

AUTOOL HTS558

AUTOOL HTS558 Walnut Blaster Engine Intake Valve Cleaner Instruction Manual

1. INTRODUCTION

The AUTOOL HTS558 Walnut Blaster is designed for deep removal of carbon deposits from engine intake manifolds, intake valves, and exhaust valves. This process helps restore engine health by addressing issues such as unstable idling, insufficient fuel combustion, and reduced air-fuel ratio. The machine utilizes walnut sand as a cleaning agent, which is an eco-friendly, non-toxic, and corrosion-preventive material known for its hardness, pressure resistance, and wear resistance.



Figure 1: AUTOOL HTS558 Walnut Blaster main unit and included accessories.

2. SAFETY INFORMATION

Always prioritize safety when operating the AUTOOL HTS558. Failure to follow safety guidelines may result in injury or damage to equipment.

- **Eye Protection:** Always wear safety goggles to protect your eyes from walnut sand and carbon debris.
- **Respiratory Protection:** Ensure adequate ventilation or wear a respirator to avoid inhaling fine dust particles.
- **Air Pressure:** The air pump pressure should be more than 0.7Mpa (7bar/102PSI) for optimal performance.
- **Engine Off:** Ensure the engine is completely turned off and cooled before beginning any cleaning procedures.
- **Walnut Sand:** Use walnut powder with a diameter between 0.4-0.8mm. Avoid exposure to water, as it can cause clumping and nozzle clogging.
- **Electrical Safety:** Ensure the machine is properly grounded and all electrical connections are secure before operation.

3. WHAT'S IN THE BOX

The AUTOOL HTS558 package includes the following components:

- 1x Engine Cleaner Main Unit
- 2x Spray Gun Barrels (long, short)
- 1x Goggles
- 1x Recycle Hose
- 1x Recycle Hose and Spray Gun Connector
- 2x Bags of Walnut Sand (approx. 2kg total)
- 2x Sand Suction Hose Elbows
- 5x Model Adapters
- 1x User Manual



Figure 2: All components included with the AUTOOL HTS558 Walnut Blaster.

4. SETUP

Follow these steps to prepare your AUTOOL HTS558 for operation:

4.1. Install Sand Suction Hose

Connect the sand suction hose to the designated port on the main unit. Ensure a secure fit to prevent leaks during operation.

4.2. Install Sandblasting Gun

Attach the desired spray gun barrel (long or short) to the sandblasting gun. Then, connect the sandblasting gun assembly to the recycle hose and the main unit.

4.3. Add Walnut Media

Remove the top cover of the main unit. Carefully pour the provided walnut sand into the internal container. Ensure the dust filter is properly seated before replacing the cover.



Figure 3: Pouring walnut sand into the machine.

4.4. Connect External Air Source

Connect an external air compressor (not included) to the machine's air inlet. The air pump pressure should be at least 0.7Mpa (7bar/102PSI).

EXTERNAL AIR SOURCE

Our machine uses an external air source, which makes walnut sand more powerful and effective against carbon deposits. You need to use it with the air pump (not included in the kit), the air pump pressure should more than 0.7Mpa (7bar/102PSI).



Figure 4: Connecting the external air source to the unit.

4.5. Select and Attach Adapter

Choose the appropriate adapter from the five types provided to match the engine's intake port size. Attach it securely to the end of the sandblasting gun assembly.

INTEGRATED DESIGN

The walnut powder sand can be sprayed & recovered simultaneously. The sprayed walnut sand will be recycled together with the fallen carbon deposition after cleaning. After filtering by the dust filter, the walnut powder sand will enter the machine again for cleaning.

