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**TOPTUL®**  
THE MARK OF PROFESSIONAL TOOLS



# OPERATING INSTRUCTIONS

**TOPTUL®**  
THE MARK OF PROFESSIONAL TOOLS



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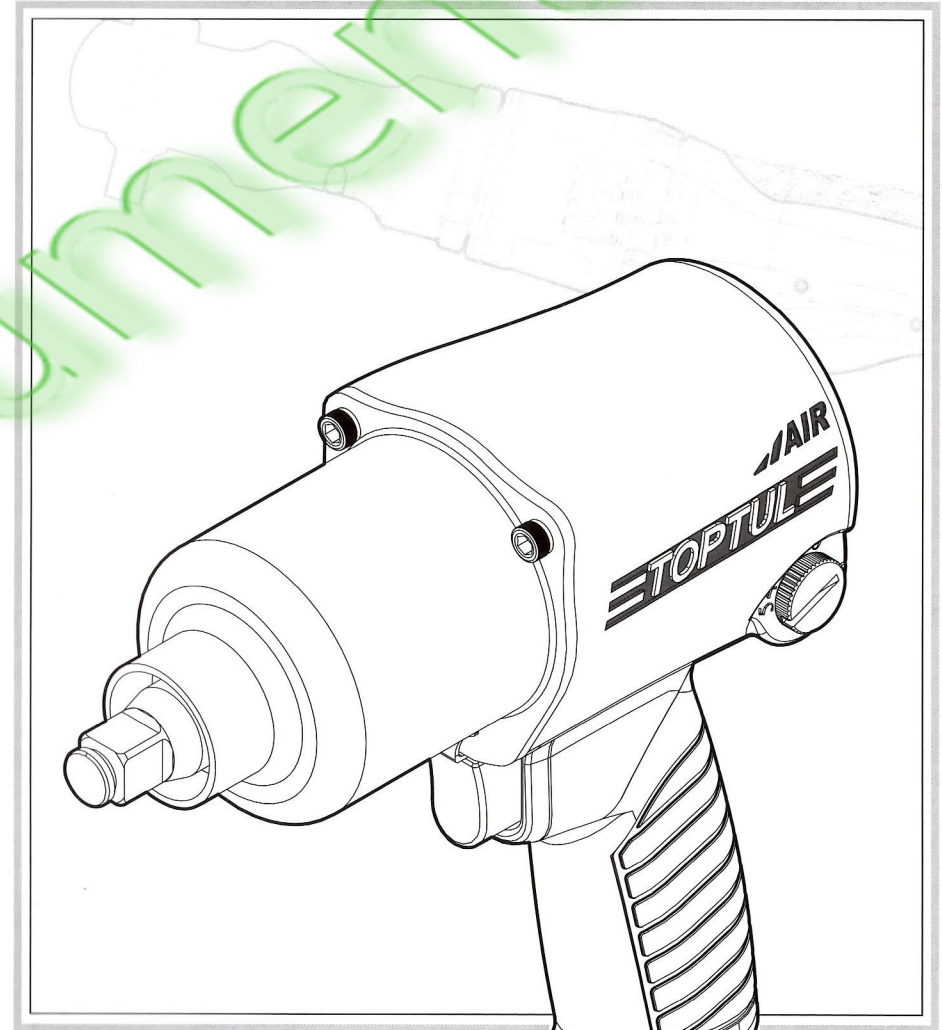
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TOPTUL AGENT



**Professional Grade Air Tools**

AIR TOPTUL SERIES FOR AUTO REPAIRS & MAINTENANCE

**TOPTUL SUPER DUTY IMPACT WRENCH, RATCHET WRENCH, HAMMER AND SCREWDRIVER**

Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

**A. OPERATION GUIDES**

**TIPS FOR USE:**

(Safety Regulations while using TOPTUL brand Pneumatic Tools)

