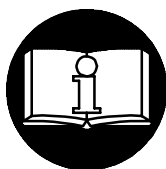


INSTRUCTIONS FOR MODEL 287-8 AND 288-8 AUTOMOTIVE IMPACT WRENCH

NOTICE

Models 287-8 and 288-8 Impact Wrench are designed for use in spring replacement, major engine repair, tractor pad removal and off-road farm equipment maintenance.

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



⚠ WARNING

**IMPORTANT SAFETY INFORMATION ENCLOSED.
READ THIS MANUAL BEFORE OPERATING TOOL.**

**IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE INFORMATION
IN THIS MANUAL INTO THE HANDS OF THE OPERATOR.
FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.**

PLACING TOOL IN SERVICE

- Always operate, inspect and maintain this tool in accordance with all regulations (local, state, federal and country), that may apply to hand held/hand operated pneumatic tools.
- For safety, top performance, and maximum durability of parts, operate this tool at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet with 1/2" (13 mm) inside diameter air supply 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 use damaged, frayed or deteriorated air hoses and fittings.
- Be sure all hoses and fittings are the correct size and are tightly secured. See Dwg. TPD905-1 for a typical piping arrangement.
- Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- 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.
- Keep hands, loose clothing and long hair away from rotating end of tool.
- Note the position of the reversing lever before operating the tool so as to be aware of the direction of rotation when operating the throttle.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Keep body stance balanced and firm. Do not overreach when operating this tool. High reaction torques can occur at or below the recommended air pressure.
- Tool shaft may continue to rotate briefly after throttle is released.
- Air powered 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.
- Use accessories recommended by Ingersoll-Rand.
- 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.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

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.

Refer All Communications to the Nearest
Ingersoll-Rand Office or Distributor.

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INGERSOLL-RAND®
PROFESSIONAL TOOLS

WARNING LABEL IDENTIFICATION



FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

WARNING
Always wear eye protection when operating or performing maintenance on this tool.

WARNING
Always wear hearing protection when operating this tool.

WARNING
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.

WARNING
Air powered 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.

WARNING
Do not carry the tool by the hose.

WARNING
Do not use damaged, frayed or deteriorated air hoses and fittings.

WARNING
Keep body stance balanced and firm. Do not overreach when operating this tool.

WARNING
Operate at 90 psig (6.2 bar/620 kPa) Maximum air pressure.

PLACING TOOL IN SERVICE

LUBRICATION

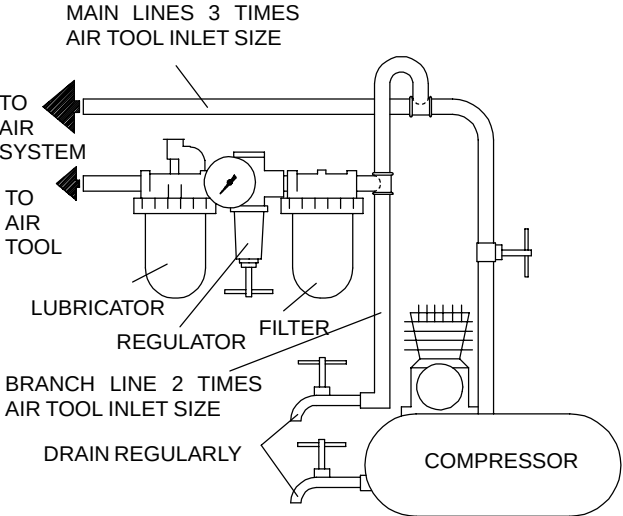


Ingersoll-Rand No. 50 Ingersoll-Rand No. 100

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

For USA- No. C11-03-G00

After each eight hours of operation, unless an air line lubricator is used, inject 1-1/2 cc of Ingersoll-Rand No. 50 Oil into the Air Inlet (10).

