

# NUMMECH PRODUCTS – MACHINED MACROLINE FITTINGS

Airsmiths have many tips and tricks to share when using macroline fittings! Please read these notes before installing.

## Tools for installation and removal:

Straight fitting: 3/16" allen key (internal)

Swivel fitting: 9/64" allen key

## Remember – do not overtighten!!

The fittings should rely on thread sealant, not hand-torque.

## Installation using thread sealants:

We recommend using a liquid threadlocker for the most reliable seal. Below is a short list of common threadlockers:

- Loctite 242 (blue), Vibra-tite 111 liquid (purple), or Vibra-tite 125 (gel) are all ideal for most pressurized fittings.
- Avoid using red Loctite or red Vibra-tite for most air fittings.
- Many paste-style sealants will also work, such as Loctite 567. (note – some pastes do not require curing time)

1. Clean all substances from the threads prior to applying liquid thread sealant.

**If you wish to reduce curing time**, use a primer such as Loctite 7649, Vibra-tite 611, or isopropyl alcohol. Sealants won't adhere to dirty threads so it's a good practice anyway.

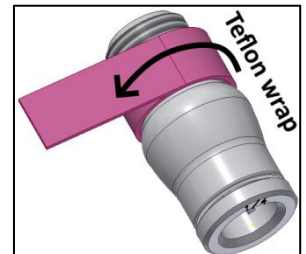
2. Shake the container of threadlocker for 30 seconds before apply 1-2 drops to the male threads.
3. Install the fitting hand-tight using an allen key. Do not overtighten the fitting.
4. Allow ~24 hours to cure before testing. If the seal leaks, you may need to remove and clean the threads, then re-apply and let set for another 24 hours or more.



## Installation using Teflon tape:

Teflon tape can be used to bypass the curing time and expedite the testing process. However, the teflon seal will degrade and eventually need to be re-applied. Caution must also be used to prevent stray chunks of tape from getting sucked into the marker, because they will clog the tiny orifices inside solenoids and other valves.

1. Wrap a strip of teflon tape 3 times around the male threads in the direction shown.
2. Install the fitting hand-tight using an allen key. Do not overtighten the fitting.
3. The fitting can be pressure-tested immediately.



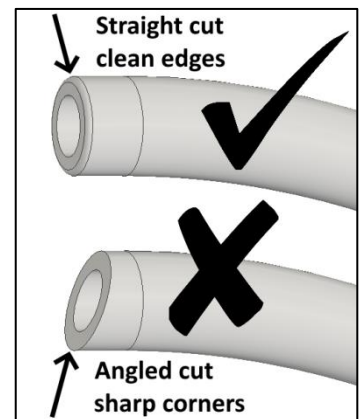
## Hose trimming:

Macroline fittings are "push-to-connect", meaning the clamp collar must be pushed inward to release the hose for removal. The collar's clamping action prevents the hose from blowing out under normal conditions.

When trimming hose to the proper length, cut it perpendicular for best results.

After cutting, use a knife or file to remove the sharp outer edge. Sharp edges may damage the macroline fitting's internal o-ring.

After repeated use, the hose may develop a wear-ring and need to be trimmed or replaced.



## Air fitting o-ring:

Macroline fittings seal using a size **10/70 o-ring** located inside.

If a leak develops, either the o-ring is worn (replace it) or the macroline hose has become damaged by the clamping collar (trim the hose or replace it).

The internal o-ring can be easily extracted with a bent dental pick.

"Soft" 70 durometer hardness o-rings tend to seal better than stiffer 90-durometer o-rings, but anything can be used as a field replacement.

