



# ATD-2102 OPERATING INSTRUCTIONS



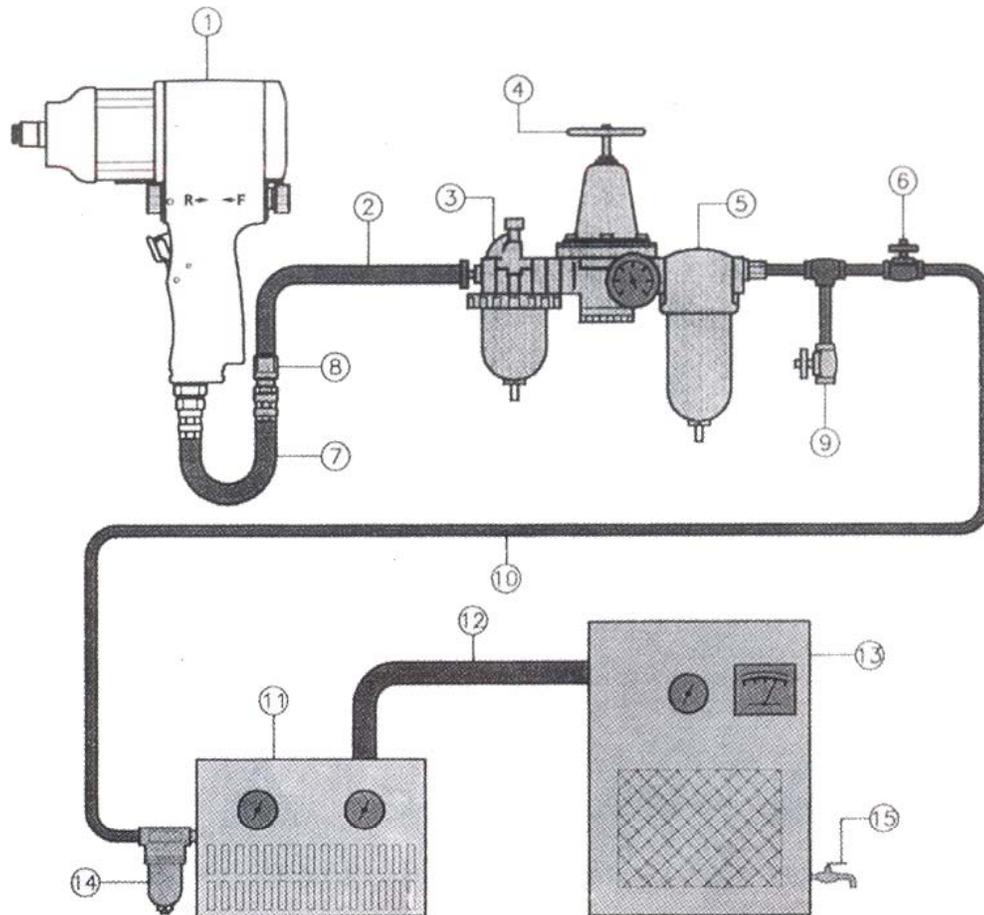
## WARNING



For your own safety, please read the operating instructions carefully before using your ATD2102 air impact ratchet.

1. Maintain proper incoming air pressure, 90 PSI (6.3 kg/cm<sup>2</sup>), at all times in order to maintain your safety and prolong the use of the tool.
2. Don't wear loose or baggy clothing when you operate this tool. Remove anything that may cause injury, i.e. neckties, jewelry, etc. Tie back long hair and ALWAYS wear eye protection
3. It is the owner's responsibility to lubricate the air tool properly. Don't use any flammable or volatile oils for lubricating, i.e. diesel oil, kerosene or gasoline
4. Make sure to use quality impact sockets only, don't use hand tool sockets. Cracking sockets will reduce the torque of the air tool and may cause serious injury.
5. Don't depress trigger when connecting the air supply hose.
6. Protect the air lines from damage or puncture
7. Never point an air tool at anyone, or at yourself. It could cause serious injury.
8. Keep all nuts, bolts and screws tight and ensure equipment is in safe working condition before each use.

