

1/2 in. AIR IMPACT WRENCH (TWIN HAMMER)



⚠ WARNING

Read Operator's Manual. Do not operate equipment until you have read this Operator's Manual for **Safety, Assembly/Operation** and **Maintenance Instructions**.

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PRODUCT SPECIFICATIONS


Component	Specifications
Square Drive	1/2 in.
Air Pressure	90 psi
Average Air Consumption	4 C.F.M
Maximum Torque	350 ft.lbs
Free Speed	7,000 RPM +/- 10 %
Air Inlet	1/4 in. N.P.T


! SAFETY INFORMATION

Please read and understand this entire manual before attempting to assemble, operate or install the product.

!WARNING IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE. READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT. WHEN USING AIR TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF PERSONAL INJURY.

!WARNING RISK OF EYE OR HEAD INJURY	
	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Air powered equipment and power tools are capable of propelling materials such as fasteners, metal chips, sawdust and other debris at high speed which could result in serious eye injury. 	<ul style="list-style-type: none"> ■ Always wear ANSI approved Z87.1 safety glasses with side shields. ■ Never leave operating tool unattended. Disconnect air hose when tool is not in use.
<ul style="list-style-type: none"> ■ Compressed air can be hazardous. The air stream can cause injury to soft tissue areas such as eyes, ears, etc. Particles or objects propelled by the stream can cause injury. 	<ul style="list-style-type: none"> ■ For additional protection use an approved face shield in addition to safety glasses.
<ul style="list-style-type: none"> ■ Tool attachments can become loose or break and fly apart propelling particles at the operator and others in the work area. 	<ul style="list-style-type: none"> ■ Make sure that any attachments are securely assembled.

!WARNING RISK OF FIRE OR EXPLOSION	
	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Abrasive tools such as sanders and grinders, rotating tools such as drills, and impact tools such as nailers, staplers, wrenches, hammers and reciprocating saws are capable of generating sparks, which could result in ignition of flammable materials. 	<ul style="list-style-type: none"> ■ Never operate tools near flammable substances such as gasoline, naphtha, cleaning solvents, etc. ■ Work in a clean, well-ventilated area free of combustible materials. ■ Never use oxygen, carbon dioxide or other bottled gases as a power source for air tools.
<ul style="list-style-type: none"> ■ Exceeding the maximum pressure rating of tools or accessories could cause an explosion resulting in serious injury. 	<ul style="list-style-type: none"> ■ Use compressed air regulated to a maximum pressure at or below the rated pressure of any attachments. ■ Never connect to an air source that is capable of exceeding 200 psi. ■ Always verify prior to using the tools that the air source has been adjusted to the rated air pressure range.

!WARNING RISK OF LOSS OF HEARING	
	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Long term exposure to noise produced from the operation of air tools can lead to permanent hearing loss. 	<ul style="list-style-type: none"> ■ Always wear ANSI S3.19 hearing protection.


⚠ WARNING**INHALATION HAZARD**


WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Abrasive tools, such as grinders, sanders and cut-off tools generate dust and abrasive materials, which can be harmful to human lungs and respiratory system. 	<ul style="list-style-type: none"> ■ Always wear properly fitting facemask or respirator when using such tools.
<ul style="list-style-type: none"> ■ Some materials such as adhesives and tar contain chemicals whose vapors could cause serious injury with prolonged exposure. 	<ul style="list-style-type: none"> ■ Always work in a clean, dry, well-ventilated area.


