



CAT3813A

Belt Sander 3/8" x 13"

OPERATING MANUAL • WARNING INFORMATION • PARTS LIST



! WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SPECIFICATIONS

Belt Size	3/8" x 13"
Free Speed	18,000 RPM
Horsepower	0.7
Overall Weight	1.7 Lbs.
Overall Length	12-7/8"
Air Inlet	1/4" NPT
Average Air Consumption	.32 cfm
Recommended Hose Size	3/8" I.D.
Sound Pressure Level	79 dBA



! WARNING



**ALWAYS READ
INSTRUCTIONS BEFORE
USING POWER TOOLS**



**ALWAYS WEAR
SAFETY GOGGLES**



**ALWAYS WEAR HEARING
PROTECTION**



**ALWAYS WEAR FACE
PROTECTION**



**ALWAYS WEAR HAND
PROTECTION**



**AVOID PROLONGED
EXPOSURE TO VIBRATION**



**RATED RPM OF
ACCESSORY MUST
EXCEED THE MAXIMUM
TOOL RPM SHOWN**

FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY

THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION.

READ THIS INSTRUCTION MANUAL CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING THIS TOOL.



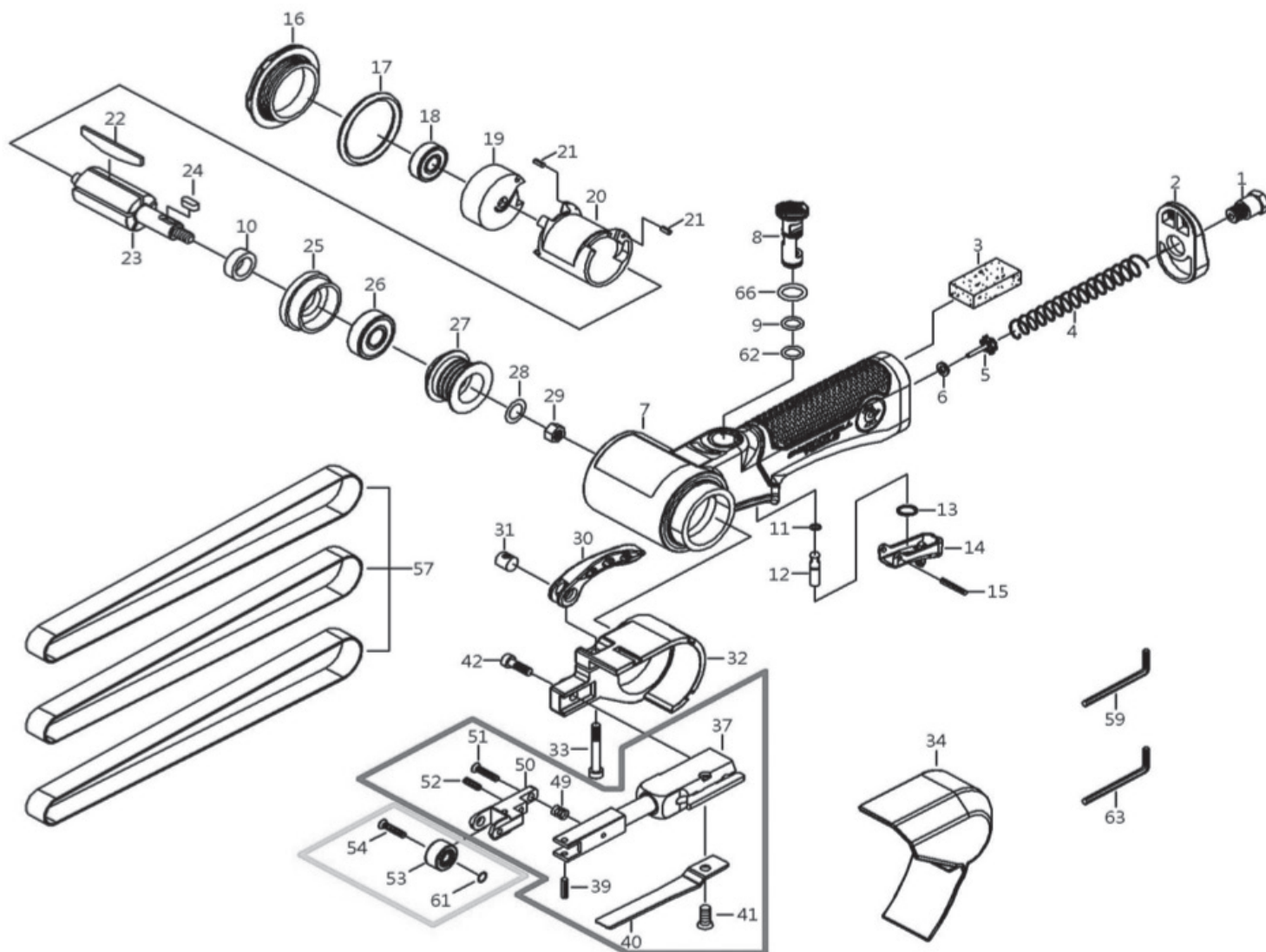
- It is the responsibility of the owner to make sure all personnel read this manual prior to using this air tool. It is also the responsibility of the air tool owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Cornwell for replacements. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.
- Always wear safety goggles, hearing protection, breathing apparatus & hand protection (users & bystanders)
- To reduce exposure to sanding debris, work in a well ventilated area with proper personal protection equipment.
- Ensure the MAX rating (RPM) of the sanding accessories is at or higher than the tools rated RPM.**
- For safety, top performance and maximum durability of parts, operate this tool at 90 psig: 6.2 bar max air pressure with 3/8" diameter air supply hose.
- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.
- Keep the tool in efficient operating condition.
- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.
- Air under pressure can cause severe injury. Never direct air at yourself or others. Always turn off the air supply, drain hose of air pressure and detach tool from air supply before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool. Failure to do so could result in injury. Whip hoses can cause serious injury. Always check for damaged, frayed or loose hoses and fittings, and replace immediately. Do not use quick detach couplings at tool. See instructions for correct set-up on page 7.
- Air powered tools can vibrate during use. Vibration, repetitive motions or uncomfortable positions over extended periods of time may be harmful to your hands and arms. Discontinue use of tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.



