



Form P7372 Edition 1 August, 1998

# OPERATION AND MAINTENANCE MANUAL FOR NO. MT1738 PISTOL GRIP AIR WRENCH

### NOTICE

No. MT1738 Pistol Grip Air Wrench is designed for general automotive repair, transmission work, exhaust system replacement and bench work.

MATCO TOOLS is not responsible for customer modification of tools for applications on which MATCO TOOLS was not consulted.



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#### 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 3/8" (10 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 MATCO Tools.
- 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

Repairs should be attempted only by authorized, trained repairmen. Consult your nearest MATCO TOOLS Authorized Service Center.

It is the responsibility of the employer to place the information into this manual in the hands of the operator.

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## WARNING LABEL IDENTIFICATION

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### FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.



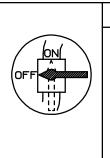
## **WARNING**

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



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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.



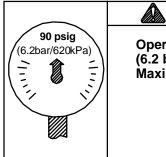
### WARNING

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.

### POWER REGULATOR ADJUSTMENT

Model MT1738 is equipped with a combination power regulator/reverse valve designed to provide power adjustment in one direction of rotation while maintaining full power in the opposite direction of rotation. The power output in either direction is calibrated by the numbers 1 through 5 stamped on the Reverse Valve (9) and Knob (13). Number "5" designates maximum power and number "1" designates minimum power.

#### Power Adjustment of MT1738 for Running Right–Hand Thread Fasteners

- 1. While facing the back of the Impactool, push the Reverse Valve (9) to the extreme left position.
- 2. Rotate the Reverse Valve so the desired power setting is aligned with the small indicator line on the Motor Housing (1).
- 3. The MT1738 will now drive a night-hand thread fastener at the power setting you have selected. It will remove the same right-hand fastener under full power. This adjustment will not change regardless of how many times you shift the Reverse Valve as long as you do not change the power selection.

#### Power Adjustment of MT1738 for Running Left–Hand Thread Fasteners

- 1. While facing the back of the Impactool, push the Reverse Valve (9) to the extreme right position.
- 2. Rotate the Reverse Valve so the desired power setting is aligned with the small indicator line on the Motor Housing (1).
- 3. The MT1738 will now drive a left-hand fastener at the power setting you have selected. It will remove the same left-hand fastener under **full power.** This adjustment will not change regardless of how many times you shift the Reverse Valve as long as you do not change the power selection.

## PLACING TOOL IN SERVICE

### - LUBRICATION —





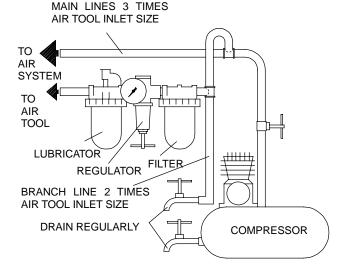
MATCO Tools Pneumatic Oil

MATCO Tools Pneumatic Grease

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

USA - No. C22-04-G00

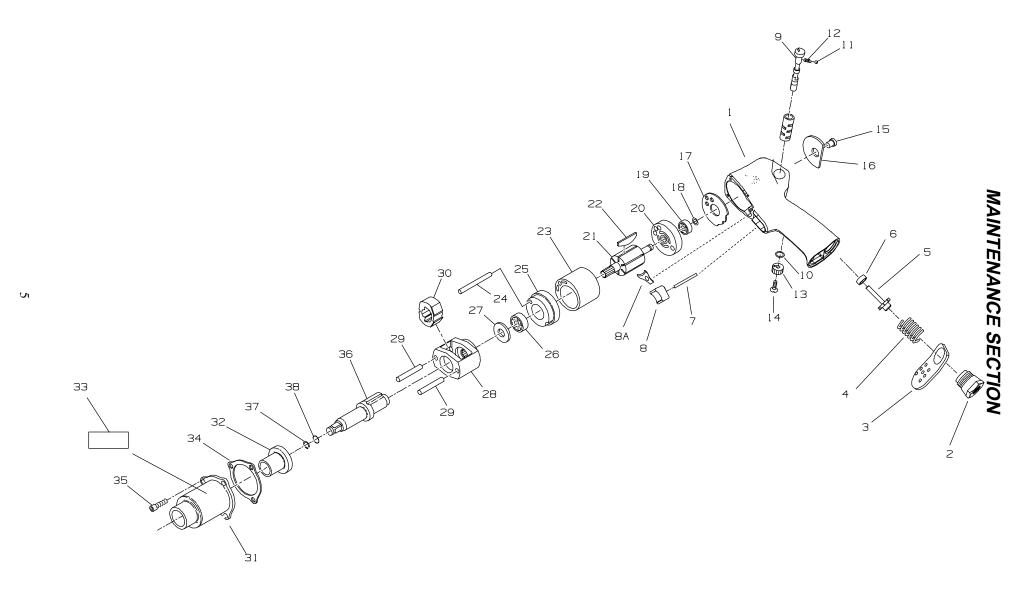
After each eight hours of operation, unless an air line lubricator is used, inject 1.5 cc of the recommended oil into the inlet of the tool and run the tool briefly. After each forty-eight hours of operation, or as experience indicates, inject about 3 cc of the recommended grease into the Grease Fitting (11).



