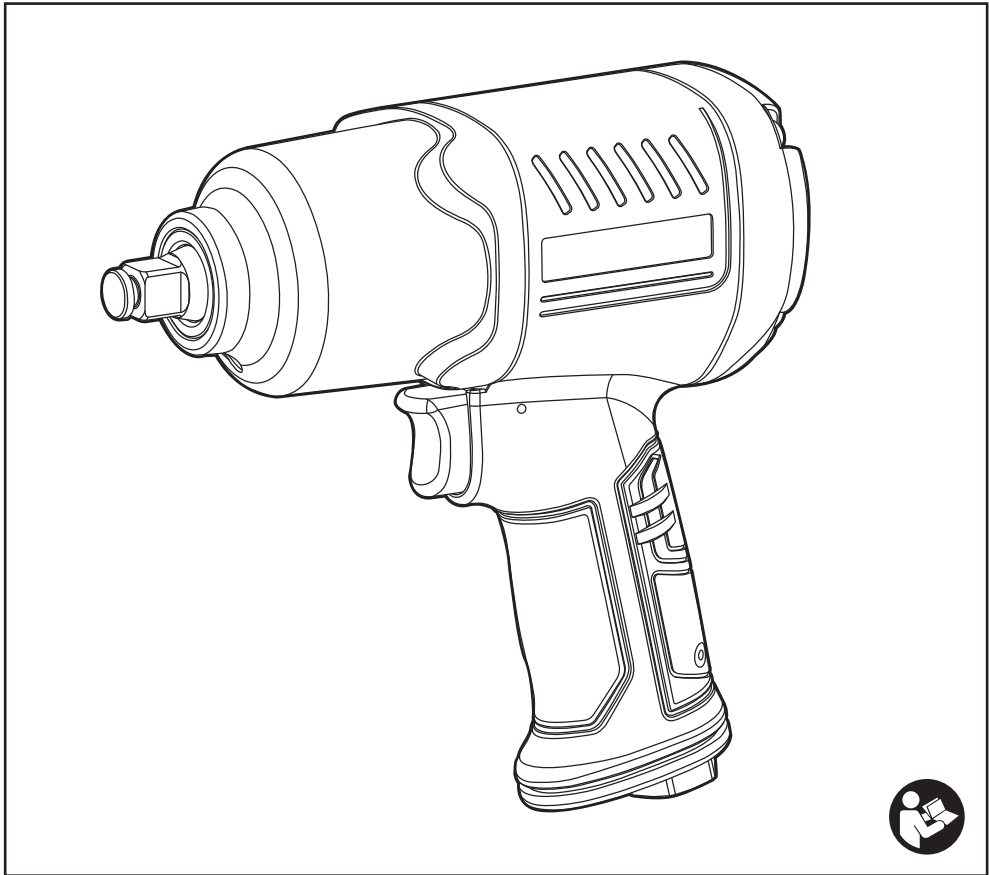




RAIWKIT1

**AIR IMPACT WRENCH KIT
OPERATOR'S MANUAL
ORIGINAL INSTRUCTIONS**



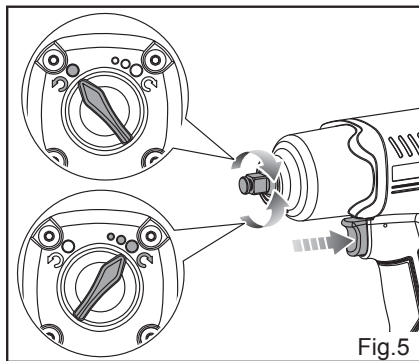
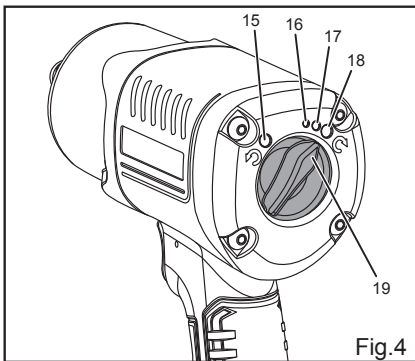
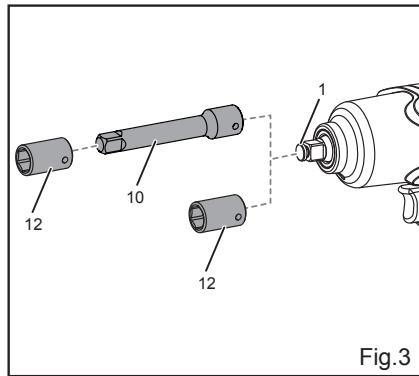
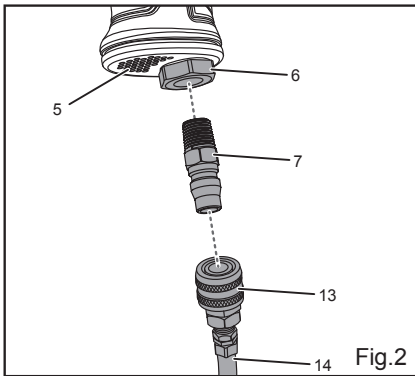
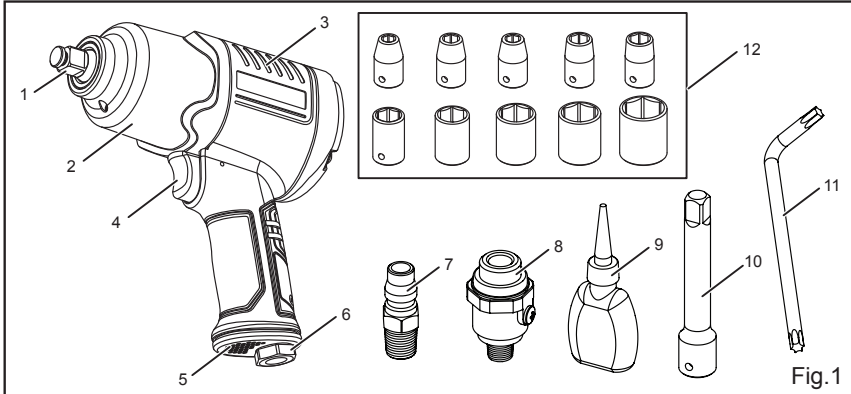
Important!

It is essential that you read the instructions in this manual before operating this machine.

Subject to technical modifications.

DESCRIPTION

- | | | | |
|------------------------|----------------------|----------------------------------|--------------------------|
| 1. Wrench anvil | 6. Air inlet | 11. Screwdriver | 16. Clockwise (torque 1) |
| 2. Front housing cover | 7. NITTO style plug | 12. 10 x Impact sockets | 17. Clockwise (torque 2) |
| 3. Main housing | 8. Automatic oiler | 13. Quick coupler (not included) | 18. Clockwise (torque 3) |
| 4. Trigger | 9. Oil bottle | 14. Air hose (not included) | 19. Adjustment knob |
| 5. Exhaust deflector | 10. Socket extension | 15. Counterclockwise | 20. Screw |