- Repetitive motions or exposure to vibration may be harmful to hands or arms.
- Sanding against sharp corners may damage the pad, rendering it useless.
- Slipping, tripping and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- Keep body working stance balanced and firm. Do not overreach when operating the tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Do not carry tool by the hose. Protect the hose from sharp objects and heat.
- Tool shaft may continue to move briefly after throttle is released. Avoid direct contact with accessories during and after use. Gloves will reduce the risk of cuts or burns.
- Keep away from moving end of tool. Do not wear jewelry or loose clothing. Secure long hair. Scalping can occur if hair is not kept away from tool and accessories. Choking can occur if neckwear is not kept away from tool and accessories.
- Do not use (or modify) the tool for any other purpose than that for which it was designed without consulting the manufacturer's authorized representative.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- This tool is not insulated against electric shock.
- This tool must not be used in explosive atmospheres.
- Servicing and repairs should only be made by an authorized service center.
- Do not force tool beyond its rated capacity.
- Use accessories recommended by Cornwell Tools.**
- Keep tool out of reach of children.
- Do not remove any labels. Replace any damaged labels.
- Failure to heed these warnings may result in serious or fatal personal injury and/or property damage.

WARNING: This product can expose you to chemicals including nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

EXPLODED VIEW





PARTS LIST

Item	Part No	Description	Qty
1	RS030101	AIR INLET	1
2	RS030102	EXHAUST COVER	1
3	RS030103	SILENCER (60L)	1
4	RS030104	SPRING	1
5	RS820R14	VALVE	1
6	RS820R15	WASHER (6x13.8x1.6)	1
7	RS261305	HOUSING	1
8	RS030106	REGULATOR	1
9	RS030107	O-RING (S10)	1
10	RS820R25	BEARING SPACER	1
11	RS31508	O-RING (3.5x1.4)	1
12	RS030108	VALVE STEM	1
13	RS246515	SNAP RING (STW-9)	1
14	RS030109	SAFETY THROTTLE LEVER	1
15	RS820R16	SPRING PIN (3x25L)	1
16	RS030110	CAP	1
17	RS030111	O-RING (AS029)	1
18	RS21114	BEARING (626ZZ)	1
19	RS030112	REAR PLATE	1
20	RS030113	CYLINDER	1
21	RS520118	SPRING PIN (2x6L) (each)	2
22	RS030114	ROTOR BLADE (each)	6
23	RS030115	ROTOR	1
24	RS030116	KEY	1
25	RS030117	FRONT PLATE	1
26	RS10920	BEARING (6000ZZ)	1
27	RS030118	DRIVE PULLEY	1
28	RS030119	WASHER (6.4x11.5x1.6t)	1
29	RS030120	NUT (M6)	1
30	RS030121	TRIGGER	1
31	RS187551	BUSHING	1
32	RS030122	GUARD HUB	1
33	RS700MB67	SCREW (M4x27L)	1
34	RS030123	GUARD COVER	1
37	*	TENSION BAR SEAT	1
39	*	SPRING PIN (2.5x10L)	2
40	*	SHOE	1
41	*	SCREW (M5x0.8Px6L)	1
42	RS030126	SCREW (M5x0.8Px12L)	1

Item	Part No	Description	Qty
49	*	SPRING	1
50	*	BRACKET	1
51	*	SCREW (M3x12L)	1
52	*	SCREW (M3x8L)	1
53	**	METAL CONTACT WHEEL	1
54	**	SCREW (M3x0.5P)	1
57		3/8" x 13" Sanding Belts (1 each 40G, 60G & 80G)	1
59	RS030128	HEX (2mm)	1
61	**	WASHER (4.1x6x0.4t) (each)	2
62	RS316021	O-RING (S9)	1
63	RS288548	HEX (3mm)	1
66	RS030135	O-RING (S11.2)	1

* RS030138A BELT ARM ASSEMBLY (3/8" x 13")

**RS030142 CONTACT WHEEL ASSEMBLY
(Metal Contact Wheel 3/8" x 13" Belts)

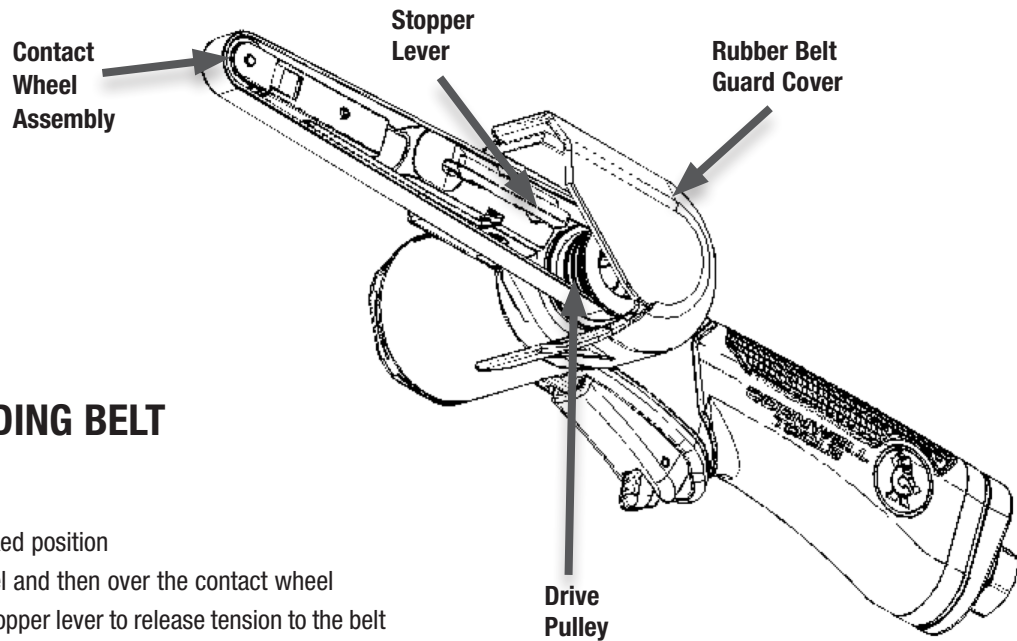
Also Available:

