

SHOT BLASTER

Training Guide

**NATIONAL
FLOORING
EQUIPMENT**®

North America Since 1968



Purpose of This Guide

The Shot blaster Training Guide is designed to provide operators with the knowledge and skills necessary to effectively operate and compare shot blasters. Whether you are a new operator or an experienced professional looking to refine your technique, this guide covers **essential operating procedures**, maintenance routines, **troubleshooting** techniques, and a **detailed comparison of the options in the market** to help you choose the right equipment for your needs.

Why This Guide Matters

Using the right shot blaster for the job can make a significant difference in your productivity. Learn how to:

- Select the right shot blaster for your project
- Understand the key differences in specs and features of various models
- Maximize machine performance with proper operation and maintenance
- Improve job site productivity with best practices

Who Should Use This Guide?

- Contractors and flooring professionals
- Equipment rental personnel
- Warehouse and facility maintenance teams
- Anyone responsible for floor prep

What You Will Learn

Throughout this guide, you will gain insight into:

- **Machine Components & Controls:** Understanding the key parts of a shot blaster.
- **Pre-Operation Checklist:** Steps to ensure your machine is ready for use.
- **Operating Procedures:** Best practices for efficient and effective floor grinding.
- **Maintenance & Troubleshooting:** Tips for keeping your equipment in top condition and resolving common issues.
- **Product Comparison:** A side-by-side comparison of shot blaster models, including specifications, features, and ideal applications.

Let's get started!



TABLE OF CONTENTS

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4	Buyer Decision Guide
5	Shot Blaster Guide
6	Shot Blaster Comparisons
8	Frequently Asked Questions
10	Maintenance Checklists
11	Tooling & Accessories
13	Troubleshooting & Resources



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BUYER DECISION GUIDE: WHICH SHOT BLASTER DO I NEED.

Understanding Your Needs

Surface Type & Condition: Different shot blasters vary in power and CSP—ensure the model you choose aligns with your project’s surface prep goals, whether you’re removing coatings, prepping for overlays, or cleaning floors.

Project Size & Scope: Smaller areas with detail work require compact, portable units. For large-scale commercial or industrial jobs, high-capacity shot blasters with wider blast widths are best.

Job Site Environment: Consider site accessibility, ventilation and power availability. Electric units are common indoors, while larger propane models offer power for outdoors or larger areas.

Key Features to Compare

Power Source: Available power at the jobsite, shot blaster size, and dust collector power are all important factors when getting ready for the project

WALL POWER - Do your projects have wall power? **Is it 110v? 230 Single Phase? OR 230 3 Phase?**

GENERATOR - Overall kW rating of the generator? Will it run both the shot blaster & dust collector?

SHOT BLASTER - Check the HP, voltage, and production capacity of the machine. This will guide your decisions on a dust collector pairing and generator or wall power requirement.

A95 - 110V, 1.5 HP, 17 Amps

A96 - 230V, Single Phase, 5.3 HP, 30 Amp,

A97 - 230V, 3 Phase, 10 HP, 30 Amp

DUST COLLECTOR - 110V?, 230V 3P?, 480V 3P?, Propane

*Pair your dust collector carefully and match the cfm so it is moving the dust and debris through the shot blaster effectively.

Blast Width & Production Rate: Wider grinding widths cover more ground quickly, while smaller compact machines offer more maneuverability. .

Shot Flow Control: Adjustable shot flow lets you tailor the blasting intensity to match the surface and desired profile, improving consistency and surface quality.

Mobility & Maneuverability: Depending on your job site, you may need a compact, easy-to-transport machine or a ride-on unit for maximum productivity on large floors.

A95

8-Inch Manual Shot Blaster, 115V Single Phase



- A.** This 8-inch shot blaster is a compact and versatile machine ideal for small to mid-size applications.
- B.** Close-faced blast wheel design directs more steel abrasive to the surface, resulting in lower maintenance costs.
- C.** Pair your A95 with our DL2000 Dust Collector for maximum results and separation of dust from the steel abrasive.
- D.** Under optimal job site conditions, you can expect production rates up to 400 square feet per hour
- E.** Pair with the National Flooring Equipment DL2000 Dust Collector

A96

8-Inch Self-Propelled Shot Blaster, 230V Single Phase



- A.** Our A96 is a variable speed, self-propelled machine with an 8-inch blasting width.
A self-propelled shot blaster can provide a more even blast pattern
- B.** The unique joystick control increases productivity and allows for more responsive handling.
- C.** Built from durable manganese steel that becomes stronger and more durable over time.
- D.** Under optimal job site conditions, you can expect production rates up to 800 square feet per hour
- E.** Pair with the National Flooring Equipment DL3000P Dust Collector