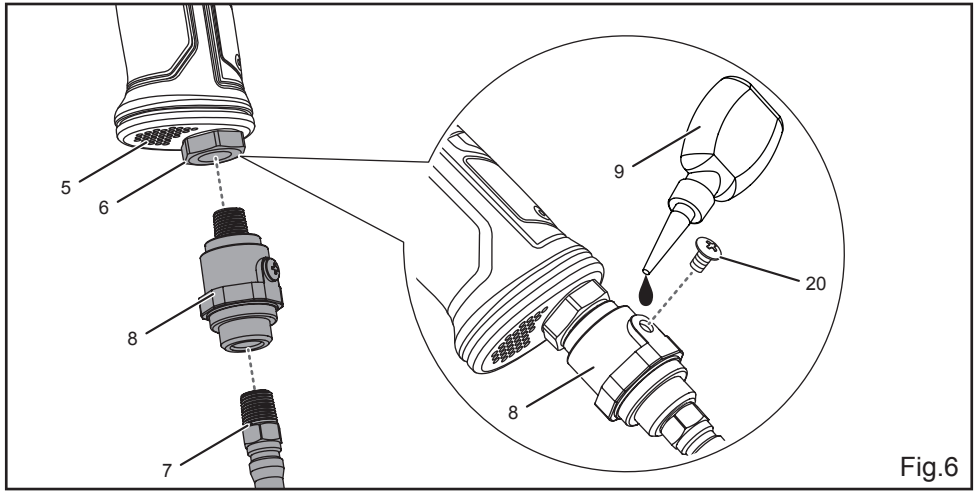


Fig.6

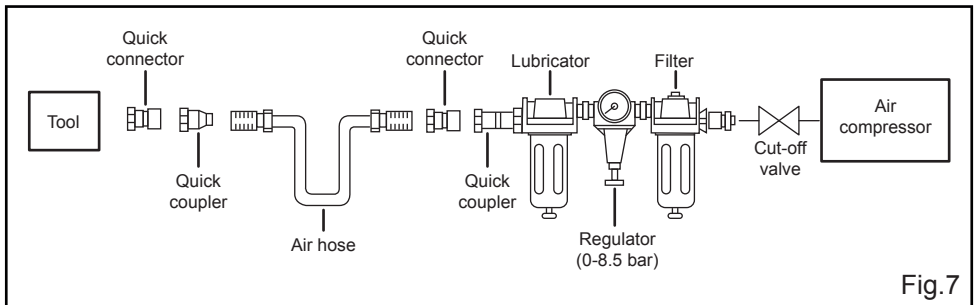


Fig.7

GENERAL SAFETY RULES

- For multiple hazards, read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the assembly power tool for threaded fasteners. Failure to do so can result in serious bodily injury.
- Only qualified and trained operators should install, adjust or use the assembly power tool for threaded fasteners.
- Do not modify this assembly power tool for threaded fasteners. Modifications can reduce the effectiveness of safety measures and increase the risks to the operator.
- Do not discard the safety instructions; give them to the operator.
- Do not use the assembly power tool for threaded fasteners if it has been damaged.
- Tools shall be inspected periodically to verify that the

ratings and markings required by this part of ISO 11148 are legibly marked on the tool. The employer/user shall contact the manufacturer to obtain replacement marking labels when necessary.

- Ensure that the pressure of the air supply is not lower than the lowest pressure specified by the manufacturer for clutch-controlled assembly tools and make sure that the air supply pressure does not fall after the clutch has been set.
- Support handle and reaction bar are not required for this product.

PROJECTILE HAZARDS

- Failure of the work piece, of accessories or even of the inserted tool itself can generate high-velocity projectiles.
- Always wear impact-resistant eye protection during the operation of the assembly power tool for threaded fasteners. The grade of protection required should be assessed for each use.

- Ensure that the work piece is securely fixed.

ENTANGLEMENT HAZARDS

- Entanglement hazards can result in choking, scalping and/or lacerations if loose clothing, personal jewellery, neck ware, hair or gloves are not kept away from the tool and accessories.
- Gloves can become entangled with the rotating drive, causing severed or broken fingers.
- Rotating drive sockets and drive extensions can easily entangle rubber-coated or metal-reinforced gloves.
- Do not wear loose-fitting gloves or gloves with cut or frayed fingers.
- Never hold the drive, socket or drive extension.
- Keep hands away from rotating drives.

OPERATING HAZARDS

- The use of the tool can expose the operator's hands to hazards including crushing, impacts, cuts and abrasions and heat. Wear suitable gloves to protect hands.
- Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool.
- Hold the tool correctly; be ready to counteract normal or sudden movements and have both hands available.
- Maintain a balanced body position and secure footing.
- In cases where the means to absorb the reaction torque are requested, it is recommended to use a suspension arm whenever possible. If that is not possible, side handles are recommended for straight case and pistol-grip tools. Reaction bars are recommended for angle nut runners. In any case, 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, and above 60 Nm for angle nut runners.
- Release the start-and-stop device in the case of an interruption of the energy supply.
- Use only lubricants recommended by the manufacturer.
- Fingers can be crushed in open-ended crow-foot nut runners.
- Do not use in confined spaces and beware of crushing hands between tool and work piece, especially when unscrewing.

REPETITIVE MOTIONS HAZARDS

- When using an assembly power tool for threaded fasteners to perform work-related activities, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
- While using an assembly power tool for threaded fasteners, the operator should adopt a comfortable posture while maintaining secure footing and avoiding awkward or off-balanced postures. The operator

should change posture during extended tasks, which can help avoid discomfort and fatigue.

- 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.