- RSCAT3813AWL PRODUCT WARNING LABEL
- CAT381340G – 40 Grit 3/8" x 13" Belts (10 pack)
- CAT381360G - 60 Grit 3/8" x 13" Belts (10 pack)
- CAT381380G - 80 Grit 3/8" x 13" Belts (10 pack)
- CAT3813100G - 100 Grit 3/8" x 13" Belts (10 pack)
- RS030139 CONTACT WHEEL ASSEMBLY
(Rubber Coated Contact Wheel for 3/8" x 13" Belts)
- RS030140A BELT ARM ASSEMBLY (1/2" x 18")
- RS030141A CONTACT WHEEL ASSEMBLY
(Rubber Coated Contact Wheel for 1/2" x 18" Belts)
- RS030143A CONTACT WHEEL ASSEMBLY
(Metal Contact Wheel 1/2" x 18" Belts)

Tool comes with both metal (installed) and rubber contact wheels for user preference

OPERATION

NOTE: DURING OPERATION SAFETY GOGGLES SHOULD ALWAYS BE WORN TO GUARD AGAINST FLYING DEBRIS (USERS AND BYSTANDERS).
Always turn off the air supply, drain hose of air pressure and detach tool from air supply before installing, removing or adjusting any part or accessory on this tool, or before performing any maintenance on this tool.

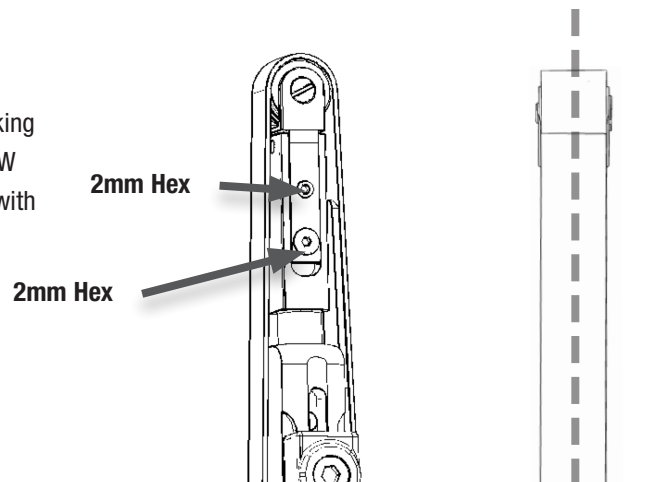


INSTALLING SANDING BELT

1. Disconnect air supply
2. Remove rubber cover
3. Compress arm to the locked position
4. Slide belt over drive wheel and then over the contact wheel
5. Press the bottom of the stopper lever to release tension to the belt
6. Replace rubber cover

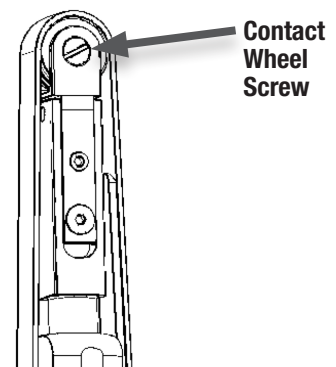
ADJUST BELT TRACKING

1. CRITICAL – Loosen set screw first with 2mm hex key
2. Slightly depress throttle to run the tool slowly and adjust tracking to center the belt visually by turning hex screw (2mm hex key) CW or CCW
3. Once the belt is centered re-tighten the uppermost set screw with 2mm hex key