A97

10-Inch Self-Propelled Shot Blaster, 230 V Three Phase



- A.** This 10-inch self-propelled machine is angled to allow for easy edging along walls.
Slightly pitched to the left, this design gets you within 1/8" of the wall
- B.** Control bolt allows precision adjustment of control valve and shot flow.
- C.** Reverse operation of this machine brings more control over positioning, direction, and line overlap.
- D.** Under optimal job site conditions, you can expect production rates up to 1300 square feet per hour
- E.** Pair with the National Flooring Equipment DL4000P Dust Collector

SHOT BLASTER COMPARISON

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Feature	National A95	Husqvarna Blastrac 1-8DM	Bartell Global Hornet	BlastPro BP-9-110
Width	12"	21"	13"	12.5"
Blasting Width	8"	8"	8"	9"
Weight	121 lbs	267 lbs	114 lbs	121 lbs
Speed	Manual	Manual	Manual	Manual
Blasting Capacity	430 sqft/hr	350 sqft/hr	Not Specified	275 sqft/hr
Voltage	115	120	110	110
HP	1.5	2	2.8	3.5
Amps	17	15	20	18



Feature	National A96	Husqvarna BT 1-8DPS30	Bartell Global Elephant	BlastPro BP-10-Super
Width	13.5"	15"	12"	17"
Blasting Width	8"	8"	8"	10"
Weight	350 lbs	320 lbs	177 lbs	736 lbs
Speed (Max)	Variable Speed, Self-Propelled	Self-Propelled	Self-Propelled	Self-Propelled
Blasting Capacity	860 sqft/hr	600 sqft/hr	Not Specified	1500 sqft/hr
Voltage	230	230	230	460
HP	5.3	4	5	15
Amps	30	14	22	21



SHOT BLASTER COMPARISON

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Feature	National A97	Husqvarna BT-10DPS75	Bartell Global Modul300	BlastPro BP-15-Super
Width	15.25"	16"	20"	23"
Blasting Width	10"	10"	12"	15"
Weight	430 lbs	510 lbs	847 lbs	847 lbs
Speed	Self-Propelled	Self-Propelled	Self-Propelled	Self-Propelled
Blasting Capacity	2000 sqft/hr	1,290 sqft/hr	Not Specified	1,950 sqft/hr
Voltage	230/415V	230V	480V	208/230/460V
HP	10 HP	10 HP	17 HP	20 HP
Amps	30 A	26 A	19.1 A	50/24 A



FAQ

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What Is a Shot Blaster Used For?

Shot blasters clean and profile concrete in a single step. Using steel shot propelled at a high velocity, these machines pair with a dust collector to prep surfaces.

How Does a Shot Blaster Work?

A blast wheel propels steel shot onto the concrete. Suction from the dust collector separates the debris from the shot, which is then recycled through the machine and used again.

When Should I Use a Shot Blaster Instead of a Grinder?

1) Achieving a High Concrete Surface Profile (CSP):

Shot blasting is ideal when a rough surface texture is needed to ensure strong adhesion for coatings like epoxy or polyurethane.

2) Efficient Removal of Thin Coatings and Contaminants:

For projects requiring the removal of thin layers of glue, paint, or epoxy, shot blasting is more efficient than grinding. It cleans the surface thoroughly without smearing residues, which can occur with grinders.

3) High Production Rates on Large, Open Areas:

Shot blasters can cover large areas quickly, making them suitable for expansive floors where speed is essential. They are particularly effective on flat, open surfaces.

4) Cost Effective:

Outside of the machine itself and the shot, additional costs are limited and a shot blaster does not require expensive consumables.

How Do I Choose The Right Shot Size?

Smaller shot (S-170, S-230) is best for smoother finishes, larger shot (S-330+) is best for deeper profiles.



FAQ

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What Size Shot Blaster Do I Need?

The size of the shot blaster you need is influenced by a couple of factors:

1) Job Size & Production Rate:

Small jobs (garages, basements, small offices) - best for machines with a blasting width of 6-8", better for tight spaces and have more maneuverability. e.g. A95

Medium jobs (retail spaces, warehouses, schools) - best for machines with a blasting width of 10"-12", faster production rate while maintaining maneuverability. e.g. A96

Large jobs (parking decks, airports, industrial floors) - best for machines with a blasting width of 15"-18", faster production rate and best for wide open spaces. e.g. A97

2) Power Availability:

110V (Standard House Power): Typically supports smaller machines like the National A95

220V-240V (Single or Three-Phase): Accommodates mid-sized machines and common in commercial environments.

480V (Three-Phase Industrial Power): Required for heavy-duty machines and is essential for industrial projects.

