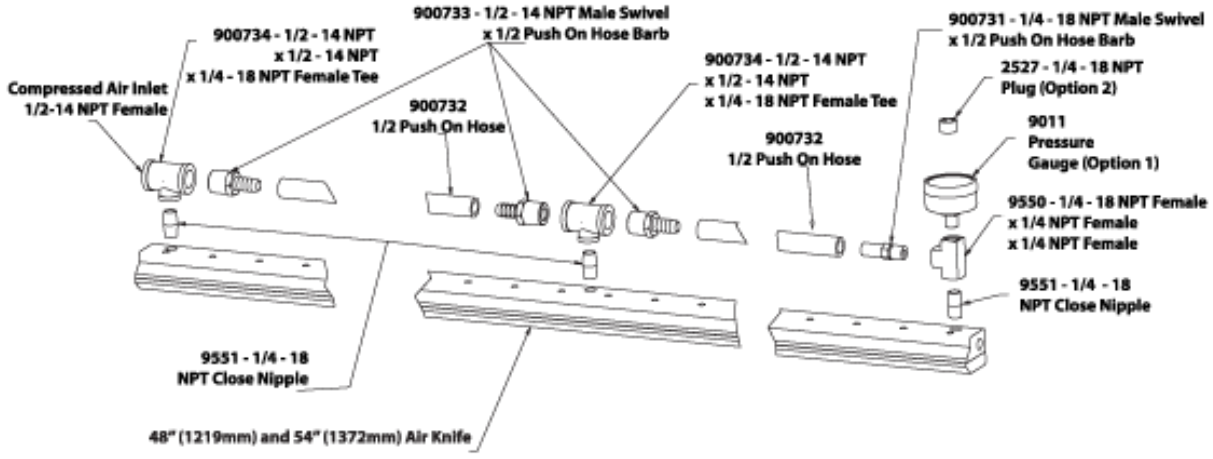
EXAIR® EXAIR TECHELP 1-800-903-9247

MODEL 9077 UNIVERSAL AIR KNIFE PLUMBING KIT INSTALLATION & MAINTENANCE

This Model 9077 Universal Air Knife Plumbing Kit is used to interconnect the compressed air inlets on each end of any single Air Knife that has a length over 42" (1067mm) through 54" (1372mm). The components of this kit have been sized appropriately to obtain best performance from the Air Knife (maintain uniform airflow across the entire length).
The Model 9076 Universal Air Knife Plumbing Kit should be used for lengths from 24" (610mm) - 42" (1067mm).
The Model 9078 Universal Air Knife Plumbing Kit should be used for lengths from 60" (1524mm) - 84" (2134mm).
The Model 9079 Universal Air Knife Plumbing Kit should be used for lengths over 84" (2134mm). Air Knives less than 24" (610mm) can be supplied at one compressed air inlet. See Lit 2111 and 2112 for Stainless Steel Air Knife Plumbing Kits.

To connect bottom compressed air inlets, use this diagram.



Pipe thread sealant should be applied to all threads (small packet included). Avoid the inside diameter of the fitting so it does not enter into the Air Knife.

STEP 1 – Install the Model 9551 ¼ NPT Close Nipple into the compressed air inlet on the bottom of the Air Knife on the end that will be connected to the plant compressed air supply. Install another Model 9551 ¼ NPT Close Nipple into the center inlet of the Air Knife.

STEP 2 – Using the (2) Model 900734 ½ x ½ x ¼ NPT female pipe Tees, install one onto each Model 9551 Close Nipple and tighten with ½ NPT female connections directed to the ends of the Air Knife.

STEP 3 – Install a Model 9551 Close Nipple into the remaining bottom inlet of the Air Knife. Install a Model 9550 pipe Tee onto the Model 9551 Close Nipple and tighten so the ¼ NPT female connection is directed to the opposite end of the Air Knife.

STEP 4 – Using the (3) Model 900733 ½ NPT x ½ Hose Barb fittings, hand tighten them into all the ½ NPT female connections of the two Model 900734 ½ x ½ x ¼ NPT female Pipe Tees as shown. Hand tighten the Model 900731 ¼ NPT x ½ Hose Barb into the horizontal ¼ NPT female thread on Model 9551 ¼ NPT pipe Tee.

STEP 5 – Determine the length of hose that is necessary by measuring from outside the yellow collar of the one barb fitting to the outside the yellow collar on the opposite fitting. For a tight hose, cut the hose to this exact length. (Increasing the hose length will result in a loose hose). **NOTE: The two hose lengths on a 54" (1372mm) Super Air Knife will be different from each other due to the location of the center inlet.**

