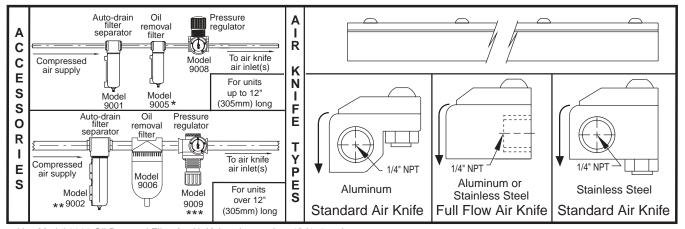




#### AIR KNIFE INSTALLATION & MAINTENANCE



- \* Use Model 9006 Oil Removal Filter for Air Knives longer than 6" (152mm)
- \*\* Use Model 9032 Auto Drain Filter with 18" to 24" (457-610mm) Air Knives
- \*\*\* Use Model 9033 Pressure Regulator with 18" to 24" (457-610mm) Air Knives

#### **COMPRESSED AIR LINE SIZES**

Compressed air lines should be sized to hold pressure drops to a minimum. Do not use restrictive fittings or undersized lines that can "starve" the Air Knife by causing excessive line pressure drop.

The following chart shows the recommended infeed pipe sizes. If compressed air hose is used, always go one size larger than the recommended pipe size due to the smaller I.D. of hose. (Example: Consider 1/2" I.D. hose the equivalent of 3/8" pipe.)

# AIR KNIFE RECOMMENDED INFEED PIPE SIZES

Single Air Knife Installation

Air Knife Length	Model Numbers	Infeed Pipe SIze Length Of Run		
	model (validate	<b>10'</b> (3m)	<b>50'</b> (15.2m)	<b>100'</b> (30.5m)
3" (76mm)	2003, 2003SS, 2603, 2603SS	1/4"	3/8"	1/2"
6" (152mm)	2006, 2006SS, 2606, 2606SS	1/4"	3/8"	1/2"
12" (305mm)	2012, 2012SS, 2612, 2612SS	3/8"	1/2"	3/4"
18" (457mm)	2018, 2018SS, 2618, 2618SS	1/2"	3/4"	1"
24" (610mm)	2024, 2024SS, 2624, 2624SS	1/2"	3/4"	1"
30" (762mm)	2030, 2030SS, 2630, 2630SS	3/4"	1"	1"
36" (914mm)	2036, 2036SS, 2636, 2636SS	3/4"	1"	1-1/4"

For 24" (610mm) and longer Air Knives, it is best to supply both ends. The standard gap setting is .002" (.05mm). For larger gap settings, it is best to supply both ends of the Air Knife in order to maintain uniform flow. (see Air Knife Shim Set)

#### MANIFOLD SYSTEMS

Sometimes, a long continuous sheet of air is needed. When the required length exceeds the standard Air Knife lengths, they can be manifolded. Stagger the Air Knives front to back, or top to bottom. The following are recommended manifold sizes for various web lengths:

# MANIFOLD AND AIR KNIFE RECOMMENDED INFEED PIPE SIZES

Multiple Air Knife Installation

Web Width	Min. Manifold	Infeed Pipe Size Length of Run			
Web Width	Size	<b>10'</b> (3m)	<b>50'</b> (15.2m)	<b>100'</b> (30.5m)	
60" (1.5m)	1"	1"	1-1/4"	1-1/4"	
84" (2.13m)	1"	1"	1-1/4"	1-1/2"	
102" (2.6m)	1-1/4"	1-1/4"	1-1/4"	1-1/2"	
120" (3m)	1-1/4"	1-1/4"	1-1/2"	2"	

#### **COMPRESSED AIR SUPPLY**

With proper filtration and separation of dirt, moisture and oil from the compressed air supply, the Air Knife will operate for years with no maintenance required.

Use a 10 micron or smaller filter separator on the compressed air supply. Use Model 9001 Automatic Drain Filter Separator for units up to 12" (305mm), Model 9032 for 18" (457mm) and 24" (610mm) units and Model 9002 for units larger than 24" (610mm). To prevent problems associated with oil, use an oil





# Air Knife Shim Set

An aluminum Air Knife has a .002" (.05mm) thick (red) shim installed. Plastic Shim Sets include (1) .001" (.03mm) thick shim (amber), (1) .003" (.08mm) thick shim (green) and (1) .004" (.10mm) thick shim (tan).