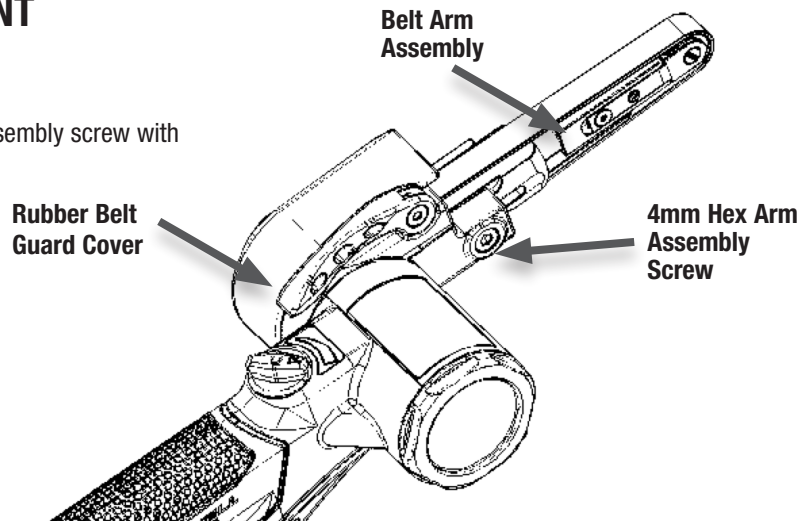
CONTACT WHEEL REPLACEMENT

1. Disconnect air supply
2. Remove belt
3. Using a flat bladed screwdriver unscrew (CCW) the contact wheel screw
4. Remove the old contact wheel and replace with new contact wheel
5. Re-install contact wheel screw and do not overtighten to avoid stripping threads
6. Re-install belt and adjust tracking per TRACKING ADJUSTMENT instructions
7. Replace rubber belt guard cover



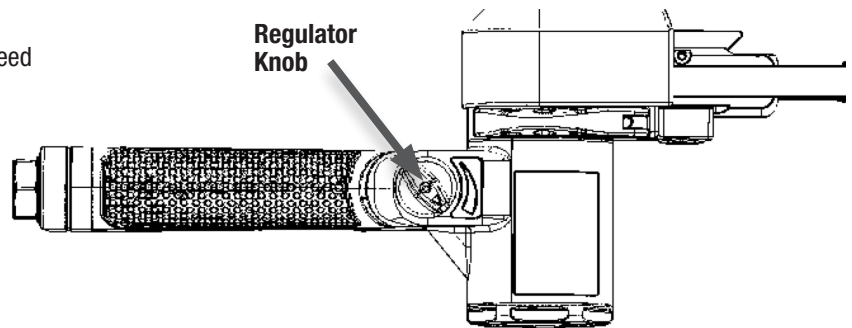
BELT ARM ASSEMBLY REPLACEMENT

1. Disconnect air supply
2. Remove rubber belt guard cover and belt
3. Remove the belt arm assembly by removing the arm assembly screw with 4mm hex key
4. Install new arm assembly
5. Torque to 25 in-lbs
6. Reinstall belt and replace rubber belt guard cover per INSTALLING SANDING BELT instructions
7. Adjust tracking if necessary



