



Universal Tool

Operator Instructions

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

Manufacturer/Supplier
Universal Air Tool Company Limited
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Important

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

Product Type
Chipping Hammer

RPM
N/A
 Cycles Per Min
1,500



Model No/Nos
UT8644H - 4" Stroke
Outside Lever Handle

Serial No

Product Nett Weight

18.5 lbs
8.4 Kg

Recommended Use Of
 Balancer Or Support

No

Recommended Hose Bore
 Size - Minimum

1/2 Ins **13** M/M

Recommended Max.
 Hose Length

30 Ft **10** M

Air Pressure

Recommended Working **6.3** bar **90** PSI
 Recommended Minimum **n/a** bar **n/a** PSI
 Maximum **7.0** bar **100** PSI

Noise Level **Sound Pressure Level 94.0 dB(A)**
Sound Power Level 105.0 dB(A)

Test Method **Tested in accordance with Pneurop**
test code PN8NTC1 and ISO Standard 3744

Personal Safety Equipment

Use - Safety Glasses **Yes**
 Use - Safety Gloves **Yes**
 Use - Safety Boots
 Use - Breathing Masks
 Use - Ear Protectors **Yes**

Vibration Level **11.1 Metres/Sec²**

Test Method **Tested in accordance with ISO**
standards 8662/1 Parts 1 & 2

Foreseen Use of the Tool

The tool is designed for the purpose of chipping, riveting and scaling of metals and stone. In general terms a reciprocating free piston in the cylinder of the tool imparts a blow to the chisel or working attachment. A list of suitable equipment to use with this tool can be provided by the manufacturer. Do not use the tool for any other purpose than that for which it was designed without consulting the manufacturer or the manufacturer's authorised representative.

Do not modify the tool for its use as a chipper etc. or for any other purpose without first agreeing any such modification with the manufacturer or the manufacturer's authorised representative.

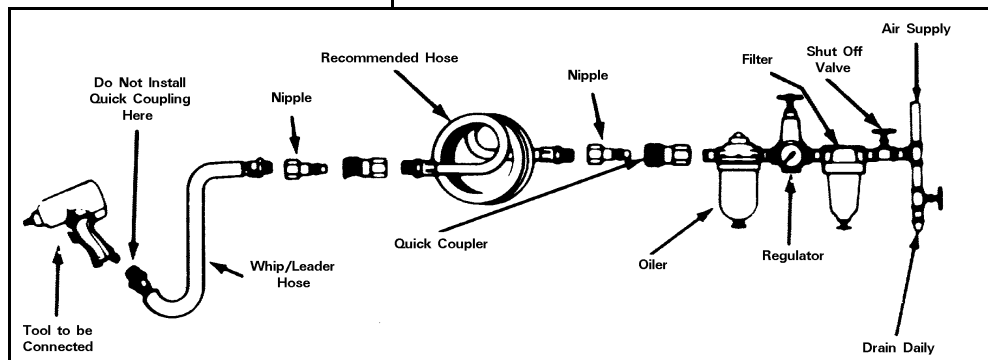
Putting Into Service

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 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 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 hose adaptor a

Work Stations

The tool should only be used as a handheld, 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 a reaction force on the hand as result of the tool doing work.



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./7.0 bar.

Operating

Connect tool to clean supply of compressed air at recommended pressure. Select chisel/attachment to perform the work task and ensure that the chisel retainer is securely fitted. Do not use tool without retainer sleeve (22) fitted. The power of the tool may be controlled by the input air pressure. Always ensure that the working tool is in contact with the workpiece before pressing the trigger. Running the tool free will reduce tool life by placing unnecessary high loads on tool retainers and cylinders. Be aware that exposure to vibration can cause injury.

Dismantling & Assembly Instructions

Disconnect tool from air supply.

