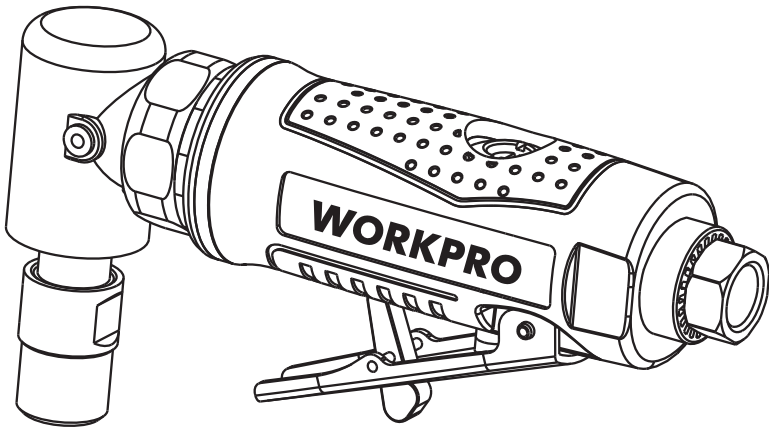


WORKPRO

OPERATOR'S MANUAL AIR ANGLE DIE GRINDER



Thank you for buying a WORKPRO product. Your Air Angle Die Grinder has been engineered and manufactured to WORKPRO's high standard for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.



WARNING: To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

Distributed by :
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FIG. 1

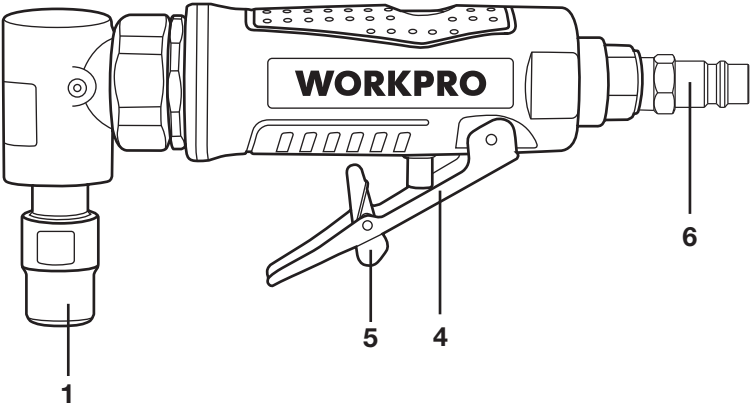


FIG. 2

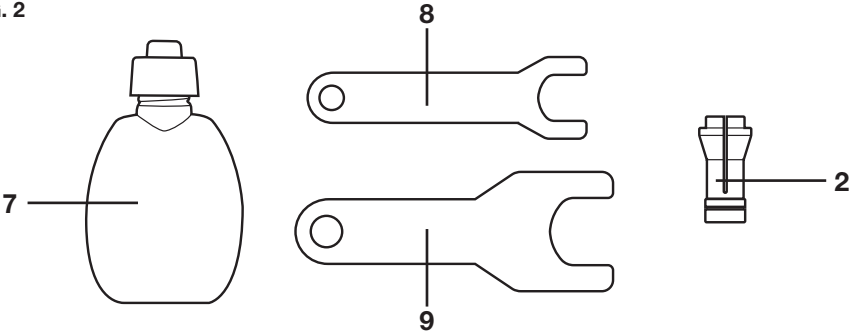


FIG. 3

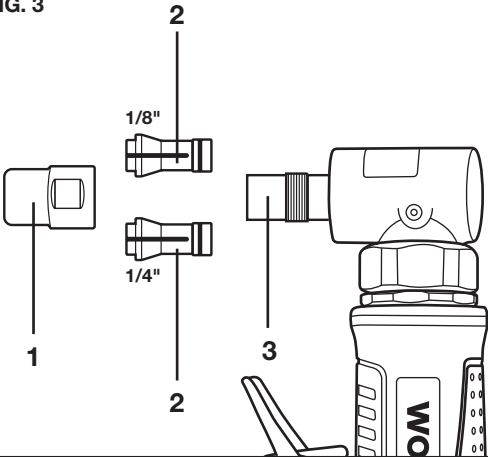
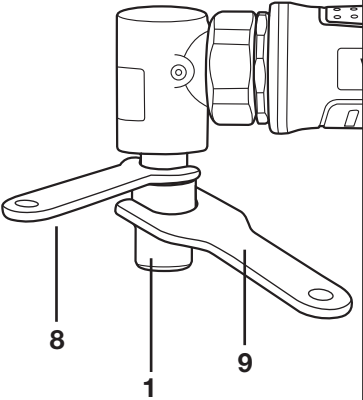


FIG. 4





Danger! - Read the operating instructions to reduce the risk of injury.