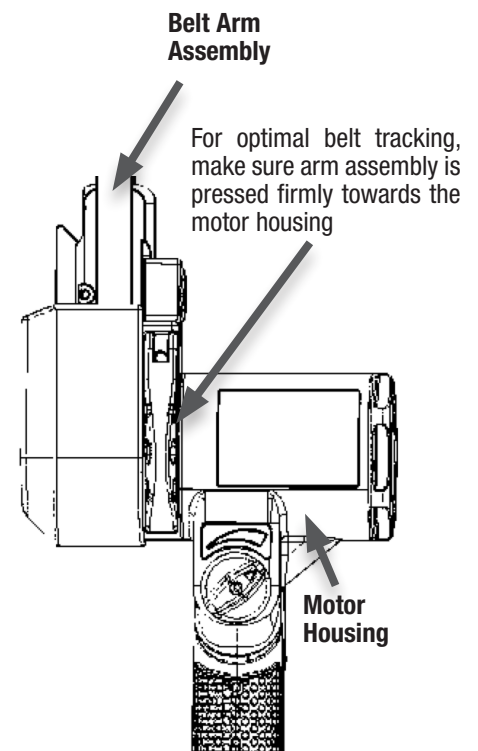
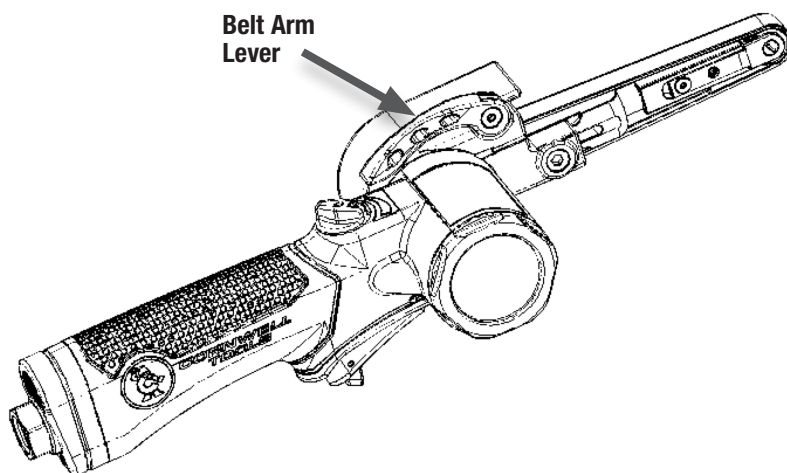
SPEED ADJUSTMENT

1. Turn the regulator knob counter clockwise to reduce speed
2. Turn the regulator knob clockwise to increase speed
3. Feather the speed in any setting via the throttle



BELT ARM ASSEMBLY ROTATION

1. To improve accessibility, or improve comfort, rotate the belt arm assembly with the quick lever design
2. Open the lever by pulling upwards
3. Rotate belt arm assembly to desired position
4. Make sure the arm assembly is tight against the motor housing to maintain belt alignment
5. Close lever by pushing down
6. If arm assembly still rotates, tighten the lever set screw with a 3mm hex key



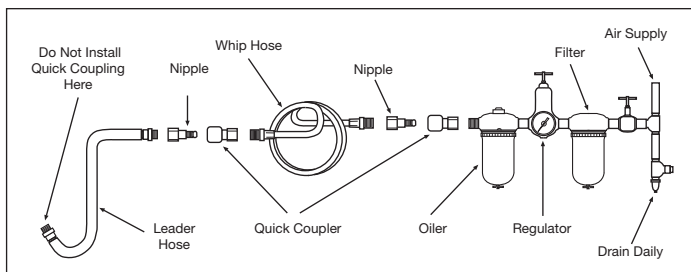


FIG. 1

AIR SUPPLY

Tools operate on a wide range of air pressures. It is recommended that air pressure measures 90 psig at the tool with the trigger fully depressed and no load applied to the tool. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool, which will shorten tool life and could cause injury.

Always use clean, dry air. Dust, corrosive fumes and/or water in the air line will cause damage to the tool. Drain the water from air lines and compressor prior to running tool. Clean the air inlet filter screen weekly. The recommended hookup procedure can be viewed in FIG. 1. The air inlet used for connecting air supply has standard 1/4" NPT. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 3/8" I.D. and fittings should have the same inside dimensions and be tightly secured.

Ensure an accessible emergency shut off valve has been installed in the air supply line and make others aware of its location.

TROUBLESHOOTING

Other factors outside the tool may cause loss of power or erratic action. Reduced compressor output, excessive drain on the air line, moisture or restrictions in air pipes or the use of hose connections of improper size or poor conditions may reduce air supply. Grit or gum deposits in the tool may cut power and may be corrected by cleaning the air strainer and flushing out the tool with gum solvent oil or an equal mixture of SAE #10 and kerosene. If outside conditions are in order, disconnect tool from hose and take tool to your nearest authorized service center.

LUBRICATION

Lubricate the air motor daily with high quality air tool oil. If no air line oiler is used, run 1/2 oz. of oil through the tool. The oil can be squirted into the tool air inlet or into the hose at the nearest connection to the air supply, then run the tool. A rust inhibitive oil is acceptable for air tools.

