

Goodway RAM-4X-ID-60-2:1

## RAM-4X Wet/Dry/Air-Flush Tube Cleaner

Model: RAM-4X-ID-60-2:1

### PRODUCT OVERVIEW

The Goodway RAM-4X Tube Cleaner is a powerful and versatile machine designed for efficient cleaning of tubes and pipes. Equipped with a 1 HP (0.75 kW) drive motor, it effectively removes hard deposits and scale from tubes/pipes with an internal diameter of 1 inch (25.4mm) and up. This unit supports wet, dry, and air-flush applications, making it suitable for various cleaning requirements.

### Key Features:

- **Powerful Motor:** Features a full 1 HP (0.75 kW) drive motor for tackling tough deposits.
- **Flexible Shaft System:** Utilizes a heavy-duty flexible shaft with a cleaning tool for effective cleaning in hard-to-reach areas.
- **Versatile Applications:** Supports wet/air-flush applications by feeding water or air, and dry applications with the GTC-DPA Dry Powder Air-Flush Attachment.
- **Durable Construction:** Built with a rugged cast aluminum housing, stainless steel shaft with corrosion-resistant nylon coating, and a high-impact polymer base for longevity.
- **User-Friendly Design:** Simple to operate with an intuitive control panel and designed for easy transport.

### PRODUCT VISUAL



Image of the Goodway RAM-4X Wet/Dry/Air-Flush Tube Cleaner. The machine features a blue top housing, a silver-colored main body, and is mounted on a wheeled cart with a handle for portability. An orange foot pedal is visible at the base.

## SETUP INSTRUCTIONS

Before operating the RAM-4X Tube Cleaner, ensure proper setup to guarantee safe and efficient performance.

1. **Unpacking and Inspection:** Carefully remove the unit from its packaging. Inspect for any visible damage that may have occurred during transit. Report any damage to the carrier and supplier immediately.
2. **Placement:** Position the RAM-4X on a stable, level surface near the area where cleaning will take place. Ensure adequate ventilation.
3. **Power Connection:** Connect the 5-foot (1.5 m) power cord with the molded plug to a suitable electrical outlet. Verify that the power supply matches the unit's requirements (refer to specifications).
4. **Flexible Shaft Attachment:** Select the appropriate flexible shaft for your application (wet, dry, or air-flush). Securely attach the flexible shaft to the drive motor output. Ensure it is properly seated and locked.
5. **Cleaning Tool Installation:** Attach the chosen cleaning tool (e.g., brush, scraper) to the tip of the flexible shaft. Ensure it is firmly secured.
6. **Water/Air Supply (for Wet/Air-Flush):** For wet or air-flush applications, connect a water hose or air line to the designated inlet on the unit. Ensure connections are tight to prevent leaks.
7. **Dry Powder Air-Flush Attachment (for Dry Applications):** If performing dry cleaning, connect the GTC-DPA Dry Powder Air-Flush Attachment as per its specific instructions.

## OPERATING INSTRUCTIONS

Follow these steps for safe and effective operation of your RAM-4X Tube Cleaner.

1. **Pre-Operation Check:** Before starting, ensure all connections (power, flexible shaft, cleaning tool, water/air

supply) are secure. Verify that the area around the machine is clear of obstructions.

2. **Power On:** Turn on the main power switch located on the control panel. The LED display should illuminate.
3. **Select Application Mode:** If applicable, select the desired mode (wet, dry, or air-flush) on the control panel.
4. **Initiate Cleaning:** Carefully insert the cleaning tool and flexible shaft into the tube or pipe to be cleaned.
5. **Start Motor:** Press the foot pedal or activate the start button to engage the drive motor. The flexible shaft will begin to rotate, and water/air will flow if in wet/air-flush mode.
6. **Advance and Retract:** Slowly advance the flexible shaft into the tube, allowing the cleaning tool to remove deposits. Maintain a steady pace. Once the end of the tube is reached, slowly retract the shaft.
7. **Monitor Performance:** Observe the cleaning process. The intuitive control panel and LED display provide feedback on operation.
8. **Shut Down:** Once cleaning is complete, release the foot pedal or press the stop button to disengage the motor. Turn off the main power switch.
9. **Disconnect Supplies:** Disconnect water/air supply lines and then unplug the unit from the power outlet.

**Important:** Always wear appropriate personal protective equipment (PPE) such as safety glasses and gloves during operation. Refer to local safety guidelines.

## MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your RAM-4X Tube Cleaner.

- **After Each Use:**
  - Clean the flexible shaft and cleaning tool thoroughly to remove any debris or residue.
  - Wipe down the exterior of the unit with a damp cloth. Do not use abrasive cleaners.
  - Ensure all connections are free of moisture before storage.
- **Flexible Shaft Care:** Inspect the flexible shaft for kinks, wear, or damage. Replace if necessary. Lubricate the shaft according to manufacturer recommendations to ensure smooth operation.
- **Cleaning Tool Inspection:** Regularly inspect cleaning tools for wear. Worn tools reduce cleaning effectiveness and can damage tubes. Replace as needed.
- **Power Cord Inspection:** Check the power cord for any cuts, fraying, or damage. Do not use the unit if the power cord is damaged.
- **Storage:** Store the RAM-4X in a clean, dry environment, away from extreme temperatures and direct sunlight. Coil the flexible shaft neatly to prevent kinking.
- **Professional Servicing:** For internal components or complex issues, contact a qualified service technician or Goodway customer support.

## TROUBLESHOOTING

This section provides solutions to common operational issues. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Unit does not power on.	No power supply; tripped circuit breaker; faulty power cord.	Check power outlet and circuit breaker. Ensure power cord is securely plugged in and undamaged.
Flexible shaft does not rotate.	Motor not engaged; flexible shaft not properly connected; motor fault.	Ensure foot pedal/start button is pressed. Verify flexible shaft is securely attached. If problem persists, contact service.
Poor cleaning performance.	Worn cleaning tool; incorrect cleaning tool for application; insufficient water/air flow.	Inspect and replace worn cleaning tools. Ensure correct tool is used. Check water/air supply and connections.
Excessive vibration or noise.	Damaged flexible shaft; foreign object in shaft; motor issue.	Inspect flexible shaft for damage. Disconnect power and check for obstructions. If issue persists, seek professional service.

## TECHNICAL SPECIFICATIONS

**Model:** RAM-4X-ID-60-2:1

**Drive Motor:** 1 HP (0.75 kW)

**Tube/Pipe I.D. Compatibility:** 1 inch (25.4mm) and up

**Applications:** Wet, Dry, Air-Flush

**Housing Material:** Rugged Cast Aluminum

**Shaft Material:** Stainless Steel with Corrosion-Resistant Nylon Coating

**Base Material:** High-Impact Polymer

**Power Cord:** 5-foot (1.5 m) with molded plug

**Certifications:** CE, CSA

**Product Dimensions:** 20 x 17 x 37 inches

**Item Weight:** 55 pounds

**Manufacturer:** Goodway

**Color:** Blue

**Power Source:** Corded Electric

## WARRANTY AND SUPPORT

For detailed warranty information, please refer to the documentation provided with your purchase or visit the official Goodway website. Warranty terms and conditions may vary.

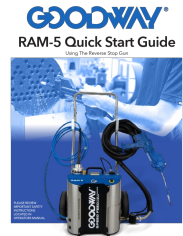


If you require technical assistance, have questions about operation, or need to order replacement parts, please contact Goodway customer support. Contact information can typically be found on the manufacturer's website or in

your product packaging.

**Goodway Technologies Corp.**

*(Contact details typically provided by manufacturer)*

Related Documents

 <p>GOODWAY® RAM-5 Quick Start Guide Using The Reverse Stop Gun</p>	<p><a href="#">Goodway RAM-5 Quick Start Guide</a></p> <p>A quick start guide for the Goodway RAM-5 tube cleaning system, detailing proper startup procedures and assembly with the reverse stop gun.</p>
 <p>GOODWAY® CC-400HF Hi-Flo® COIL CLEANER Operating and Maintenance Instructions</p> <p>Read before operating</p>	<p><a href="#">Goodway CC-400HF Hi-Flo Coil Cleaner Operating and Maintenance Instructions</a></p> <p>Comprehensive operating and maintenance instructions for the Goodway CC-400HF Hi-Flo Coil Cleaner, covering safety, operation, troubleshooting, and parts.</p>
 <p>GOODWAY® SPECIALTY DRY STEAM TOOLS</p>	<p><a href="#">Goodway Specialty Dry Steam Tools and Accessories Catalog</a></p> <p>Explore the comprehensive range of Goodway's specialty dry steam tools and accessories. This catalog details hoses, guns, cleaning kits, wands, scrapers, steam mops, and advanced conveyor belt cleaning systems, including product model numbers, specifications, and pricing. Find solutions for industrial cleaning and sanitation needs.</p>