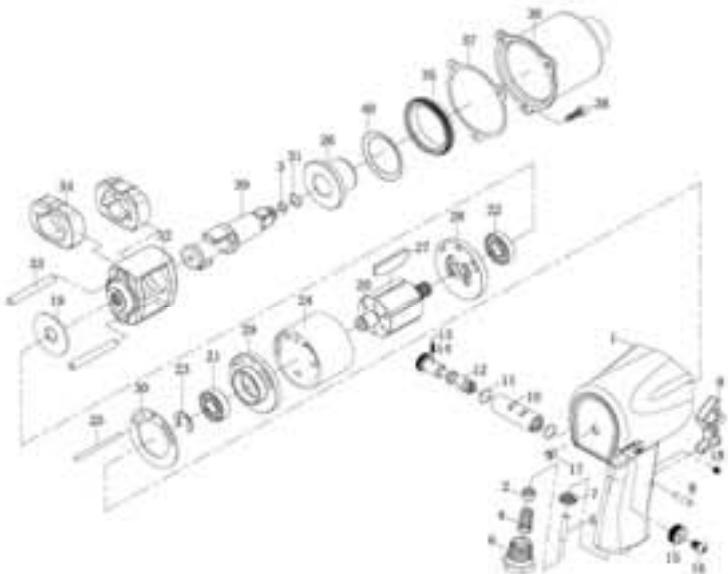


PARTS BREAKDOWN



No.	Description	Qty	No.	Description	Qty
1*	Housing	1	21	Bearing	1
2	Valve Sleeve	1	22	Front Rotor Bearing	1
3	O-ring	1	23	Bead Flange	1
4	Spring	1	24	Cylinder	1
5	Valve Stem	1	25	Cylinder Dowel	1
6	Air Inlet Bushing	1	26	Anvil Bushing	1
7	Oil Seal	1	27	Rotor Blade	6
8	Trigger	1	28	Front End Plate	1
9	Spring Pin	1	29	Rear End Plate	1
10*	Reverse Valve Bushing	1	30	Gasket	1
11	O-ring	2	31	Anvil Collar	1
12	Reverse Valve	1	32	Hammer Cage	1
13	Steel Ball	1	33	Hammer Pin	2
14	Spring	1	34	Hammer	2
15	Reverse Valve Knob	1	35	Hammer Case Pilot	1
16	Screw	1	36	Protector Cover	1
17*	Grease Fitting	1	37	Gasket	1
18	Bolt	1	38	Screw	3
19	Washer	1	39	Standard Anvil	1
20	Rotor	1	NS-A	Housing Assembly A	1

Parts marked with an asterisk (*) are only available with the associated housing assembly and cannot be ordered individually.



1/2" Drive
Air Impact Wrench
User's Manual
KTI-81631A



SPECIFICATIONS

Model No.	Drive Size	Max. Torque	Free Speed	Air Inlet	Recommended Air Pressure	Recommended Hose Size	Average Air Consumption
KTI-81631A	1/2"	450 ft./lbs.	7,500 rpm	1/4" NPT	90 psi	3/8" ID	7 cfm

DO NOT DISCARD

You will need the manual for the safety warnings and precautions, operating instructions and maintenance procedures. Keep your invoice with this manual in a safe, dry location for future reference.



WARNING!

Study, understand and follow all instructions before operating this device. Failure to heed these warnings may result in personal injury and/or property damage.

IMPORTANT SAFETY INFORMATION

1. This impact wrench is rated for 1/2" USS bolt size. Rating will decrease for U-bolts, long cap screws, spring fasteners and rusted/corroded fasteners. All of these factors absorb power and reduce torque capability.
2. Use only impact sockets designed for impact wrenches.
3. Most impact wrenches have high torque capability. Keep a firm grip on the tool at all times. Use both hands whenever possible. Be physically prepared for the task you will perform.
4. Always use approved eye and ear protection when using air powered tools. If raising dust/debris, wear a suitable mask. Do not wear loose clothing or jewelry.
5. Always operate tool at a safe distance from yourself and others in the work area. Keep footing and balance at all times.
6. Make sure work piece is secure to allow safe operation of the tool with both hands. Do not hold the work piece in your hand, lap or against any part of your body.
7. Make sure trigger is in the "off" position before connecting or disconnecting the tool from air source. Disconnect tool from air source before changing accessories, performing service and when not in use.
8. Follow air source manufacturer's directions for connection of regulators, filters and other accessories to air source. Do not install quick couplers directly at tool air inlet. This causes inlet failure due to excess weight and vibration. Use a whip hose between tool and quick couplers.
9. DO NOT OVERLOAD! Do not force tool. Match tool capacity to work load requirement. Use tool within its rated capacity and only for its designated purpose. Overloading air tools will cause premature wear and/or permanent damage of internal and external driver parts and will void warranty.
10. Inspect hoses and fitting for wear and damage prior to using tool. Do not carry or drag tool by the air hose. Keep air hose free from obstructions, twisting and binding.

