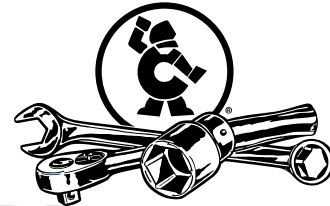


## CAT-3780 3/4" Dr. Composite Housing Impact Wrench

- Operating Instructions • Warning Information
- Parts Breakdown

### SPECIFICATIONS

Max Torque: ..... 1,300 ft./lbs.  
Working Torque: ..... 200 - 1,000 ft. / lbs.  
Free Speed: ..... 7,500 RPM  
Overall Length: ..... 8.2"  
Net Weight: ..... 6.9 lbs.  
Air Inlet: ..... 3/8" NPT  
Min. Hose Size: ..... 1/2"



**CORNWELL  
TOOLS**

# CAT-3780

3/4" Dr.  
Composite Housing  
Impact Wrench

## ! 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.

## ! WARNING



**ALWAYS READ INSTRUCTIONS BEFORE USING POWER TOOLS**



**ALWAYS WEAR SAFETY GOGGLES**



**WEAR HEARING PROTECTION**



**AVOID PROLONGED EXPOSURE TO VIBRATION**

# ! WARNING

## FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY.



THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION.

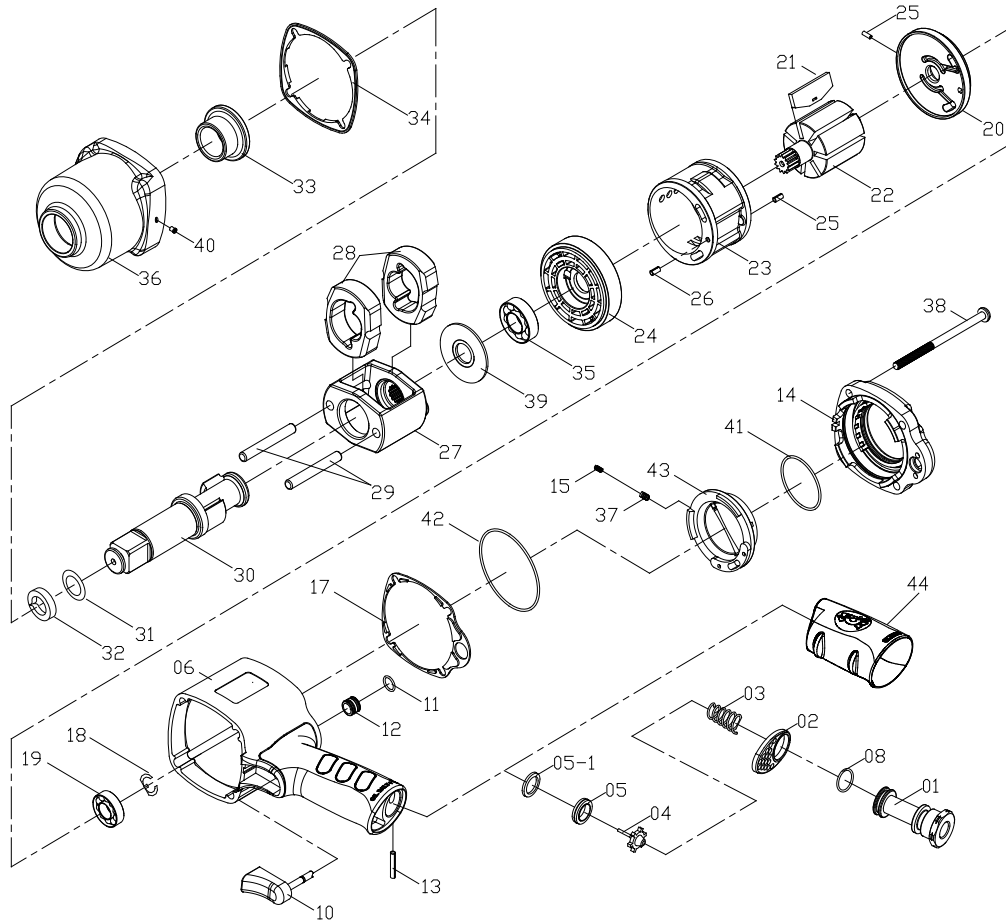
READ THIS INSTRUCTION MANUAL CAREFULLY AND UNDERSTAND ALL INFORMATION **BEFORE** OPERATING THIS TOOL.

- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.
- For safety, top performance and maximum durability of parts, operate this tool at 90 psig 6.2 bar max air pressure with 1/2" diameter air supply hose.
- Always wear impact-resistant eye and face protection when operating or performing maintenance on this tool. Always wear hearing protection when using this tool.
- High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation.
- 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.
- Air powered tools can vibrate in 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.



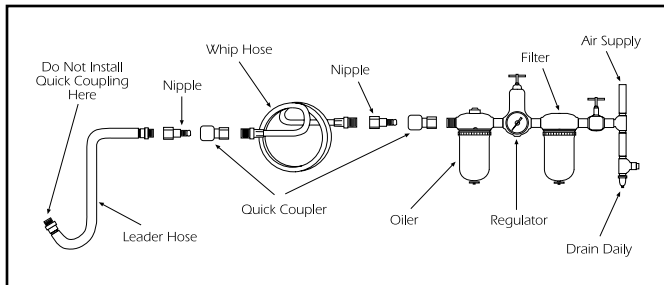
- Place the tool on the work before starting the tool.
- Slipping, tripping and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- Keep body working stance balanced and firm. Do not overreach when operating 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 rotate 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 rotating 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.
- Impact wrenches are not torque control devices. Fasteners with specific torque requirements must be checked with suitable torque measuring devices after installation with an impact wrench.
- Use only impact wrench sockets and accessories on this tool. Do not use hand sockets and accessories.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not force tool beyond its rated capacity.
- Do not remove any labels. Replace any damaged labels.

