

INSTRUCTIONS FOR MODEL IR-C212 PISTOL GRIP AIR WRENCH



NOTICE

Model IR-C212 Standard Duty Impact Wrenches are designed for general automotive repair, transmission work, exhaust system replacement and bench work.

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
Ingersoll-Rand Office or Distributor.

© Ingersoll-Rand Company 2002

Printed in U.S.A.



CORNWELL®
The Choice of Professionals®

BY INGERSOLL-RAND

Using the Tool (Continued)

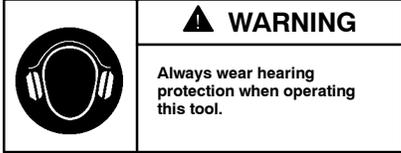
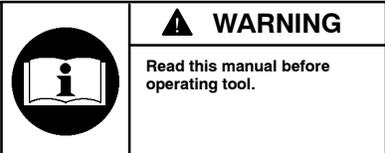
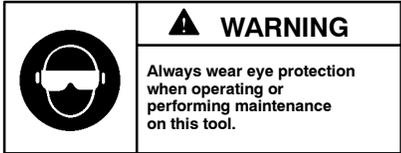
- Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
- Keep hands, loose clothing, long hair and jewelry away from working end of tool.
- Power tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful 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 Servicer.

WARNING SYMBOL IDENTIFICATION



POWER REGULATOR

Model IR-C212 Impact Wrench is equipped with a combination power regulator/reverse valve designed to provide power adjustment in the forward direction while maintaining full power in the reverse direction. The power output is calibrated by stamped numbers “1” through “5”.

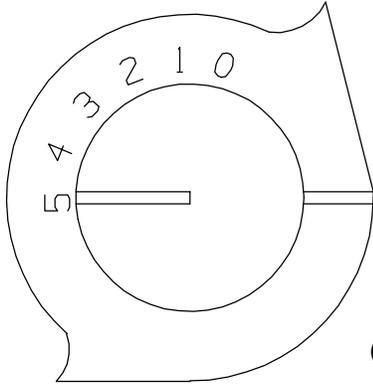
SETTING THE POWER REGULATOR

The **Model IR-C212 Impact Wrench** incorporates a power regulator into the reverse mechanism that allows the operator to have either full power output in one direction and reduced power output in the other direction or full power output in both directions. To adjust the power, proceed as follows:

For full power in both directions, rotate the Reverse Valve (5) until the notch on each end of the Reverse Valve aligns with the number 5 on each side of the housing.

NOTICE

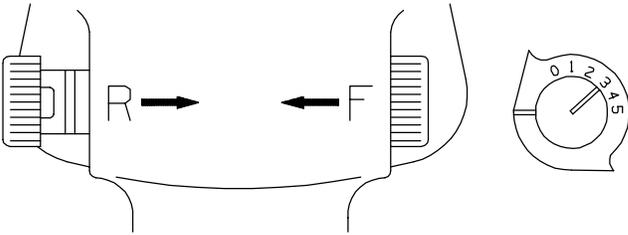
The numbers 1 thru 5 on the housing are only for reference and **DO NOT** denote a specific power output. One (1) designates the lowest power output while five (5) denotes the highest.



(Dwg. TPD1247)

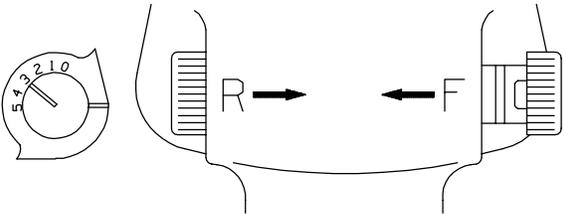
For reduced power in the forward direction and full power in the reverse direction, push the reverse valve inward on the right side of the tool and rotate the reverse valve until the notch on the right side aligns with the

desired number on the right side. This provides reduced power in forward but full power in reverse when the reverse valve is pushed in the opposite direction. See Dwg. TPD1248.



(Dwg. TPD1248)

For reduced power in the reverse direction and full power in the forward direction, push the reverse valve inward on the left side of the tool and rotate the reverse valve until the notch on the left side aligns with the desired number on the left side. This provides full power in forward but reduced power in reverse when the reverse valve is pushed the opposite direction. See Dwg. TPD1249.