WARNING: After an air tool has been lubricated, oil will discharge through the exhaust port during the first few seconds of operation. The exhaust port must be covered with a towel before applying air pressure to prevent serious injury.

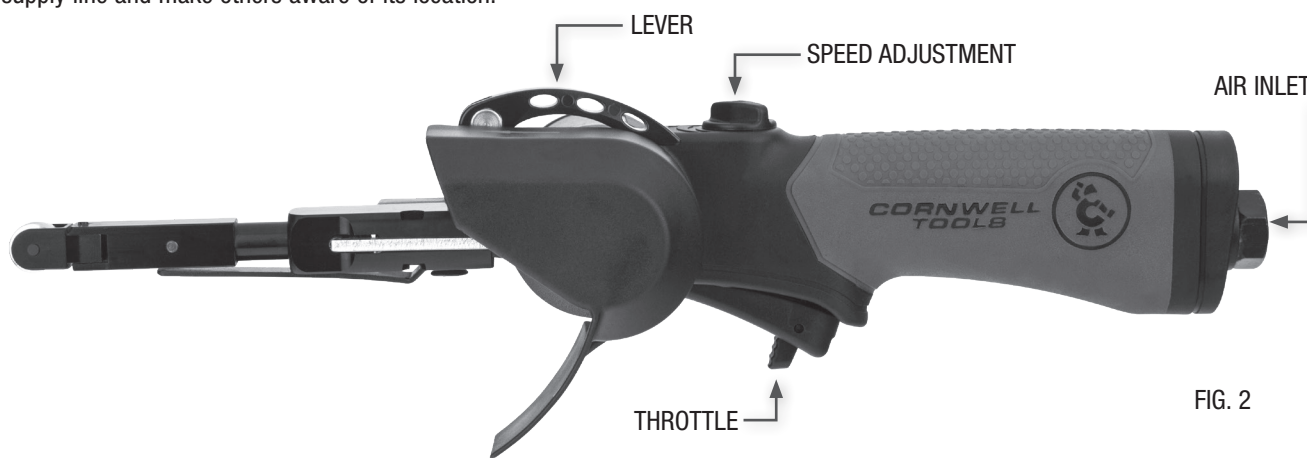


FIG. 2

WARRANTY

Cornwell Quality Tools Company ("Cornwell") warrants this product against defects in material and workmanship for a period of ONE (1) YEAR from the date of original retail purchase. Subject to the conditions and limitations set forth below, Cornwell will, at its option, either repair or replace any part of the product(s) that proves defective by reason of improper workmanship or materials.

This warranty does not cover any damage to this product that results from accident, abuse, misuse, natural or personal disaster, or any unauthorized disassembly, repair, or modification. Repairs, disassembly and modification are only authorized to be made by Cornwell or a Cornwell Authorized Warranty Center.

WARRANTY SERVICE

In order to have your tool repaired, return the tool to any Cornwell Authorized Warranty Center, freight prepaid. Please include a copy of your proof of purchase and a brief description of the problem. The tool will be inspected and if any part or parts are found to be defective in material or workmanship, they will be repaired free of charge, and the repaired tool will be returned to you freight prepaid.

EXCLUSIONS AND LIMITATIONS

THIS WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. CORNWELL SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, TO THE EXTENT PERMITTED BY APPLICABLE LAW, ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF CORNWELL CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

IN NO EVENT SHALL CORNWELL BE LIABLE TO THE PURCHASER OR TO THE USER OF A CORNWELL PRODUCT FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, TORT, OR ANY OTHER LEGAL THEORY. SUCH DAMAGES INCLUDE, WITHOUT LIMITATION, EXPENSES, LOST REVENUES, LOST SAVINGS, LOST PROFITS, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE PURCHASE, USE OR INABILITY TO USE THE CORNWELL PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages or exclusions or limitation on the duration of implied warranties or conditions, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary by state.

Repair kits and replacement parts are available for many Cornwell products, regardless of whether or not the product is still covered by a warranty plan.