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TECHNICAL HELP 647-876-6358 DIRECT

INSTALLATION AND OPTIMAL PERFORMANCE OF SUPREME AIR PRODUCTS™ ADJUSTABLE AIR AMPLIFIERS

Achieving maximum performance from your Supreme Air Products™ Adjustable Air Amplifier, or a series of them, begins with minimizing pressure loss in the supply line.

COMPRESSED AIR LINE SIZING: THE KEY TO AIRFLOW

To prevent "starving" the Air Amplifier and ensure peak force, the compressed air lines must be adequately sized. Avoid restrictive fittings at all costs, as these create significant pressure loss.

AIR AMPLIFIER MODEL	MAXIMUM RUN LENGTH	RECOMMENDED PIPE SIZE	RECOMMENDED HOSE SIZE
Small Units (up to 2 OD - e.g., Model AA002A)	Up to 25 feet	1/4" Pipe	3/8" Hose
Small Units (up to 2" OD - e.g., Model AA002A)	25 to 50 feet	3/8" Pipe	1/2" Hose
Small Units (up to 2" OD - e.g., Model AA002A)	Over 50 feet	1/2" Pipe (or larger)	Not Recommended
Large Units (e.g., Model SAM212A or larger)	Any length	Equal to or greater than the amplifier's connection size	N/A

MAINTAINING A CLEAN AIR SUPPLY

Supreme Air Products™ Adjustable Air Amplifiers rely on a tiny, precision-engineered air “gap.” Contaminants like **moisture, oil, and dirt** can easily clog this gap, reducing performance. Proper filtration is essential for years of **maintenance-free operation.**

WATER REMOVAL:
Install a minimum **10-micron** filter with an **automatic (float-type) drain.**

OIL REMOVAL:
If oil is a concern, add an oil removal filter downstream from the water filter. This filter must also have an **automatic drain.**

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SIZING: Both filters must be **sized to handle the total airflow** of all connected Air Amplifiers at their operating pressure.

PLACEMENT: Mount filters close to the Air Amplifier, ideally **within 10 to 15 feet.**

OPERATING AND TUNING THE AIR AMPLIFIER MOUNTING AND TARGET DISTANCE

The Air Amplifier can be supported directly by the compressed air piping or by using a clamping mechanism.

For best performance, position the target **within 12 inches** of the Air Amplifier's outlet. Force begins to diminish beyond 12 inches, though it may be sufficient for many applications up to **24 inches away.**

ADJUSTING FORCE AND AIR CONSUMPTION

The "gap" in your Streamtek™ Air Amplifier is preset to **0.002"** and secured with a lock ring. You have two primary methods for tuning the force:

INCREASING FORCE

1. Unlock the lock ring and open the gap up to a **0.004" maximum** (double the gap).
2. **Impact:** This increases mass flow, velocity, and force.
3. **Caution:** Doubling the gap will approximately double the air consumption. Ensure your airline sizing (refer to the table above) can handle this increased demand.

DECREASING FORCE AND CONSERVING AIR

1. **Regulate Pressure:** The most effective method for both force reduction and air conservation is to add a pressure regulator and simply reduce the inlet pressure. Use the lowest pressure that still achieves the required results.
2. **Reduce Gap:** You may also reduce the gap down to **0.001".**

Note: If reducing the gap below the factory setting, we **strongly recommend** upgrading your filtration to a minimum **5-micron air filter** to prevent premature clogging.

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The Supreme Air Products™ Adjustable Air Amplifier is ideal for applications requiring **intermittent blow-off.** Use a **solenoid valve** controlled by a sensor or timer to turn the air on and off as needed, consuming energy **only when the unit is operating.**

MAINTENANCE AND TROUBLESHOOTING

CLEANING PROCEDURES

If contamination clogs the Air Amplifier, simply **dismantle, clean,** and **re-assemble** the unit.

A common issue is a film buildup on the **throat** surface from vapors in the surrounding atmosphere. To clean this:

1. Use a **mild solvent and a clean rag.**
2. Pass a small amount of **compressed air** through the unit while cleaning to ensure contaminants are **not** pushed back into the precision gap.

TROUBLESHOOTING REDUCED PERFORMANCE

With zero moving parts, internal failure is rare. However, factors outside the unit can reduce flow or force:

1. **Check Inlet Pressure:** Install a pressure gauge near the inlet of the Air Amplifier.
2. **Low Pressure Causes:** If the pressure is low, check for:
   - Undersized airlines
   - Restrictive fittings
   - **Clogged filter elements** (These are the most common culprits and should be checked first.)

If you have any questions or experience persistent problems, please contact our factory directly at **647-876-6358.**