

## GRS 004-895

# GRS Tools 004-895 GraverSmith Instruction Manual

Model: 004-895

## 1. INTRODUCTION

The GRS Tools 004-895 GraverSmith is an engraving system designed for precision work in stone setting and engraving. It provides pneumatic impact power, making it suitable for production environments, multiple factory installations, and individual craftsmen. This manual provides essential information for the safe and effective operation, setup, and maintenance of your GraverSmith system.

## 2. SAFETY INFORMATION

**Read all instructions before use.** Failure to follow these instructions may result in injury or damage to the equipment.

- Always wear appropriate personal protective equipment, including eye protection, when operating the GraverSmith.
- Ensure the work area is well-lit and free from obstructions.
- Disconnect power and air supply before performing any maintenance or adjustments.
- Do not operate the system if any components are damaged or appear to be malfunctioning.
- Use only clean, oil-free compressed air as specified in the setup section. Contaminated air can damage the internal components.
- Ensure electrical connections meet the specified voltage and frequency requirements.
- Keep children and unauthorized personnel away from the operating equipment.

## 3. PACKAGE CONTENTS

Verify that all items listed below are present in your package:

- GRS Tools 004-895 GraverSmith Unit
- Foot Control
- Air Filter
- Power Cord

*Note: Handpieces are sold separately and are required for operation.*

## 4. SETUP

---

Follow these steps to set up your GraverSmith system:

**1. Air Supply Connection:**

Connect your clean, oil-free compressed air source to the GraverSmith unit via the provided air filter. The system requires a minimum of 45 psi (3 bar) pressure and 1.4 cfm (40 liters per minute) flow. Ensure all air connections are secure to prevent leaks.

**2. Electrical Connection:**

Plug the power cord into the GraverSmith unit and then into a suitable electrical outlet. The system operates on 100/240 V at 50/60 Hz. Verify your power source matches these requirements.

**3. Foot Control Connection:**

Connect the foot control cable to the designated port on the GraverSmith unit.

**4. Handpiece Connection (Sold Separately):**

If you have a compatible GRS handpiece, connect its air line to the appropriate output port on the GraverSmith unit. Refer to your handpiece's manual for specific connection instructions.



**Figure 1:** The GRS Tools 004-895 GraverSmith system, showing the main unit, foot control, and air filter. A handpiece (not shown) connects to the unit for engraving and stone setting operations.

## 5. OPERATING INSTRUCTIONS

---

Once the GraverSmith is properly set up and a handpiece is connected, you can begin operation.

### 1. Power On:

Turn on the main power switch on the GraverSmith unit. The unit should power up, and any indicator lights will illuminate.

### 2. Adjust Stroke Speed:

Use the control knob or interface on the GraverSmith unit to set the desired stroke speed. The system offers a range from 400 to 8000 strokes per minute (SPM). Start with a lower speed and gradually increase as needed for your specific task and material.

### 3. Engraving/Stone Setting:

With your handpiece properly prepared and the workpiece secured, press the foot control to activate the pneumatic impact. The impact force and frequency will be delivered to the handpiece, allowing for precise engraving or stone setting. Release the foot control to stop the impact.

### 4. Practice:

It is recommended to practice on scrap material to familiarize yourself with the system's response and to find the optimal settings for different tasks.

## 6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your GraverSmith system.

- **Air Filter:** Periodically check and clean or replace the air filter to ensure a continuous supply of clean, oil-free air. A clogged filter can reduce performance and damage internal components.
- **Air Lines:** Inspect air lines for kinks, leaks, or damage. Replace any compromised lines immediately.
- **General Cleaning:** Keep the exterior of the GraverSmith unit clean and free of dust and debris. Use a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- **Storage:** When not in use, store the GraverSmith system in a clean, dry environment, protected from extreme temperatures.

## 7. TROUBLESHOOTING

If you encounter issues with your GraverSmith system, refer to the following common problems and solutions:

| Problem                     | Possible Cause                                                                          | Solution                                                                                                         |
|-----------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| No power to unit            | Power cord disconnected, outlet malfunction, unit switch off                            | Check power cord connection, test outlet, ensure power switch is ON.                                             |
| No impact from handpiece    | No air supply, low air pressure, foot control not pressed, handpiece disconnected       | Verify air compressor is on, check air pressure (min 45 psi), press foot control, ensure handpiece is connected. |
| Weak or inconsistent impact | Low air pressure, clogged air filter, air leak in lines, incorrect stroke speed setting | Check air pressure, clean/replace air filter, inspect air lines for leaks, adjust stroke speed.                  |

If problems persist after attempting these solutions, contact GRS customer support for further assistance.

## 8. SPECIFICATIONS

|              |             |
|--------------|-------------|
| Model Number | GRS 004-895 |
|--------------|-------------|

|                         |                                   |
|-------------------------|-----------------------------------|
| Electrical Requirements | 100/240 V, 50/60 Hz               |
| Minimum Air Pressure    | 45 psi (3 bar)                    |
| Minimum Air Flow        | 1.4 cfm (40 liters per minute)    |
| Stroke Speed Range      | 400-8000 SPM (Strokes Per Minute) |
| Package Dimensions      | 18.9 x 14.6 x 7.1 inches          |
| Item Weight             | 10.78 pounds                      |

© 2023 GRS Tools. All rights reserved.

### ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

**Name**

Anonymous

**Email**

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question