

Raimondi 125USA GS86

Raimondi 125USA GS86 Portable Tile Saw Instruction Manual

Model: 125USA GS86

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1. INTRODUCTION

This instruction manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Raimondi 125USA GS86 Portable Tile Saw. Please read this manual thoroughly before using the saw to ensure proper handling and to prevent injury or damage to the equipment.

The Raimondi 125USA GS86 is designed for precision cutting of various tile materials, including porcelain, single-double fired tiles, marble, and granite. It is capable of performing straight cuts, 45° bevel (Jolly) cuts, and creating square or round knockouts.

2. SAFETY INFORMATION

Always prioritize safety when operating power tools. Failure to follow these safety guidelines may result in serious injury or property damage.

- **Read the Manual:** Before any operation, thoroughly read and understand all instructions and warnings in this manual.
- **Personal Protective Equipment (PPE):** Always wear appropriate PPE, including safety glasses, hearing protection, and gloves. A dust mask is recommended when cutting dry.
- **Work Area:** Ensure your work area is clean, well-lit, and free from obstructions. Keep children and bystanders away from the operating saw.
- **Electrical Safety:** Connect the saw to a properly grounded 110V power outlet. Do not operate in wet conditions or expose the saw to rain. Inspect power cords for damage before each use.
- **Blade Safety:** Ensure the blade is correctly installed and secured. Never operate the saw without the blade guard in place. Disconnect power before changing blades.
- **Material Securement:** Always secure the workpiece firmly to prevent movement during cutting.
- **Maintenance:** Perform regular maintenance as described in this manual. Disconnect power before performing any maintenance or adjustments.
- **Emergency Stop:** Familiarize yourself with the location and operation of the emergency stop button.

3. PRODUCT OVERVIEW

The Raimondi 125USA GS86 is a compact and portable tile saw designed for versatility and precision. Key features include a powerful motor, a water cooling system for the blade, and the ability to perform various types of cuts on different materials.



Figure 3.1: Raimondi 125USA GS86 Portable Tile Saw. This image shows the complete tile saw unit, including the cutting table, motor assembly, blade guard, and water tray.



Figure 3.2: Raimondi 125USA GS86 in its protective turtle shell cover. The cover helps prevent damage during transport and storage.

Components:

- **Motor:** 0.9 HP, 110V motor providing 7000 RPM blade speed.
- **Blade:** Accepts 4" to 4-1/2" diameter blades. Supplied with a 4" turbo blade for tiles.
- **Water Cooling System:** Heavy-duty pump for blade cooling.
- **Cutting Table:** Provides a stable surface for material.
- **Blade Guard:** Essential safety feature covering the blade.
- **Turtle Shell Cover:** Integrated cover for protection during transport and storage.
- **Accessories:** Includes 5 abrasive discs for polishing/sanding, key kit, and dressing stone.

4. SETUP

Follow these steps to prepare your tile saw for operation.

- 1. Unpacking:** Carefully remove the saw from its packaging. Inspect for any shipping damage.
- 2. Placement:** Place the saw on a stable, level surface capable of supporting its weight (approximately 55 lbs). Ensure adequate space for material handling and safe operation.
- 3. Power Connection:** Connect the saw to a standard 110V, grounded electrical outlet. Verify that the power switch is in the "OFF" position before plugging in.
- 4. Water Reservoir:** Fill the integrated water tray with clean water. The water level should be sufficient to cover the lower portion of the blade during operation, ensuring proper cooling and dust suppression.
- 5. Blade Installation/Check:**
 - Ensure the saw is unplugged.
 - Verify that the correct blade (4" to 4-1/2" diameter) is securely mounted. The supplied 4" turbo blade is suitable for most tile cutting tasks.
 - Check the blade for any damage or wear. Replace damaged blades immediately.
- 6. Initial Test:** With the blade guard in place and the water reservoir filled, briefly turn on the saw to ensure the blade spins freely and the water pump is functioning, delivering water to the blade.

5. OPERATING INSTRUCTIONS

This section details the procedures for cutting various materials and performing different types of cuts.

General Cutting Procedure:

- 1. Prepare Material:** Mark your cutting line clearly on the tile.
- 2. Position Tile:** Place the tile firmly on the cutting table, aligning the marked line with the blade's path. Ensure the tile is stable and will not shift during the cut.
- 3. Start Saw:** Turn on the saw. Allow the blade to reach full speed before beginning the cut. Ensure the water cooling system is active.
- 4. Perform Cut:** Slowly and steadily push the tile through the blade. Do not force the material; let the blade do the work. Maintain a consistent feed rate.
- 5. Complete Cut:** Continue pushing until the cut is complete. Turn off the saw and wait for the blade to stop before removing the cut pieces.