A stainless steel Air Knife has a .002" (0.5mm) thick stainless steel shim installed. Stainless steel Shim Sets for the Super and Standard Air Knife include (3) .002" (.05mm) thick stainless steel shims. Stainless steel Shim Sets for the Full-Flow Air Knife include (1) .002" (0.5mm) thick stainless steel shim. Shims may be interchanged or stacked to change the air gap setting. The shim thickness sets the air gap opening. Larger air gaps give more flow and higher velocity. Air consumption doubles if the air gap opening doubles.

If you have any questions or problems, please contact an EXAIR

Application Engineer at:

Toll Free: 1-800-903-9247 (U.S. & Canada)

Telephone: 513 671-3322 outside of U.S. & Canada Toll Free Fax: 866-329-3924 (U.S. & Canada) FAX: 513 671-3363 outside of U.S. & Canada

E-mail: techelp@exair.com Website: www.exair.com removal filter. Use Model 9005 Oil Removal Filter for units up to 6" (152mm), Model 9006 Oil Removal Filter for units longer than 6" (152mm). The oil removal filter should be used downstream from the automatic drain filter separator. Filters should be used close to each Air Knife, within 10 to 15' (3 to 4.6m) is best.

The Air Knife is designed to use normal shop air supplies up to 100 PSIG (6.9 BAR). For infinite control of flow and force, pressure may be regulated. Use Model 9008 Pressure Regulator for lengths up to 12" (305mm), Model 9033 Pressure Regulator for 18" & 24" (457 & 610mm) and Model 9009 Pressure Regulator for lengths over 12" (305mm).

## **USING THE AIR KNIFE**

In most cases, the Air Knife will be supported by the compressed air supply pipe. It can be mounted by using the existing bolts (be sure to re-tighten to 7.5 foot pounds for proper performance).

The force (combination of mass flow and velocity) of an Air Knife is reasonably constant up to a 12" (305mm) distance. Force is lower at distances greater than 12" (305mm). However, many applications are successful at 18" (457mm), 24" (610mm) or more.

To increase force, shims may be added to the Air Knife. This will increase mass flow, velocity, and compressed air consumption. See the catalog or website for ordering shim sets.

The high velocity air stream thickens as it flows away from the Air Knife. At 6" (152mm), it is 2-1/2" (64mm) thick and at a 12" (305mm) distance, 5" (127mm) thick. If the application requires a thin "knife" of air, mount the Air Knife close. This gives a high velocity, thin sheet of air that has lower mass flow. As the distance from the product surface to the Air Knife increases, the thickness of the sheet of air increases, velocity decreases and mass flow increases. By moving the Air Knife up and down, the optimum operating distance may be determined.

### AIR KNIFE SHIM SET

Force and flow through the Air Knife may be easily increased by adding shims to open the air gap. The Air Knife is supplied with a .002" (.05mm) thick shim installed. It sets the air slot to a .002" (.05mm) opening. To increase the air gap, use a shim set (shim set is not included with the Air Knife). Aluminum Standard and Full-Flow Shim Sets include shims of .001" (.03mm), .003" (.08mm) and .004" (.10mm) thickness. Stainless Steel Standard Air Knife Shim Sets include (3) .002"

(.05mm) thick shims. Stainless Steel Full-Flow Air Knife Shim Sets include (1) .002" (.05mm) thick shim. By changing and stacking them, gaps may be set from .001" to .010" (.03 to .25mm) for aluminum Air Knives and .002" to .008" (.05 to .20mm) for stainless steel. Individual shims are available.

To change shims, remove the assembly nuts and bolts. Inspect the Air Knife and shim to assure no dirt or chips are on matching surfaces or in the plenum chamber. Replace or add a shim(s) and re-assemble. If the force is more than needed, regulate pressure down to match the force to the application requirements.

#### TROUBLESHOOTING & MAINTENANCE

If There Is A Reduction In Flow Or Force From The Air Knife, check the pressure by installing a gage at the inlet of the Air Knife. Large pressure drops are possible due to undersized lines, restrictive fittings and clogged filter elements.