Notice! Wear ear-muffs. The impact of noise can cause damage to hearing.



Notice! Wear a breathing mask. Dust which is injurious to health can be generated when working on wood and other materials. Never use the device to work on any materials containing asbestos!



Notice! Wear safety goggles. Sparks generated during working or splinters, chips and dust emitted by the device can cause loss of sight.



Direction of rotation

OIL DAILY

Each time before use, oil the compressed connection.

⚠ Danger!

When using the equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety regulations with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, hand over these operating instructions and safety regulations as well. We cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety instructions.

1. Safety regulations

■ **KEEP CHILDREN, VISITORS AND BYSTANDERS AWAY FROM TOOL.** Distractions can cause misuse and possible loss of control. When tool is not operational it should be locked in a safe place out of the reach of children.

■ **USE SAFETY GLASSES AND EAR PROTECTION:** Air tool operators and others in work area should always wear safety glasses and ear protection to prevent injury from flying debris as well as possible hearing damage.

■ **NEVER USE OXYGEN, COMBUSTIBLE OR ANY OTHER BOTTLED GAS** as a power source or it can cause an explosion and serious personal injury.

■ **DO NOT CONNECT TOOL TO COMPRESSED AIR THAT EXCEEDS 120PSI.**

■ **MAKE SURE HOSE IS FREE OF ANY OBSTRUCTIONS OR SNAGS.** Entangled hoses can cause loss of balance or footing.

■ **KEEP THE TOOL POINTED AWAY FROM YOURSELF** and others at all times and keep hands, any body parts away from rear area to safety guard against possible injury.

■ **DISCONNECT TOOL FROM AIR SUPPLY BEFORE LOADING FASTENERS** to prevent accidental firing during connection.

■ **DISCONNECT TOOL FROM AIR SUPPLY HOSE** and close the compressor before performing maintenance and during non-operation.

■ **DO NOT OVERREACH DURING USAGE.** Maintain proper footing at all times to avoid loss of balance and possible injury.

■ **NEVER USE A TOOL THAT IS LEAKING AIR, HAS MISSING OR DAMAGED PARTS OR REQUIRES REPAIR.** and make sure all the screws are securely tightened.

■ **ALWAYS OPERATE TOOL IN CLEAN WELL LIT AREAS.** Be sure the work area is clear of any debris.

■ **ONLY USE PARTS AND ACCESSORIES** recommended by manufacturer.

⚠ Danger!

Read all safety regulations and instructions. Any

errors made in following the safety regulations and instructions may result in an electric shock, fire and/or serious injury.

Keep all safety regulations and instructions in a safe place for future use.

Protect yourself and your environment from risks and accidents by taking the appropriate precautionary measures.

Residual risks

Even if you use the equipment in accordance with the instructions, certain residual risks cannot be eliminated.

2. Layout and Unpacking

2.1 Layout (Fig. 1)

1. Clamp nut
2. Clamps (1/8", 1/4")
3. Clamp holder
4. Operating switch
5. Safety lock-off
6. Compressed air connection
7. Lubricant
8. Chuck key, 11.5 mm
9. Chuck key, 17 mm

2.2 Items supplied

Carefully remove the tool and accessories from the box. Make sure that all items listed in the packing list are included. Inspect the tool carefully to make sure no breakage or damage occurred during shipping. Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

This package contains:

- Clamp (one installed and one replacement)
- Compressed air connection
- Lubricant
- Chuck key: 11.5mm, 17mm
- Operating instruction

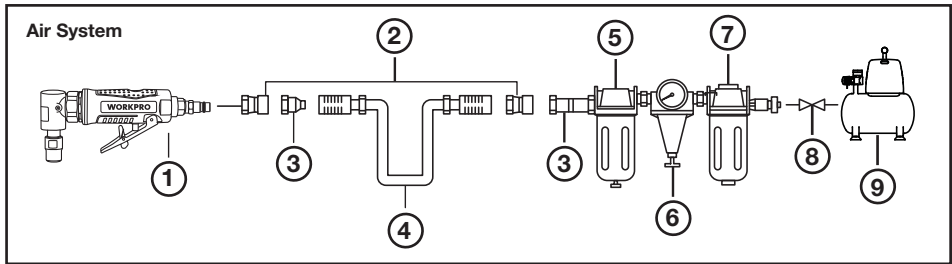
Check for damage to the tool, parts or accessories which may have occurred during transport. Take the time to thoroughly read and understand this manual prior to operation.