2) Desired CSP:

Some shot blasters are capable of achieving different concrete surface profiles than others. Depending on the end result you are looking for, it may be beneficial to research individual CSPs.



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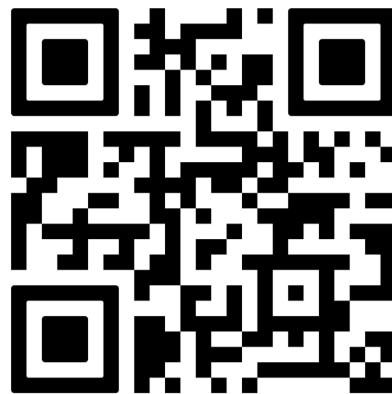
MAINTENANCE CHECKLISTS



A95 Maintenance Checklist



A96 Maintenance Checklist



A97 Maintenance Checklist

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6551 HEAVY-DUTY MAGNETIC SHOT SWEEPER

This sweeper is ideal for steel shot, and it picks up metal debris and easily.

- Release handle
- Height-adjustable settings of 1, 2, and 3 inches
- Wheeled construction makes it easy to push across surfaces
- 24-inch magnet, 25-inch width



6553 14-INCH MAGNETIC SHOT SWEEPER

The push-type sweeper is made with a powerful ceramic magnet and durable aluminum frame and handle. It features a 14-inch sweeping width, 6 inch wheels, and a quick release handle to make picking up nails, screws, and other metal debris easy.

- Sweeping Width: 14"
- Shipping weight: 21 lb
- Overall width: 15.125"
- Approx. pull: 400 lb
- Height: 42"



6552 24-INCH MAGNETIC SHOT SWEEPER

This push-type sweeper is made with a powerful ceramic magnet and durable aluminum frame and handle. It features a 24-inch sweeping width, 6-inch wheels, and a quick release handle to make picking up nails, screws, and other metal debris easy.

- Sweeping width: 24"
- Shipping weight: 41 lb
- Overall Width: 30.25"
- Approx. pull: 400 lb
- Height: 42"



6555 HAND MAGNET

Handheld magnet designed for loading and unloading media into shot blast machines.

SHOT

- 3404: S-280, 50-pound bag
- 3411: S-330, 50-pound bag

MISCELLANEOUS

- 3477-204000590: Hose adapter
- 3398-201000494: Rear seal



SHOT BLAST ACCESSORIES



A95 ACCESSORIES

A95 Kit

Available as a Kit or Individual Parts

404147	Toolbox 20" x 9" x 9"	404150	Hex key wrench 6 mm	400413	Abrasive control cable
404149	Open wrench 10 mm	1009	Safety Glasses	400458	2 x Brush, side LH & RH
404148	Open wrench 13 mm	404330	Blast wheel kit 165 mm	400457	2 x Brush, front & rear
404153	Universal Socket - 24 mm	400473	Top liner	404154	Wrench, open, 17 mm
404152	Slotted screwdriver 6"	400410	RH Liner	404155	Ratchet, 1/2"
404151	Hammer	400409	LH Liner	404235	Wrench, open, 11 mm

Additional Support Parts

3395-201001726	Creates 2" Blast Width	401868	Belt
3395-201001725	Creates 4" Blast Width		
3395-201001724	Creates 6" Blast Width		

A96 ACCESSORIES

A96 Kit

Available as a Kit or Individual Parts

404147	Toolbox 20" x 9" x 8"	404150	Hex key 6 mm	404392	Front Brush
404148	Open wrench 13 mm	1009	Safety Glasses	405010	V-ribbed belt
404149	Open wrench 10 mm	404330	Blast wheel kit 165 mm	404870	Blast Wheel Adapter
404154	Open wrench 17 mm	404400	Top liner	405112	Bottom Liner
404155	Ratchet 1/2"	405111	RH liner	405003	Screw, Blast Wheel
404152	Slotted screwdriver 6"	405110	LH liner	405231	Socket 13 mm
404151	Hammer	404603	Side brush (2)		

A97 ACCESSORIES

A97 Kit

Available as a Kit or Individual Parts

404147	Toolbox 20" x 9" x 8"	404150	Hex key wrench 6 mm	404648	LH liner (small)
404149	Open wrench 10 mm	1009	Safety Glasses	404647	Bottom liner
404148	Open wrench 13 mm	404330	Blast wheel kit 165 mm	404603	Side brush (2)
404154	Open wrench 17 mm	404361	Top liner	404604	Front brush
404155	Ratchet 1/2"	404646	RH liner	404870	Blast Wheel Adapter
404152	Slotted screwdriver	404645	LH liner	405003	Screw, Blast Wheel
404151	Hammer	404649	RH liner (small)	405231	Socket 13 mm
404540	Belt				



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TROUBLESHOOTING & MAINTENANCE

Overfilling the shot hopper is one of the most common—and costly—mistakes operators make when using a shot blaster.