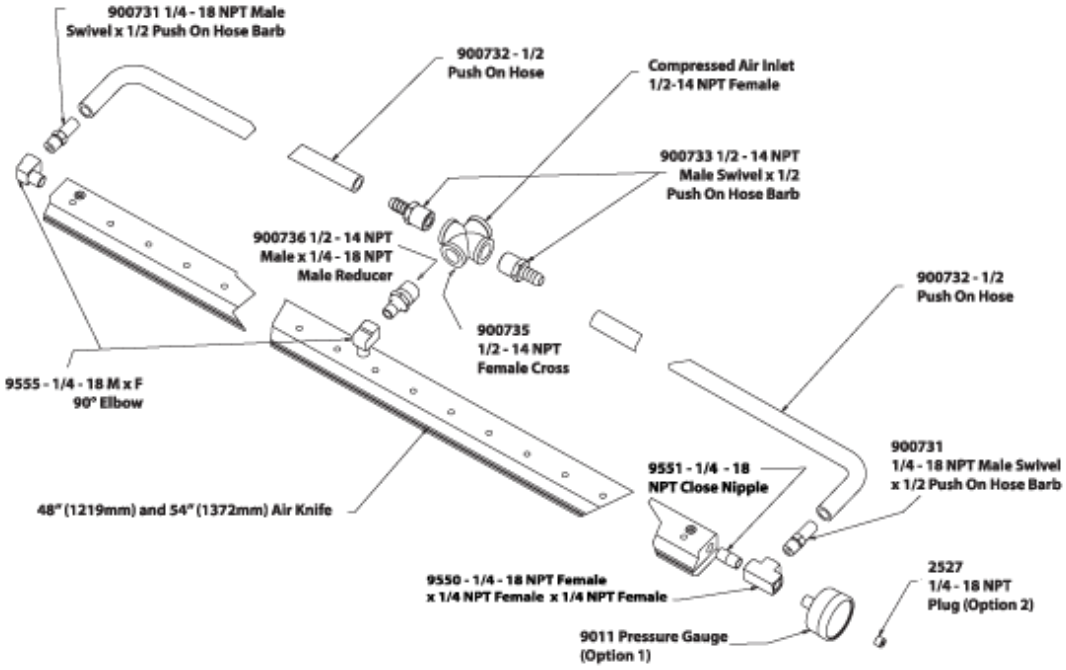
 ©2026 EXAIR LLC 3/1/26

STEP 6 – Remove hand tightened barb fittings and push the hose on to the hose barbs. You may use a glycerin based lubricant such as soap (not included). **DO NOT USE AN OIL BASED LUBRICANT TO INSTALL THE FITTINGS.**

STEP 7 – Install and tighten the ¼ NPT male ends of the hose into the Model 9551 ¼ NPT female Tee connections. Install and tighten the ½ NPT male end of the hose into the Model 900734 ½ NPT female Tee connection.

STEP 8 – A Model 9011 Pressure Gauge is provided to monitor the pressure at the Air Knife. You may choose to install it or the Model 2527 Pipe Plug into the remaining ¼ NPT female connection of the Model 9551 Tee. Your Air Knife is now ready for installation.

To connect compressed air inlets on each end and the center, use this diagram.



Pipe thread sealant should be applied to all threads (small packet included). Avoid the inside diameter of the fitting so it does not enter into the Air Knife.

STEP 1 - Install the Model 9550 ¼ NPT Close Nipple into the compressed air inlet on one end of the Air Knife. Install a Model 9550 Tee onto the Model 9551 Close Nipple.

STEP2 – Using the (2) Model 9555 ¼ NPT male x ¼ NPT female 90 degree Elbows, install one into the bottom center compressed air inlet of the Air Knife. Install the second elbow into the compressed air inlet at the opposite end of the Air Knife.

STEP 3 –Using the (2) Model 900731 ¼ NPT x ½ Hose Barbs, hand tighten one into the Model 9550 ¼ NPT pipe Tee, and the other into the Model 9555 ¼ NPT male x ¼ NPT female 90 degree Elbow on the opposite end as shown.

STEP 4 – Install the Model 900736 ¼ NPT male to ½ NPT male Reducer into the Model 9555 ¼ NPT male x ¼ NPT female 90 degree Elbow that was previously installed in the bottom center compressed air inlet of the Air Knife. Install the Model 900735 ½ NPT female Cross onto the Model 900736 ¼ NPT male to ½ NPT male Reducer.

STEP 5 –Using the (2) Model 900733 ½ NPT x ½ Hose Barbs, hand tighten them into the opposite ends of the Model 900735 ½ NPT female Cross as shown.

STEP 6 - Determine the length of hose necessary by measuring from outside the yellow collar on the Model 900733 ½ NPT x ½ Hose Barb to the hex portion of the Model 900731 ¼ NPT x ½ Hose Barb. Add two inches to your measurement to avoid any potential kinks in the hose. Cut the hose to this length. **NOTE: The two hose lengths on a 54" (1372mm) Super Air Knife will be different from each other due to the location of the center**

 ©2026 EXAIR LLC 3/1/26

STEP 7 - Remove hand tightened barb fittings and push the hose on to the hose barbs. You may use a glycerin based lubricant such as soap (not included). **DO NOT USE AN OIL BASED LUBRICANT TO INSTALL THE FITTINGS.**

STEP 8 - Install and tighten the ¼ NPT male fittings into the ¼ NPT female elbows. Install and tighten the ½ NPT male connections into the ½ NPT female cross.

STEP 9 - A Model 9011 Pressure Gauge is provided to monitor the pressure at the Air Knife. You may choose to install it or the Model 2527 Pipe Plug into the remaining ¼ NPT female connection of the Model 9551 pipe Tee. Your Air Knife is now ready for installation.

If you have any questions or problems, please contact an EXAIR Application Engineer at:

Toll Free: 1-800-903-9247 (US & Canada)
Toll Free Fax: 866-329-3924 (US & Canada)
E-mail: techelp@exair.com
Telephone: 513 671-3322 outside of US & Canada
Fax: 513 671-3363 outside of US & Canada
Website: www.exair.com

 ©2026 EXAIR LLC 3/1/26