ACCESSORY HAZARDS

- Disconnect the assembly power tool for threaded fasteners from the energy supply before changing the inserted tool or accessory.
- Do not touch sockets or accessories during impacting, as this increases the risk of cuts, burns or vibration injuries.
- Use only sizes and types of accessories and consumables that are recommended by the assembly power tool for threaded fasteners manufacturer; do not use other types or sizes of accessories and consumables.
- Use only impact-wrench-rated sockets in good condition, as poor condition or hand sockets and accessories used with impact wrenches can shatter and become a projectile.

WORKPLACE HAZARDS

- Slips, trips and falls are major causes of workplace injury. 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.
- Proceed with care in unfamiliar surroundings. Hidden hazards, such as electricity or other utility lines, can exist.
- The assembly power tool for threaded fasteners is not intended for use in potentially explosive atmospheres and is not insulated against coming into contact with electric power.
- Make sure there are no electrical cables, gas pipes, etc., that can cause a hazard if damaged by use of the tool.

DUST AND FUME HAZARDS

- Dust and fumes generated when using assembly power tools for threaded fasteners can cause ill health (for example cancer, birth defects, asthma and/or dermatitis); risk assessment and implementation of appropriate controls for these hazards are essential.
- Risk assessment should include dust created by the use of the tool and the potential for disturbing existing dust.
- Direct the exhaust so as to minimize disturbance of dust in a dust-filled environment.
- Where dust or fumes are created, the priority shall be to control them at the point of emission.

- 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.
- Use respiratory protection in accordance with employer's instructions and as required by occupational health and safety regulations.

NOISE HAZARDS

- Exposure to high noise levels can cause permanent, disabling hearing loss and other problems, such as tinnitus (ringing, buzzing, whistling or humming in the ears). Therefore, a risk assessment and implementation of appropriate controls for these hazards are essential.
- Appropriate controls to reduce the risk may include actions such as damping materials to prevent work pieces from "ringing".
- Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.
- Operate and maintain the assembly power tool for threaded fasteners as recommended in the instructions handbook, to prevent an unnecessary increase in noise levels.
- If the assembly power tool for threaded fasteners has a silencer, always ensure it is in place and in good working order when the assembly power tool for threaded fasteners is operating.
- Select, maintain and replace the consumable/inserted tool as recommended in the instructions handbook, to prevent an unnecessary increase in noise.

VIBRATION HAZARDS

The information for use shall draw attention to vibration hazards that have not been eliminated by design and construction and remain as residual vibration risks. It shall enable employers to identify the circumstances in which the operator is likely to be at risk from vibration exposure. If the vibration emission value obtained using ISO 28927-2 does not adequately represent the vibration emission in the intended uses (and foreseeable misuses) of the machine, additional information shall be supplied to enable the risks arising from vibration to be assessed and managed.

For recommended interface dimensions for spindles and drive adapters to help reduce vibrations, see ISO/TS 21108.

- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
- Keep the hands away from the nutrunner sockets.
- Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the assembly power tool for threaded fasteners, tell your

employer and consult a physician.

- Operate and maintain the assembly power tool for threaded fasteners as recommended in the instructions handbook, to prevent an unnecessary increase in vibration levels.
- Do not use worn or ill-fitting sockets or extensions, as this is likely to cause a substantial increase in vibration.
- Select, maintain and replace the consumable/inserted tool as recommended in the instructions handbook, to prevent an unnecessary increase in vibration levels.
- Sleeve fittings should be used where practicable.
- Support the weight of the tool in a stand, tensioner or balancer, if possible.
- 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.

ADDITIONAL SAFETY INSTRUCTIONS FOR PNEUMATIC POWER TOOLS

- Air under pressure can cause severe injury.
- 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;
- Never direct air at yourself or anyone else.
- Whipping hoses can cause severe injury. Always check for damaged or loose hoses and fittings.
- Cold air shall be directed away from the hands.
- Do not use quick-disconnect couplings at tool inlet for impact and air-hydraulic impulse wrenches. Use hardened steel (or material with comparable shock resistance) threaded hose fittings.
- 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.
- Do not exceed the maximum air pressure stated on the tool.
- For torque-control and continuous-rotation tools, the air pressure has a safety critical effect on performance. Therefore, requirements for length and diameter of the hose shall be specified.
- Never carry an air tool by the hose.