For replacement or repair filter and regulator parts contact Nimmo Fluid Power at 1-888-646-6097.

#### **CLEANING**

If contaminates have clogged the Air Knife, inspect the unit by disassembling. The Air Knife consists of two component parts and between them is a shim that sets the gap the compressed air exhausts through. This shim is usually .002" (.05mm) thick although thicker shims can be used. Inspect each part for dirt contamination and a possible oil film in the area of the slotted nozzle. Clean each part and reassemble with the shim installed in the correct position.

Occasionally, there is a build up which occurs on the face of the Air Knife as a result of vapors in the atmosphere. Clean this surface with a solvent and a clean rag. To prevent contaminants from getting pushed back into the slot, perform this procedure with a small amount of compressed air passing through the Air Knife.

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

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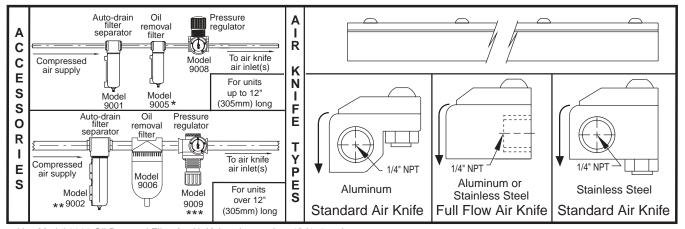
E-mail: techelp@exair.com Website: www.exair.com

For more information about this product, visit "Frequently Asked Questions" at www.exair.com





#### AIR KNIFE INSTALLATION & MAINTENANCE



- \* Use Model 9006 Oil Removal Filter for Air Knives longer than 6" (152mm)
- \*\* Use Model 9032 Auto Drain Filter with 18" to 24" (457-610mm) Air Knives
- \*\*\* Use Model 9033 Pressure Regulator with 18" to 24" (457-610mm) Air Knives

#### **COMPRESSED AIR LINE SIZES**

Compressed air lines should be sized to hold pressure drops to a minimum. Do not use restrictive fittings or undersized lines that can "starve" the Air Knife by causing excessive line pressure drop.

The following chart shows the recommended infeed pipe sizes. If compressed air hose is used, always go one size larger than the recommended pipe size due to the smaller I.D. of hose. (Example: Consider 1/2" I.D. hose the equivalent of 3/8" pipe.)

# AIR KNIFE RECOMMENDED INFEED PIPE SIZES

Single Air Knife Installation

Air Knife Length	Model Numbers	Infeed Pipe SIze Length Of Run		
	model (validate	<b>10'</b> (3m)	<b>50'</b> (15.2m)	<b>100'</b> (30.5m)
3" (76mm)	2003, 2003SS, 2603, 2603SS	1/4"	3/8"	1/2"
6" (152mm)	2006, 2006SS, 2606, 2606SS	1/4"	3/8"	1/2"
12" (305mm)	2012, 2012SS, 2612, 2612SS	3/8"	1/2"	3/4"
18" (457mm)	2018, 2018SS, 2618, 2618SS	1/2"	3/4"	1"
24" (610mm)	2024, 2024SS, 2624, 2624SS	1/2"	3/4"	1"
30" (762mm)	2030, 2030SS, 2630, 2630SS	3/4"	1"	1"
36" (914mm)	2036, 2036SS, 2636, 2636SS	3/4"	1"	1-1/4"

For 24" (610mm) and longer Air Knives, it is best to supply both ends. The standard gap setting is .002" (.05mm). For larger gap settings, it is best to supply both ends of the Air Knife in order to maintain uniform flow. (see Air Knife Shim Set)

#### MANIFOLD SYSTEMS

Sometimes, a long continuous sheet of air is needed. When the required length exceeds the standard Air Knife lengths, they can be manifolded. Stagger the Air Knives front to back, or top to bottom. The following are recommended manifold sizes for various web lengths:

# MANIFOLD AND AIR KNIFE RECOMMENDED INFEED PIPE SIZES

Multiple Air Knife Installation

Web Width	Min. Manifold	Infeed Pipe Size Length of Run			
Web Width	Size	<b>10'</b> (3m)	<b>50'</b> (15.2m)	<b>100'</b> (30.5m)	
60" (1.5m)	1"	1"	1-1/4"	1-1/4"	
84" (2.13m)	1"	1"	1-1/4"	1-1/2"	
102" (2.6m)	1-1/4"	1-1/4"	1-1/4"	1-1/2"	
120" (3m)	1-1/4"	1-1/4"	1-1/2"	2"	

#### **COMPRESSED AIR SUPPLY**

With proper filtration and separation of dirt, moisture and oil from the compressed air supply, the Air Knife will operate for years with no maintenance required.

