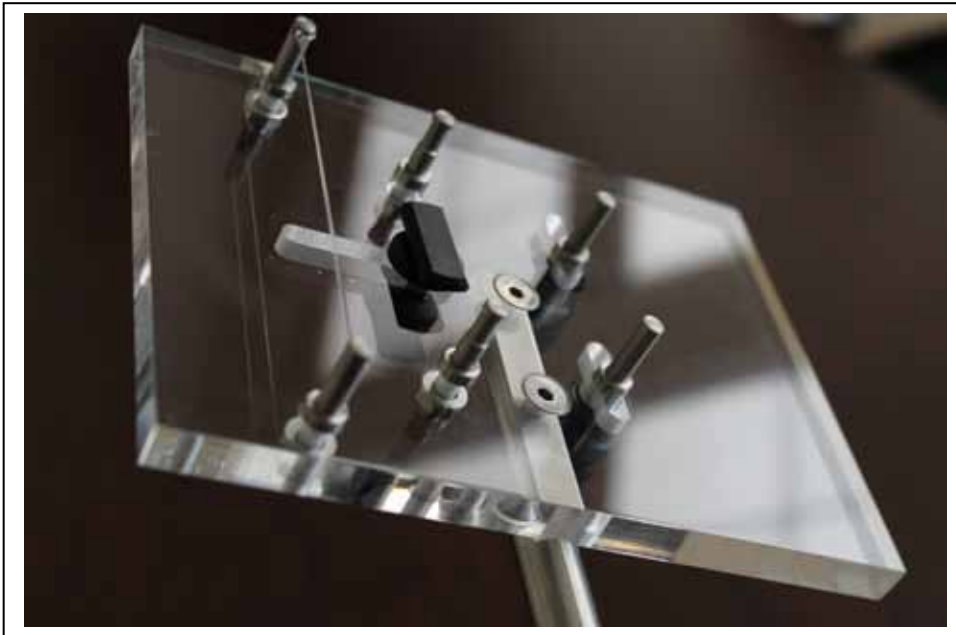


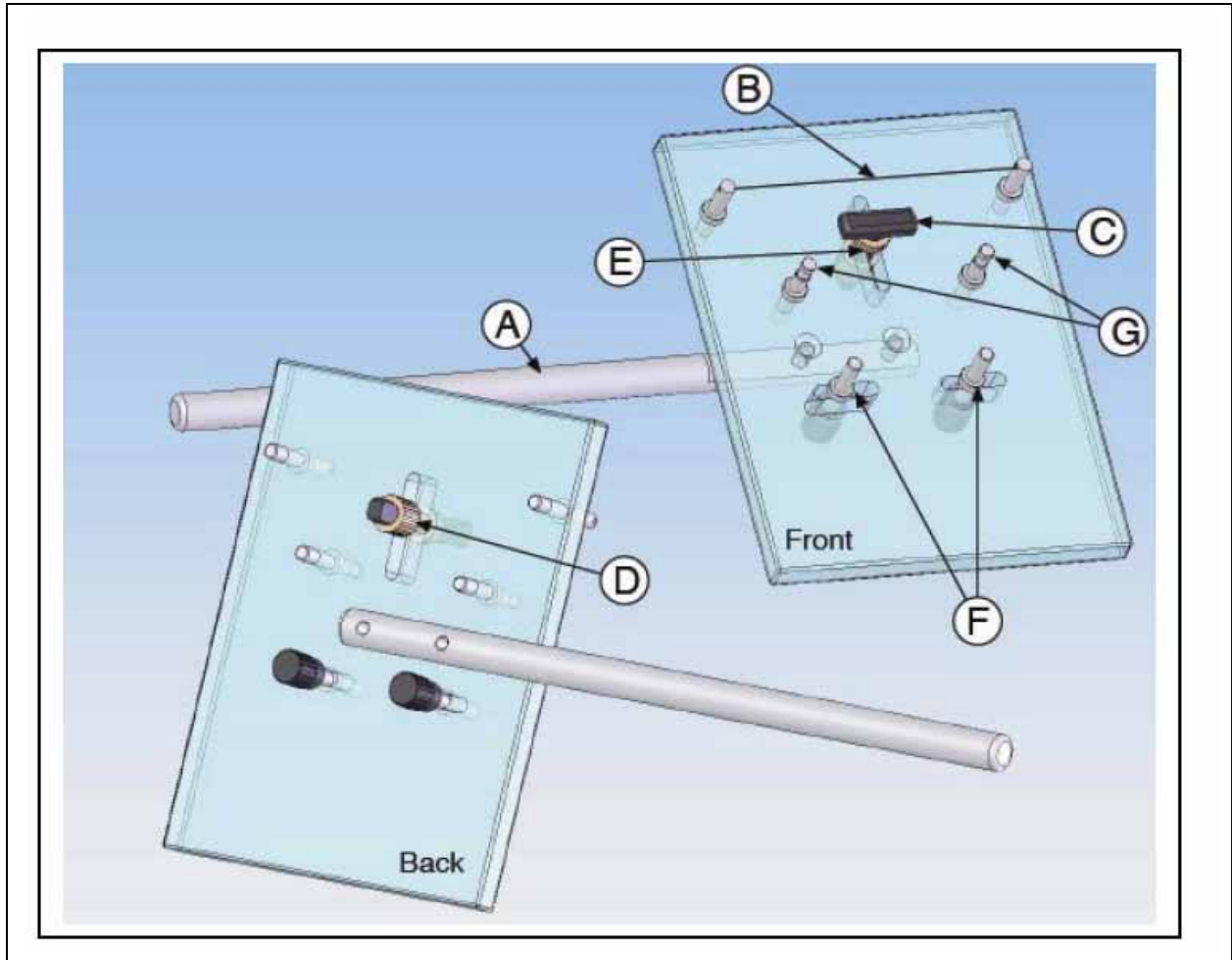
Mouse Intubation Platform (MIP) Instructions for Use