MODEL SPECIFICATIONS									
Part No.									
125INOX F	8024648003584	1	230 V 50 Hz	Single-phase	0,9 HP / 0,65 kW	2800	115 mm	4 1/2"	5800
125INOX 60	8024648017055	1	230 V 60 Hz	Single-phase	0,9 HP / 0,65 kW	3360	115 mm	4 1/2"	7000
125INOX US	8024648009265	1	110 V 60 Hz	Single-phase	0,9 HP / 0,65 kW	3360	115 mm	4 1/2"	7000
125INOX GB	8024648009258	1	110 V 50 Hz	Single-phase	0,9 HP / 0,65 kW	2800	115 mm	4 1/2"	5800

Figure 5.1: Examples of tile cutting operations, including straight cuts and creating knockouts. Always ensure hands are clear of the blade path.

Specific Cutting Operations:

- **Straight Cuts:** Align the tile's edge with the fence (if applicable) and feed it through the blade.
- **45° Bevel (Jolly) Cuts:** Adjust the cutting table or blade angle to 45 degrees as per the saw's mechanism. Carefully feed the tile to achieve the desired bevel.
- **Square/Round Knockouts:** For internal cuts, plunge the blade into the material at the desired location, then

carefully guide the tile to complete the cutout. Multiple passes may be required.

- **Polishing/Sanding:** Use the supplied abrasive discs for finishing edges. Ensure the correct disc is installed and follow safety precautions.

Maximum Cut Thickness: The saw can cut up to 1 inch in a single pass and up to 2 inches in a double pass. For thicker materials, make a shallow first pass, then adjust the material or blade depth for a second pass.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Raimondi tile saw. Always disconnect the saw from power before performing any maintenance.

- **Cleaning:** After each use, clean the saw thoroughly. Remove all tile debris and sludge from the cutting table, water tray, and blade guard. This prevents buildup that can affect performance and cooling.
- **Water System:** Drain and clean the water tray regularly to prevent algae growth and pump clogging. Inspect the water pump for proper function.
- **Blade Inspection:** Regularly inspect the blade for wear, cracks, or missing segments. A dull or damaged blade can lead to poor cuts and increased motor strain. Replace blades as needed.
- **Blade Dressing:** Use the supplied dressing stone to clean and sharpen the diamond blade. This helps expose new diamond particles and maintains cutting efficiency.
- **Drive Belt:** Periodically check the Z90 drive belt for tension and wear. Adjust or replace if necessary.
- **General Inspection:** Check all nuts, bolts, and fasteners for tightness. Lubricate moving parts as recommended by the manufacturer (refer to specific product documentation if available).
- **Storage:** When not in use, store the saw in a clean, dry place, preferably using its turtle shell cover for protection.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter.

Problem	Possible Cause	Solution
Saw does not start.	No power, faulty switch, motor issue.	Check power connection and circuit breaker. Ensure switch is fully engaged. If problem persists, contact service.
Poor cut quality (chipping, rough edges).	Dull or incorrect blade, improper feed rate, insufficient water.	Dress or replace blade. Reduce feed rate. Ensure water reservoir is full and pump is working.
Blade overheating or excessive dust.	Insufficient water cooling, clogged pump.	Check water level. Clean water pump and lines. Ensure water is reaching the blade.
Motor strains or slows down during cut.	Forcing the cut, dull blade, worn drive belt.	Reduce feed pressure. Dress or replace blade. Inspect and replace drive belt if worn.

8. SPECIFICATIONS

Detailed technical specifications for the Raimondi 125USA GS86 Portable Tile Saw.

Feature	Detail
Model	125USA GS86

Feature	Detail
Brand	Raimondi
Power Source	110V
Motor Power	0.9 HP (90 Watts)
Blade RPM	7000 RPM
Maximum Disc Diameter	4-1/2 inches (115 mm)
Minimum Disc Diameter	4 inches (100 mm)
Maximum Cut Thickness (Single Pass)	1 inch (25 mm)
Maximum Cut Thickness (Double Pass)	2 inches (50 mm)
Cutting Angle	0-45 Degrees (for bevel cuts)
Blade Cooling	Heavy-duty pump water cooling
Drive Belt Type	Z90
Gear Ratio (Motor to Disc)	1 ÷ 2.1
Product Dimensions (L x W x H)	18" x 18" x 12" (45 x 45 x 30 cm)
Item Weight	55 lbs (25 kg)
Materials for Cutting	Porcelain, Single-Double Fired Tiles, Marble, Granite
Included Accessories	4" Turbo Blade, 5 Abrasive Discs, Key Kit, Dressing Stone, User and Maintenance Manual












CUTTING SPECIFICATIONS AND MACHINE DIMENSIONS/WEIGHT												
Model												
GS86	100 mm 115 mm	4" 4 1/2"	18 mm 25 mm	3/32" 1"	10 mm 10 mm	4" 4"	∞ ∞	∞	45x45xh 30 cm 18"x18"xh 12"	25 Kg 55.1 lbs	50x50xh 35 cm 20"x20"xh 13	26 Kg 57.3 lbs

Figure 8.1: Visual representation of technical characteristics and model specifications, including blade sizes, cutting capabilities, and dimensions.

9. WARRANTY AND SUPPORT

For specific warranty details, terms, and conditions, please refer to the warranty card included with your product or contact Raimondi customer support directly. Keep your purchase receipt as proof of purchase.

For technical assistance, spare parts, or service inquiries, please contact your authorized Raimondi dealer or visit the official Raimondi website for contact information.