SYMBOLS



Safety alert



CE conformity



Please read and understand all instructions before operating the product, follow all warnings and safety instructions.



Please read the instructions carefully before starting the product.



Wear eye protection.



Wear ear protection.



Lubricate with air tool oil daily.

SPECIFICATIONS

Air impact wrench kit	
Model	RAIWKIT1
Square drive	12.7 mm (1/2")
Capacity bolt size	16 mm (5/8")
No-load speed	7,800/min
Max. torque	569 N.m
Average air consumption	184 L/min (6.5 cfm)
Maximum working pressure	6.3 bar (90 psi)
Air inlet size	6.35 mm (1/4")
Air hose ID	9.52 mm (3/8")
Weight	2.14 kg
A-weighted sound pressure level	95.1dB(A), K=3dB
Sound power level	106.1dB(A), K=3dB
Vibration value	5.778 m/s ²
Uncertainty	1.33 m/s ²

Noise emission values are in accordance with EN ISO 4871 and EN ISO 15744.

Vibration emission values are in accordance with EN 12096, EN28662-1 and EN ISO 8662-7.

INTENDED USE

The impact wrench kit is intended to be used only by adults who have read and understood the instructions and warnings in this manual, and can be considered responsible for their actions.

The product is intended for fastening and removing screws and bolts using an impact socket.

Do not use the product for any other purpose.

RESIDUAL RISKS

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product:

1. Health defects resulting from vibration and noise emission if the product is being used over long periods of time or not adequately managed and properly maintained.
2. Injuries and damage to property due to broken cutting attachments or the sudden impact of hidden objects during use.
3. Danger of injury and property damage caused by flying objects.

ASSEMBLY

UNPACKING

- Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included.

⚠ WARNING! Do not use the product if it is not completely assembled or if any parts appear to be missing or damaged. Use of a product that is not properly and completely assembled could result in serious personal injury.

- Inspect the product 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.

Packing list

- Air impact wrench
- 10 x impact sockets
- Socket extension
- NITTO style plug
- Automatic oiler
- Oil bottle
- Screwdriver
- Operator's manual

⚠ WARNING! If any parts are damaged or missing do not operate this tool until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

⚠ WARNING! Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

AIR SUPPLY SET UP

See figure 2.

- Ensure the trigger is not depressed before connecting to the air supply.
 - Wrap the thread of the NITTO style plug with thread seal tape. Screw the NITTO style plug into the air inlet.
 - Adjust the air compressor's output regulator to not more than 6.3 bar (90 psi).
 - Attach the air hose to the compressor's air outlet. Then connect the hose's coupler to the NITTO style plug attached to the product.
- NOTE:** the air hose must be long enough to reach the work area with enough extra length to allow free movement while working.
- Turn on the air compressor according to the manufacturer's instructions. Allow it to build up pressure until it cycles off.
 - The minimum hose diameter should be 9.52 mm (3/8") I.D. and the fittings must have the same inside dimensions.
 - Check for leaks in the air connections. Repair as needed.
 - If the product will not be used, turn off and disconnect the air supply. Discharge any residual air pressure to prevent accidental operation.

OPERATION

PREPARATION

- Designate a work area which is clean and well lit. Prevent access by children and animals.
- Route the air hose along a safe route to reach the work area. The air hose must be long enough to reach the work area with enough extra length to allow free movement while working.
- Make sure no hazardous objects such as utility lines or foreign objects are present nearby.
- If possible, clamp the workpiece so that it will not move freely.

⚠ WARNING! Prior to operation, protect other people and property in the work area from flying debris by providing barriers or shields. Wear appropriate personal protective equipment.

GENERAL OPERATING INSTRUCTION

See figure 2 - 5.

- Ensure the trigger is not depressed before connecting to the air supply.
- Adjust the air compressor's output regulator to not more than 6.3 bar (90 psi).
- Attach the air hose to the compressor's air outlet. Then connect the hose's coupler to the NITTO style plug attached to the product.

- Attach the impact socket to the square drive.

⚠ WARNING! Ensure the air supply is clean and does not exceed 6.3 bar (90 psi) while operating the product. Too high an air pressure and unclean air will shorten the product's life due to excessive wear, and may be dangerous causing damage and/or personal injury.

