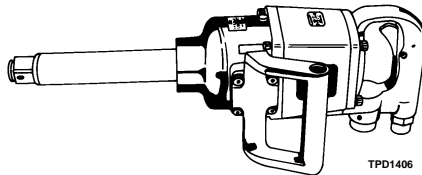


## INSTRUCTIONS FOR MODELS 285A-AP AND 285A-6-AP AUTOMOTIVE IMPACT WRENCHES



### NOTICE

Model 285A-AP and 285A-6-AP Impact Wrenches 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 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 Servicer.

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.**


	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Always wear eye protection when operating or performing maintenance on this tool.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Always wear hearing protection when operating this tool.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>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.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>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.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Do not carry the tool by the hose.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Do not use damaged, frayed or deteriorated air hoses and fittings.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Keep body stance balanced and firm. Do not overreach when operating this tool.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Operate at 90 psig (6.2bar/620 kPa) Maximum air pressure.</p>
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**International Warning Label:**  
Order Part No. \_\_\_\_\_

## PLACING TOOL IN SERVICE

### LUBRICATION



**Ingersoll-Rand No. 50**

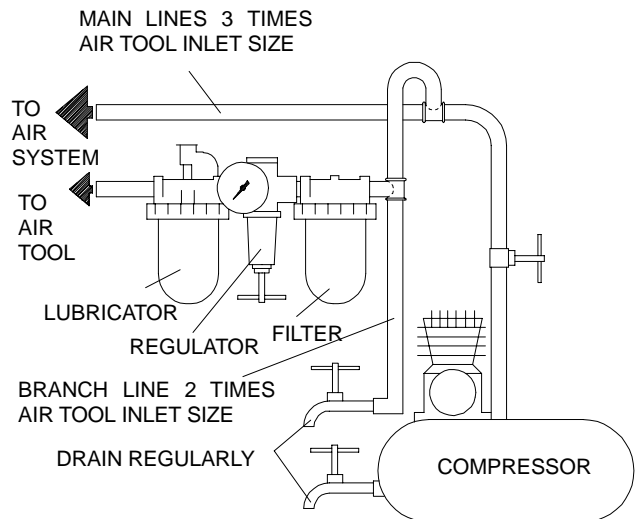


**Ingersoll-Rand No. 100**

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

**For International- No. C16-C3-A29**  
**For USA- No. C11-03-G00**

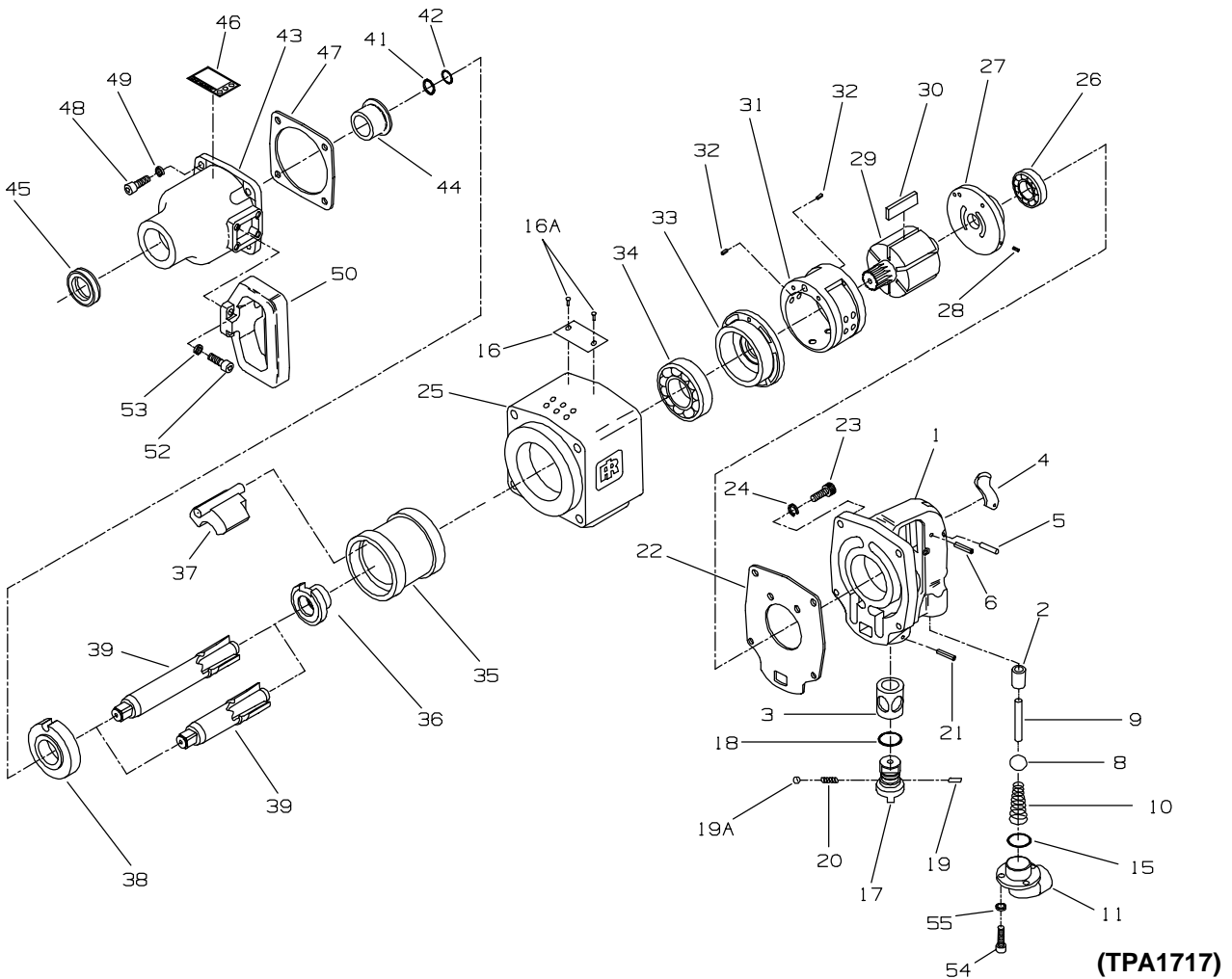
**After each eight hours of operation**, unless an air line lubricator is used, inject 1-1/2 cc of Ingersoll-Rand No. 50 Oil into the Air Inlet (10).



