

# INSTRUCTIONS FOR MODEL IR-C2112 ULTRA DUTY 3/8" AUTOMOTIVE IMPACT WRENCH

## NOTICE

Ingersoll-Rand is not responsible for customer modification of tools for applications on which Ingersoll-Rand was not consulted.

## ⚠ WARNING

**IMPORTANT SAFETY INFORMATION ENCLOSED - SAVE THESE INSTRUCTIONS  
READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING THIS PRODUCT**



**IT IS YOUR RESPONSIBILITY TO MAKE THIS SAFETY INFORMATION  
AVAILABLE TO OTHERS THAT WILL OPERATE THIS PRODUCT**

**FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD  
RESULT IN INJURY**

### PLACING TOOL IN SERVICE

- Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.).
- Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet. Higher pressure may result in hazardous situations including excessive speed, rupture, or incorrect output torque or force.
- Be sure all hoses and fittings are the correct size and are tightly secured. See Dwg. TPD905-2 for a typical piping arrangement.
- Ensure an accessible emergency shut off valve has been installed in the air supply line, and make others aware of its location.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.
- Keep work area clean, uncluttered, ventilated and illuminated.
- Do not remove any labels. Replace any damaged label.

### USING THE TOOL

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Always use Personal Protective Equipment appropriate to the tool used and material worked. This may include dust mask or other breathing apparatus, safety glasses, ear plugs, gloves, apron, safety shoes, hard hat and other equipment.
- This tool is not designed for working in explosive environments, including those caused by fumes and dust, or near flammable materials.
- This tool is not insulated against electric shock.
- Be aware of buried, hidden or other hazards in your work environment. Do not contact or damage cords, conduits, pipes or hoses that may contain electrical wires, explosive gases or harmful liquids.
- Prevent exposure and breathing of harmful dust and particles created by power tool use. 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.

Refer All Communications to the Nearest  
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**Using the Tool (Continued)**

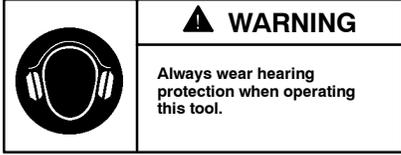
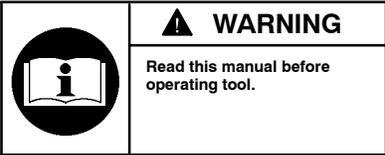
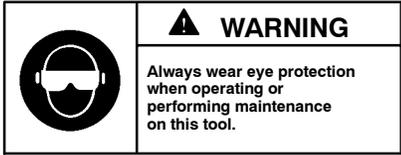
- Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
- Keep hands, loose clothing, long hair and jewelry away from working end of tool.
- Power tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Keep body stance balanced and firm. Do not overreach when operating this tool. Anticipate and be alert for sudden changes in motion, reaction torques, or forces during start up and operation.
- Tool and/or accessories may briefly continue their motion after throttle is released.
- To avoid accidental starting - ensure tool is in "off" position before applying air pressure, avoid throttle when carrying, and release throttle with loss of air.
- Ensure work pieces are secure. Use clamps or vises to hold work piece whenever possible.
- Do not carry or drag the tool by the hose.
- Do not use power tools when tired, or under the influence of medication, drugs, or alcohol.
- Never use a damaged or malfunctioning tool or accessory.
- Do not modify the tool, safety devices, or accessories.
- Do not use this tool for purposes other than those recommended.
- Use accessories recommended by Ingersoll-Rand.
- Note the position of the reversing mechanism before operating the tool so as to be aware of the direction of rotation when operating the throttle.
- Use only impact sockets and accessories. Do not use hand (chrome) sockets or accessories.
- Impact Wrenches are not torque wrenches. Connections requiring specific torque must be checked with a torque meter after fitting with an impact wrench.
- Periodically check the drive end of the tool to make certain that the socket retainer functions correctly, and that sockets and drive ends are not excessively worn which may allow the socket to come off when rotating.

**NOTICE**

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased tool performance, and increased maintenance, and may invalidate all warranties.

Repairs should be made only by authorized trained personnel. Consult your nearest Ingersoll-Rand Authorized Servicenter.

**WARNING SYMBOL IDENTIFICATION**

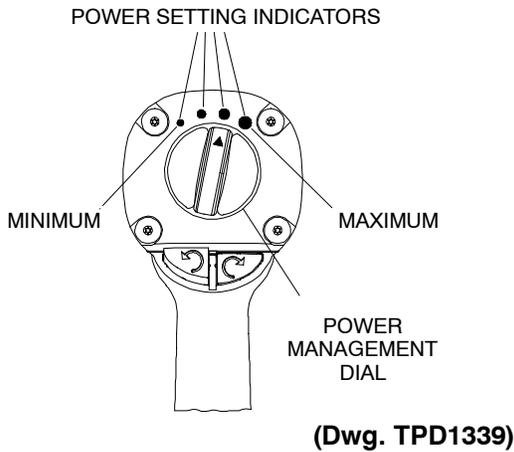


## USING THE POWER MANAGEMENT SYSTEM

### **⚠ WARNING**

Air wrenches are not torque control devices. Fasteners with specific torque requirements must be checked with suitable torque measuring devices after installation with an air wrench.