Use a 10 micron or smaller filter separator on the compressed air supply. Use Model 9001 Automatic Drain Filter Separator for units up to 12" (305mm), Model 9032 for 18" (457mm) and 24" (610mm) units and Model 9002 for units larger than 24" (610mm). To prevent problems associated with oil, use an oil





# Air Knife Shim Set

An aluminum Air Knife has a .002" (.05mm) thick (red) shim installed. Plastic Shim Sets include (1) .001" (.03mm) thick shim (amber), (1) .003" (.08mm) thick shim (green) and (1) .004" (.10mm) thick shim (tan).

A stainless steel Air Knife has a .002" (0.5mm) thick stainless steel shim installed. Stainless steel Shim Sets for the Super and Standard Air Knife include (3) .002" (.05mm) thick stainless steel shims. Stainless steel Shim Sets for the Full-Flow Air Knife include (1) .002" (0.5mm) thick stainless steel shim. Shims may be interchanged or stacked to change the air gap setting. The shim thickness sets the air gap opening. Larger air gaps give more flow and higher velocity. Air consumption doubles if the air gap opening doubles.

If you have any questions or problems, please contact an EXAIR

Application Engineer at:

Toll Free: 1-800-903-9247 (U.S. & Canada)

Telephone: 513 671-3322 outside of U.S. & Canada Toll Free Fax: 866-329-3924 (U.S. & Canada) FAX: 513 671-3363 outside of U.S. & Canada

E-mail: techelp@exair.com Website: www.exair.com removal filter. Use Model 9005 Oil Removal Filter for units up to 6" (152mm), Model 9006 Oil Removal Filter for units longer than 6" (152mm). The oil removal filter should be used downstream from the automatic drain filter separator. Filters should be used close to each Air Knife, within 10 to 15' (3 to 4.6m) is best.

The Air Knife is designed to use normal shop air supplies up to 100 PSIG (6.9 BAR). For infinite control of flow and force, pressure may be regulated. Use Model 9008 Pressure Regulator for lengths up to 12" (305mm), Model 9033 Pressure Regulator for 18" & 24" (457 & 610mm) and Model 9009 Pressure Regulator for lengths over 12" (305mm).

## **USING THE AIR KNIFE**

In most cases, the Air Knife will be supported by the compressed air supply pipe. It can be mounted by using the existing bolts (be sure to re-tighten to 7.5 foot pounds for proper performance).

The force (combination of mass flow and velocity) of an Air Knife is reasonably constant up to a 12" (305mm) distance. Force is lower at distances greater than 12" (305mm). However, many applications are successful at 18" (457mm), 24" (610mm) or more.

To increase force, shims may be added to the Air Knife. This will increase mass flow, velocity, and compressed air consumption. See the catalog or website for ordering shim sets.

The high velocity air stream thickens as it flows away from the Air Knife. At 6" (152mm), it is 2-1/2" (64mm) thick and at a 12" (305mm) distance, 5" (127mm) thick. If the application requires a thin "knife" of air, mount the Air Knife close. This gives a high velocity, thin sheet of air that has lower mass flow. As the distance from the product surface to the Air Knife increases, the thickness of the sheet of air increases, velocity decreases and mass flow increases. By moving the Air Knife up and down, the optimum operating distance may be determined.

### AIR KNIFE SHIM SET

Force and flow through the Air Knife may be easily increased by adding shims to open the air gap. The Air Knife is supplied with a .002" (.05mm) thick shim installed. It sets the air slot to a .002" (.05mm) opening. To increase the air gap, use a shim set (shim set is not included with the Air Knife). Aluminum Standard and Full-Flow Shim Sets include shims of .001" (.03mm), .003" (.08mm) and .004" (.10mm) thickness. Stainless Steel Standard Air Knife Shim Sets include (3) .002"

(.05mm) thick shims. Stainless Steel Full-Flow Air Knife Shim Sets include (1) .002" (.05mm) thick shim. By changing and stacking them, gaps may be set from .001" to .010" (.03 to .25mm) for aluminum Air Knives and .002" to .008" (.05 to .20mm) for stainless steel. Individual shims are available.