(Dwg. TPD905-1)

#### SPECIFICATIONS

| Model  | Type of<br>Handle | Drive                                  | Impacts per min. | Recommended Torque<br>Range |  |
|--------|-------------------|--|------------------|-----------------------------|--|
|        |                   | in.                                    |                  | ft–lbs (Nm)                 |  |
| MT1738 | pistol            | 3/8" sq. dr.,<br>ring–type<br>retainer | 1500             | 20–125 (27–170)             |  |



PART NUMBER FOR ORDERING -

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| 1  | Motor Housing Assembly      | MT1738-A40  |                    | 21                                  | Rotor                               | 401–53       |
|----|-----------------------------|-------------|--------------------|-------------------------------------|-------------------------------------|--------------|
| 2  | Inlet Bushing               | 235-565     | –565 22 Vane I     |                                     | Vane Packet (set of 6 Vanes)        | 401–42A–6    |
| 3  | Exhaust Deflector           | 235-EU-23   |                    | 23                                  | Cylinder                            | 401–3        |
| 4  | Throttle Valve Spring       | MT1738-51   |                    | 24                                  | Cylinder Dowel                      | HH92–74      |
| 5  | Throttle Valve              | 235-50      | 25 Front End Plate |                                     | Front End Plate                     | 201-11       |
| 6  | Throttle Valve Seat         | 235-303     |                    | 26                                  | Front Rotor Bearing                 | R00H–97      |
| 7  | Trigger Rod                 | 235-302     |                    | 27                                  | Hammer Frame Washer                 | 1702–706     |
| 8  | Trigger                     | 231H-93     |                    | 28                                  | Hammer Frame Assembly               | 1702–A703A   |
| 8A | Trigger Retainer            | MT1738-656  |                    | 29                                  | Hammer Pin (2)                      | 1702–704     |
| 9  | Reverse Valve               | 1702P-329   |                    | 30                                  | Hammer                              | 1702–724A    |
| 10 | Reverse Valve O–ring (2)    | CE110-210   |                    | 31                                  | Hammer Case Assembly                | 1702–A727    |
| 11 | Detent Ball                 | R000B-263   |                    | 32                                  | Hammer Case Bushing                 | 401–641      |
| 12 | Detent Ball Spring          | 202–664     |                    | 33                                  | Hammer Case Label                   | WARNING-2-99 |
| 13 | Reverse Valve Knob          | 1702P–666   |                    | *                                   | 0.005" Oversize Hammer Case Bushing | 401-641-5    |
| 14 | Knob Screw                  | WWA100-77-4 | •                  | 34                                  | Hammer Case Gasket                  | 401–36       |
| 15 | Grease Fitting              | 130SR-188   |                    | 35                                  | Hammer Case Cap Screw (3)           | 1702–638     |
| 16 | Nameplate                   | MT1738-301  |                    | 36 3/8" Square Drive Anvil Assembly |                                     |              |
| 17 | End Plate Gasket            | 202–739     |                    |                                     | with Ring-type Retainer             | 1702–A626    |
| 18 | Rear Rotor Bearing Retainer | MF-18       | •                  | 37                                  | Socket Retaining Ring               | 1702–425     |
| 19 | Rear Rotor Bearing401–22    |             |                    | 38                                  | Retainer Support Ring               | 1702–426     |
| 20 | Rear End Plate              | 201–12      |                    |                                     |                                     |              |

\* Not illustrated.

9

• 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.

# NOTES