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Form P7545
Edition 1
January, 2002

OPERATION AND MAINTENANCE MANUAL FOR NO. AI150 AUTOMOTIVE AIR WRENCH

NOTICE

No. AI150 Automotive Air Wrench is designed for general automotive repair, body shops, front end service, light truck and farm equipment applications.

⚠ 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. TPD905-1 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 the 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.
- Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
- This tool is not insulated against electric shock.

Using the Tool (Continued)

- **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.
- This tool is not designed for working in explosive environments, including those caused by fumes and dust, or near flammable materials.
- 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.
- 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 MATCO TOOLS.
- 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.

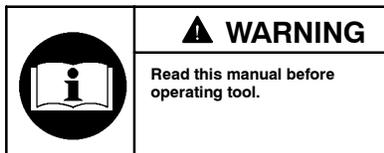
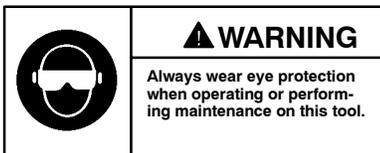
NOTICE

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

The AI150 has a one year warranty.

Repairs should be made only by authorized trained personnel. Consult your nearest MATCO TOOLS Authorized Service Center.

WARNING SYMBOL IDENTIFICATION



⚠ WARNING

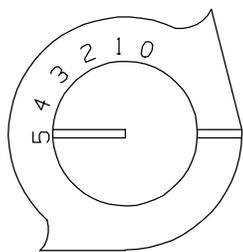
Impact wrenches are not torque control devices. Fasteners with specific torque requirements must be checked with suitable torque measuring devices after installation with an impact wrench.

AI150 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 until the notch on each end of the reverse valve aligns with the number 5 on each side of the housing.

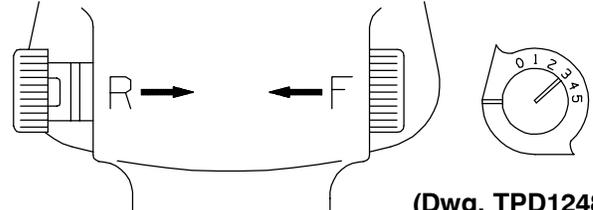
NOTICE

The numbers 0 thru 5 on the housing are only for reference and DO NOT denote a specific power output. Zero (0) designates the lowest power output while five (5) denotes the highest.



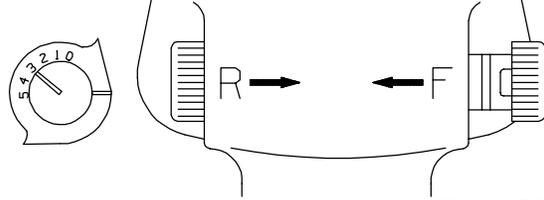
(Dwg. TPD1247)

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.



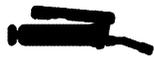
(Dwg. TPD1249)

PLACING TOOL IN SERVICE

LUBRICATION

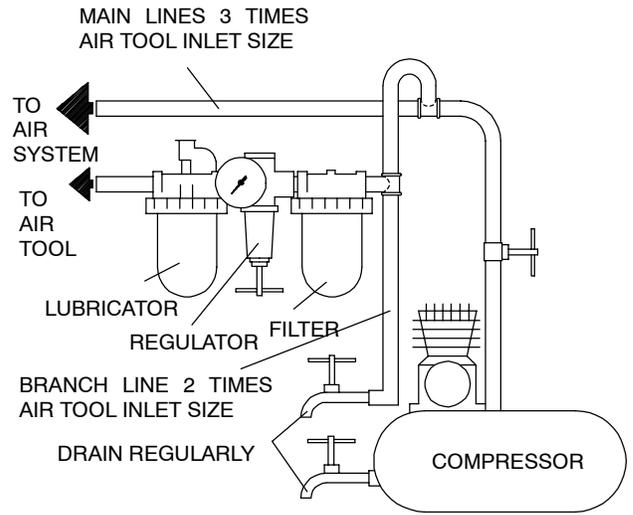


MATCO TOOLS Pneumatic Oil



MATCO TOOLS Pneumatic Grease for routine external lubrication of the impact mechanism through the Hammer Case Grease Fitting (4).

Use **MATCO TOOLS Pneumatic Grease** when disassembling and assembling the impact mechanism. Always use an air line lubricator with these tools. We recommend the following Filter-Lubricator-Regulator Unit:



(Dwg. TPD905-1)

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

HOW TO ORDER

Order all repair parts for your Air Wrench by the **NAME** and **NUMBER** shown in the Repair Part List section. Never use the illustration numbers which appear in the first column.

