



Universal Tool

Operator Instructions

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

Manufacturer/Supplier
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Important

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

Product Type Tyre Buffer	RPM 2,600 Cycles Per Min	
Model No/Nos UT5742-TB	Serial No	
Product Nett Weight 2.4 lbs 1.1 Kg	Recommended Use Of Balancer Or Support No	Recommended Hose Bore Size - Minimum 3/8 Ins 10 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 bar	100 PSI	

Noise Level **Sound Pressure Level 79.0 dB(A)**
 Test Method **Tested in accordance with Pneurop test code PN8NTC 1 and ISO Standard 3744**

Personal Safety Equipment	
Use - Safety Glasses	Yes
Use - Safety Gloves	Yes
Use - Safety Boots	
Use - Breathing Masks	Yes
Use - Ear Protectors	Yes

Vibration Level **Less than 2.5 Metres / Sec²**
 Test Method **Tested in accordance with ISO standards 8662/1 & 8662/13**

Foreseen Use Of The Tool

This tool should not be fitted with cutting off wheels, saw blades, drill bits, etc. If there is any doubt about the correct use of this product contact your supplier for advice.

Also make sure that the shank size of the attachment to be driven matches with the collet size fitted in the tool and that the maximum allowed running speed of the attachment exceeds that marked on the buffer.

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, de pressurising the line by pressing the lever/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

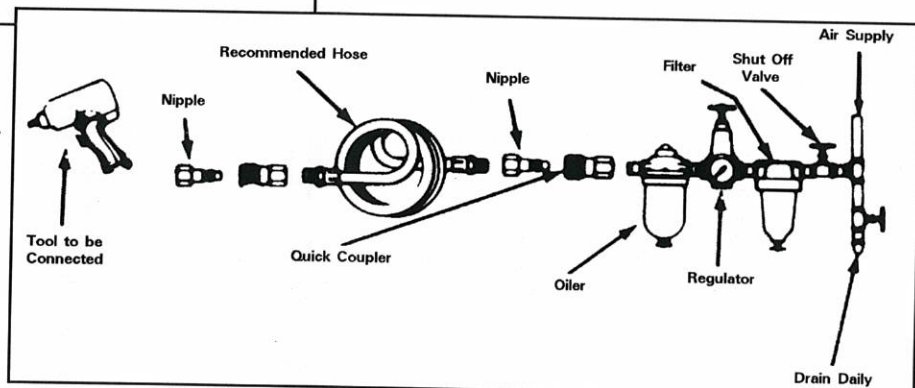
The tool should only be used as a handheld hand operated tool. It is always recommended that the tool is used when standing on the solid floor. It can be used in other positions but before any such use, the operator must be in a secure position having a firm grip and footing and be aware of the extra safety precautions that must be observed when using Grinding Machines.

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 lever/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



Operating if used as a die grinder

Select a suitable mounted point that has a free running speed higher than the maximum running speed marked on the tool. Make sure that the diameter of the shank exactly matches the diameter of the collet mounted in the grinder. There are four standard sizes of collet available for use with this grinder, i.e.

- (1) - 1/4" Dia (0.250ins)(6.35mm)
- (2) - 6mm (0.236ins)
- (3) - 1/8" (0.125ins)(3.175mm)
- (4) - 3mm (0.118ins)

* available to order 2mm, 2.5mm, 3.5mm and 5mm diameter collets
Never try to force a 1/4" diameter shank into a 6mm collet or a 1/8" diameter shank into a 3mm collet. Never try to close a 1/4" diameter collet to secure a 6mm shank or a 1/8" diameter collet to secure a 3mm diameter shank. Always match correctly the shank size to the collet size. If uncertain, have parts measured by a competent person. Push the shank as far as possible into the collet and tighten the collet nut using the spanners provided on the collet nut and output spindle.

The shank of the mounted point may be pulled forward from the maximum insertion length but always ensure a minimum gripping length of not less than 10mm - See Figure 2.

Be aware that the allowed running speed of the mounted point is lowered because of an increase in the length of the shank between the end of the collet and the body of the mounted point. This distance is shown in Diagram 2 as "LO" and is called the overhang. The information with respect to mounted point size, permissible running speed and reduction in running speed due to an increase in overhang is available from the supplier of the mounted point.

If the increase in overhang for access reasons takes the permissible running speed of the mounted point below the free running speed of the grinder select a smaller diameter mounted point.