To change shims, remove the assembly nuts and bolts. Inspect the Air Knife and shim to assure no dirt or chips are on matching surfaces or in the plenum chamber. Replace or add a shim(s) and re-assemble. If the force is more than needed, regulate pressure down to match the force to the application requirements.

#### TROUBLESHOOTING & MAINTENANCE

If There Is A Reduction In Flow Or Force From The Air Knife, check the pressure by installing a gage at the inlet of the Air Knife. Large pressure drops are possible due to undersized lines, restrictive fittings and clogged filter elements.

For replacement or repair filter and regulator parts contact Nimmo Fluid Power at 1-888-646-6097.

#### **CLEANING**

If contaminates have clogged the Air Knife, inspect the unit by disassembling. The Air Knife consists of two component parts and between them is a shim that sets the gap the compressed air exhausts through. This shim is usually .002" (.05mm) thick although thicker shims can be used. Inspect each part for dirt contamination and a possible oil film in the area of the slotted nozzle. Clean each part and reassemble with the shim installed in the correct position.

Occasionally, there is a build up which occurs on the face of the Air Knife as a result of vapors in the atmosphere. Clean this surface with a solvent and a clean rag. To prevent contaminants from getting pushed back into the slot, perform this procedure with a small amount of compressed air passing through the Air Knife.

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

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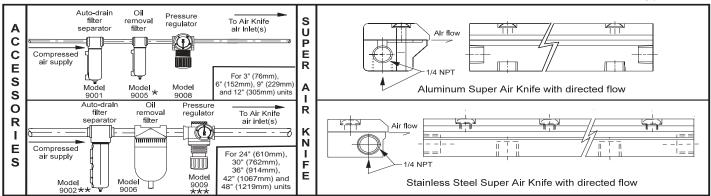
For more information about this product, visit "Frequently Asked Questions" at www.exair.com







### SUPER AIR KNIFE™ INSTALLATION & MAINTENANCE



- \*Use Model 9006 Oil Removal Filter for Super Air Knives longer than 6" (152mm)
- \*\* Use Model 9032 Auto Drain Filter with 18" (459mm) Super Air Knives
- \*\*\* Use Model 9033 Pressure Regulator with 18" (459mm) Super Air Knives

#### **COMPRESSED AIR LINE SIZES**

Compressed air lines should be sized to hold pressure drops to a minimum. Do not use restrictive fittings or undersized lines that can "starve" the Super Air Knife by causing excessive line pressure drop.

The following chart shows the recommended infeed pipe sizes. If compressed air hose is used, always go one size larger than the recommended pipe size due to the smaller I.D. of hose. (Example: consider 1/2" I.D. hose the equivalent of 3/8" pipe.)

## SUPER AIR KNIFE RECOMMENDED INFEED PIPE SIZES

Single Air Knife Installation

Super Air	Model Numbers	Infeed Pipe Size Length Of Run		
Knife Length		<b>10'</b> (3m)	<b>50'</b> (15.2m)	100' (30.5m)
3" (76mm)	110003, 110003SS	1/4"	3/8"	1/2"
6" (152mm)	110006, 110006SS	1/4"	3/8"	1/2"
9" (229mm)	110009, 110009SS	3/8"	1/2"	3/4"
12" (305mm)	110012, 110012SS	3/8"	1/2"	3/4"
18" (457mm)	110018, 110018SS	1/2"	3/4"	1"
24" (610mm)	110024, 110024SS	1/2"	3/4"	1"
30" (762mm)	110030, 110030SS	3/4"	1"	1"
36" (914mm)	110036, 110036SS	3/4"	1"	1-1/4"
42" (1067mm)	110042, 110042SS	3/4"	1"	1-1/4"
48" (1219mm)	110048, 110048SS	3/4"	1"	1-1/4"

#### **MANIFOLD SYSTEMS**

Sometimes, a long continuous sheet of air is needed. When the required length exceeds the standard Super Air Knife lengths, they can be manifolded. Inlets in the bottom of the Super Air Knife are provided for this

purpose. The following chart shows the recommended manifold sizes for various web widths.

