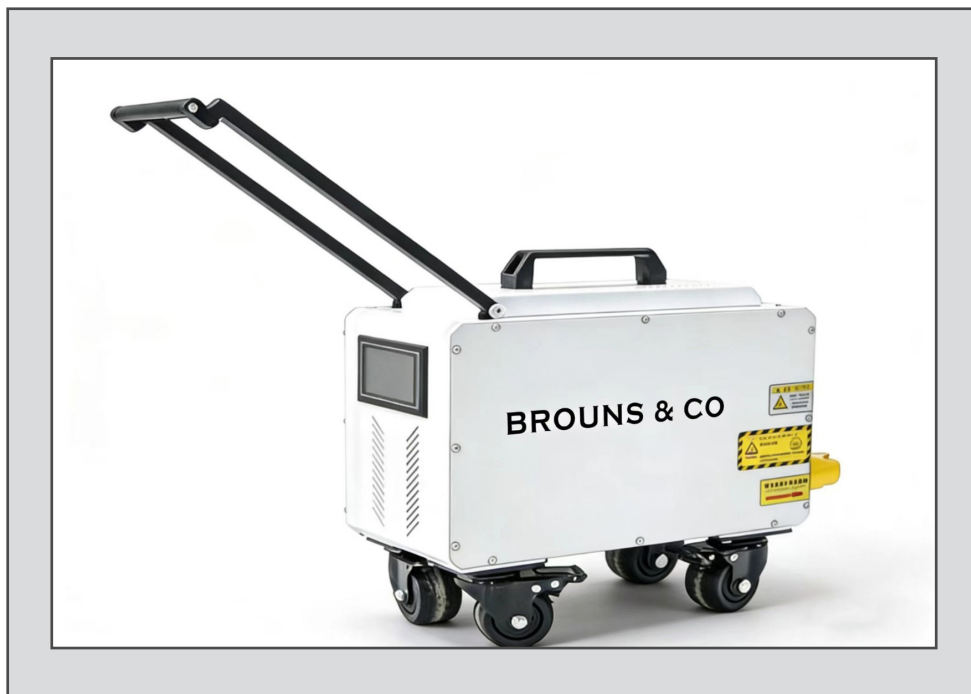


PULSE LASER CLEANER

Operator's Manual

BROUNS & CO Safety | Care | Rental Procedures



Version 1.0



MACHINE SPECIFICATIONS AND IMPORTANT NOTICES

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Pulse Laser Cleaner Operator's Manual

MACHINE SPECIFICATIONS

Specification	Value
Laser Type	Pulse Fiber Laser
Rated Power	300 W or 500 W
Electrical Supply	110 V AC
Air Requirement	Optional/60 psi when used
Working Distance	10-12 in. (250-300 mm)
Cooling	Air-cooled
Weight 300 W	61.7 lbs (28 kg)
Weight 500 W	81.6 lbs (37kg)
Emergency Contact	(202) 771 9546

IMPORTANT

This manual is intended as a quick-reference guide for operators who have already received in-person basic laser safety instruction.

Failure to follow these procedures may result in equipment damage, serious injury, or permanent eye damage.

Never operate this equipment without the approved safety eyewear.

BEFORE YOU BEGIN

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Personal Protective Equipment

Minimum Required PPE:

- Laser safety eyewear (provided)
- Respirator appropriate for the coating being removed
- Hearing protection
- Gloves
- Non-synthetic clothing recommended
- Closed-toe footwear

Work Area

Before turning the machine on:

- ✓ Remove flammable materials within the work area.
- ✓ Ensure no one can accidentally look into the beam path.
- ✓ Use dust extraction or HEPA vacuum whenever possible.
- ✓ Never operate outdoors in rain or damp conditions.
- ✓ Keep the machine dry.

Pre-Operation Inspection

- ☐ Fiber optic cable is free of cuts, kinks, or crushing.
- ☐ Laser head lens is clean and the protective cap is installed.
- ☐ Dust extractor/vacuum is connected and operational.
- ☐ Air supply is connected (if required).
- ☐ Emergency Stop ("Reset") button is engaged.
- ☐ Power cord is undamaged.
- ☐ The work area is clear of unnecessary personnel and reflective objects.



Do not power on the machine if any damage is observed. Contact Brouns & Co. before operating the equipment.

MACHINE SET UP & STARTING THE MACHINE

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Machine Setup

1. Position the machine

- Place on a stable surface
- Lock wheels

2. Connect Power

The laser operates on:

- 110V household outlet.

Only use a properly grounded outlet and do not use undersized extension cords.

3. Connect Air Supply

Air Assist

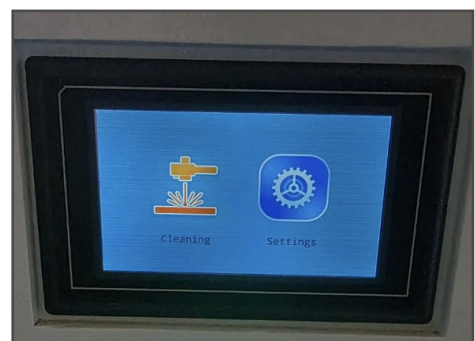
The laser may be operated without compressed air under normal conditions.