⚠ Danger!

The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts. There is a danger of swallowing or suffocating!

3. Proper use

The equipment is designed for the grinding, deburring, engraving and cleaning of iron, plastic and similar materials using the appropriate grinding pins (not included).



No.	Description	No.	Description
1	Air angle die grinder	6	Regulator
2	Quick connector	7	Filter
3	Quick coupler	8	Cut-off valve
4	Air hose	9	Air compressor
5	Lubricator		

The equipment is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user / operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this. Please note that our equipment has not been designed for use in commercial, trade or industrial applications.

⚠ Too small a diameter of the hose and too long a hose line will result in loss of power.

4. Technical data

Description	Air angle die grinder
Operating pressure	90psi (6.3 bar)
Rated speed	20000 rpm
Air consumption	85.5l/min (3cfm)
Clamping Capacity	1/8", 1/4"
Air Inlet Diameter	1/4" (6.3mm)
Recommended hose diameter(internal)	3/8" (9.5mm)

Danger!

Sound and vibration

Sound and vibration values were measured in accordance with ISO/TR 11688-1 and ISO/TR 11688-2.

L_{pA} sound pressure level	88.1 dB(A)
K_{pA} uncertainty	3 dB
L_{WA} sound power level	99.1 dB(A)
K_{WA} uncertainty	3 dB

Wear ear-muffs.

The impact of noise can cause damage to hearing.

Total vibration values (vector sum of three directions) were determined in accordance with ISO/TR 11688-1 and ISO/TR 11688-2.

Vibration emission value $a_h = 5.02 \text{ m/s}^2$

K Uncertainty = 1.5 m/s^2

Warning!

The specified vibration value was established in accordance with a standardized testing method. It may change according to how the equipment is used and may exceed the specified value in exceptional circumstances.

The specified vibration value can be used for initial assessment of a harmful effect.

Keep the noise emissions and vibrations to a minimum.

- Only use appliances which are in perfect working order.
- Service and clean the appliance regularly.
- Adapt your working style to suit the appliance.
- Do not overload the appliance.
- Have the appliance serviced whenever necessary.
- Switch the appliance off when it is not in use.
- Wear protective gloves.

Caution!

Residual risks

Even if you use this tool in accordance with instructions, certain residual risks cannot be ruled out. The following hazards may arise in connection with the equipment's construction and layout:

- Lung damage if no suitable protective dust mask is used.
- Damage to hearing if no suitable ear protection is used.
- Health damage caused by hand-arm vibrations if the equipment is used over a prolonged period or is not properly guided and maintained.

5. Before starting the equipment

Disconnect the compressed air supply before performing any cleaning, adjusting and maintenance work

Air supply:

Via a compressed air source with pressure setting function, e.g. a compressor. Before starting up, please also read the section on care and maintenance.

Performance values of the compressor:

The compressor used should have a tank volume of at least 50 liters.

Setting values for work:

Set a maximum working pressure of 8.3 bar at your compressed air supply.

5.1 Lubricating the tool

Each time before starting and during prolonged operation:

- Insert 3-5 drops of special compressed air oil into the compressed air connection (6)
- Let the equipment run briefly so that any surplus oil is blown out.

5.2 Fitting the grinding pins (not included in delivery) (Fig. 3, 4)

- Unscrew the clamp nut (1).
- Insert the appropriate clamp (2) and screw on the clamp nut (1) by hand.
- Insert the grinding pin (make sure the shaft diameter is correct).
- Make sure that the clamping length is at least 10 mm.
- Tighten the clamp nut (1) using the two chuck keys (8,9).
- Check that the grinding pin is secure.

6. Operation

6.1 Connecting to a compressed air supply

- Connect the air connection (6) to the quick-lock coupling of a compressed air hose (the hose is not supplied).
- Note the maximum permissible operating pressure of the equipment.