- Turn the adjustment knob to change the rotational direction and adjust the torque (available for clockwise direction) of the tool.
- Place the socket over the subject nut and squeeze the trigger to operate the tool.
- Do not use any additional force upon the tool.
- Do not allow the tool to free run for an extended period of time as this will shorten its life.
- Disconnect the product from the air supply before changing accessories or making adjustments.

LUBRICATION

AUTOMATIC OILER

See figure 6.

An automatic oiler can be installed between the air inlet and NITTO style plug to achieve automatic oiling for the tool.

- Wrap the thread of the automatic oiler with thread seal tape. Screw the automatic oiler into the air inlet.
- Wrap the thread of the NITTO style plug with thread seal tape. Screw the NITTO style plug into the automatic oiler.
- Undo the screw on the oiler to refill oil.

IN-LINE LUBRICATOR

An automatic in-line filter-regulator-lubricator is recommended (Fig. 7) as it increases product life and keeps the product in sustained operation. The in-line lubricator should be regularly checked and filled with air tool oil.

Proper adjustment of the in-line lubricator is performed by placing a sheet of paper next to the exhaust ports and holding the throttle open for approximately 30 seconds. The lubricator is properly set when a light stain of oil collects on the paper. Excessive amounts of oil should be avoided.

If it becomes necessary to store the product for an extended period of time (overnight, weekend, etc.), it should receive a generous amount of lubrication at that time. The product should be run for approximately 30 seconds to ensure oil has been evenly distributed throughout the product. The product should be stored in a clean and dry environment.

- It is most important that the product be properly lubricated by keeping the air line lubricator filled and correctly adjusted. Without proper lubrication the product will not work properly and parts will wear prematurely.

- Use correct lubricant in the air line lubricator. The lubricator should be of low air flow or changing air flow type, and should be kept filled to the correct level. Use only recommended lubricants, specially made for pneumatic applications. Substitutes may harm the rubber compounds in the product's O-rings and other rubber parts.

IMPORTANT!

See Figure 7.

If a filter/regulator/lubricator is not installed on the air system, air operated tools should be lubricated at least once a day or after 2 hours of work with 2 - 6 drops of #10 spindle oil, depending on the work environment, directly through the air inlet.

MAINTENANCE

⚠ WARNING! Maintenance tasks not explained in this manual must be carried out by qualified personnel.

⚠ WARNING! To prevent serious personal injury from accidental operation, disconnect the product from the air supply and discharge any residual air pressure in the product before carrying out any inspection, maintenance or cleaning.

⚠ WARNING! To prevent serious personal injury from product failure, do not use damaged equipment. If abnormal noise, vibration or air leak occurs, stop using the product and have the product inspected and corrected before use.

- Keep the product safe by regular maintenance. Maintenance shall be performed weekly.
- Before each use, check for loose screws, misalignment, or binding of moving parts, clogged nozzle, damaged supply hose, cracked or broken parts, and any other condition which may affect safe operation. Do not use damaged equipment.
- Always keep your air tool clean and lubricated. Daily lubrication is essential to avoid internal corrosion and possible failure.
- #10 spindle oil is recommended for lubrication.
- Only lubricants recommended by the manufacturer should be used.
- Drain the air tank daily. Water in the air line will damage the product.
- If the product cannot be used anymore, make sure to dispose of it so as not to impose hazards on people and the environment.
- Clean the air inlet filter weekly.

TROUBLESHOOTING

⚠ WARNING! If any of the following symptoms appears during operation, stop using the product immediately, or serious personal injury could result. Only qualified persons

or an authorised service centre can perform repairs or replacement of the product.

Disconnect the product from the air supply before attempting repair or adjustment. When replacing O-rings or cylinder, lubricate with air tool oil before assembly.

PROBLEM: Product runs at normal speed but fails under load.

POSSIBLE CAUSES

- Motor parts are worn.
- Cam clutch is worn or sticking due to lack of lubricant.

REMEDIES

- Lubricate clutch housing.
- Check for excess clutch oil. Clutch cases need only be half full. Overfilling can cause drag on high speed clutch parts, i.e. a typical oiled/lubricated tool requires 14,20 ml (1/2 ounce) of oil.