# SUPER AIR KNIFE RECOMMENDED MANIFOLD AND INFEED PIPE SIZES

Multiple Air Knife Installation

Web Width	Min. Manifold	Infeed Pipe Size Length of Run			
Web Width	Size	10' (3m)	50' (15.2m)	100' (30.8m)	
60" (1.52m)	1"	1"	1- 1/4"	1- 1/4"	
84" (2.13m)	1"	1"	1- 1/4"	1-1/2"	
102" (2.6m)	1- 1/4"	1- 1/4"	1- 1/4"	1-1/2"	
120" (3m)	1- 1/4"	1- 1/4"	1-1/2"	2"	

### **COMPRESSED AIR SUPPLY**

The Super Air Knife has compressed air inlets on each end and on the bottom. Lengths 24" (610mm) and longer should be supplied at two inlets (opposite ends) to maintain a balanced airflow. An additional center inlet is provided on the bottom of the 48" (1219mm) lengths.

With proper filtration and separation of dirt, moisture and oil from the compressed air supply, the Super Air Knife will operate for years with no maintenance required. Use a 10 micron or smaller filter separator on the compressed air supply. Use Model 9001 Automatic Drain Filter Separator for units up to 12" (305mm), Model 9032 for 18" (457mm) units and Model 9002 for all other units larger than 18" (457mm). To prevent problems associated with oil,





# Air Knife Shim Set

An aluminum Air Knife has a .002" (.05mm) thick (red) shim installed. Plastic Shim Sets include (1) .001" (.03mm) thick shim (amber), (1) .003" (.08mm) thick shim (green) and (1) .004" (.10mm) thick shim (tan).

A stainless steel Air Knife has a .002" (0.5mm) thick stainless steel shim installed. Stainless steel Shim Sets for the Super and Standard Air Knife include (3) .002" (.05mm) thick stainless steel shims. Stainless steel Shim Sets for the Full-Flow Air Knife include (1) .002" (0.5mm) thick stainless steel shim. Shims may be interchanged or stacked to change the air gap setting. The shim thickness sets the air gap opening. Larger air gaps give more flow and higher velocity. Air consumption doubles if the air gap opening doubles.

If you have any questions or problems, please contact an EXAIR

Application Engineer at:

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Telephone: 513 671-3322 outside of U.S. & Canada Toll Free Fax: 866-329-3924 (U.S. & Canada) FAX: 513 671-3363 outside of U.S. & Canada

E-mail: techelp@exair.com Website: www.exair.com use an oil removal filter. Use Model 9005 Oil Removal Filter for units up to 6"(152mm), Model 9006 Oil Removal Filter for units longer than 6" (152mm). The oil removal filter should be used downstream from the automatic drain filter separator. Filters should be used close to each Super Air Knife, within 10 to 15' (3 to 4.6m) is best.

The Super Air Knife is designed to use normal shop air supplies up to 100 PSIG (6.9 BAR). For infinite control of flow and force, pressure may be regulated. Use Model 9008 Pressure Regulator for lengths up to 12" (305mm), Model 9033 Pressure Regulator for 18" lengths (457mm) and Model 9009 Pressure Regulator for lengths over 18" (457mm).

#### USING THE SUPER AIR KNIFE

In most cases, the Super Air Knife will be supported by the compressed air supply pipe. It can be mounted using the tapped holes (1/4-20) in the bottom. The existing bolts can be used for mounting as long as the mating bracket (user supplied) allows proper thread engagement. Be sure to re-tighten to 7.5 ft. lbs. for best performance.

The force (combination of mass flow and velocity) of a Super Air Knife is reasonably constant up to a 12" (305mm) distance. Force is lower at distances greater than 12" (305mm) . However, many applications are successful at 18" (457mm), 24" (610mm) or more.

The high velocity airstream thickens as it flows away from the Super Air Knife. At 6" (152mm), it is 2" (51mm) thick and at a 12" (305mm) distance, 4" (102mm) thick. If the application requires a thin "knife" of air, mount the Super Air Knife close. This gives a high velocity, thin sheet of air that has lower mass flow. As the distance from the product surface to the Super Air Knife increases, the thickness of the sheet of air increases, velocity decreases and mass flow increases. By moving the Super Air Knife in and out from the material, the optimum operating distance may be determined.