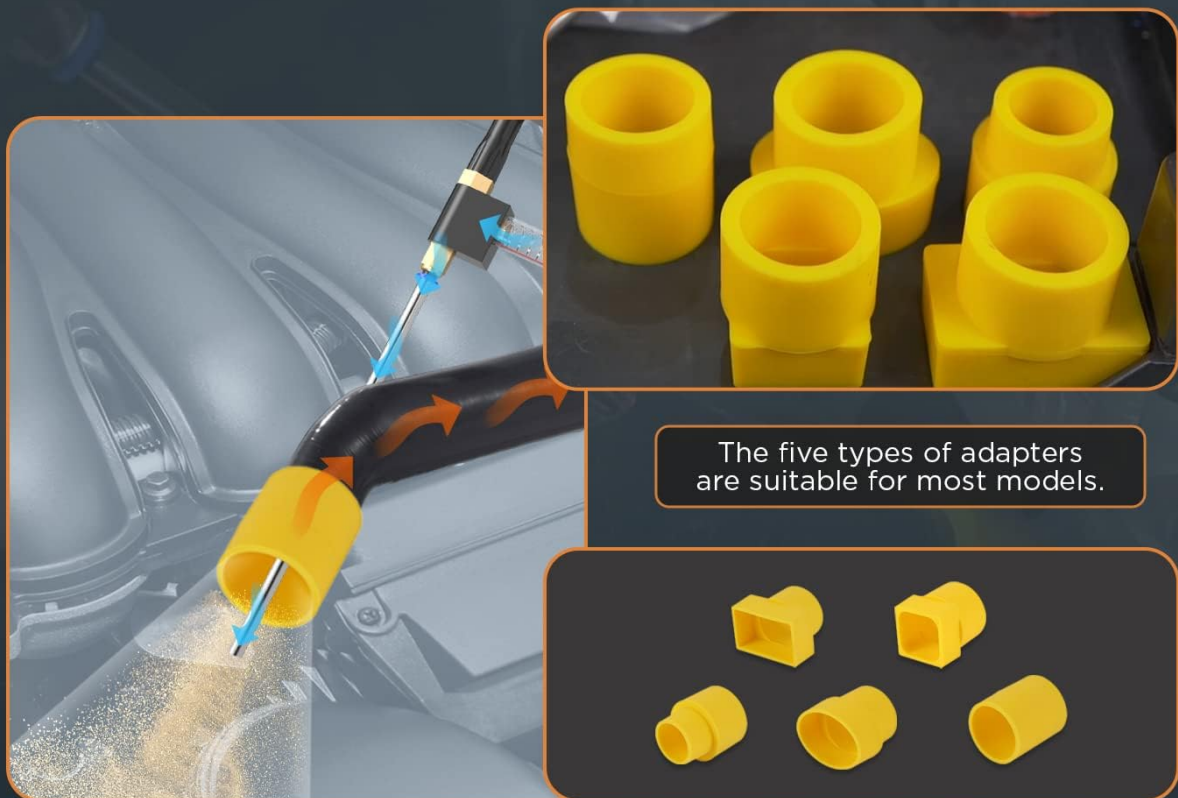


Figure 5: Various adapters and their connection to the sandblasting gun.

4.6. Video Guide: Setup

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Video 1: Demonstrates the setup process for the AUTOOL Walnut Blaster, including hose connections and media loading.

5. OPERATING INSTRUCTIONS

Perform carbon cleaning using the following procedure:

5.1. Prepare Engine for Cleaning

Turn off the engine. Rotate the crankshaft to ensure the intake valve of the cylinder you are working on is closed. This prevents walnut sand from entering the combustion chamber.

5.2. Insert Nozzle and Begin Cleaning

Insert the sandblasting gun with the appropriate adapter into the engine's intake port. Activate the machine to begin spraying walnut sand. The integrated design allows for simultaneous spraying and recovery of walnut sand and carbon deposits.



Figure 6: Cleaning an engine intake port with the walnut blaster.

5.3. Cleaning Duration

Cleaning time typically ranges between 1-3 minutes per port, depending on the severity of carbon buildup. Monitor the cleaning progress as needed.

5.4. Inspect Results

After cleaning, visually inspect the intake manifold and valves to ensure all carbon deposits have been removed. Repeat the process if necessary.



Figure 7: Before and after cleaning of an intake manifold.



Figure 8: Before and after cleaning of engine intake and exhaust valves.

5.5. Video Guide: Operation

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Video 2: Shows the AUTOOL HTS558 in action, demonstrating the carbon cleaning process on an engine.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your AUTOOL HTS558.

- **Dust Filter Cleaning:** The built-in dust filter separates recovered walnut sand from carbon deposits for recycling. Periodically check and clean the filter to maintain efficient operation.

BUILT-IN DUST FILTER

The built-in dust filter can help you separate the recycled walnut powder sand from the carbon deposit for recycling.



Figure 9: The built-in dust filter for separating walnut sand.

- **Walnut Sand Management:** Walnut shell grit tends to clump and clog the nozzle when exposed to water. If clumping occurs, shake or blow dry the grit to break up the clumps before use.
- **Storage:** Store the unit in a dry, clean environment when not in use.