For prompt service and genuine **MATCO TOOLS** parts, place orders with your **MATCO TOOLS** Distributor or the nearest Parts Distributor.

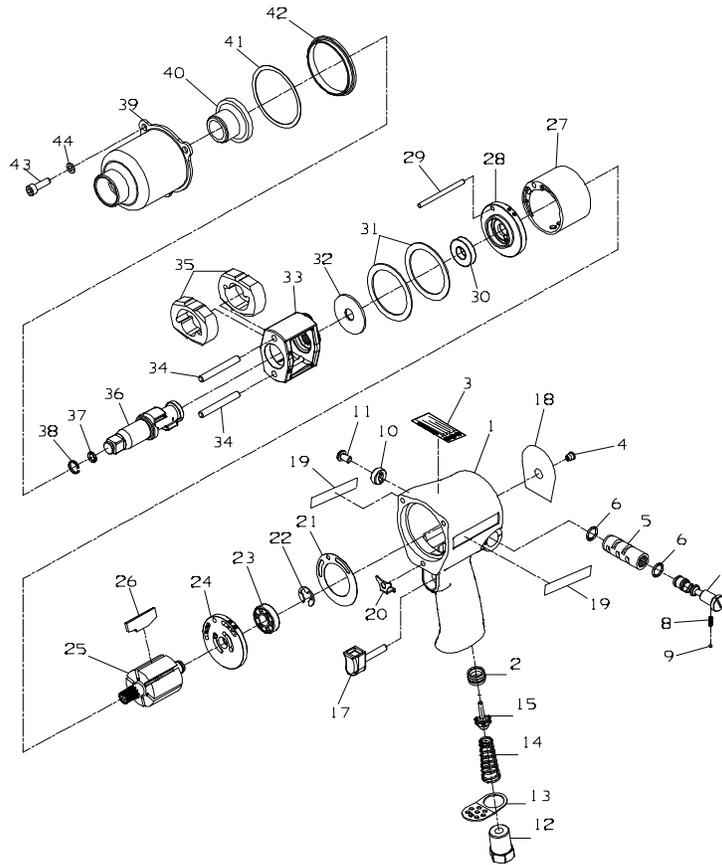
SPECIFICATIONS

Model	Type of Handle	Drive	Impacts	Recommended Torque Range		Inlet Connection	Minimum Inside Ø Air Hose
				Forward	Reverse		
		in.	per min.	ft-lbs (Nm)	ft-lbs (Nm)	Thread Type	in. (mm)
AI150	pistol grip	1/2" sq.	1,225	25-300 (34-407)	25-350 (34-475)	1/4" NPT	3/8" (10)

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.



(TP1953)



PART NUMBER FOR ORDERING



	Motor Housing Assembly	131S-A40	25	Rotor	231-53
1	Motor Housing	131-B40	26	Vane (set of 6 Vanes)	2131-42A-6
2	Throttle Valve Seat	131-303	27	Cylinder	131-3
3	Warning Label	WARNING-2-99	28	Front Endplate	231-11
4	Grease Fitting	131-188	29	Cylinder Dowel	230-98
5	Reverse Valve Bushing	231-A330	30	Front Rotor Bearing	4U-97
6	Reverse Valve Bushing Seal (2)	PS3-67	31	Motor Clamp Washer (2)	227-207
7	Reverse Valve	131-329	32	Hammer Frame Rear Washer	231-706
8	Reverse Valve Detent Spring	131-664	33	Hammer Frame Assembly	231XP-A703
9	Reverse Valve Detent Ball	AV1-255	34	Hammer Pin (2)	231-704
10	Reverse Valve Knob	231-666	35	Hammer (2)	231XP-724
11	Reverse Valve Knob Screw	131-665	36	Anvil Assembly	131-A626
12	Inlet Bushing	131-565	37	Socket Retainer O-Ring	R1A-159
13	Exhaust Deflector	235-EU-23	38	Socket Retaining Ring	231-425A
14	Throttle Valve Spring	131-51	39	Hammer Case Assembly	131-A927
15	Throttle Valve	131-50	40	Hammer Case Bushing	705-941
17	Trigger Assembly	231H-A93	41	Hammer Case Gasket	230-36
18	Nameplate	AI150-301	42	Hammer Case Pilot	405-800
19	Label (2)	AI150-300	43	Hammer Case Cap Screw (3)	131-638
20	Trigger Retainer	131-656	44	Hammer Case Cap Screw Lock Washer (3)	131-637
21	Endplate Gasket	231-283			
22	Rear Rotor Bearing Retainer	131-118			
23	Rear Rotor Bearing	402-22			
24	Rear Endplate	231-12			