Description

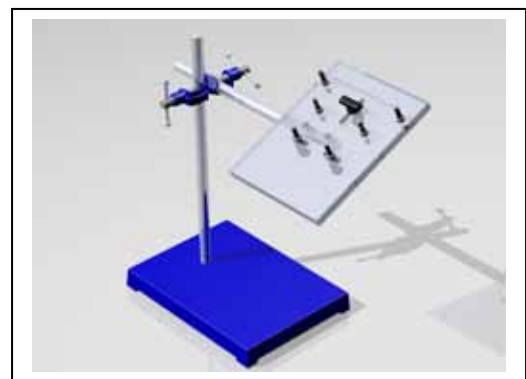
Endotracheal intubation of anesthetized mice can pose challenges due to the animal's small size and unique anatomy and the difficulty in visualizing the epiglottis. Researchers performing intratracheal aerosol administration to mice with Penn-Century's unique MicroSprayer® Aerosolizer and Dry Powder Insufflator™ face similar challenges. Having a platform especially designed for mouse intubation can make the process far safer, faster and easier. The Penn-Century offers a Mouse Intubation Platform is designed to assist researchers working with our intratracheal aerosol devices, or other intubation or instillation procedures in mice. It is simple, durable, easy-to-use system for supporting the anesthetized mouse securely during intubation and/or insertion of our aerosol delivery devices.

- Solid Plexiglass®/Perspex® base and stainless steel support rod, attaches to any standard laboratory clamp stand (not included)
- Unique adjustable neck support can be swiveled to maximize view of the trachea.
- Stainless steel posts with plastic "wire" maintain the anesthetized animal in the correct position for intubation, suspended from the front incisors
- Two fixed side posts and two adjustable posts permit the user hold the mouse securely in place



