

## Technical Notes

### AIR-300

Introducing the Alpha® AIR-300, designed for unique applications that are difficult to accomplish using conventional polishers. A smaller version of the well-known Alpha® AIR-658, the AIR-300 is ergonomically designed to fit comfortably in your hand and only weighs 1.6 pounds reducing fatigue from long hours of polishing. The smaller design is easy to maneuver and produces flawless sink rims and bowls. The Alpha® AIR-300 accepts 3" and 4" discs along with 2", 3" and 4" rubber pads. It requires a 3HP compressor with air consumption of 10 CFM and air pressure between 85–95 PSI. The Alpha® AIR-300 Polisher easily converts from in-shop to on-site; a must have for all fabricators!

**Sections:**

- How to Use
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Part No.	Description
AIR-300	Mini Air Polisher
AIR-008	Lubrication Oil for Pneumatic Tools (8oz.)

Specifications:	Equipment Included:
Air Consumption.....10CFM (280 l/ Min)	<ul style="list-style-type: none"> <li>• Air Lead Hose - 10' (3m)</li> <li>• Water Hose - 10' (3m)</li> <li>• Lubrication Oil (1oz / 30cc sample bottle)</li> <li>• Faucet/Garden Hose Adapter</li> <li>• Wrench (17mm)</li> </ul>
Air Pressure..... 87 PSI (0.6Mpa (6 bar))	
Max. Speed (no load).....5,800 RPM	
Weight.....1.6lbs/.731kg	
Spindle..... 5/8"-11	
Air Inlet.....1/4" BSPP	
Water Inlet.....1/4" BSPP	

### How to Use

**Preparation:**

Install and test air compressor and airline in the shop or jobsite. AIR-300 requires 10 CFM at 87 PSI for one unit. Operation the tool at a pressure that exceeds the recommended operating specifications (85-90 PSI) may result in premature failure of the tool.

Select appropriate couplings and connect the lead hose from the polisher to the airline from the compressor.

Install and test waterline in your shop or jobsite.

Bring a garden hose to the polishing area and connect to the hose bib fitting on the end of the black water hose.

Attach water hose and air supply hose to polisher.

Slide the blue exhaust hose to the end case of polisher then install the stainless hose band to secure.

Test all machine functions before use.

**Usage:**

Select the desired accessories for the application to be performed.

Attach the accessory onto the 5/8"-11 spindle of the polisher.

Open water control valve to desired volume.

Open air supply valve gradually to maximum level to perform application.

Close air supply valve to stop polisher.

Close water control valve.

Refer to the polishing tools owner's manual for proper usage of this tool.

## Frequently Asked Questions (FAQs)

### What applications is the Alpha® AIR-300 recommended for?

The Alpha® AIR-300 is recommended for wet sanding and polishing only. For wet core drilling, profiling and grinding applications, we recommend AIR-658 that offers more torque.

### What is the warranty for this AIR-300?

Alpha® warrants the AIR-300 against defects in material and workmanship for a period of 90 days from the date of original retail purchase (proof of purchase is required for all warranty repairs). Customers are asked to send in the warranty cards, however, we still need proof of purchase for warranty repairs. Our obligation assumed under this warranty is limited to the repair or replacement of parts without charge of problems caused by defects in material and/or workmanship. The warranty does not apply to tool accessories. The warranty for repairs is 30 days on the parts and labor that were repaired.

### Does the AIR-300 have a maintenance program?

Alpha® recommends greasing the tool housing periodically to keep your tool running. Failure to perform greasing, may reduce the life of the gears. Jiffy Lubber (Part No. 300047) and Grease (Part No. 300048) are available on our web site [www.alpha-tools.com](http://www.alpha-tools.com).

### How can I get the parts list and schematic for the AIR-300?

There are several ways to obtain information such as this from Alpha®. It is available on our web site [www.alpha-tools.com](http://www.alpha-tools.com) and you can purchase Alpha® genuine parts from the same web site. You can also contact our customer service or tool repair departments at 800-648-7229.

### If my AIR-300 breaks down, whom should I contact for repair?

Please contact Alpha® for information or send tool to your nearest repair center. For warranty repairs, please include a copy if the sales receipt.

#### USA

Alpha Professional Tools®  
103 Bauer Drive  
Oakland, New Jersey 07436  
800-648-7229 ext 281 (Tool Dept Help Desk)

#### EASTERN CANADA

P.L.M. Repair Centre  
3001 Markham Road, Unit 21  
Scarborough, Ontario M1X 1L6  
Phone #: (416) 332-8460 - Fax #: (416) 321-1386

#### WESTERN CANADA

Tool Care Plus  
3612 Blackfoot Trail SE  
Calgary, AB T2G4E6  
Phone #: (403) 777-9920 - Fax #: (403) 777-9922

### What size air nipples are recommended for use on the AIR-300?

The thread on the endcase for the air on the AIR-300 is metric or 1/4" BSPP; this is a parallel pipe thread that seals on the flat seat of the fitting.

