




# Universal Tool

## Operator Instructions

Includes - Foreseen Use, Work Stations, Putting Into Service, Operating, Dismantling, Assembly and Safety Rules

## Important

**Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible place.**

Manufacturer/Supplier <b>Universal Air Tool Company Limited</b> <b>Unit 8</b> <b>Lane End Industrial Park</b> <b>High Wycombe</b> <b>Bucks</b> <b>HP14 3BY</b> Tel No <b>(01494) 883300</b> Fax No <b>(01494) 883237</b>	Product Type <b>Angle Grinder</b>	RPM <b>10,000</b> Cycles Per Min	
	Model No/Nos <b>UT8740A10 - 4" M10</b> <b>UT8740A14 - 4" M14</b> <b>UT8740B14 - 4 1/2" M14</b> <b>UT8740C14 - 5" M14</b>	Serial No	

Product Nett Weight <b>4.4</b> lbs <b>2.0</b> Kg	Recommended Use Of Balancer Or Support <b>No</b>	Recommended Hose Bore Size - Minimum <b>3/8</b> Ins <b>10</b> M/M	Recommended Max. Hose Length <b>30</b> Ft <b>10</b> M
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Air Pressure		Noise Level <b>Sound Pressure Level 83.0 dB(A)</b>	
Recommended Working	<b>6.3</b> bar <b>90</b> PSI	Test Method <b>Tested in accordance with Pneurop test code PN8NTC 1</b>	
Recommended Minimum	<b>n/a</b> bar <b>n/a</b> PSI		
Maximum	<b>7.0</b> bar <b>100</b> PSI		

Personal Safety Equipment	Vibration Level <b>1.2 Metres / Sec<sup>2</sup></b>
Use - Safety Glasses <b>Yes</b>	Test Method <b>Tested in accordance with ISO standard 8662</b>
Use - Safety Gloves <b>Yes</b>	
Use - Safety Boots	
Use - Breathing Masks <b>Yes</b>	
Use - Ear Protectors <b>Yes</b>	

## Foreseen Use of Tool

This right angle grinder is designed to be used with reinforced resin bonded depressed centre grinding wheels that have a permitted rotational speed in excess of 10,000 RPM. See parts lists for details of available wheel sizes.

The tool is designed to be used for light grinding and dressing of welds, etc. but not for cutting off. The grinder must never be used if a wheel guard (disc cover) is not fitted.

operate air shut off valve. The air supply should be lubricated. It is strongly recommended that an air filter, regulator, lubricator (FRL) is used as shown in Figure 1 as this will supply clean, lubricated air at the correct pressure to the tool. Details of such equipment can be obtained from your supplier. If such equipment is not used then the tool should be lubricated by shutting off the air supply to the tool, depressurising the line by pressing the trigger on the tool. Disconnect the air line and pour into the intake bushing a teaspoonful (5ml) of a suitable pneumatic motor lubricating oil preferably incorporating a rust inhibitor. Reconnect tool to air supply and run tool slowly for a few seconds to allow air to circulate the oil. If tool is used frequently lubricate on daily basis and if tool starts to slow or lose power.

It is recommended that the air pressure at the tool whilst the tool is running is 90 p.s.i./6.3 bar. The tool can run at lower and higher pressures with the maximum permitted working air pressure of 100 p.s.i./7 bar.

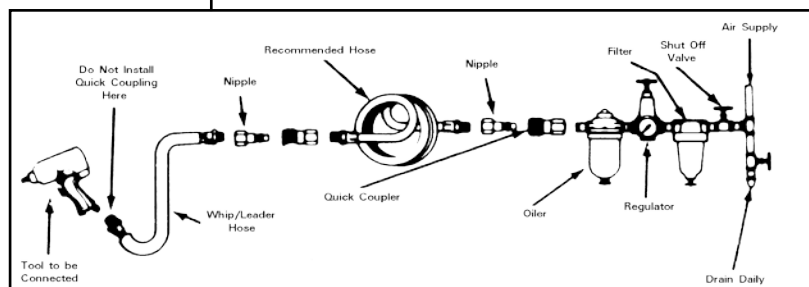
## Work Stations

The tool should only be used as a hand held hand operated tool. It is always recommended that the tool is used when standing on a solid floor. It can be used in other positions but before any such use the operator must be in a secure position having a firm grip and footing and be aware of the safety rules to be obeyed when using the grinder.