LUBRICATION & MAINTENANCE

Oil tool before each use. Four (4) to five (5) drops of a good grade air tool oil placed in the air inlet is sufficient. Use proper air pressure and CFM rating listed for this tool.

Drain water from hoses and compressor tank. Water in the air supply line will cause gummy and loss of power. Clean the air filter on the supply line and flush the tool with gum solvent or a 50/50 mix of air tool oil and kerosene. It may be necessary to disassemble the tool to properly clean and re-lubricate.

Oil plug is available to add air tool oil after repair or maintenance (see drawings below). Use 1 ounce air tool oil. Do not overfill.

Hammer mechanism maintenance (hammer cage, hammer dog anvil and drive cam). When cleaning or repairing the tool, be sure to lightly coat the load bearing and mating surfaces with clean wheel bearing grease or suitable substitute. Do not apply a thick coat of grease to these parts. This will reduce the torque capability of the tool and will require flushing to regain its power. You may also run the tool until the excessive grease works its way out.

Test the tool for proper grease periodically by shaking the tool from side. Listen for a metallic rattle. If the sound is loud and sharp, grease the hammer parts. If it is a dull sound, the lubrication is correct.



Yes



No

AIR SOURCE

Clean air and correct air pressure is recommended for the power supply for this tool. A maximum of 90 PSI is recommended for most air tools of this class. Check specifications section for recommended pressure. (Depending on length of air hose and other circumstances, air pressure at compressor may need to be increased to 100 PSI to ensure 90 PSI at the tool.)

Water in the air hose and compressor tank contributes to reduced performance and damage of the air tool. Drain the air tank and filters before each use and as necessary to keep the air supply dry.

Hose length over 25' causes loss in line pressure. Increase hose I.D. or increase compressor pressure to compensate for the pressure loss. Use an in-line pressure regulator with gauge if air inlet pressure is critical.

OPERATION

1. This impact wrench is rated to 1/2" USS bolt size. Rating will decrease for U-bolts, long cap screws, spring fasteners and rusted/corroded fasteners. All of these factors absorb power and reduce torque capability.
2. Use the simplest socket to wrench hook-up. Any additional extensions, U-joints or adaptors will absorb power and reduce torque capability.
3. Use only impact sockets designed for impact wrenches.
4. Forward/reverse lever: Select "F" for forward (clockwise) or "R" for reverse (counterclockwise) operation. **DO NOT** attempt to change direction while tool is running.
5. If fastener bogs, slows or binds the tool (or if fastener fails to move in 5 seconds), use a larger size impact wrench with a higher torque rating. Overloading this tool will cause premature wear and/or permanent damage to internal and external drive parts and will void warranty.
6. Air regulator: This can be used as an air throttle. Turn air regulator knob out (counterclockwise) for maximum power.
7. Torque setting: to set the tool to desired torque, select a fastener of known tightness of the same size, thread pitch and thread condition as those on the job. Turn air regulator to lowest position. Apply wrench to (turn regulator out) until fastener moves slightly in the direction it was originally set. This wrench is now set to duplicate the torque applied to this fastener. Critical torque specifications cannot be met by any wrench in this class. Use an appropriate torque wrench to attain a specific torque.



TROUBLESHOOTING

INSUFFICIENT POWER:

Probable Cause

Dirty or clogged air passages
insufficient air supply

Solution

Flush and lubricate tool, drain air tank and supply line, increase line pressure. Make sure compressor matches tool's air pressure and consumption needs.

Air leakage

Use Teflon tape at all fittings and joints. Check tool for leaks and repair as necessary.

Worn/damaged wear and tear parts/tool matching

Be sure you are using a tool suited for the torque requirements of the job at hand.