### What shall I do if my AIR-300 breaks down and I need to complete the job immediately?

This largely depends upon the time frame involved. Alpha® is the only warranty repair service center for tools still under warranty. Tools sent in for warranty repair with a copy of the sales receipt; receive priority same day or next day repair service. Tools sent in that are out of warranty will be estimated and a quote will be sent. Upon approval, repairs usual ship 7 to 10 days after approval. A \$30.00 estimate fee per tool for non-warranty tools will be applied. If the tool is repaired, the \$30.00 estimate fee will be applied toward the labor charge. Any parts used in the repair will be an additional charge. Please contact our tool repair department for alternative solutions.

**Can I use motor oil to lubricate the AIR-300? How about WD40?**

No. You can not use motor oil for lubrication. The AIR-300 requires special lightweight pneumatic oil for maintenance. These types of lubricants can cause the vanes to stick in the rotor. We recommend Alpha® Lubrication Oil for Pneumatic Tools (Part No. AIR-008). You can purchase genuine Alpha® parts from our website [www.alpha-tools.com](http://www.alpha-tools.com)

**Can I use an automatic oil feeder in the air supply line?**

No. The volume, grade, and composition of oil used may cause premature failure. The AIR-300 does not require much oil so a few drops a day at the end of operations should be enough for maintenance. We recommend inserting 2 -3 drops of Pneumatic Oil in the air line and running the AIR-300 for about 1minute on a daily basis at the end of your work shift.

**How much horsepower should my compressor have to operate one air polisher?**

The airflow needs to run at 10 CFM in order to run one air polisher. Therefore, you will need a minimum of 3HP per tool efficiently operate the AIR-300. A 3HP compressor is highly recommended as the minimum requirement for one AIR-300. If a second polisher is added or planned for future growth, the air flow requirement increases 10 CFM per tool and the horsepower increases 3HP per tool.

**Can I use my AIR-300 as a wet cutting tool with a diamond blade?**

No. The AIR-300 has only 5,800 rpm at no load. This is not enough rpm for diamond blade cutting applications. It is also unsafe to use as a cutting tool. Do not attempt to cut with the AIR-300. Operating the tool at a pressure that exceeds the recommended operating specifications (85-90 PSI) may result in premature failure of the tool.

**Can I use my AIR-300 for dry polishing applications?**

Yes. The AIR-300 can be used for dry polishing applications. Use only dry polishing abrasives such as Ceramica DRY, PVA Quick Change, Sandpaper or other dry polishing pads that can be used under 4,000 loaded RPM.

**What is the RPM of the Alpha® AIR-300?**

The Alpha® AIR-300 has a no load RPM of 5,800, the RPM of a pneumatic tool will drop to the optimum polishing speed of 3,500 to 4,500 RPM under load. Do not attempt to increase RPM by increasing PSI due the operating the tool at a pressure that exceeds the recommended operating specifications (85-90 PSI) as this may result in premature failure of the tool.

**What is the largest diameter accessory that the AIR-300 will accept?**

The AIR-300 will accept accessories up to 4". Do not attempt to use accessories larger than 4" for safety reasons. In addition, large accessories require more torque than the AIR-300 can provide. Operating the AIR-300 under these conditions will result in an overheating failure.

**Can I use the AIR-300 for drilling applications such as faucet holes?**

No. We recommend that you use AIR-658 with C-Handle attachment that is available as an optional part and a template in order to use Alpha® Core Bits to drill faucet mounting holes.

**How many gallons of water does the Alpha® AIR-300 use per minute?**

The AIR-300 uses 0.5 gallons of water per minute if the needle valve is fully opened.

**Helpful Hints**

- Drain compressed air and water daily from air holding tank at the end of work shift to avoid any problems with rust.
- In-line air dryers are recommended to extend the life of the tool.
- Check compressors and air lines time to time since old or worn compressors, which emit oil through the air lines, can dramatically shorten the life of the tool.
- Do not leave the tool submersed in water. This could expose the inner moving parts to moisture, which will shorten the life of the tool.
- Do not leave threaded accessories (backer pads) on the spindle of tool for extended periods of time; this may result in making it difficult to remove these accessories.
- Excessive force or impact to the spindle may result in premature failure of gears and/or bearings, which may not be immediately evident.

- Avoid dragging the air polisher on top of surface of stone. Aluminum body may leave aluminum mark on the surface.
- Use only Alpha® lubrication oil for pneumatic tools, part number AIR-008.

## Reference