## Putting Into Service

### Air Supply

Use a clean lubricated air supply that will give a measured air pressure at the tool of 90 p.s.i./6.3 bar when the tool is running with the trigger/lever fully depressed. Use recommended hose size and length. It is recommended that the tool is connected to the air supply as shown in figure 1. Do not connect the tool to the air line system without incorporating an easy to reach and



## Operating

With the grinder correctly connected to the air supply, check the speed of the grinder with an inlet pressure of 100 psi/7.0 bar measured at the tool inlet. Check with a calibrated tachometer. Check that the guard is in position and securely fixed. Check that the grinding wheel is of correct dimensions, is not cracked or chipped and has a permitted speed rating higher than the maximum permissible running speed of the grinder which is 10,000 RPM. Check that the disc receiver is the correct type as parts list and is screwed tightly to the shaft and locates the bore of the grinding wheel on the spigot of the disc receiver and screw on disc nut using the spanners provided. Do not over tighten as this could crack the wheel. It should be tight enough to prevent wheel spin off when the air supply is shut off.

When first starting the grinder with a new or changed wheel fitted, the grinder should first be started in a protected area, i.e. such as under a heavy bench well away from other persons and run for, say, one minute. This will provide protection if the wheel should break because some fault was not detected.

Always use eye protection and wear protective gloves if there are sharp edges in the working area. The tool and the grinding process can create a noise level such that ear protectors should be worn.

If the grinding process creates a dust then use a suitable breathing mask.

Check that the material being worked will not cause harmful dust or fumes. If this is so then special breathing apparatus may be required. Seek advice before starting work.

If the grinder vibrates when first fitting the wheel or during use, remove from service immediately and arrange for the fault to be corrected before continuing to use.

Do not apply excessive pressure as this will reduce the cutting efficiency. Apply light loads and allow the wheel to cut.

Handle the grinder with care. If the grinder is dropped, carefully examine the wheel for damage and replace if necessary. Start the machine as if for the first time of fitting a wheel, i.e. under a bench.

Make sure the object to be ground is in a firm fixed position.

## Tool Maintenance

It shall be the tool owner's and/or employer's responsibility to assure that tools are maintained in a safe operating condition. Tool maintenance and repair shall be performed by authorised, trained, competent personnel. Tools shall be disconnected from their compressed air supply before repairs are attempted. Repairs shall be consistent with the manufacturer's recommended procedures. Tool, hoses and fittings shall be replaced if unsuitable for safe operation. It shall be the tool owner's and/or employer's responsibility to keep required rating markings and warnings on the tool in legible condition.

## Safety Rules For A Grinder

- 1) Read all the instructions before using this tool. All operators must be fully trained in its use and aware of these safety rules.
- 2) Do not exceed the maximum working air pressure.
- 3) Use personal safety equipment.
- 4) Use only compressed air at the recommended conditions.
- 5) If the tool appears to malfunction remove from use immediately and arrange for service and repair.
- 6) If the tool is used with a balancer or other support device ensure that it is fixed securely.
- 7) Always keep hands away from the working attachment fitted to the tool.
- 8) The tool is not electrically insulated. Never use the tool if there is any chance of it coming into contact with live electricity.
- 9) Always when using the tool adopt a firm footing and/or position and grip the tool firmly to be able to counteract any forces or reaction forces that may be generated whilst using the tool.
- 10) Use only correct spare parts. Do not improvise or make temporary repairs.
- 11) Do not lock, tape, wire, etc. the on/off valve in the run position. The trigger/lever etc. must always be free to return to the 'off' position when it is released.
- 12) Always shut off the air supply to the tool, and depress the trigger/lever etc. to exhaust air from the feed hose before fitting,

adjusting or removing the working attachment.

13) Check hose and fittings regularly for wear. Replace if necessary. Do not carry the tool by its hose and ensure the hand is remote from the on/off control when carrying the tool with the air supply connected.

14) Take care against entanglement of moving parts of the tool with clothing, ties, hair, cleaning rags, etc. This will cause the body to be drawn towards the tool and can be very dangerous.

15) It is expected that users will adopt safe working practices and observe all relevant legal requirements when installing, using or maintaining the tool.

16) Do not install the tool unless an easily accessible and easily operable on/off valve is incorporated in the air supply.

17) Take care that the tool exhaust air does not cause a problem or blows on another person.

18) Never lay a tool down unless the working attachment has stopped moving.

19) A grinding wheel should only be fitted by a competent person trained to do so. The wheel must be of the correct size and speed rating.

20) Check the speed of the grinder at least once per week, if it is in regular use, with an accurate tachometer.

21) The tool must only be used with the grinding wheels as set out in section "Foreseen Use of the Tool" and shown on parts list. Never fit any other device.

22) Carry out the instructions as set out in "Putting into Service".

23) Many countries have local or national rules re the use and fitting of grinding wheels. Make sure such rules are observed.

24) Use a barrier to prevent sparks causing a hazard to the operator, any other person or anything within the vicinity of the sparks.

25) If a wheel guard becomes damaged or has withstood a wheel breakage, the guard must be changed.

26) Do not use chipped or cracked grinding wheels.