During extended operation or when ambient temperatures exceed **70°F (21°C)**, connect clean, dry compressed air to improve cooling and protect the optics.

Recommended pressure: 60 psi (0.4 MPa)

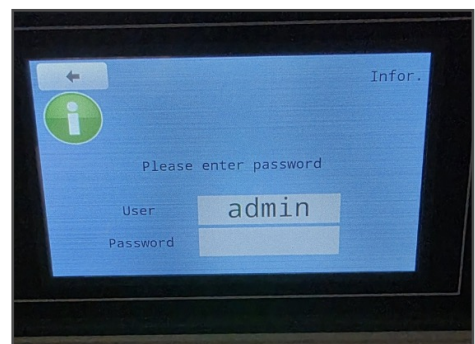
Starting the Machine

1. Connect Power.
2. Turn "Reset" button a quarter turn to the right.
3. Allow the touchscreen to boot.
4. Open the Cleaning interface - select "Cleaning"



5. Enter the provided operator password

- Touch the "Password" input field.



MACHINE SET UP & STARTING THE MACHINE

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- Enter the operator password provided by Brouns and Co. and then press "Enter".



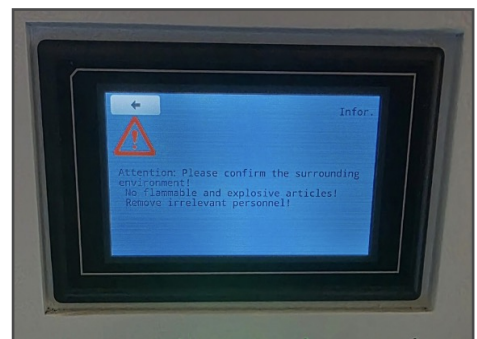
6. Enable the laser.

- Select "Sway" after which the laser aiming beam will appear from the laser head.
- Select "Laser".



7. Begin using the laser.

- The above message will appear after the laser has been enabled.
- Remove the lens cap and connect the vacuum/extractor to the laser head gun to pull fumes and particles away.
- Verify that the red aiming beam is centered within the cleaning head aperture before beginning work.
- Press the trigger twice to begin cleaning.



Always begin in an inconspicuous test area to determine the appropriate cleaning speed and avoid damage to the substrate.

Note: Do not remove the lens cap until immediately before firing the laser.

OPERATING & SHUTDOWN

BROUNS & CO

Pulse Laser Cleaner Operator's Manual

During Operation

Always:

- Keep the beam moving.
- Watch the surface continuously.
- Stop immediately if excessive heating occurs.
- Never aim the laser at glass unless specifically instructed.
- Frequently remove accumulated dust.



Never allow dust to accumulate on the lens. This can permanently damage the optics.



Never step on, kink, sharply bend, or place heavy objects on the fiber optic cable.

Damage to the cable may require expensive repairs and is not considered normal wear.

Shutdown Procedure

1. Release the trigger.
2. Turn the laser **OFF** by turning the Reset button a quarter turn to the right.
3. Turn **Air OFF**.
4. Disconnect power.
5. Allow the machine to cool before transport.
6. Clean the lens.
7. Replace the protective lens cap immediately after cleaning is complete and before transporting or storing the machine.

DAILY CARE & SAFETY

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Daily Care

After each use:

- ✓ Vacuum dust from machine exterior.
- ✓ Wipe laser head with a clean microfiber cloth.
- ✓ Clean the protective lens using the supplied lens cloth. Never use paper towels, shop rags, or abrasive materials.
- ✓ Replace protective lens cover.
- ✓ Coil cables carefully.
- ✓ Report any damage immediately.

Never use compressed air directly on the laser optics or touch the lens with your fingers.

Important Safety Rules

Never:

- Point the laser toward people or reflective surfaces.
- Modify factory settings.
- Leave the machine unattended while powered.

Never operate:

- Within reach of children.
- Without appropriate ventilation.
- Near gasoline, solvents, flammable vapors or explosive materials.
- Without confirming that all bystanders are wearing appropriate laser safety eyewear or are outside the controlled work area.
- In rain or standing water.
- While fatigued or impaired.

BEFORE RETURNING

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Before Returning

Please ensure:

- ☐ Machine is clean
- ☐ Cables are properly wrapped
- ☐ Fiber optic cable free of cuts or damage
- ☐ Lens is undamaged
- ☐ Accessories are accounted for
- ☐ Safety glasses are returned
- ☐ No damage has occurred during rental

Need Help?

If the machine displays an error message, loses laser output, is dropped, or the fiber optic cable or laser head is damaged:

Stop using the equipment immediately.

Contact Brouns & Co before attempting any troubleshooting or repairs.