**1. Air Pressure**

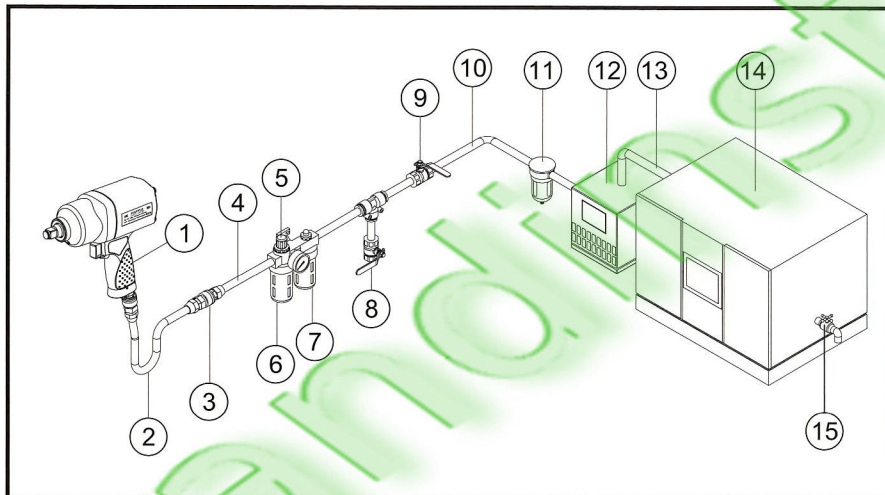
Do not exceed the maximum working air pressure.  
The air pressure of this tool during operating must be restricted at or less than the maximum pressure of 90 psi (6.2 bar).

**2. Air Line**

Properly use a suitable air hose for connection between the compressor and the tool.  
The compressed air is cooled and its water content separated as soon as the air leaves the compressor. A portion of the water content might be condensed in the piping and enter the tool mechanism, and maybe cause mechanical trouble.  
So it is strongly recommended to install an air filter, moisture separator, regulator and lubricator between the air supply and the air tools.

**3. Air Hose**

Clean the hose with a blast of compressed air before connecting the hose to air tool.  
This will prevent both moisture and dust within the hose from entering the tool and causing possible rust or malfunction.



① Air Tool	⑥ Oiler	⑪ Auto Drain
② Lead Hose	⑦ Filter	⑫ Air Dryer
③ Coupler body and connector	⑧ Drain daily	⑬ 1" or larger pipe and fitting
④ Air Hose 3/8"	⑨ Shut Off Valve	⑭ Air Compressor
⑤ Pressure Regulator	⑩ 1/2" or larger pipe and fitting	⑮ Drain daily



**4. Inserted Tools**

Use only impact sockets, extensions, universal joints and other impact type tools with suitable square drive dimension or to fit its recess dimension. The tool is used for fastening and loosening of threaded fasteners.

Any other use is forbidden. In addition, use only sockets and adapters which are in good condition and are intended for use with air power tools.



**5. Personal Protection Equipment**

The approved eye and hearing protector, mouth-muffle and safety gloves shall be worn when operating this tool.



**6. Always when using the tool**, adopt a firm footing and/or position and grip the tool sufficiently only to overcome any reaction forces that may result from the tool doing work. Do not over grip.



**7. If the tool is to be used with a balancer or other suspension device**, ensure that the tool is firmly attached to the suspension/support device.



**8. Always shut off the air supply to the tool and press the on/off valve to exhaust the air from the feed hose before fitting**, removing or adjusting the working attachment fitted to the tool.



**9. Be aware of entanglement of the moving parts of the tool with clothing, neckties, long hair, jewelry, watches and etc.** This could cause the body or parts of the body to be drawn towards and in contact with the moving parts of the tool and may be very dangerous.



**10. Be aware of the exhaust air** does not point towards any other person or material that could be contaminated by oil droplets.



**11. This tool is not electrically insulated.** Never use the tool if there is any chance of coming into contact with live electricity.



