



Manuals.plus /

› Ingersoll Rand /

› Ingersoll Rand 308B Air Straight Die Grinder Instruction Manual

Ingersoll Rand 308B

Ingersoll Rand 308B Air Straight Die Grinder Instruction Manual

Model: 308B
Brand: Ingersoll Rand

PRODUCT OVERVIEW

The Ingersoll Rand 308B Air Straight Die Grinder is a lightweight and durable tool designed for powerful performance in various applications. Its composite grip ensures superior ergonomics and comfort during extended use. This tool is ideal for tasks such as porting, weld breaking, de-burring, polishing, and grinding.

Key features include:

- Powerful vane motor delivering 0.33 HP (0.25 kW) and 25,000 RPM free speed.
- Durable ball-bearing construction for improved balance, reduced vibration, and extended life.
- Lightweight and ergonomic composite housing that protects the tool from cold air and enhances operator comfort.
- Integral safety-lock throttle lever to prevent accidental start-up.
- Rear exhaust system that directs air away from the operator, with compatibility for "piped away" exhaust kits.
- Built-in lubricating wick to increase gear life.



Figure 1: Ingersoll Rand 308B Air Straight Die Grinder, showing its compact and ergonomic design.

SETUP AND ASSEMBLY

Before operating the Ingersoll Rand 308B Die Grinder, ensure all components are present and properly assembled. The package typically includes the 308B Pneumatic Straight Die Grinder, 1/4 inch and 6 mm collets, and two wrenches.

Unpacking and Inspection

1. Carefully remove the die grinder and all accessories from the packaging.
2. Inspect the tool for any signs of damage that may have occurred during shipping. Do not use the tool if it appears damaged.
3. Verify that all listed components are included.

Connecting to Air Supply

This tool operates on air power. A clean, dry, and regulated air supply is crucial for optimal performance and tool longevity.

- **Air Inlet NPTF:** 1/4-inch
- **Minimum Hose Size:** 3/8-inch (10mm)
- **Air Pressure:** 90 psi (6.2 bar)

1. Attach an air hose (minimum 3/8-inch diameter) to the 1/4-inch NPTF air inlet on the grinder.
2. Ensure the air supply is regulated to 90 psi (6.2 bar) for safe and efficient operation.
3. It is recommended to use an air filter/regulator/lubricator (FRL) unit in your air line to provide clean, lubricated air at the correct pressure.

Installing Collets and Accessories

1. Select the appropriate collet (1/4 inch or 6 mm) for your accessory.
2. Insert the collet into the collet nut.
3. Insert the accessory (e.g., grinding stone, burr) into the collet.
4. Tighten the collet nut securely using the provided wrenches. Ensure the accessory is firmly seated to prevent slippage during operation.



Figure 2: Included components for the 308B Die Grinder, showing the tool, collets, and wrenches.

OPERATING INSTRUCTIONS

The Ingersoll Rand 308B Die Grinder is designed for precision and power. Always wear appropriate personal protective equipment (PPE), including eye protection, hearing protection, and gloves, when operating the tool.

Basic Operation

1. Ensure the tool is properly connected to the air supply and the accessory is securely installed.
2. Hold the die grinder firmly with both hands, maintaining a stable grip on the composite housing.
3. To activate the tool, depress the integral safety-lock throttle lever. This lever prevents accidental start-up, enhancing user safety.
4. Apply the rotating accessory to the workpiece with controlled pressure. The tool's variable speed feature allows for precise control over different applications.
5. Move the tool smoothly and consistently across the work surface for even material removal or finishing.
6. Release the throttle lever to stop the tool.

Applications

The 308B is versatile and suitable for a range of tasks:

- **Cutting:** For light cutting tasks with appropriate accessories.
- **Deburring:** Removing sharp edges or burrs from metal or other materials.
- **Grinding:** Shaping, smoothing, or removing material from surfaces.
- **Polishing:** Achieving a smooth, refined finish on various materials.
- **Porting:** Modifying intake and exhaust ports in engines.
- **Weld Breaking:** Cleaning up or preparing welds.