The fitting of the mounted point should be done by a trained operator. When first starting the grinder with a new wheel fitted, the grinder should not be near other persons and be held in a protected area, i.e. under a bench and run for a few seconds. This will protect personnel from possible effects of damage to the mounted point before it was fitted to the grinder i.e. wheel breakage.

Always use eye protection and wear protective gloves if there are sharp edges in the work area. The tool and the grinding process can create a noise level such that the use of ear protectors is advised.

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 masks may be required.

If the grinder vibrates when first fitting a mounted point or during operation, remove from service immediately and correct fault before continuing to use.

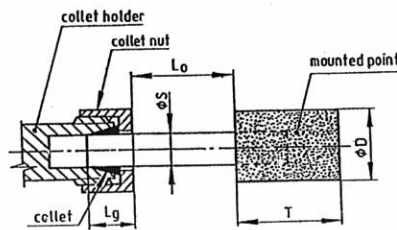
Do not apply excessive pressure as this will reduce the cutting efficiency and can bend the shank of the mounted point causing vibration and the possibility of breakage. Apply light loads to allow the wheel to cut.

Handle the grinder with care. If the grinder is dropped, carefully check the mounted point for damage, i.e. cracks, chipping and start for the first time as for fitting a new wheel i.e. under a bench.

Never exceed the maximum air pressure. If there is this possibility always use this grinder with a pressure reducing valve fitted in the supply line. Your supplier will advise of suitable equipment.

This grinder is fitted with a speed regulator and the speed may be reduced by rotating air regulator (4) with a suitable screwdriver. When making speed checks always rotate the air regulator to the position to give the highest maximum speed.

Figure 2. Gripping length of collet and chuck



- D = diameter of mounted point
T = length of mounted point
Lo = overhang
S = diameter of shank
Lg = gripping length

Dismantling & Assembly Instructions

Disconnect tool from air supply.

Grip chuck clamp nut (32) with spanner (38mm) than you can tear shaft sleeve (34) and washer (33) down. Grip housing (15) by the flats at the rear end and unscrew air inlet (9) and take off exhaust sleeve group (10, 11, 12). Grip housing (15) to loose and remove clamp nut (32) from housing (15) then you can tear the gear seat group (26, 27, 28, 29, 30, 31, 40) down. Grip housing (15) remove washer (25) and pull out the motor group then you can tear the other things down step by step.

Grip or locate on the cylinder (21) side of rear plate (17) and tap the rear end of rotor (20) and drive it through the rear plate (17) and bearing (16) assembly, with a suitable punch, tap out bearing (16) from rear plate (17).

Take out rotor blade (19) from rotor (20) carefully so as not to damage it or raise burrs on it and drive it through the front plate (23) and bearing (24) assembly, with a suitable punch, tap out bearing (24) from front plate (23).

Drive out pin (12) and remove safety throttle lever (13). Use the socket (12mm) to loose the screw (1) down and remove O-ring (2 & 3) and air regulator (4) and valve stem group (5, 6, 7, 8).