⚠ WARNING**RISK OF INJURY**


WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ A tool left unattended, or with the air hose attached, can be activated by unauthorized persons leading to their injury or injury to others. 	<ul style="list-style-type: none"> ■ Remove air hose when tool is not in use and store tool in secure location away from reach of children and untrained users.
<ul style="list-style-type: none"> ■ Air tools can propel fasteners or other materials throughout the work area. 	<ul style="list-style-type: none"> ■ Use only parts, fasteners and accessories recommended by the manufacturer. ■ Keep work area clean and free of clutter. Keep children and others away from operating of the tool. ■ Keep work area well lit.
<ul style="list-style-type: none"> ■ A wrench or a key that is left attached to a rotating part of the tool increases the risk of personal injury. 	<ul style="list-style-type: none"> ■ Remove adjusting keys and wrenches before turning the tool on.
<ul style="list-style-type: none"> ■ Using inflator nozzles for duster applications can cause serious injury. 	<ul style="list-style-type: none"> ■ DO NOT use inflator nozzles for duster applications.
<ul style="list-style-type: none"> ■ Air tools can become activated by accident during maintenance or tool changes. 	<ul style="list-style-type: none"> ■ Remove air hose to lubricate or add grinding attachments, sanding discs, drills, etc. to the tool. ■ Never carry the tool by the hose. ■ Avoid unintentional starting. Don't carry hooked-up tool with finger on trigger. ■ Only an authorized service representative should do repair servicing.
<ul style="list-style-type: none"> ■ Air tools can cause the workpiece to move upon contact, leading to injury. 	<ul style="list-style-type: none"> ■ Use clamps or other devices to prevent movement.
<ul style="list-style-type: none"> ■ Loss of control of the tool can lead to injury to self or others. 	<ul style="list-style-type: none"> ■ Never use tool using drugs or alcohol. ■ Don't overreach. Keep proper footing and balance. ■ Keep handles dry, clean and free from oil/grease. ■ Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
<ul style="list-style-type: none"> ■ Poor quality, improper or damaged tools such as grinding wheels, chisels, sockets, drills, nailers, staplers, etc., can fly apart during operation, propelling particles throughout the work area causing serious injury. 	<ul style="list-style-type: none"> ■ Always use tool attachments rated for the speed of the power tool. ■ Never use tools, which have been dropped, impacted or damaged by use. ■ Use only impact grade sockets on an impact wrench. ■ Do not apply excessive force to the tool; let the tool perform the work.
<ul style="list-style-type: none"> ■ Fasteners could ricochet or be propelled causing serious injury or property damage. 	<ul style="list-style-type: none"> ■ Never point discharge of tool at self or others. ■ Do not pull trigger unless tool contact safety device is against work surface. ■ Never attempt to drive fasteners into hard surfaces such as steel, concrete, or tile. ■ Avoid driving a fastener on top of another fastener. ■ Position tool carefully so that fasteners will be

	delivered to the proper location.
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▲WARNING RISK OF INJURY (continued) 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Improperly maintained tools and accessories can cause serious injury. 	<ul style="list-style-type: none"> ■ Maintain the tool with care. ■ Keep a cutting tool sharp and clean. A properly maintained tool, with sharp cutting edges, reduces the risk of binding and is easier to control.
<ul style="list-style-type: none"> ■ There is a risk of bursting if the tool is damaged. 	<ul style="list-style-type: none"> ■ Check for misalignment or binding of moving parts, breakage of parts and any other condition that affects the tool's operation. If damaged, have the tool serviced before using.
<ul style="list-style-type: none"> ■ Use only accessories identified by the manufacturer to be used with specific tools. 	<ul style="list-style-type: none"> ■ Use of an accessory not intended for use with the specific tools increases the risk of injury to persons.

▲WARNING RISK OF ELETRIC SHOCK 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Using air tools to attach electrical wiring can result in electrocution or death. 	<ul style="list-style-type: none"> ■ Never use nail/staplers to attach electrical wiring while energized.
<ul style="list-style-type: none"> ■ This tool is not provided with an insulated gripping surface. Contact with a "live" wire will also make exposed metal parts of the tool "live" and can result in electrocution or death. 	<ul style="list-style-type: none"> ■ Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
<ul style="list-style-type: none"> ■ Fasteners coming in contact with hidden electrical wiring could cause electrocution or death. 	<ul style="list-style-type: none"> ■ Thoroughly investigate the workpiece for possible hidden wiring before performing work.