**12. Do not lay the tool down until the working attachment has stopped moving completely.**

**13. The working place shall be ventilating.**

**14. Release the on-off device in case of air supply failure.**

**15. Release the start and stop device in case of energy supply failure.**

**16. Use only the lubricant recommended by the manufacturer.**

**17. It is possible to attach a second handle on the tool or fix the tool to a suspension device, even if it is not delivered with the tool. Please contact the sales agent for details.**

**B. OPERATIONAL METHOD**

**1. On-Off Device**

The on-off device is on the inner or outer contour of the grip. It is a "hold-to-run" type device. This tool will stop rotation in a few seconds after releasing the lever.

**2. Torque Adjuster**

To adjust the torque by rotating the knob which is indicated by numbers. Lower number indicates lower torque output setting.

**3. Speed Adjustment**

The speed adjuster, if any, is indicated by an arrow together with an indication either by "H"(high) and "L"(low) or by "+"(high) and "-"(low). Rotating the knob to desired speed.

**4. Rotating Direction**

Make sure the direction of rotation before actuate this tool. The "F" indicates forward and the "R" indicates reverse. Forward is defined as clockwise direction seen from the operator's position.

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### C. MAINTENANCE & REPAIRS

#### 1. Lubrication

Before connecting the air hose, apply 4 to 5 drops of #60 spindle oil at the air inlet. Repeating oiling after each 3 to 4 hours of operation will be necessary.

#### 2. Tightness of Parts

Regularly check whether all the connecting parts are fastened securely. It is recommended to carry out this check before starting daily work.

#### 3. Cleaness

An oil surface on the handle will reduce the grip which counteracts the reaction torque. Clean the handle with dry cloth is recommended before operating this tool.

#### 4. Storage

Store the tool in a dry average room temperature environment. If the tool shall not to be used for a period of time and it is used, the residual moisture inside the tool can cause rust. Before storing, oil the tool at the air inlet with spindle oil and run it for a short period.

#### 5. Repairs

Use only correct spare parts for maintenance and repair. Do not improvise or make temporary repairs. Major services and repairs should only be carried out by persons trained to do so or someone other than TOPTUL of its authorized service representatives.

### D. DISPOSAL

Follow the national legislation of waste disposal. Never dispose of the air tools into fire. Separate collection! This product must not be disposed with normal household waste.

### Manufacturer's Limited Warranty

All AIR **TOPTUL** Serial pneumatic tools are provided with complete service and product warranty to the product that manufactured by **TOPTUL (Rotar Machinery Industrial Co., Ltd.)** and sold by its worldwide authorized dealers. **TOPTUL** professional air tools, unless otherwise specified, are unconditionally guaranteed against defects in materials and workmanship for the life of the tool, excluding any other inappropriate operation, modification or repair. **TOPTUL** will repair or replace the tool that fails to give satisfactory service, on the condition that the tool has not been abused or modified and that it is returned to an authorized warranty **TOPTUL** dealer. If there is a defective product claim of **TOPTUL**, contact the **TOPTUL** authorized sales/service representatives.