(Dwg. TPD905-1)

## SPECIFICATIONS

Model	Type of Handle	Drive	Impacts per min.	Recommended Torque Range
		<b>in.</b>		<b>ft-lbs (Nm)</b>
285A-AP	pistol	1" sq.	700	100-900 (136-1220)
285A-6-AP	pistol	1" sq. & 6" anvil	700	100-900 (136-1220)



**PART NUMBER FOR ORDERING**

1	Trigger Handle Assembly . . . .	285AP-A92	31	Cylinder Assembly . . . . .	285-A3
2	Plunger Bushing . . . . .	291-303	32	Cylinder Dowel (2) . . . . .	291-98
3	Reverse Valve Bushing . . . .	285-330A	33	Front End Plate . . . . .	291-11
4	Trigger . . . . .	285AP-93	34	Front Rotor Bearing . . . . .	58-96
5	Spring Pin . . . . .	285A-437	35	Hammer Frame . . . . .	285-703
6	Stop Pin . . . . .	281-439	36	Hammer Cam . . . . .	285-721
8	Throttle Valve . . . . .	285-50	37	Hammer . . . . .	285-724
9	Throttle Valve Plunger . . . . .	285-302	38	Side Plate . . . . .	285-706
10	Throttle Valve Spring . . . . .	285-51	39	1" Square Drive Anvil Assembly	
11	Inlet Bushing . . . . .	285AP-565		Standard Length . . . . .	285-A726
15	O-ring . . . . .	291-566	39A	6" Extended Length . . . . .	285-A726-6
16	Nameplate		41	Retaining Ring . . . . .	291-425
	for 285A-AP . . . . .	285A-AP-301	42	Retaining O-ring . . . . .	291-426
	for 285A-6-AP . . . . .	285A-6-AP-301	43	Hammer Case Assembly . . . . .	285-A727
16A	Nameplate Screw (2) . . . . .	222-302	44	Hammer Case Bushing . . . . .	291-641
17	Reverse Valve Assembly . . . . .	285-A329	45	Oil Seal . . . . .	291-642
18	Reverse Valve Seal . . . . .	291-338	46	Warning Label . . . . .	WARNING-27-99
19	Stop Pin . . . . .	291-332	47	Hammer Case Gasket . . . . .	285-36
19A	Ball . . . . .	291-333	48	Hammer Case Cap Screw (4) . . . .	291-105
20	Spring . . . . .	291-334	49	Hammer Case Cap Screw	
21	Spring Pin . . . . .	281-120		Lockwasher (4) . . . . .	291-104
22	Handle Gasket . . . . .	285-283	50	Dead Handle (for 285A-AP) . . . . .	291-48
23	Handle Cap Screw (4) . . . . .	281-638	51	Dead Handle (for 285A-6-AP) . . . .	281-48-6
24	Handle Cap Screw		52	Dead Handle Cap Screw (4) . . . . .	291-49
	Lockwasher (4) . . . . .	291-104	53	Dead Handle Cap Screw	
25	Motor Housing . . . . .	285AP-40		Lockwasher (4) . . . . .	291-504
26	Rear Rotor Bearing . . . . .	291-24	54	Cap Screw . . . . .	285AP-639
27	Rear End Plate Assembly . . . .	291-A12	55	O-ring . . . . .	285AP-104
28	Pin . . . . .	291-10			
29	Rotor . . . . .	285-53			
30	Vane Packet (set of 6 vanes) . .	291-42-6			

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