▲WARNING RISK OF ENTANGLEMENT 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Tools which contain moving elements, or drive other moving tools, such as grinding wheels, sockets, sanding discs, etc. can become entangled in hair, clothing, jewelry and other loose objects, resulting in severe injury. 	<ul style="list-style-type: none"> ■ Never wear loose fitting clothes or apparel that contains loose straps or ties, etc., which could become entangled in moving parts of the tool. ■ Remove any jewelry, watches, identifications, bracelets, necklaces, etc., which might become caught by the tool. ■ Keep hands away from moving parts. Tie up or cover long hair. ■ Always wear proper fitting clothing and other safety equipment when using this tool.

▲WARNING RISK OF CUT OR BURNS 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> ■ Tools that cut, shear, drill, staple, punch, chisel, etc. are capable of causing serious injury. 	<ul style="list-style-type: none"> ■ Keep the working part of the tool away from hands and body.

▲WARNING <ul style="list-style-type: none"> ■ Use of This tool may expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
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PACKAGE CONTENTS

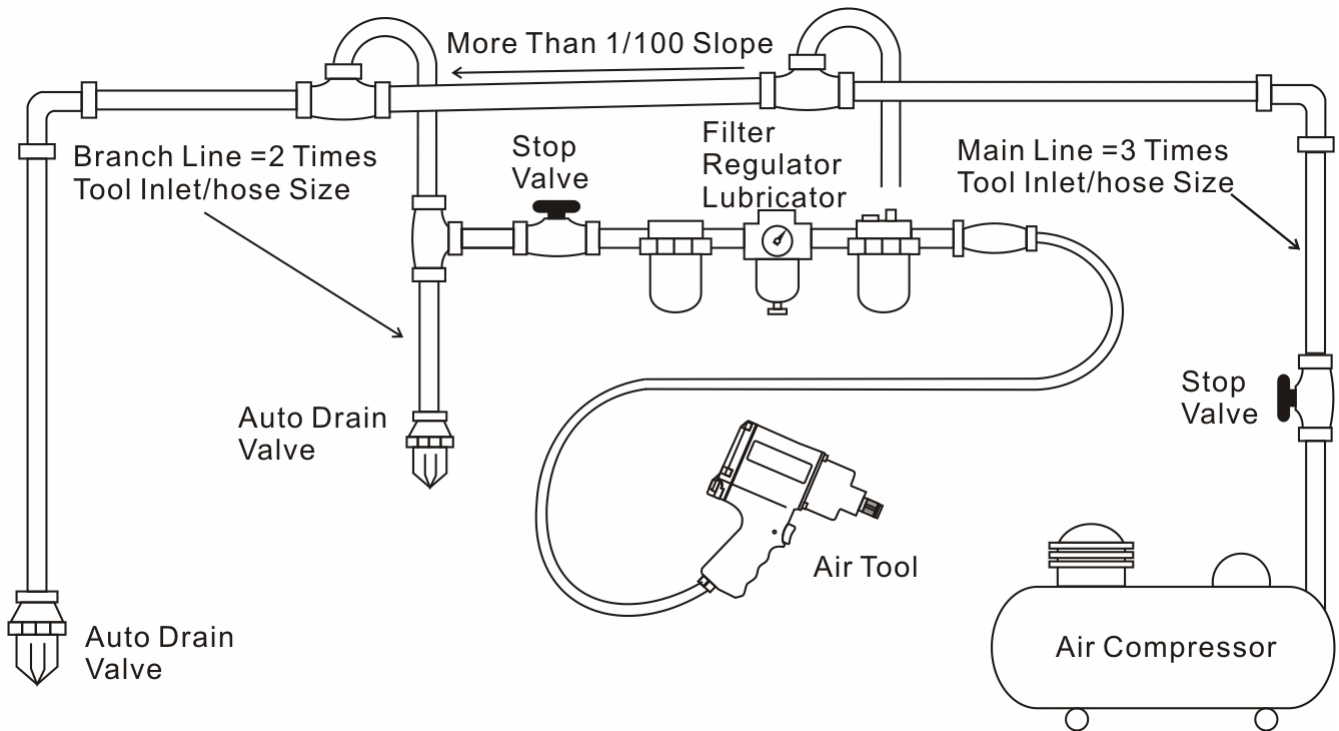
Description	Quantity
1/2 in. Impact Wrench	1



PREPARATION

Before beginning assembly or operation of product, make sure all parts are present. Compare parts with package contents list and diagram above. If any part is missing or damaged, do not attempt to assemble, install or operate the product. Contact customer service for replacement parts.