308B



COMFORT

The composite housing on these models is lightweight and contoured for increased comfort and protection from temperature fluctuations.



ACCESS

With two configurations in the 302B (right angle) and 308B (straight), you can find a die grinder that fits your needs and reaches all your tough spots.



PIPED-AWAY EXHAUST OPTIONS

These die grinders are compatible with “piped away” exhaust kits, so you can transfer exhaust away from you and your workspace.



POWER

Powerful motor delivers 0.33 HP (0.25 kW) and 25,000 rpm free speed. A general purpose tool designed for porting, light weld grinding, and breaking sharp edges.



DURABLE

Durable ball-bearing construction improves balance, reduces vibration, and ensures a longer life. Built-in lubricating wick increases angle gear life.



Figure 3: The 308B Die Grinder in use, demonstrating its maneuverability for detailed work.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Ingersoll Rand 308B Die Grinder. Always disconnect the tool from the air supply before performing any maintenance.

Lubrication

The tool features a built-in lubricating wick that increases gear life. However, additional lubrication is recommended:

- Add a few drops of air tool oil into the air inlet before each use, or if the tool has been stored for an extended period.
- If using an FRL unit, ensure the lubricator is properly filled and adjusted to provide a fine mist of oil to the air supply.

Cleaning and Storage

- After each use, wipe down the tool with a clean, dry cloth to remove any dust or debris.
- Periodically check the air inlet screen for blockages and clean if necessary.
- Store the die grinder in a clean, dry environment, away from excessive moisture or extreme temperatures.

Collet Care

- Inspect collets regularly for wear or damage. Replace worn collets to ensure secure accessory retention.
- Keep collets clean and free of debris to prevent accessories from sticking or slipping.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your Ingersoll Rand 308B Die Grinder. For problems not listed here, contact authorized service personnel.

Problem	Possible Cause	Solution
Tool does not start or runs slowly.	Insufficient air pressure. Air line restriction or leak. Lack of lubrication. Worn motor vanes.	Check air supply pressure (should be 90 psi). Inspect air hose and fittings for damage or blockages. Add air tool oil to the air inlet. Contact service center for repair.
Excessive vibration.	Unbalanced accessory. Worn bearings. Loose collet or accessory.	Ensure accessory is balanced and not damaged. Contact service center for repair. Tighten collet nut securely.
Air leaks from tool body.	Loose housing screws. Damaged O-rings or seals.	Tighten housing screws. Contact service center for repair.

SPECIFICATIONS

Attribute	Value
Brand	Ingersoll Rand
Model Number	308B
Power Source	Air Powered
Recommended Uses	Cutting, Deburring, Grinding, Polishing
Color	Gray
Special Feature	Variable Speed
Included Components	308B Pneumatic Straight Die Grinder, 1/4 inch and 6 mm Collets, Two Wrenches.
Item Weight	1.02 Pounds
Maximum Rotational Speed	25000 RPM
Item Dimensions (L x W x H)	10.24 x 7.94 x 3.94 inches
Average Air Consumption	7 cfm (198 L/minute)
Air Consumption @ Load	28 cfm (793 L/minute)
Sound Pressure / Power	92/103 dBA
Air Inlet NPTF	1/4-inch
Minimum Hose Size	3/8-inch (10mm)
Air Pressure	90 psi (6.2 bar)
Exhaust Direction	Rear
Product Length	6.85 inches

WARRANTY AND SUPPORT

Warranty Information

The Ingersoll Rand 308B Air Straight Die Grinder comes with a **1-year warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

Customer Support

For technical assistance, service, or parts, please contact Ingersoll Rand customer support. Refer to the official Ingersoll Rand website or the contact information provided in your product packaging for the most current support details.

You can also visit the official Ingersoll Rand store on Amazon for more product information and accessories [Ingersoll Rand Amazon Store](#)