Grip handle (12) by the grip part in a vice and insert a screwdriver in the loop end of lock coil spring (24) and pull out the spring. Slide off retaining sleeve (25) and pull out the chisel as fitted. Loosen the 2 off jubilee clips holding silencer (26) in position and slide off the silencer assembly over the front end of cylinder (21). Insert a suitable tool in the slit in lock shield (19) and prise it open sufficiently to be able to remove it over the cylinder (21). Slide or carefully tap off the lock (18). Note at this time how the lock (18) slides over and locates on the splines of the cylinder (21) and how the tangs on the lock (18) locate in the cut outs on the front of handle (12). Locate a suitable spanner on the flats on cylinder (21) and unscrew and remove cylinder (21) from handle (12). Note that the cylinder is tightened firmly on assembly and it may be necessary to use an extension tube over the spanner to provide the required force to loosen the cylinder.

Take off upper valve case lid (13), valve (14), valve case (15) and lower valve case lid (16) and remove 2 off dowel pins (17) from cylinder (21). Take out piston (20) from cylinder (21). When separating parts (13), (14), (15) and (16) carefully note the orientation of each part and when refitting the valve assembly to the cylinder via the dowel pins (17) to locate the valve assembly on the pins so that the valve assembly is concentric to the cylinder. Unscrew and remove hose adaptor with screen (8). Drive out pins (9) and (10) and remove lever (11). Unscrew throttle valve plug (1) and take out throttle valve spring (2). Throttle valve (3), O-ring (4) and pins (6) and (7). Do not remove bushing fitted into handle (12).

Reassembly

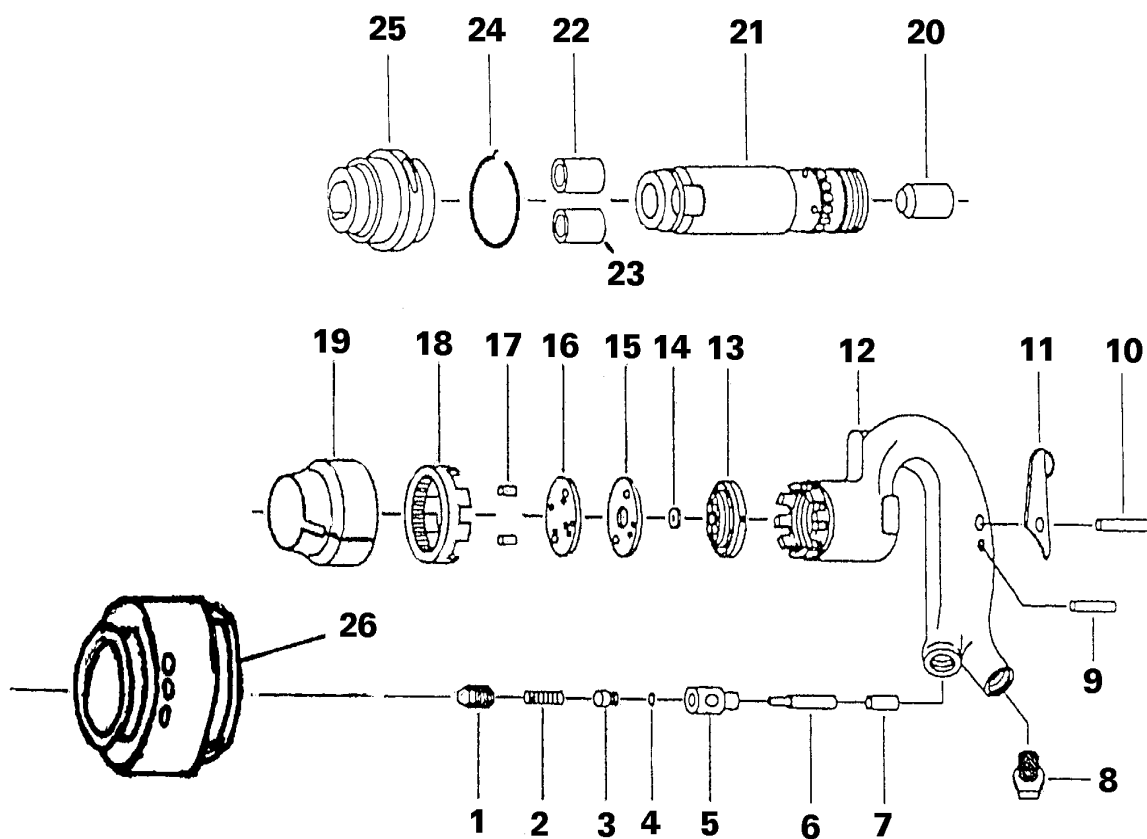
Clean and examine all parts and replace any parts only with parts obtained from the manufacturer or an authorised supplier. Reassemble in the reverse order. Note that when refitting lock (18) first tighten the cylinder (21) to handle (12) securely and slide the lock (18) over the cylinder (21) and locate it on the splines. The lock must locate on the splines and the tangs on it in the front of the handle. It may be necessary to try the lock in different radial locations and/or tighten the cylinder further. With the trigger (11) depressed pour into hose adaptor (8) 5ml of a suitable pneumatic tool lubricating oil and release trigger. Connect to a suitable air supply and run the tool for 2 to 3 seconds to allow the oil to circulate.