6.2 Switching on and off (Fig. 1)

With a firm grip on the angle die grinder, slowly apply hand pressure to the operating switch until the desired speed is obtained, and steadily moving tool to right and left until achieving desired appearance (finish) on workpiece.

NOTE: The tool always turns the Grinding Drum/Drill Chuck clockwise.

- If air angle die grinder requires more force to accomplish task, verify that it receives sufficient, unobstructed airflow (CFM) and increase pressure (PSI) output of regulator up to maximum air pressure rating of tool.
- If the tool still does not have sufficient force at maximum pressure and sufficient airflow, then a larger tool may be required.
- Turn off air compressor. Slowly squeeze the operating switch to release any remaining air pressure from Die Grinder. Then disconnect air hose.

6.3 Practical tips

- Exert only moderate pressure on the workpiece, so that it can be machined at constant speed.
- Instead of accelerating your work, high pressure will cause the drive unit to slow down and even stop.
- For your own safety, it is essential to secure small workpieces with a screw clamp or vise.
- Precision work/engraving: Hold the drive unit like a pen (single-handed).
- Rough work: Hold the drive unit like the handle of a hammer (two-handed).

7. Cleaning and maintenance

Disconnect the compressed air supply from the equipment before performing any cleaning work.

7.1 Cleaning

- Keep all safety devices, air vents and the motor housing free of dirt and dust as far as possible. Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.
- We recommend that you clean the device immediately each time you have finished using it.

- Clean the equipment regularly with a moist cloth and some soft soap. Do not use cleaning agents or solvents; these could attack the plastic parts of the equipment. Ensure that no water can seep into the device.

7.2 Maintenance

Warning!

Disconnect the equipment from the compressed air supply before you carry out any maintenance or cleaning work.

Compliance with the maintenance instructions listed here will help this quality product provide you with a long service life and trouble-free operation.

Regular lubrication is essential for your equipment to work properly for a prolonged period of time.

Regularly check the speed and the vibration level by simply observing the tool.

NOTE: Use environmentally friendly compressed air oil if you want to operate the equipment outside the workshop.

The following lubrication options are available:

Lubrication

Each time before using the compressed air tool insert 3-5 drops of special compressed air oil into the compressed air connection. If the compressed air tool has not been used for several days you must insert 5-10 drops of special compressed air oil into the compressed air connection before switching on.

Store your compressed air tool only in a dry room.

8. Disposal and recycling

If your tool has become damaged beyond repair, do not throw it out. Bring it to the appropriate recycling facility.

9. Trouble shooting

The following form lists the common operating system with problem and solutions. Please read the form carefully and follow it.

Warning!

If any of the following symptoms appears during your operating, stop using the tool immediately, or serious personal injury could result. Only a qualified persons or an authorized service center can perform repairs or replacement of tool.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
Tool runs at normal speed but loses under load	■ Motor parts worn. ■ Cam clutch worn or sticking due to lack of lubricant.	Lubricating clutch housing. ■ Check for excess clutch oil. Clutch cases need only be half full. Overfilling can cause drag on high speed clutch parts, ie. a typical oiled/lubricated wrench requires 1/2 ounce of oil. ■ GREASE LUBRICATED. NOTE: Heat usually indicates insufficient grease in chamber. Severe operating conditions may require more frequent lubrication.
Tool runs slowly. Air flows slightly from exhaust	■ Motor parts jammed with dirt particles. ■ Power regulator in closed position ■ Air flow blocked by dirt.	Check air inlet filter for blockage. ■ Pour air tool lubricating oil into air inlet as per instructions. ■ Operate tool in short bursts quickly reversing rotation back and forth where applicable. ■ Repeat above as needed.
Tools will not run. Air flows freely from exhaust	One or more motor vanes stuck due to material build up. "O" rings throttle valve dislodged from seat inlet valve.	Pour air tool lubricating tool into air inlet. ■ Operate tool in short bursts of forward and/or reverse rotation where applicable. ■ Tap motor housing gently with plastic mallet. ■ Disconnect supply. Free motor by rotating drive shank manually where applicable
Tool will not shut off	"O" rings throttle valve dislodged from seat inlet valve.	Replace "O" ring.
NOTE: Repairs should be carried out by a qualified person.		