#### SUPER AIR KNIFE SHIM SET

Force and flow through the Super Air Knife may be easily increased by adding shims to open the air gap. The Super Air Knife is supplied with a .002" thick shim installed. It sets the air slot to a .002" opening. To increase the air gap, use a shim set (included with the Super Air Knife Kits). A shim set includes shims of .001" (.03mm), .003" (.08mm) and .004" (.1mm) thickness for aluminum models or (3) .002" (.05mm) thickness shims for stainless steel models. By changing and stacking them, gaps may be set from .001" to .010"

(.03 to .25mm) for aluminum Super Air Knives and .002" to .008" (.05 to .20mm) for stainless steel. Individual shims are available.

To change shims, remove the assembly bolts. Inspect the Super Air Knife and shim(s) to assure no dust, dirt or chips are on matching surfaces or in the plenum chamber. Replace or add a shim(s), and re-tighten bolts to 7.5 ft. lbs. Note that mating parts (body & cap) do not align flush. The flat surface of the cap extends past the body to direct the airflow in a perfectly straight line. The air opening cannot be dead-ended, which meets OSHA requirements.

#### TROUBLESHOOTING & MAINTENANCE

If There Is A Reduction In Flow Or Force From The Super Air Knife, check the pressure by installing a gage in one of the unused inlets. Large pressure drops are possible due to undersized lines, restrictive fittings and clogged filter elements.

For replacement or repair filter and regulator parts, contact Nimmo Fluid Power at 1-888-646-6097.

#### **CLEANING**

If contaminates have clogged the Super Air Knife, inspect the unit by disassembling. The Super Air Knife consists of two component parts and between them is a shim that sets the gap the compressed air exhausts through. This shim is usually .002" (.05mm) thick although thicker shims can be used. Inspect each part for dust or dirt contamination and a possible oil film in the area of the slotted nozzle. Clean each part and re-tighten bolts.

Occasionally, there is a build up which occurs on the face of the Super Air Knife as a result of vapors in the atmosphere. Clean this surface with a solvent and a clean rag. To prevent contaminants from getting pushed back into the slot, perform this procedure with a small amount of compressed air passing through the Super Air Knife.

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

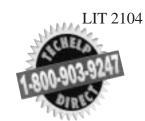
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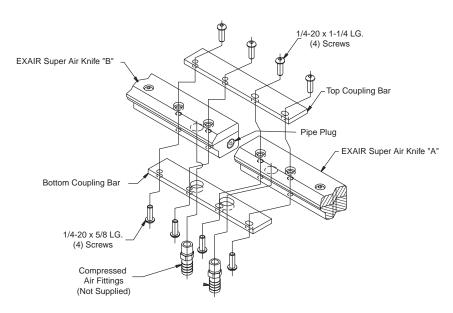
E-mail: techelp@exair.com Website: www.exair.com

For more information about this product, visit "Frequently Asked Questions" at www.exair.com





#### MODEL 110900 ALUMINUM SUPER AIR KNIFE COUPLING BRACKET KIT



The purpose of this kit is to couple two EXAIR Aluminum Super Air Knives for longer Air Knife lengths. The Model 110900 Aluminum Super Air Knife Coupling Bracket Kit consists of:

- (1) Top Coupling Bar
- (1) Bottom Coupling Bar
- (4) 1/4-20 x 5/8" Button Head Cap Screws
- (4) 1/4-20 x 1-1/4" Button Head Cap Screws

#### **Assembly Instructions:**

- 1. Determine which ends of the Super Air Knives are going to be coupled together.
- 2. Remove the last two button head cap screws from each Super Air Knife at the end where they are to be joined.
- 3. Make sure pipe plugs (already supplied on the Super Air Knives) are installed on the ends of the Super Air Knives where they will be joined by the bracket kit.
- 4. Position the ends of the Super Air Knives, with the screws removed, together.
- Lay the top coupling bar (has four holes) over the two adjacent Super Air Knives. Match the holes of the coupling bar to the holes of the Super Air Knives where the original screws were located.
- 6. Assemble (4) of the 1/4-20 x 1-1/4" button head cap screws through the top coupling bar and into the Super Air Knives. (Note: Do not tighten).
- 7. Flip the Super Air Knife assembly 180 degrees so that the opposite side is facing up.