### ! WARNING

1. For multiple hazards, read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the air power tool. Failure to do so can result in serious bodily injury.
2. Only qualified and trained operators should install, adjust or use the air power tool.
3. Do not modify this air power tool. Modifications can reduce the effectiveness of safety measures and increase the risks to the operator.
4. Do not discard the safety instructions; give them to the operator.
5. Do not use the air power tool if it has been damaged.
6. The employer/user shall contact the sales representative or manufacturer to obtain replacement marking labels when necessary.
7. Failure of the workpiece, accessories or even of the inserted tool itself can generate high-velocity projectiles.
8. Always wear impact-resistant eye protection during the operation of the air power tool. The grade of protection required should be assessed for each use.
9. Ensure that the workpiece is securely fixed.
10. Entanglement hazards can result in choking, scalping or lacerations if loose clothing, personal jewelry, neckwear, hair or gloves are not kept away from the tool and accessories.
11. Gloves can become entangled with the rotating drive and cause severed or broken fingers.
12. Rotating drive sockets and drive extensions can easily entangle rubber-coated or metal-reinforced gloves.
13. Do not wear loose-fitting gloves or frayed, cut glove.
14. Never hold the drive, socket or drive extension.
15. Keep hands away from rotating drives.
16. The use of the tool can expose the operator's hands to hazards including crushing, impacts, cuts, abrasions and heat. Wear suitable gloves to protect hands.
17. Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool.
18. Hold the tool correctly; be ready to counteract normal or sudden movements and have both hands available.
19. Maintain a balanced body position and secure footing.
20. It is recommended to use a suspension arm whenever possible.
21. Reaction bars are recommended for angle nutrunners.
22. It is recommended to use a means to absorb the reaction torque above 4 Nm for straight tools, above 10 Nm for pistol-grip tools.
23. Release the start-and-stop device in the case of an interruption of the energy supply.
24. Use only lubricants recommended by TOPTUL's authorized sales or service representatives.
25. Do not use in confined spaces and beware of crushing hands between tool and workpiece, especially when unscrewing.
26. Tool and/or accessories may briefly continue their motion after trigger is released.
27. Keep others a safe distance from your work area, or ensure they use appropriate personal protective equipment.
28. When using a power tool for the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
29. While using an air power tool, the operator should adopt a comfortable posture while maintaining secure footing and avoiding awkward or off-balanced postures.
30. While using an air power tool, the operator should change posture during extended tasks, which can help avoid discomfort and fatigue.
31. If the operator experiences symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensations or stiffness. These warning signs should not be ignored. The operator should tell the employer and consult a qualified health professional.
32. Disconnect the air power tool from the energy supply before changing the inserted tool or accessory.
33. Do not touch sockets or accessories during impacting, as this increases the risk of cuts, burns or vibration injuries.
34. Use only types and sizes of accessories and consumables that are recommended by TOPTUL's authorized sales or service representatives.
35. Use only impact wrench rated sockets in good condition. The poor condition or hand sockets and accessories used with impact wrenches can shatter and become a projectile.
36. Slips, trips and falls are major causes of workplace injury.
37. Be aware of slippery surfaces caused by the use of the tool and also of trip hazards caused by the air line or hydraulic hose.
38. Proceed with care in unfamiliar surroundings. Hidden hazards, such as electricity or other utility lines can exist.
39. The air power tool is not intended for use in potentially explosive atmospheres and is not insulated against coming into contact with electric power.
40. Make sure there are no electrical cables, gas pipes and others in the workplace. The use of air power tool can damage the equipment and cause a potential hazard.
41. Use of air power tools can generate dusts and fumes and cause ill health (for example, cancer, birth defects, asthma and/or dermatitis); risk assessment and implementation of appropriate controls for these hazards are essential.

