

Best Practices for Using the Milton 5-in-ONE and 2-in-ONE Safety Exhaust Couplers

General Usage Guidelines:

- Always use with a connection or whip hose; never connect directly to a high-vibration tool.
- Ensure the coupler is used with a clean, undamaged, case-hardened steel plug.
 - Damaged or dirty plugs can damage internal seals and cause leaks.
 - Aluminum plugs wear fast and can cut the seals with sharp edges.
- Keep the coupler free from moisture and dirt to maintain optimal performance and longevity.

Why High-Vibration Impact Tools Should Be Used with a Whip Hose:

Using the coupler with high-vibration tools without a whip hose can lead to performance issues due to the following factors:

- 1. Use of a Whip Hose:**
 - Many pneumatic tool manufactures recommend whip hoses on high vibration air impact tools.
 - A whip hose is a short, flexible hose that connects the tool to the main air supply line, reducing vibration transfer and enhancing maneuverability. This setup is particularly beneficial for high-vibration tools such as impact wrench, die grinders, and sanders as it minimizes user fatigue and prolongs tool life. (see images below)
 - Incorporating a whip hose not only minimizes vibration but also provides greater maneuverability, allowing for more precise work in various applications. It is a valuable addition to any pneumatic tool setup, ensuring both efficiency and safety.
- 2. Unsecured Airflow Control:**
 - The sliding sleeve, which controls airflow, lacks a detent or positive lock in the "on" position.
 - Vibrations may inadvertently shift the sleeve to the "off" position, disrupting airflow.
- 3. Material Wear and Locking Issues:**
 - The coupler's aluminum body houses interlocking ball bearings.
 - Continuous vibration can cause these bearings to wear into the aluminum, potentially locking the sleeve in place.
- 4. Seal Durability and Fit:**
 - As a universal coupler, it uses a more pliable seal to accommodate various plug styles and sizes.
 - This design does not grip plugs as securely as couplers designed for specific plug types.

- Excessive movement from vibrations accelerates seal wear, reducing lifespan and potentially causing the sleeve to vibrate down and shut off airflow.

Optimal Use Case for the Coupler:

The Milton 5-in-ONE and 2-in-ONE Safety Exhaust Coupler is most effective when installed before a whip hose, long extension air hose or air tank. This setup allows:

- Safe purging of air before disconnecting, de-energizing the hose.
- Prevention of hose whip, enhancing workplace safety.
- Ensure that you have clean plugs free of defects and debris. Sharp edges and debris damage internal seals and can cause leakage and tear seals.
 - Aluminum plugs are **NOT** recommended as they wear faster than brass and steel plugs and can damage internal seals.

Using this coupler directly on a tool does not take full advantage of these benefits, as the compressed air volume within the tool is minimal. Additionally, the sliding sleeve mechanism may make operation less convenient than a standard coupler in such cases.

By following these best practices, users can maximize the efficiency, longevity, and safety of the Milton 5-in-ONE and 2-in-ONE Safety Exhaust Couplers along with your air tools.