- 8. Place the bottom coupling Bar (has six holes) evenly over the joint of the two Super Air Knives. Make sure all holes are properly aligned to the Super Air Knives.
- 9. Assemble the (4) 1/4-20 x 5/8" button head cap screws through the bottom coupling bar and into the bolt holes in the Super Air Knives. (Note: Do not tighten).
- 10. Make sure that the two Super Air Knives are aligned with one another and are positioned tight end to end. Tighten all button head cap screws to 7.5 ft. lbs.
- 11. Remove the pipe plugs from the compressed air inlets on the bottom of the air knives, at the joint where the bottom bracket is located.
- 12. Install fittings into the 1/4-18 NPT ports to allow for proper compressed air supply to the ports.
- 13. The Super Air Knife assembly is now ready for installation into the application.

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

Toll Free: 1-800-903-9247 (U.S. & Canada) Telephone: 513 671-3322 outside of U.S. & Canada Toll Free Fax: 866-329-3924 (U.S. & Canada) FAX: 513 671-3363 outside of U.S. & Canada

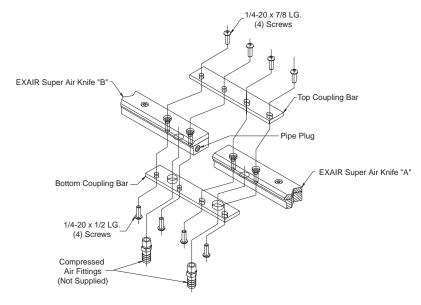
E-mail: techelp@exair.com Website: www.exair.com

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#### MODEL 110900SS STAINLESS STEEL SUPER AIR KNIFE COUPLING BRACKET



The purpose of this kit is to couple two EXAIR Stainless Steel Super Air Knives for longer Air Knife lengths. The Model 110900SS Stainless Steel Super Air Knife Coupling Bracket Kit consists of:

- (1) Top Coupling Bar
- (1) Bottom Coupling Bar
- (4) 1/4-20 x 1/2" Button Head Cap Screws
- (4) 1/4-20 x 7/8" Button Head Cap Screws

#### **Assembly Instructions:**

- 1. Determine which ends of the Super Air Knives are going to be coupled together.
- 2. Remove the last two button head cap screws from each Super Air Knife at the end where they are to be joined.
- 3. Make sure pipe plugs (already supplied on the Super Air Knives) are installed on the ends of the Super Air Knives where they will be joined by the bracket
- 4. Position the ends of the Super Air Knives, with the screws removed, together.
- 5. Lay the top coupling bar (has four holes) over the two adjacent Super Air Knives. Match the holes of the coupling bar to the holes of the Super Air Knives where the original screws were located.
- 6. Assemble (4) of the  $1/4-20 \times 7/8$ " button head cap screws through the top coupling bar and into the Super Air Knives. (Note: Do not tighten).
- 7. Flip the Super Air Knife assembly 180 degrees so that the opposite side is facing up.

- 8. Place the bottom coupling Bar (has six holes) evenly over the joint of the two Super Air Knives. Make sure all holes are properly aligned to the Super Air Knives.
- 9. Assemble the (4) 1/4-20 x 1/2" button head cap screws through the bottom coupling bar and into the bolt holes in the Super Air Knives. (Note: Do not tighten).
- 10. Make sure that the two Super Air Knives are aligned with one another and are positioned tight end to end. Tighten all button head cap screws to 7.5 ft. lbs.
- 11. Remove the pipe plugs from the compressed air inlets on the bottom of the air knives, at the joint where the bottom bracket is located.
- 12. Install fittings into the 1/4-18 NPT ports to allow for proper compressed air supply to the ports.
- 13. The Super Air Knife assembly is now ready for installation into the application.

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

Toll Free: 1-800-903-9247 (U.S. & Canada) Telephone: 513 671-3322 outside of U.S. & Canada Toll Free Fax: 866-329-3924 (U.S. & Canada)

FAX: 513 671-3363 outside of U.S. & Canada

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> For more information about this product, visit "Frequently Asked Questions" at www.exair.com