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42. Risk assessment should include dust generated by the use of the tool; the dust can disturb the operator and cause a potential hazard.
43. Direct the exhaust away from the operator so as to minimize disturbance of dust in a dust-filled environment.
44. Where dust or fumes are generated, the priority shall be to control them at the point of emission.
45. All integral features or accessories for the collection, extraction or suppression of airborne dust or fumes should be correctly used and maintained in accordance with the manufacturer's instructions.
46. Use respiratory protection in accordance with employer's instructions and as required by occupational health and safety regulations.
47. Unprotected exposure to high noise levels can cause permanent and disabling hearing loss and other problems, such as tinnitus ringing, buzzing, whistling or humming in the ears. Risk assessment and implementation of appropriate controls for these hazards are essential.
48. Appropriate controls to reduce the risk may include actions such as damping materials to prevent workpieces from "ringing".
49. Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.
50. Operate and maintain the air power tool as recommended in the instruction handbook in order to prevent an unnecessary increase in noise levels.
51. If the assembly air power tool for threaded fasteners has a silencer, always ensure it is in place and in good working order when operating.
52. Select, maintain and replace the consumable/inserted tool as recommended in the instruction handbook in order to prevent an unnecessary increase in noise.
53. For recommended interface dimensions for spindles and drive adapters to help reduce vibrations, please contact the TOPTUL's authorized sales or service representatives.
54. Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
55. Keep the hands away from the sockets.
56. Wear warm clothing when working in cold conditions and keep your hands warm and dry.
57. If you experience numbness, tingle, pain or whitening of the skin in your fingers or hands, stop using the assembly air power tool for threaded fasteners, talk to your employer and consult a physician.
58. Operate and maintain the assembly air power tool for threaded fasteners as recommended in the instruction handbook in order to prevent an unnecessary increase in vibration levels.
59. Select, maintain and replace the consumable/inserted tool as recommended in the instruction handbook in order to prevent an unnecessary increase in vibration levels.
60. Do not use worn or ill-fitting sockets or extensions, as this is likely to cause a substantial increase in vibration.
61. Sleeve fittings should be used where practicable.
62. Support the weight of the tool in a stand, tensioner or balancer if possible.
63. Hold the tool with a light but safe grip, taking account of the required hand reaction forces because the risk from vibration is generally greater when the grip force is higher.
64. Air under pressure can cause severe injury.
65. Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use before changing accessories or when making repairs.
66. Never direct air at yourself or anyone else.
67. Whipping hoses can cause severe injury.
68. Always check for damaged or loose hoses and fittings.
69. Cold air shall be directed away from the hands.
70. Do not use quick-disconnect couplings at tool inlet for impact wrenches. Use hardened steel (or material with comparable shock resistance) threaded hose fittings.
71. Whenever universal twist couplings (claw couplings) are used, lock pins shall be installed and whipcheck safety cables shall be used to safeguard against possible hose-to-tool and hose-and-hose connection failure.
72. Do not exceed the maximum air pressure stated on the tool.
73. Never carry an air power tool by the hose.
74. Setting up or fixing the air power tool in a stable position. The tool can also be appropriately mounted in a support.
75. Keep the air power tools safe by regular preventative maintenance.
76. Check the speed and make a simple check of the vibration level after each service.
77. Check the speed regularly.
78. The working places shall keep ventilated, clean and illuminated.
79. Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
80. Any other use of this air power tool other than its designated purpose is prohibited.

**GENERAL TROUBLESHOOTING GUIDE**

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Tool runs slowly down or doesn't work	1. Grit or gum in motor set.	1. (A) Drop diesel oil from air inlet to flush motor set and drop SAE#10 motor oil to lubricate it. 1. (B) Disassemble the tool and repair it. (Authorized Dealer Recommended)
	2. Low air pressure.	2. Check the air compressor meter and properly adjust the compressor regulator.
	3. Dry or rusty motor set.	3. Lubricate the tool with SAE#10 motor oil or sewing machine oil.
	4. No oil in tool.	4. Do the same as point 3.
Reduced torque	5. Worn ball bearing.	5. Replace ball bearing. (Authorized Dealer Recommended)
	1. Lack of lubrication.	1. Lubricate the tool.
	2. Regulator set in wrong position.	2. Check and adjust the regulator to correct position.
Doesn't impact totally but can run free	3. Low pressure.	3. Check the pressure of air inlet to see if it is at correct number 90 psi.
	4. Worm impact mechanism.	4. Replace parts. (Authorized Dealer Recommended)
Self-running	1. Serious worn parts or damaged parts of impact set.	1. Replace parts. (Authorized Dealer Recommended)
	Trigger system: 1. Valve system can not remove back. 2. Rusty or deformed steel ball. 3. Rusty or cracked spring.	1. Replace parts. (Authorized Dealer Recommended)
Moisture blowing out of tool	1. Water in tank.	1. Drain the tank. Oil the tool and run until no water is evident remained. Oil the tool again and run for 2-3 seconds.
	2. Water in the air lines/hoses.	2. (A) Install a water separator/filter. Note: Separator only work properly when the air passing through the separator is cool. Locate the separator/filter as far as possible from the compressor. 2. (B) Install an air dryer.