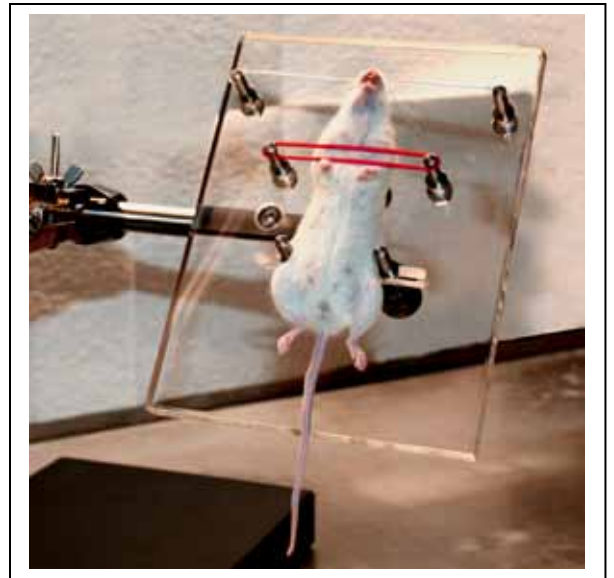
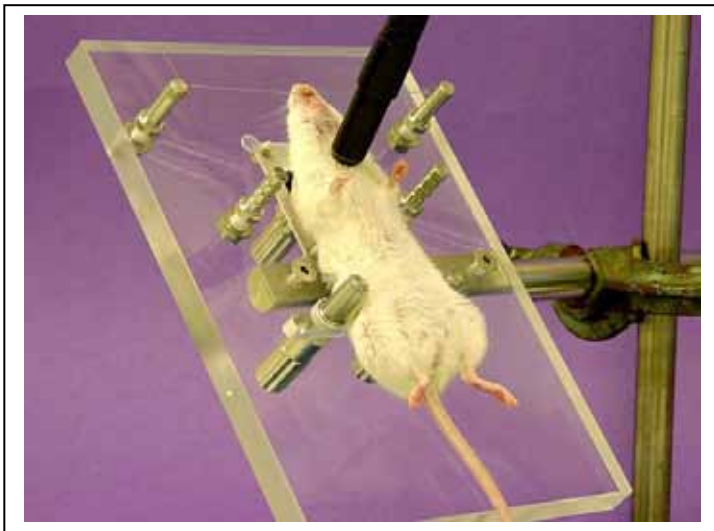
To assemble:

1. Unscrew the screws attached to the end of the steel support bar (A) using the small hex wrench provided.
2. Line up the holes on the steel support bar with those on the base of the platform, and insert the screws up through the base into the steel bar.
3. Tighten screws with hex wrench firmly, but not with excessive force - until the top of the screw is even with the surface.
4. The platform is designed to be attached to a standard laboratory holder-clamp setup (not provided). Clamp the bar in place and position the platform and bar angle as desired.



For intubation procedures:

1. Position the anesthetized mouse so that it is suspended from its front incisors on the nylon wire provided (B). This wire can be sterilized after each use. Additional replacement wire is provided.
2. To adjust the rectangular neck support bar(C), reach under the platform and loosen the black Delrin® knob (E) from below. Slide the neck support up or down or swivel it to the desired position and retighten the knob.
3. If the animal is especially large, you may remove the neck support completely by unscrewing the knob below all the way until it comes off of the post to which it is attached. Note: The device is not intended for use with rats of a standard size.
4. The two middle steel posts (G) are intended to secure the animal across the chest with a rubber band. Several extra rubber bands are provided. Simply attach the rubber band to one post, pull it across the mouse's chest and attach to the opposite post. Adjust as needed.
5. The two lower steel posts are to secure the mouse on its back and prevent lateral movement while anesthetized. They may be adjusted from right to left as needed. To do so, loosen each post one by one (F) by reaching below and unscrewing the black knobs while grasping the circular nuts above the platform. Slide the posts to fit the width of the animal *without applying pressure on it*. To tighten the knobs, hold the silver circular nuts in place with one hand while tightening the knob from below with the other.





Cleaning instructions:

1. The entire Plexiglass®/Perspex® base and all the fittings may be cleaned with ethanol or a dilute solution of (e.g. Clorox® /Clidox®). The device may be immersed in the solution and/or it may be applied generously with a paper towel, sponge or soft cloth. Do not use abrasive pads, or common glass or window cleaners that contain alcohol or ammonia – such as Windex™ which can harm the surface. Do not autoclave the device or subject it to high heat as this will cause it to warp.
2. The nylon “wire” can be cleaned and re-used. Additional wire is provided. The stainless steel posts and the Delrin® fittings can be wiped clean with a damp cloth, using ethanol or (e.g. Clorox® / Clidox®).
3. Dry the platform with a soft, lint-free clean cloth.

This device is for laboratory use only; not for human in vivo use.

Questions? Call Penn-Century, Inc. (215) 753-6540