### MODEL IR-C2112 POWER MANAGEMENT SYSTEM



Model IR-C2112 Air Wrench incorporates a Power Management System that allows the operator to select four power output settings. These settings range from minimum power output through maximum power output in the forward direction only.

The Air Wrench will always operate at maximum power output in the reverse direction, no matter what power output level is selected.

### **⚠ WARNING**

The four power setting indicators of increasing size on the rear of the housing indicate increasing power output levels, are for reference only and DO NOT denote a specific power output. The smallest power setting indicator designates minimum power output, the two middle power setting indicators denote medium power outputs and the largest power setting indicator denotes maximum power output.

The power output can be further reduced in forward or reverse by using the variable throttle. Air supply systems which do not deliver adequate air pressure can affect power output at all settings.

## SERVICING THE TOOL

### Lubrication

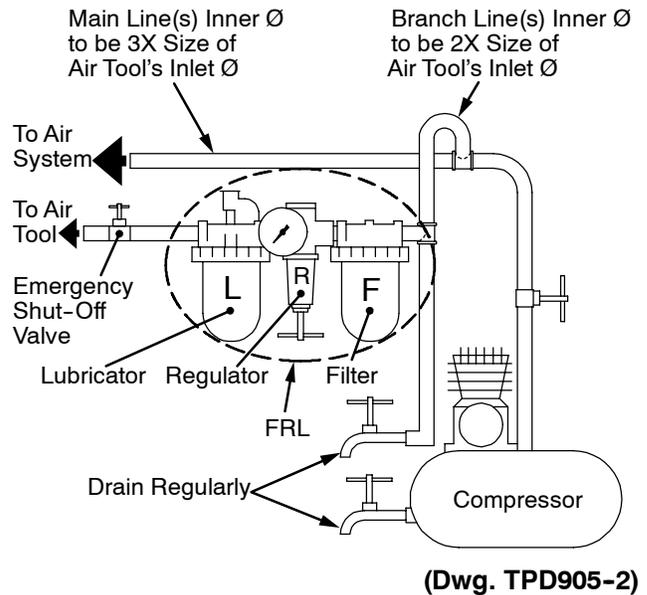


### Ingersoll-Rand No. 50

Always use an air line lubricator with these tools. We recommend the following Filter-Regulator-Lubricator (FRL) Unit:

For USA use Unit Number C18-03-FKG0-28

After each eight hours of operation, unless an air line lubricator is used, detach the air hose and inject about 1-1/2 cc of Ingersoll-Rand No. 50 Oil into the Inlet Bushing (22).