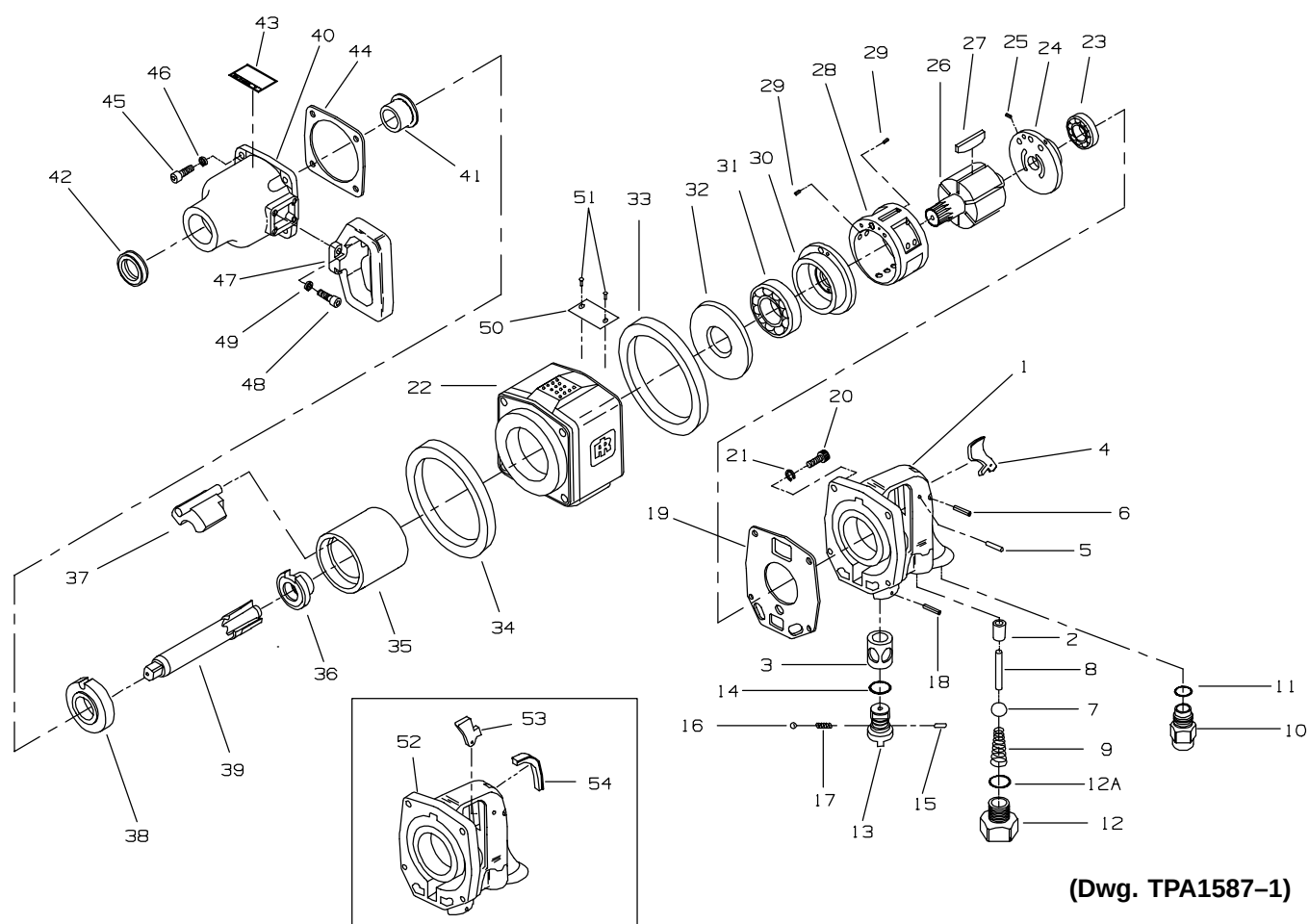


(Dwg. TPD905-1)

SPECIFICATIONS

Model	Type of Handle	Drive	Impacts per min.	Recommended Torque Range
		in.		ft-lbs (Nm)
287-8	Inline, outside trigger	1" sq., 8" ext. anvil	650	200-1200 (271-1627)
288-8	Inline, inside trigger	1" sq., 8" ext. anvil	650	200-1200 (271-1627)

MAINTENANCE INSTRUCTIONS



PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

1	Handle Assembly (outside Trigger) (287)	287-A92	31	Front Rotor Bearing	287-25
2	Throttle Valve Bushing	291-303	32	Spacer	287-706
3	Reverse Valve Bushing	285-330A	33	Rear Rubber Protector	287-110
4	Trigger	287-93	34	Front Rubber Protector	287-109
5	Trigger Stop Pin	281-439	35	Hammer Frame	287-703
6	Trigger Pin	281-437	36	Hammer Cam	287-721
7	Throttle Valve	285-50	37	Hammer	287-724
8	Throttle Valve Plunger	287-302	38	Hammer Plate	287-707
9	Throttle Valve Spring	285-51	39	Anvil (1" sq. drive, 8" extended)	287-726-8
	Inlet Bushing Assembly	291-A565	40	Hammer Case Assembly	287-A727
10	Inlet Bushing	291-565	41	Hammer Case Bushing	287-641
11	Inlet Bushing O-ring	291-566	42	Seal	287-642
12	Throttle Valve Cap Assembly	287-A266	43	Warning Label	222-99
12A	Throttle Valve Cap O-ring	291-566	44	Hammer Case Gasket	287-36
13	Reverse Valve Assembly	285-A329	45	Hammer Case Cap Screw (4)	291-105
14	Reverse Valve O-ring	291-338	46	Hammer Case Cap Screw	
15	Reverse Valve Stop Pin	291-332		Lockwasher (4)	291-104
16	Reverse Valve Detent Ball	291-333	47	D-Handle	291-48
17	Ball Spring	291-334	48	D-Handle Cap Screw (4)	291-49
18	Pin	281-120	49	D-Handle Cap Screw	
19	Handle Gasket	287-283		Lockwasher (4)	291-504
20	Handle Cap Screw (4)	291-105	50	Nameplate	
21	Handle Cap Screw Lock			for 287	287-301
	Washer (4)	291-104		for 288	288-8-301
22	Motor Housing	287-40	51	Nameplate Screw (2)	222-302
23	Rear Rotor Bearing	287-24	52	Handle Assembly (inside Trigger) (288)	288-A92
24	Rear End Plate Assembly	287-A12	53	Trigger	285-93A
25	Pin	287-10	54	Trigger Slot Cover	281-438
26	Rotor	286-53		Also includes illustrated parts 2, 3, 5 and 6	
27	Vane Packet (set of 6 Vanes)	287-42-6			
28	Cylinder Assembly	287-A3			
29	Cylinder Dowel (2)	287-98			
30	Front End Plate	287-11			

Service Center

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