Grease lubrication

NOTE: Heat usually indicates insufficient grease in chamber. Severe operating conditions may require more frequent lubrication.

PROBLEM: Product runs slowly. Air flows slightly from exhaust.

POSSIBLE CAUSES

- Motor parts are jammed with dirt particles.
- Power regulator is in closed position.
- Air flow is blocked by dirt.

REMEDIES

- Check air inlet filter for blockage.
- Pour air tool lubricating oil into air inlet as per instructions.
- Operate the product in short bursts quickly reversing rotation back and forth where applicable.
- Repeat above as needed.

PROBLEM: Product will not run. Air flows freely from exhaust.

POSSIBLE CAUSE

One or more motor vanes are stuck due to material build up.

REMEDIES

- Pour air tool lubricating oil into air inlet.
- Operate the product in short bursts of forward and/or reverse rotation where applicable.
- Tap motor housing gently with a plastic mallet.
- Disconnect the air supply. Free the motor by rotating drive shank manually where applicable.

- If the product remains jammed, return to the service centre.

PROBLEM: Product will not shut off.

POSSIBLE CAUSE

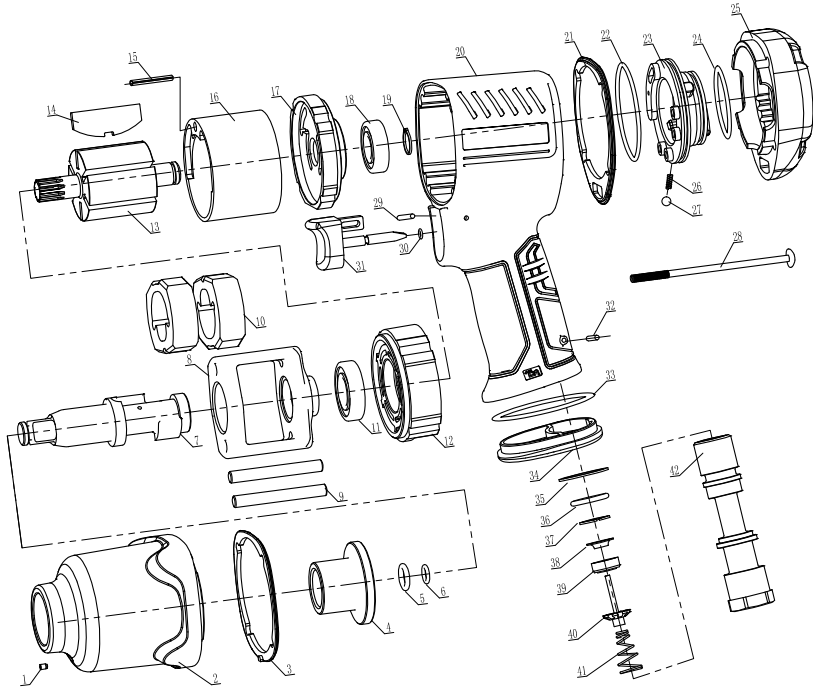
O-rings throttle valve is dislodged from seat inlet valve.

REMEDY

Replace the O-ring.

NOTE: Repairs should be carried out by a qualified person.

PARTS LIST



No.	Description	No.	Description	No.	Description	No.	Description
1	Washer	12	Front cap	23	Rotary controller	34	Exhaust deflector
2	Head	13	Rotor	24	O-ring 34 x 1.8	35	Washer
3	Gasket	14	Rotor blade	25	Sealing cover	36	O-ring 15 x 2.65
4	Anvil bushing	15	Bolt 4 x 46	26	Spring	37	Retaining ring
5	Washer	16	Cylinder	27	Steel ball	38	Plug cover
6	O-ring 7.5 x 1.8	17	Cylinder cap	28	Screw M5 x 88.5	39	Plug
7	Output shaft	18	Bearing 6001	29	Bolt 2.5 x 33	40	Valve stem
8	Hammer cage	19	Circlip	30	O-ring 3 x 1	41	Spring
9	Hammer pin	20	Housing	31	Trigger	42	Air inlet
10	Hammer dog	21	Gasket	32	Bolt		
11	Bearing R8	22	O-ring 50 x 1.8	33	O-ring 35 x 1.8 (Red)		



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