Safety Rules For A Percussive Air Hammer

- 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) Never point a tool at any person.
- 20) Use only suitable pneumatic tool lubricants. This is important as a safeguard against the "diesel effect" i.e. explosive mixtures firing.
- 21) Chisels worn/blunt at the cutting edge or shank should not be used as such conditions promote tool breakage, reduce efficiency and increase vibration. A chisel which breaks can cause injury by creating unexpected movement.
- 22) When chipping or scaling in potentially explosive atmospheres use spark resistant chisels usually made of beryllium copper. Consult the manufacturer of the tool standard chisels about sources of supply.
- 23) Do not store chisels etc. at freezing and below freezing temperatures. Freezing temperatures can make hardened-tool steels brittle which can cause breakage and lead to injury.
- 24) Do not start tool until steel/chisel/needles are in contact with the working surface. Do not run tool unless retainer is fitted.
- 25) Always use tool with a whip hose as shown in fig 1.
- 26) Don't over reach. Keep proper footing and balance at all times.
- 27) Do not force the tool but allow it to cut.
- 28) When possible secure work with clamps or vice so both hands are free to operate the tool.
- 29) Use correct size of chisel shank to match the tool.

UT8644H

Chipping Hammer



Ref No	Part No	Description
1	CH410001	Throttle Valve Plug
2	CH410002	Throttle Valve Spring
3	CH410003	Throttle Valve
4	P006020	O-Ring
5	CH410004	Throttle Valve Bushing
6	CH410005	Push Pin
7	CH410006	Push Pin Bushing
8	729562	Hose Adaptor
9	1009786	Stop Pin
10	729563	Throttle Lever Pin
11	729564	Throttle Lever
12	729565	Handle
13	729566	Upper Valve Case Lid
14	729567	Valve

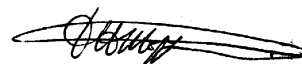
Ref No	Part No	Description
15	729568	Valve Case
16	729569	Lower Valve Case Lid
17	729571	Dowel Pin (2)
18	729581	Lock
19	729582	Shield Lock
20	729574	Piston
21	729580	Cylinder
22	CH410026	Cylinder Bush - Round
23	731064	Cylinder - Hex
24	729584	Lock Oil Spring
25	729583	Retainer Sleeve
26	101052	Silencer & 2 Jubilee Clips

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 UT8644H Chipping Hammer, 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, Pneurop PN8NTC1
following the provisions of **89/392/EEC as amended by 91/368/EEC & 93/44/EEC Directives**

Lane End

D.H.Moppett (Man. Director)



Place and date of issue

Name and signature or equivalent marking of authorised person

Accessories

Notes

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