27) Always wear impact resistant eye protection.

28) Use only the disc plates, Items (4) and (5) provided with the grinder for locating and clamping the wheel. Never use substitutes. Use the paper blotter fixed to the wheel as this ensures even tightness when the wheel is secured.

29) Tighten the wheel plates sufficiently to prevent wheel spin off when the grinder is turned off. Do not tighten excessively as this may crack the wheel.

30) The noise from the tool or the process noise of the grinding operation may be such that hearing protection should be worn.

31) Avoid inhaling dust from the grinding process. Wearing of a breathing mask is recommended. Grinding certain materials may mean that special breathing precautions are necessary. Seek advice before using the tool.

32) Always ensure that the workpiece is firmly supported so that it cannot move during the grinding process.

33) If the grinder is dropped do not use unless the wheel is first checked for damage by a competent person.

34) When not in use the grinder should be stored in a safe place where it will not be damaged. If a tool has not been used for a period of time check the tool as for the first time of using.

35) Be aware that if the grinding process causes high vibration, special precautions should be taken.

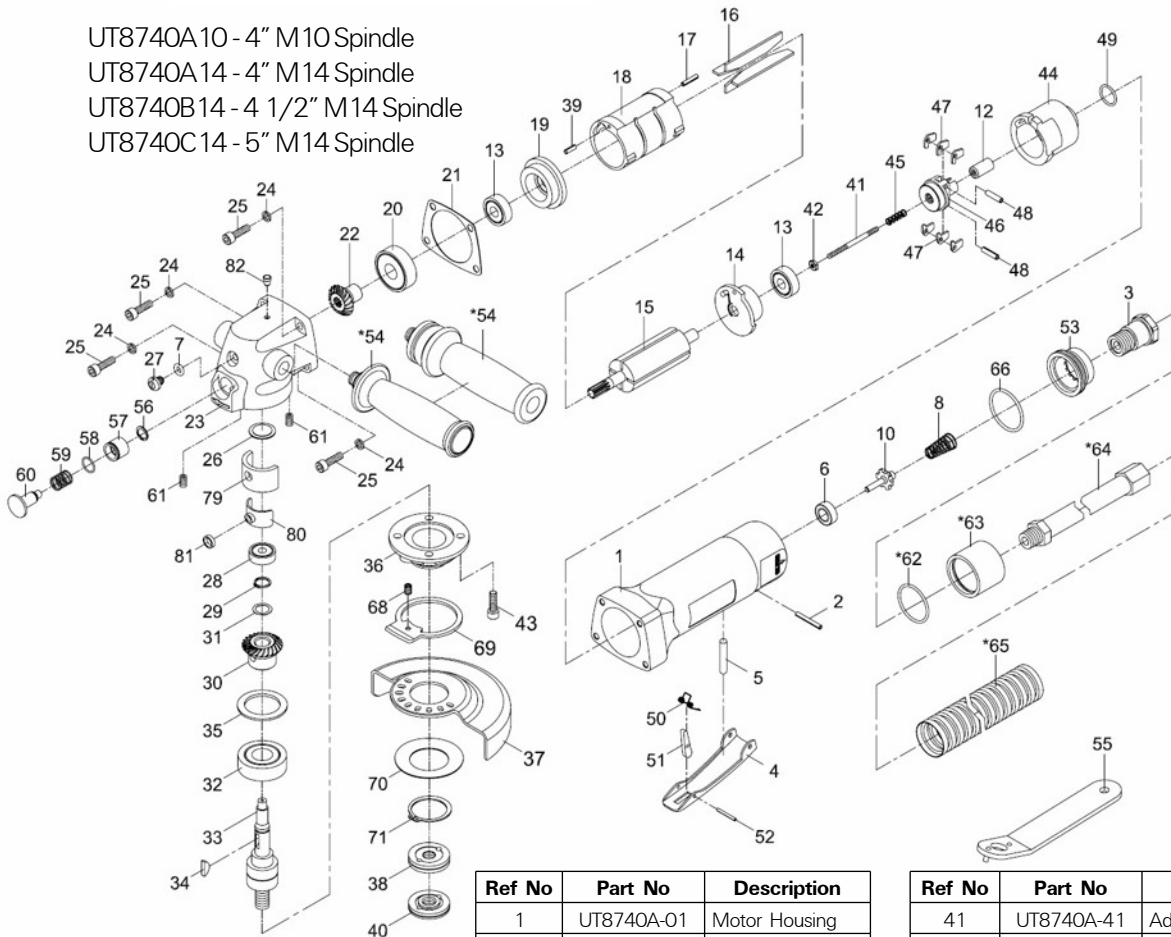
36) The operator should be aware that the grinding wheel will continue to rotate after the power supply has been shut off. This could cause a hazard.

37) Always store grinding wheels in accordance with the manufacturer's instructions.