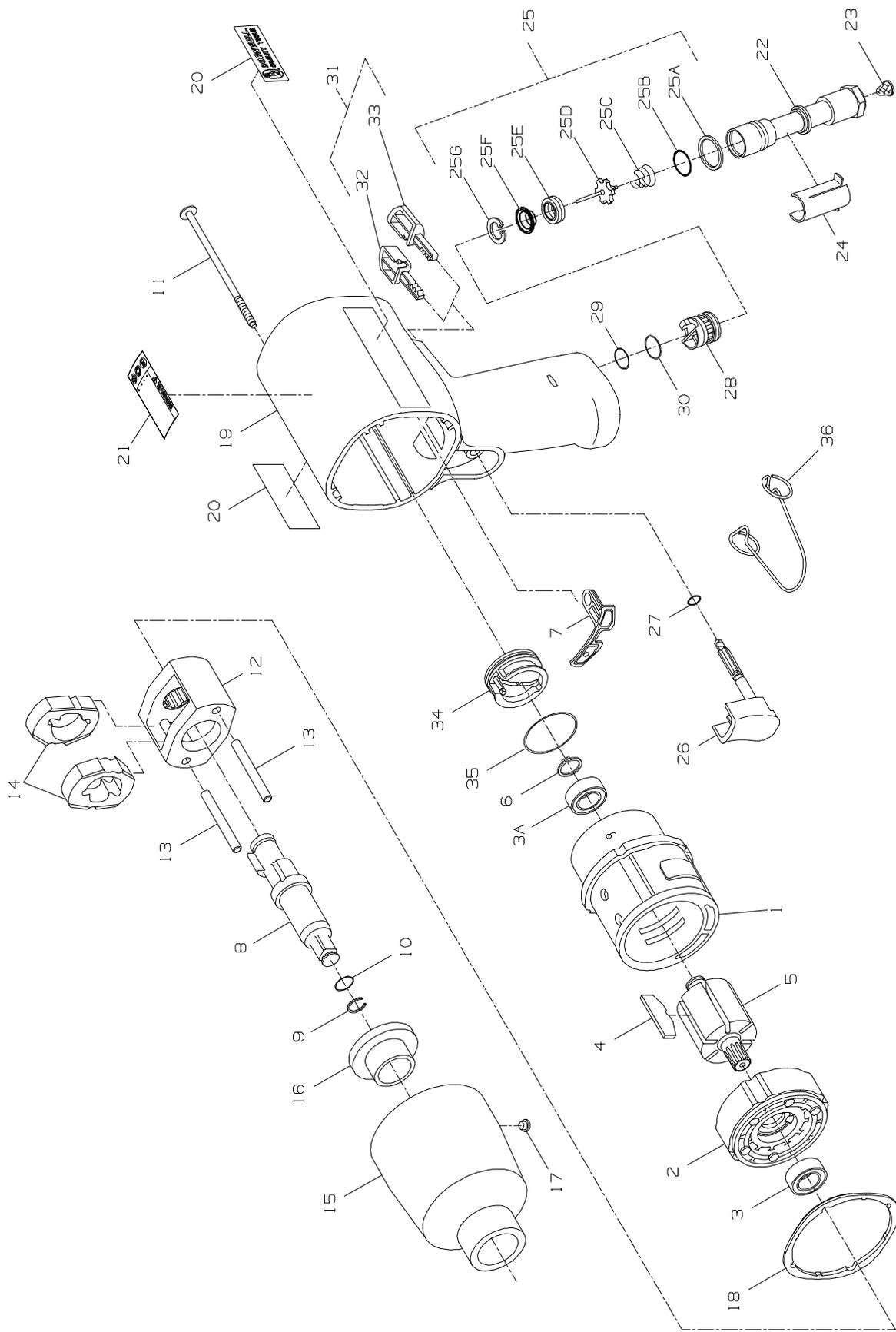


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**SPECIFICATIONS**

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<b>Model</b>	<b>Type of Handle</b>	<b>Drive</b>	<b>Impacts per min.</b>	<b>Recommended Torque Range</b>	
				<b>Forward ft-lbs (Nm)</b>	<b>Reverse ft-lb (Nm)</b>
IR-C2112	pistol grip	3/8"	1,500	25-200 [230 Max.] (34-272 [312 Max.] )	230 [260 Max.] (312 [352 Max.] )



(Dwg. TPA1835)

**PART NUMBER FOR ORDERING** →

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1	Cylinder	2112-3	•	Trigger Assembly	2131-A93
2	Front End Plate	2112-11	26	Trigger O-ring	-----
3	Front Rotor Bearing	2131-97	27	Reverse Valve Assembly	2131-A329
3A	Rear Rotor Bearing	R00H-97	28	Reverse Valve O-ring (top)	-----
4	Vane Packet (set of 6 Vanes)	2112-42-6	29	Reverse Valve O-ring (bottom) (blue)	-----
5	Rotor	2112-53	30	Button Kit	C2112-K75
6	Rear Rotor Bearing Retainer	4E-6	31	Forward Button	-----
7	Motor Gasket	2112-283	32	Reverse Button	-----
8	Anvil Assembly	2112-A626	33	Power Management Dial	2112-A249
9	Socket Retainer	1702-425	34	Power Management	2112-248
10	Socket Retainer O-ring	1702-426	35	Dial Seal	2131-322
11	Hammer Case Screw (4)	2112-638	36	Inlet Clip Removal Tool	115-1LB
12	Hammer Frame Assembly	2112-A703	*	Grease (1 lb) (for external lubrication of the impact mechanism)	
13	Hammer Frame	2112-703	*	Grease (for lubrication when disassembling and assembling the impact mechanism)	
14	Hammer Pin (2)	2112-704		1 lb	105-1LB
15	Hammer (2)	2112-724		8 lb	105-8LB
16	Hammer Case Assembly	2112-727		Grease Gun	R000A2-228
17	Hammer Case	2112-641		Seal Kit (includes illustrated items 7, 18, 25B, 27, 29, 30 and 35)	C2112-K36
18	Bushing	D0F9-879	*	Tune-up Kit (includes illustrated items 3, 3A, 4, 6, 7, 9, 10, 18, 23, 25, 27, 29, 30 and 35)	C2112-TK2
19	Grease Fitting	C2112-36	*	Hammer Kit (includes illustrated items 11 [4], 14 [2], 18, and Anvil Assembly part number 2112-A626)	C2112-THK1
20	Hammer Case Gasket	C2112-A40			
21	Housing Assembly	C2112-301			
22	Nameplate (2)	WARNING-2-99			
23	Warning Label	2131-A565			
24	Inlet Bushing Assembly	5RA-61			
25	Inlet Bushing Screen	2131-57			
25A	Inlet Retainer Clip	2131-K303			
25B	Inlet Parts Kit	-----			
25C	Washer	-----			
25D	Inlet Bushing Seal	-----			
25E	Tilt Valve Spring	-----			
25F	Tilt Valve	-----			
	Tilt Valve Seat	-----			
	Tilt Valve Seat	-----			
	Support	-----			
25G	Tilt Valve Seat Retainer	-----			

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a Bullet (•) for every four tools in service.  
 \* Not illustrated.