(Dwg. TPD1249)

SERVICING THE TOOL

Lubrication



Ingersoll-Rand No. 50

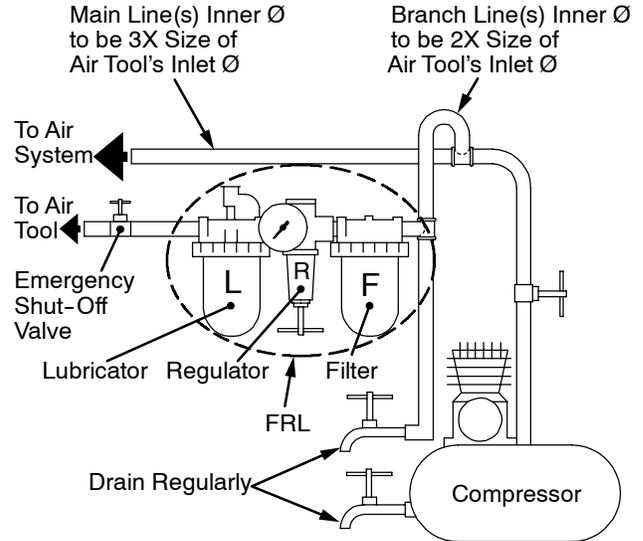
Ingersoll-Rand No. 100

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

For USA use Unit Number C28-04-FKG0-28

After each eight hours of operation, unless an air line lubricator is used, inject 1.5 cc of Ingersoll-Rand No. 50 Oil into the inlet of the tool and run the tool briefly.

After each forty-eight hours of operation, or as experience indicates, inject about 3 cc of Ingersoll-Rand No. 100 Grease into the Grease Fitting (11).