38) Check frequently that the spindle thread has not become damaged or worn.

39) Always ensure that the grinding wheel has a higher permissible running speed to the speed of the grinder.

UT8740A10 - 4" M10 Spindle  
 UT8740A14 - 4" M14 Spindle  
 UT8740B14 - 4 1/2" M14 Spindle  
 UT8740C14 - 5" M14 Spindle



For **M10** Spindle  
 UT8740A10

Ref No	Part No	Description
33	8740A10-33	M10 Spindle
38	8740A10-38	M10 Flange
40	8740A10-40	M10 Flange Nut

For **M14** Spindle  
 UT8740A14  
 UT8740B14  
 UT8740C14

Ref No	Part No	Description
33	8740A14-33	M14 Spindle
38	8740A14-38	M14 Flange
40	8740A14-40	M14 Flange Nut

### Guard Size

A = 4"  
 B = 4 1/2"  
 C = 5"

Ref No	Part No	Description
37	8740A-37	4" Disc Cover
	8740B-37	4 1/2" Disc Cover
	8740C-37	5" Disc Cover

Ref No	Part No	Description
1	UT8740A-01	Motor Housing
2	UT8740A-02	Spring Pin
3	UT8740A-03	Air Inlet
4	UT8740A-04	Throttle Lever
5	UT8740A-05	Pin
6	UT8740A-06	Rubber Spacer
7	UT8740A-07	O-Ring
8	UT8740A-08	Spring
10	UT8740A-10	Valve Stem
12	UT8740A-12	Plunger
13	UT8740A-13	Ball Bearing (2)
14	UT8740A-14	Rear Plate
15	UT8740A-15	Rotor
16	UT8740A-16	Rotor Blade (4)
17	UT8740A-17	Spring Pin
18	UT8740A-18	Cylinder
19	UT8740A-19	Front End Plate
20	UT8740A-20	Ball Bearing
21	UT8740A-21	Gasket
22	UT8740A-22	Bevel Gear
23	UT8740A-23	Gear Housing
24	UT8740A-24	Spring Washer
25	UT8740A-25	Screw
26	UT8740A-26	Spacer
27	UT8740A-27	Screw
28	UT8740A-28	Ball Bearing
29	UT8740A-29	Retaining Ring
30	UT8740A-30	Bevel Gear
31	UT8740A-31	Wave Washer
32	UT8740A-32	Ball Bearing
34	UT8740A-34	Key
35	UT8740A-35	Spacer
36	UT8740A-36	Bearing Cap
39	UT8740A-39	Spring Pin

Ref No	Part No	Description
41	UT8740A-41	Adjust Screw
42	UT8740A-42	Adjust Nut
43	UT8740A-43	Screw (4)
44	UT8740A-44	Inlet Guide
45	UT8740A-45	Spring
46	UT8740A-46	Governor
47	UT8740A-47	Pendulum (6)
48	UT8740A-48	Spring Pin (2)
49	UT8740A-49	O-Ring
50	UT8740A-50	Spring
51	UT8740A-51	Safety Bar
52	UT8740A-52	Spring Pin
53	UT8740A-53	Exhaust Diffuser
54	UT8740A-54	Vibration Reduced Handle
55	UT8740A-55	Pin Wrench
56	UT8740A-56	Retaining Ring
57	UT8740A-57	Bushing
58	UT8740A-58	O-Ring
59	UT8740A-59	Spring
60	UT8740A-60	Spindle Stop Button
61	UT8740A-61	Set Screw (2)
62	UT8740A-62	O-Ring
63	UT8740A-63	Clamp
64	UT8740A-64	Hose
65	UT8740A-65	Exhaust Hose
66	UT8740A-66	O-Ring
68	UT8740A-68	Spring
69	UT8740A-69	Lock Ring (Spring)
70	UT8740A-70	Disc Spring
71	UT8740A-71	Retainer Ring
79	UT8740A-79	Felt Oiler
80	UT8740A-80	Steady
81	UT8740A-81	Washer
82	UT8740A-82	Oil Cap

**Declaration of Conformity**  
**Universal Air Tool Company Limited**  
**Unit 8, Lane End Industrial Park, High Wycombe, Bucks, HP14 3BY, England**

declare under our sole responsibility that the product

**Model UT8740A10/A14/B14/C14 Angle Grinder, Serial Number**  
to which this declaration relates is in conformity with the following standard(s) or other normative document(s)  
**EN792 (Draft), EN292 Parts 1 & 2, ISO 8662 Parts 1, 2 & 14, Pneurop PN8NTC1**  
following the provisions of **Directive 2006/42/EC**

**Lane End**

**C. Moppett, Managing Director**



Place of issue

For and on behalf of the company

**Accessories**

**Notes**

**Distributor**

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