## CAT-3780 3/4" Dr. Composite Housing Impact Wrench



Ref #	Parts #	Description	Qty	Ref #	Parts #	Description	Qty
1	RS378001	Fixed Inlet Bushing	1	24	RS378024	Front Plate	1
2	RS378002	Exhaust Deflector	1	25	RS378025	Spring Pin	2
3	RS378003	Throttle Valve Spring	1	26	RS378026	Spring Pin	1
4	RS378004	Throttle Valve	1	27	RS378027	Hammer Cage	1
5	RS378005	Throttle Valve Seat	1	28	RS378028	Hammer	2
5-1	RS3780051	Spacer	1	29	RS378029	Hammer Pin	2
6	RS378006	Motor Housing	1	30	RS378030	Anvil	1
8	RS378008	O-Ring	1	31	RS378031	Retainer O-Ring	1
10	RS378010	Trigger	1	32	RS378032	Socket Retainer	1
11	RS378011	O-Ring	2	33	RS378033	Anvil Bushing	1
12	RS378012	Pipe	1	34	RS378034	Gasket	1
13	RS378013	Spring Pin	1	35	RS378035	Ball Bearing	1
14	RS378014	Housing Cap	1	36	RS378036	Hammer Housing	1
15	RS378015	Spring	1	37	RS378037	Spring Cap	1
17	RS378017	Gasket	1	38	RS378038	Screw	4
18	RS350TH18	Retaining Ring	1	39	RS378039	Hammer Frame Rear Spacer	1
19	RS85324	Ball Bearing	1	40	RS378040	Grease Fitting	1
20	RS378020	Rear Plate	1	41	RS378041	O-Ring	1
21	RS378021	Rotor Blade (set of 7)	1	42	RS378042	O-Ring	1
22	RS378022	Rotor	1	43	RS378043	Power Management Knob	1
23	RS378023	Cylinder	1	44	RS378044	Grip	1

## CAT-3780 3/4" Dr. Composite Housing Impact Wrench



### AIR SUPPLY

Tools of this class operate on a wide range of air pressures. It is recommended that air pressure of these tools measures 90 PSI at the tool while running free. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool which will shorten tool life because of faster wear 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 air tank daily. Clean the air inlet filter screen on at least a weekly schedule. The recommended hookup procedure can be viewed in the above figure.

The air inlet used for connecting air supply, has standard 3/8" NPT. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 1/2" I.D. and fittings should have the same inside dimensions and be tightly secured.

### LUBRICATION

Lubricate the air motor daily with quality air tool oil. If no air line oiler is used, run a 1/2 ounce 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. The amount of oil to be used is 1 ounce.

Overfilling will cause a reduction in the power of the tool.

### OPERATION

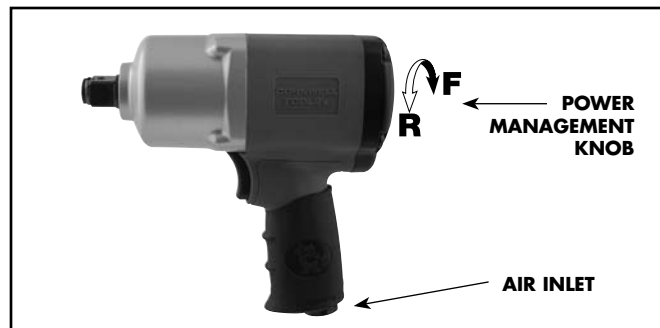
The power management knob can be used to adjust torque to the approximate tightness of a known fastener. To set the tool to desired torque, select a nut or screw of known tightness of the same size, thread pitch and thread condition as those on the job. Turn power management knob to low position, apply wrench to nut and gradually increase power (turn power management knob to admit more air) until nut moves slightly in the direction it was originally set. The tool is now set to duplicate that tightness - note power management knob setting for future use. When tightening nuts not requiring critical torque values, run nut up flush and then tighten an additional one-quarter to one-half turn (slight additional turning is necessary if gaskets are being clamped). For additional power needed on disassembly work, turn power management knob to its fully open position. This impact wrench is rated at 3/8" USS bolt size. Rating must be down graded for spring U bolts, tie bolts, long cap screws, double depth nuts, badly rusted conditions and spring fasteners as they absorb much of the impact power. When possible, clamp or wedge the bolt to prevent springback.

Soak rusted nuts in penetrating oil and break rust seal before removing with impact wrench. If nut does not start to move in three to five seconds use a larger size impact wrench. Do not use impact wrench beyond rated capacity as this will drastically reduce tool life.

The power management knob is also used to change the rotation of the tool. When the power management knob is turned to the right, the tool is in a forward or right hand rotation. When the power management knob is turned to the left, the rotation is reversed or left hand rotation.

**NOTE:** Actual torque on a fastener is directly related to joint hardness, tool speed, condition of socket and the time the tool is allowed to impact.

Use the simplest possible tool-to-socket hook up. Every connection absorbs energy and reduces power.



### WARRANTY

Cornwell warrants its air tools for a period of 1 year to the consumer. We will repair any air tool covered under this warranty which proves to be defective in material or workmanship during the warranty period. 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.

This warranty gives you specific rights. You may also have other rights which vary from state to state.

The foregoing obligation is Cornwell's sole liability under this or any implied warranty and under no circumstances shall Cornwell be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.