

Instruction Manual



1. Introduction

Thank you for choosing the Lucid Aero Drum Buffer.

This tool is designed for professional polishing and surface finishing applications using pneumatic power and compatible drum buffing pads. When used correctly, it provides fast material correction, smooth control, and consistent results across large curved and flat surfaces.

This manual covers:

- Initial setup
- Pad installation
- Air supply and lubrication
- Operation guidelines
- Shutdown and basic maintenance

Read this manual fully before operating the tool.

2. Safety Overview



WARNING

Improper use of this tool can result in serious injury.

- Always wear approved eye and hearing protection
- Keep hands, hair, clothing, and jewelry away from rotating components
- Disconnect air supply before installing or adjusting pads
- Ensure throttle is not engaged before connecting air
- Do not operate the tool if abnormal behavior is observed

Refer to the included **Safety Warning Card** for detailed hazard information.

3. Tool Condition upon Delivery

The Lucid Aero Drum Buffer ships **nearly fully assembled**.

Before first use:

- Inspect the tool for shipping damage
- Verify that all components are secure
- Confirm the pneumatic drum is deflated

You will need to install:

- Buffing pad
- Support handle
- Air hose fitting (user-supplied)

4. Buffing Pad Selection

The drum buffer is compatible with:

- **Wool pads** — heavy cutting, oxidation removal
- **Cotton pads** — light cutting and final finishing
- **Wool/Cotton blend pads** — combined cut and finish

The buffer ships with a wool pad to get started. Additional pads are available through Lucid Aero.

Select the pad appropriate to your application and polishing compound.

5. Buffing Pad Installation

1. Ensure the air supply is **disconnected**
2. Confirm the pneumatic drum is **fully deflated**
3. Slide the buffing pad onto the drum
4. Center the pad evenly along the drum length
5. Inflate the drum to **no more than 15 PSI**



Do not overinflate. Excess pressure may cause pad or drum failure.

Inflate only enough to hold the pad securely in place.

6. Drum Orientation (Optional)

The air valve is factory installed facing toward the motor to accommodate users without large socket tools.

If you have appropriate tools, the drum may be reversed to improve valve access

If removing the drum:

- Use one wrench on the shaft
- Use a second wrench on the nylock nut
- Ensure washers are properly seated during reinstallation

Do not operate with improperly seated hardware.

7. Support Handle Installation

The support handle bracket allows for:

- Left- or right-handed operation
- Throttle orientation above or below the handle
- Thumb or index-finger throttle control

Installation Steps:

1. Position the handle in the desired orientation
2. Thread the handle rod into the bracket
3. Ensure the grip is fully seated and secure

The handle grip is sized to accept **standard bicycle grips**, allowing easy replacement or customization.

Do not operate if the handle or grip is loose.

8. Lubrication (Required)

Use **air tool oil only**.

Before connecting the air hose:

- Add **2–4 drops** of air tool oil into the motor air inlet

Lubricate:

- Before each use
- Periodically during extended operation

Failure to lubricate may result in reduced performance or internal damage.

9. Air Supply Connection

- The motor inlet is **¼" NPT female**
- Use clean, dry compressed air only
- Install filtration and regulation where possible

Lucid Aero does not supply air fittings, as systems vary.

If using thread sealant:

- Do not overtighten fittings
- Ensure no loose tape or debris can enter the motor

A swivel fitting is recommended to reduce hose strain.

10. Regulator Setup

The buffer ships with the regulator in the **OFF position** (fully counter-clockwise).

Operating speed depends on:

- Hose diameter
- Hose length
- Compressor output

Typical Reference:

- With a high-CFM compressor and ½" hose, only minimal regulator opening may be required
- Smaller hoses or lower air supply will require more regulator opening

The pneumatic drum is rated to **4,000 RPM maximum**.



Do not fully open the regulator with high-capacity air systems.

The internal reduction drive provides high torque at lower air flow. Increase speed gradually and adjust as needed.

11. Pre-Operation Check

Before starting:

- Verify pad is secure and centered
- Confirm handle and fittings are tight
- Ensure throttle is **not engaged**
- Maintain a firm, controlled grip

Connect air supply only after completing these checks.

12. Operation

- Start at low speed
- Allow the pad and compound to do the work
- Apply light, even pressure
- Avoid forcing the tool into the surface

If abnormal vibration, sound, or behavior occurs:

- Release the throttle
- Disconnect air immediately
- Inspect before continuing use

13. Shutdown Procedure

1. Release throttle
2. Disconnect air supply
3. Allow all rotating components to stop
4. Deflate the pneumatic drum



Always release drum air pressure after use to prevent pad stretching.

14. Cleaning and Storage

- Remove pads after use
- Wash pads separately using mild detergent
- **Air dry only**
- Store tool in a clean, dry location

Do not store with the drum inflated.

15. Service and Support

If the tool:

- Continues running after throttle release
- Exhibits reduced power
- Shows abnormal vibration or noise

Discontinue use immediately and service the tool.

For questions, replacement parts, or support, contact Lucid Aero directly.

16. Intended Use & Disclaimer

This tool is intended for professional use only.

Failure to follow instructions, modification of the tool, or improper air supply may result in injury, property damage, or voided warranty.

Limited WARRANTY



This product is warranted to be free from defects in materials and workmanship under normal use for a period of **12 months** from date of purchase.

Warranty Does Not Cover:

- Normal wear items (pads, bearings, seals)
- Damage caused by misuse, abuse, or modification
- Improper air supply or lack of lubrication
- Unauthorized repairs

Limitation of Liability

In no event shall the manufacturer be liable for incidental or consequential damages. Liability is limited to repair or replacement of the product at manufacturer discretion.

This warranty provides specific legal rights. Other rights may vary by jurisdiction.

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