- Air Compressor is required for use (not included)



ASSEMBLY/OPERATION INSTRUCTIONS

1. Remove the air inlet protective cap.



Fig. 1

2. Thread the male plug by hand into the inlet bushing (male plug not supplied).



Fig. 2

3. Add 2-3 drops of oil into male plug before each use.



Fig. 3

4. Connect to air source with quick coupler.



Fig. 4

5. Choose the correct socket (not included) as needed and connect to impact wrench anvil.



Fig. 5

6. If longer reach is necessary, use an extension bar (not included).



Fig. 6

CARE AND MAINTENANCE

Lubrication

An in-line oiler is recommended as it increases tool life and keeps the tool in sustained operation. The in-line oiler should be regularly checked and filled with air-tool oil. Proper adjustment of the in-line oiler is performed by placing a sheet of paper next to the exhaust ports and holding the throttle open approximately 30 seconds. The in-line oiler is properly set when a light stain of oil collects on the paper. Excessive amounts of oil should be avoided.

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

Recommended lubricants: Use air-tool oil or any other high grade turbine oil containing moisture absorbent, rust inhibitors, metal wetting agents and an EP (extreme pressure) additive.

TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
Tool runs slowly or will not operate	<ol style="list-style-type: none"> 1. Grit or gum in tool. 2. No oil in tool. 3. Low air pressure. 4. Air hose leaks. 5. Pressure drops. 6. Worn rotor blade. 7. Moisture blowing out of tool exhaust. 	<ol style="list-style-type: none"> 1. Flush the tool with air tool oil or gum solvent. 2. Lubricate the tool according to the lubrication instructions in this manual. 3. <ol style="list-style-type: none"> a. Adjust the regulator on the tool to maximum setting. b. Adjust the compressor regulator to tool maximum of 90 PSIG. 4. Tighten and seal hose fittings if leaks are found. Use Teflon[®] tape. 5. <ol style="list-style-type: none"> a. Be sure the hose is the proper size. Long hoses or tools using large volumes of air may require a hose with an I.D. of 1/2 in. or larger depending on the total length of the hoses. b. Do not use a multiple number of hose connected together with quick-connect fittings. This causes additional pressure drops and reduces the tool power. Directly connect the hoses together. 6. Replace rotor blade. 7. Water in tank: drain tank. (See air compressor manual). Oil tool and run until no water is evident. Oil tool again and run 1-2 seconds.

REPLACEMENT PARTS LIST

IMPACT WRENCH

Part	Description	Part	Description
1	Housing	24	Spring
3	Bushing	25	Trigger Sleeve
4	Anvil Collar	26	Pin
5	O-Ring	27	Valve Sleeve
6	Anvil	28	Plunger
7	Hammer Cage	29	O-Ring
8	Hammer	30	Set Pin
9	Hammer Pin	31	Set Pin
10	Bearing	32	Spring
11	Front Plate	33	Switch
12	Set Pin	34	Oil Seal
13	Cylinder	35	Pin
14	Set Pin	36	Pin Cover
15	Rotor	37	Spring
16	Rotor Blade	38	Inlet Cap
17	Rear Plate	39	Air Inlet
18	Seal Plate	40	Handle Cover
19	Ring	41	Plug
20	Rear Cover	42	Oil Seal
21	Screw	43	Front Cover
22	Trigger Cover	44	Rivet
23	Trigger	45	Housing Cover