7. TROUBLESHOOTING

If you encounter issues with your AUTOOL HTS558, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Insufficient cleaning power	Low air pressure; clogged nozzle; wet walnut sand.	Ensure air compressor provides $>0.7\text{Mpa}$; check and clear nozzle; dry walnut sand.
Walnut sand not spraying	Nozzle or hose blockage; insufficient walnut sand; incorrect assembly.	Check all connections and clear blockages; ensure sufficient walnut sand in reservoir; re-assemble according to instructions.
Poor suction/recovery	Clogged dust filter; loose hose connection; full collection tank.	Clean or replace dust filter; secure all hose connections; empty collection tank.

8. SPECIFICATIONS

Key technical specifications for the AUTOOL HTS558 Walnut Blaster:

Feature	Specification
Application	All vehicle types
Rated Voltage	110V/220V
Rated Frequency	50/60HZ
Rated Power	1200W
Capacity	13L
Vacuum Suction	0.02Mpa
Air Flow	<300L/Min
Package Dimensions	24 x 16 x 16 inches (approx. 400x400x540mm)
Item Weight	26 pounds (approx. 10KG)

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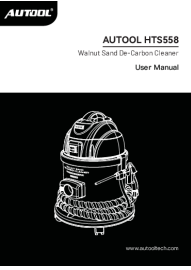
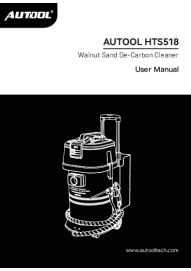
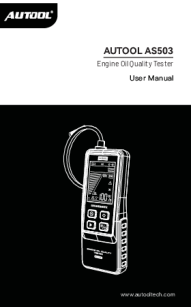
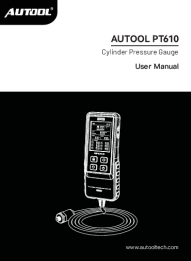
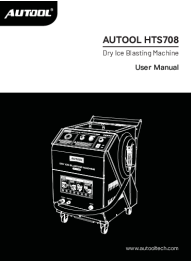



Figure 10: Detailed specifications and labeled components of the AUTOOL HTS558.

9. WARRANTY AND SUPPORT

The AUTOOL HTS558 comes with a 3-year warranty covering damages caused by non-human factors. AUTOOL is committed to providing replacement parts for free within this 3-year period. For any technical support or inquiries, please contact AUTOOL customer service. They aim to respond within 24 hours.

Related Documents - HTS558

	<p>AUTOOL HTS558 Automotive Walnut Sand De-Carbon Cleaner User Manual AUTOOL Tech</p> <p>User manual for the AUTOOL HTS558 automotive walnut sand de-carbon cleaner, detailing its features, operation, maintenance, and safety guidelines for effective engine intake system cleaning.</p>
	<p>AUTOOL HTS518 Walnut Sand De-Carbon Cleaner User Manual</p> <p>User manual for the AUTOOL HTS518 Walnut Sand De-Carbon Cleaner. Provides detailed instructions on operation, safety, maintenance, warranty, and technical specifications for automotive engine carbon cleaning.</p>
	<p>AUTOOL AS503 Engine Oil Quality Tester User Manual</p> <p>Comprehensive user manual for the AUTOOL AS503 Engine Oil Quality Tester, providing instructions on operation, maintenance, safety, warranty, and technical specifications for automotive professionals.</p>
	<p>AUTOOL PT610 Cylinder Pressure Gauge User Manual</p> <p>Comprehensive user manual for the AUTOOL PT610 Cylinder Pressure Gauge, detailing its features, operation, safety guidelines, maintenance, and warranty information for accurate automotive engine diagnostics.</p>
	<p>AUTOOL HTS708 Engine De-Carbon Cleaner Machine User Manual</p> <p>User manual for the AUTOOL HTS708 Engine De-Carbon Cleaner Machine (Dry Ice Blasting Machine), covering operation, safety, technical specifications, troubleshooting, and maintenance for industrial cleaning applications.</p>
	<p>AUTOOL SDT205 Smoke Leak Detector User Manual Vehicle Diagnostic Tool</p> <p>Comprehensive user manual for the AUTOOL SDT205 Smoke Leak Detector. Learn about its features, technical specifications, operation, maintenance, and troubleshooting for professional vehicle leak detection.</p>