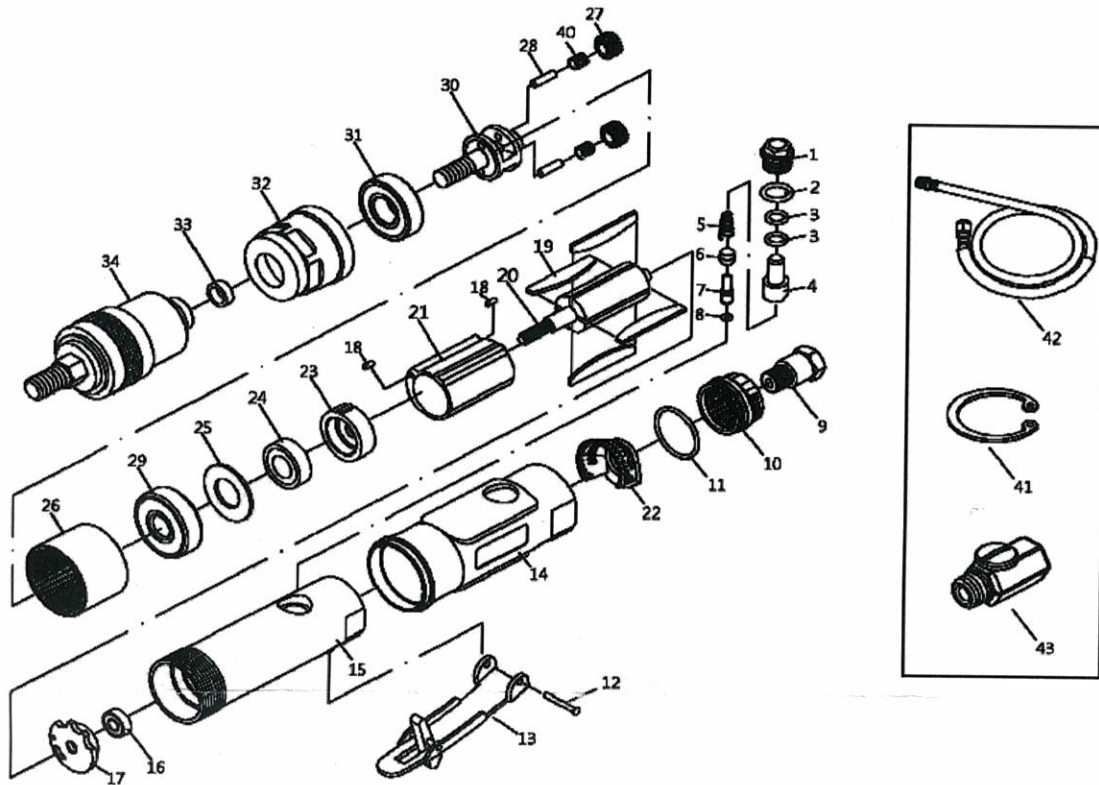
Reassembly

Clean all parts and examine for wear. Coat all parts with a pneumatic tool lubricating oil and grease all bearings with a molybdenum or lithium based general purpose grease. Before reassembling the motor, make sure that the faces of rear plate (17) and front plate (23) that abuts cylinder (21) are flat and free from burrs. If necessary, lap on a flat, very fine grade of abrasive paper. Reassemble in the reverse order. When refitting the complete motor assembly to the housing (15), make sure that the assembly is clamped tightly together and the rotor spins freely. With safety throttle lever (13) depressed, pour into air inlet (9) 5ml of pneumatic tool lubricating oil. Release the lever and connect the tool to a suitable air supply. Run tool slowly for a few seconds to allow oil to circulate.

Check that the safety lever (13) and air regulator (1-8) operate correctly. Check the speed of the tool at an air pressure 90psig (6.2bar), measure at the tool inlet when the tool is running free, does not exceed 2,600 rpm.

Safety Rules When Using A Tyre Buffer / Die 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) Always select suitable abrasive to use with this tool - see Operating Instructions.
- 3) Always shut off the air supply to the grinder and depress the lever to exhaust air from the feed hose before fitting, adjusting or removing the mounted point.
- 4) Always adopt a firm footing and/or position before using the grinder.
- 5) Use only correct spare parts.
- 6) Check hose and fittings regularly for wear. Do not carry the tool by its hose.
- 7) Do not remove and never tie down the safety lever.
- 8) Never exceed the maximum air pressure and check the free running speed frequently. Have air regulator fully open when making speed checks.
- 9) Use safety equipment as recommended.
- 10) Take care against entanglement of moving parts of the tool with clothing, ties, hair, cleaning rags, etc.
- 11) Use only compressed air at the recommended pressure.
- 12) Do not attempt to fit any other attachment than those recommended - see "Foreseen Use of Tool".
- 13) If the tool appears to malfunction, remove from use immediately, and arrange for service and repair.



Ref No	Part No	Description
1	70001	Screw
2	70002	O-Ring
3	70003	O-Ring (2)
4	70004	Air Regulator
5	50332	Spring
6	70429	Valve Stem Bushing
7	70007	Valve Stem
8	UT-OB-04	O-Ring
9	70009	Air Inlet
10	CT70010A	Exhaust Sleeve
11	70011	O-Ring
12	70432BK	Spring Pin
13	ST80509	Lever
14	70014	Protecting Rubber
15	ST21015	Housing
16	20312	Bearing
17	ST70017	Rear Plate
18	70018	Pin (2)
19	20019	Rotor Blade (4)

Ref No	Part No	Description
20	ST165021	Rotor
21	ST70021	Cylinder
22	70022A	Cone Muffler
23	ST70023	Front Plate
24	21024	Bearing
25	50310	Washer
26	ST165028	Thread Ring Gear
27	ST165029	Idler Gear (2)
28	70028	Idler Gear Pin (2)
29	OB-31	Bearing
30	26530	Gear Plate
31	24531	Bearing
32	ST24532	Clamp Nut
33	20329	Washer
34	UT-27033	Shaft Sleeve
40	ST165052	Needle Bearing (2)
41	ST22653	Snap Ring
42	BT22654	Exhaust Rubber Hose
43	ST22655	Regulator