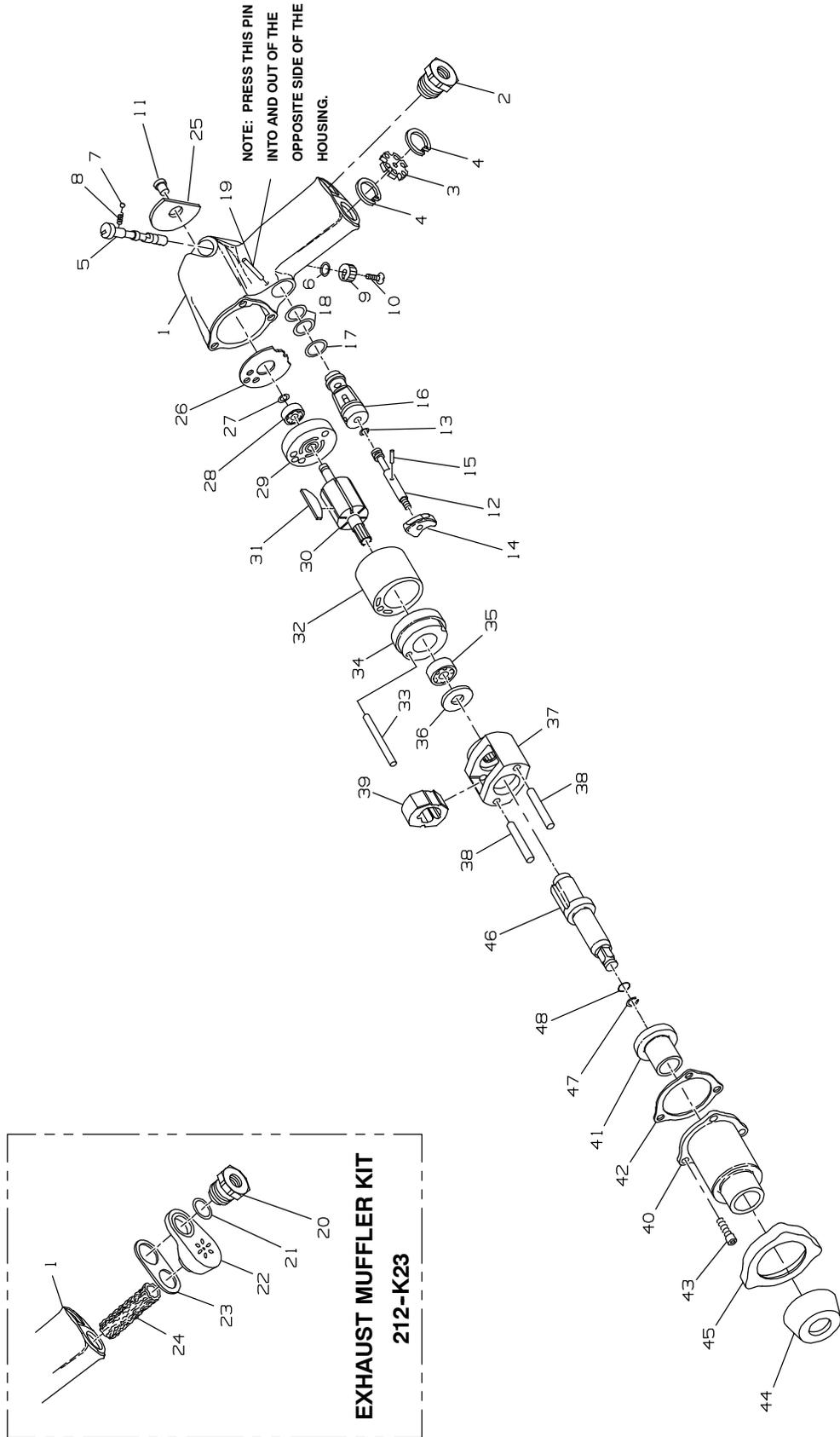


(Dwg. TPD905-2)

SPECIFICATIONS

Model	Type of Handle	Drive	Impacts per min.	Recommended Torque Range	■ Sound Level dB (A)		◆ Vibrations Level
					Pressure	• Power	
		in.		ft-lbs (Nm)			m/s ²
IR-C212	pistol	3/8" sq. dr., ring-type retainer	1500	20-125 (27-170)	97.5	110.5	2.7

MAINTENANCE SECTION



(Dwg. TPA1515)

MAINTENANCE SECTION

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

1	Motor Housing Assembly	C212-A40	29	Rear End Plate	201-12
2	Inlet Bushing	402-565	30	Rotor	401-53
◆	Exhaust Deflector	1702P-123	31	Vane Packet (set of 6 Vanes)	401-42A-6
4	Exhaust Deflector Retaining Ring (2) ..	2908-304	32	Cylinder	401-3
5	Reverse Valve	1702P-329	33	Cylinder Dowel	HH92-74
◆	Reverse Valve O-ring (2)	CE110-210	34	Front End Plate	201-11
◆	Detent Ball	R000B-263	35	Front Rotor Bearing	R00H-97
◆	Detent Ball Spring	202-664	36	Hammer Frame Washer	1702-706
9	Reverse Valve Knob	1702P-666	37	Hammer Frame Assembly	1702-A703A
10	Knob Screw	WVA100-77	38	Hammer Pin (2)	1702-704
11	Grease Fitting	130SR-188	39	Hammer	1702-724A
12	Throttle Valve Assembly	202-A302	40	Hammer Case Assembly	2902-A727
13	Throttle Valve	202-302	41	Hammer Case Bushing	401-641
◆◆	Throttle Valve Face	R000BR1C-283	*	Hammer Case Label	WARNING-2-99
14	Trigger	5RA-93	*	0.005" Oversize Hammer Case Bushing ..	401-641-5
15	Throttle Valve Retaining Pin	AF120-322	◆◆	Hammer Case Gasket	401-36
16	Throttle Valve Bushing	202-503	42	Hammer Case Cap Screw (3)	1702-638
◆◆	Bushing O-ring, large	410-283	43	Bumper	BN224-109
◆	Bushing O-ring, small (2)	202-290	44	Grommet	BN224-110
18	Bushing Retaining Pin	R100B-120	45	3/8" Square Drive Anvil Assembly with	
19	Exhaust Muffler Kit	212-K23	46	Ring-type Retainer	1702-A626
20	Inlet Bushing Assembly	202-A565	◆◆	Socket Retaining Ring	1702-425
21	Bushing O-ring	202-103	◆	Retainer Support Ring	1702-426
22	Exhaust Deflector	202-23	*	Lube Injector	230-228
23	Exhaust Deflector Gasket	202-223	*	Bottle of Oil	405-M01
◆	Exhaust Silencer	728-310	*	Tube of Grease	201-MG1
25	Nameplate	C212-301	*	Tune-up Kit (includes illustrated parts	
◆	End Plate Gasket	202-739		3, 6, 7, 8, 13, 17, 18, 24, 26, 27, 28, 31, 35,	
◆	Rear Rotor Bearing Retainer	MF-18		42, 47 and 48)	212-TK2
◆	Rear Rotor Bearing	401-22			

* Not illustrated.

• 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.

◆ Indicates Tune-up Kit part.

NOTES