- Learn why keeping your shot level in check matters
- How too much shot can affect machine performance, surface profile, and productivity.



Need **clean, consistent edges** on your concrete surface prep jobs?

- Here we demonstrate how to edge effectively using the A97 National Shot Blaster.
- Learn the best techniques for getting close to walls and tight spaces without sacrificing performance or surface profile quality.



Think your **shot blaster** is just wearing out? It might be your **liner**.

- We break down why replacing the liner is critical to maintaining performance, protecting your machine, and delivering a clean, consistent surface profile.





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TROUBLESHOOTING & MAINTENANCE

Proper maintenance and upkeep will help you get the most out of your shot blaster—and one of the most critical wear parts to monitor is your blast wheel.

- **Step-by-step guide to replacing your blast wheel** - keep your equipment running efficiently and extend its lifespan.



Not sure whether the A96 or A97 shot blaster is right for your job, or just want to understand them better?

- We break down the **key differences between these two powerful surface prep machines** from National Flooring Equipment to help you make the best choice for your needs.



The more shot you have flowing into your machine, the more power it takes.

- In this video we explain **how to adjust amperage draw**
- what the sweet spot may be for your shot blasting machine.

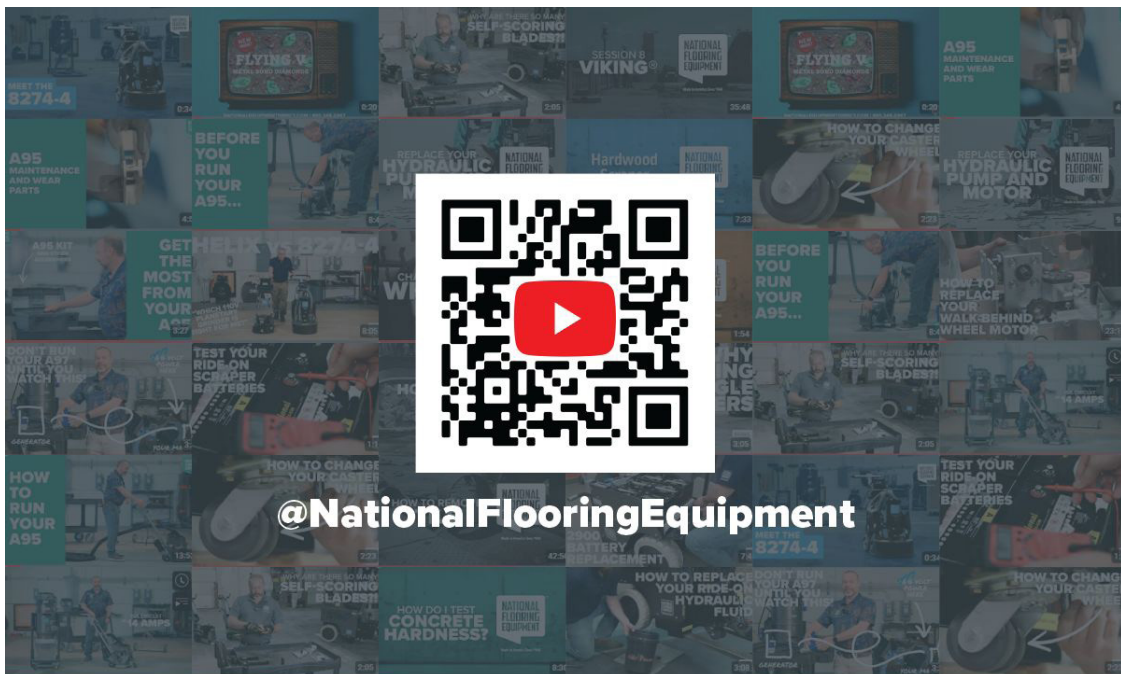




RESOURCES

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Visit our YouTube channel and website for more resources.



Great work—you've made it through the guide! By now, you should have a solid understanding of shot blasters, from selecting the right model for your job to maintaining performance, replacing key wear parts, and troubleshooting common issues in the field.

At National Flooring Equipment, we know that jobsite conditions vary—and so should your tools. That's why we're committed to helping you get the most out of your shot blaster, no matter the application. Keep this guide handy as a reference, and revisit it whenever you need a quick tip or reminder.

If you need more support, we've got you covered. Check out our online video library for how-to's and maintenance walkthroughs, or reach out to our team directly—we're always here to help you troubleshoot, plan, and get back to work with confidence.

Thank you for choosing National. We're proud to be part of your surface prep journey, and we're here to keep you moving forward.

For more materials, resources, and expert support, be sure to visit:



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