## Air Tools and Pipe Fitting System



1. Air Tool
2. Air Hose 3/8"
3. Oiler
4. Pressure Regulator
5. Filter
6. Shut Off Valve
7. Lead Hose
8. Coupler body and connector
9. Drain daily
10. 1/2" or larger pipe and fitting
11. Air Dryer
12. 1" or larger pipe and fitting
13. Air Compressor
14. Auto Drain
15. Drain daily

### \* CAUTION :

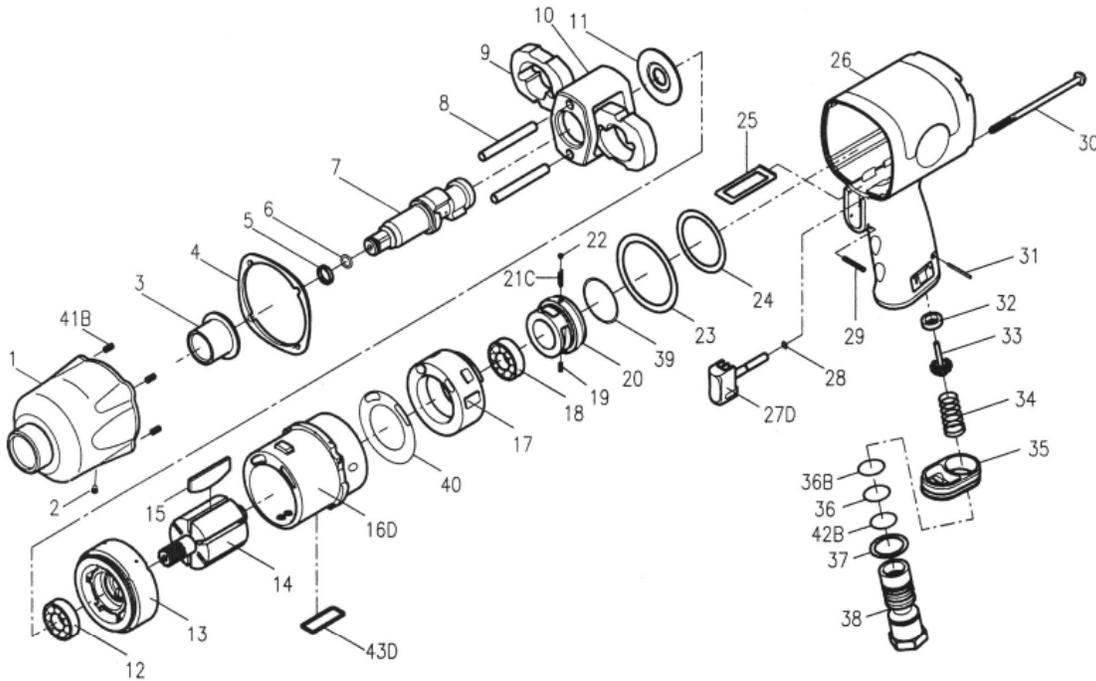
1. To protect air tools, we strongly recommend that you install a pneumatic filter, moisture separator, regulator and lubricator between the air supply and Air Tools.
2. Please notice if the moisture in pipe is too much and if your air compressor is made to drain daily.
3. Be sure to fill with SAE#10 lubricating oil into the air inlet before using air tools.
4. Before using air tools, please keep proper air pressure.
5. Don't fill with too thick of oil, or it will lessen the air motor power.

## GENERAL TROUBLESHOOTING GUIDE

| SYMPTOM                                 | POSSIBLE CAUSES   | CORRECTIVE ACTION   |
|---|---|---|
| Tool runs slowly down or doesn't work.  | <ol style="list-style-type: none"> <li>1. Grit or gum in motor set.</li> <li>2. Low air pressure.</li> <li>3. Dry or rusty motor set.</li> <li>4. No oil in tool.</li> <li>5. Worn ball bearing.</li> </ol> | <ol style="list-style-type: none"> <li>1a. Drop diesel oil from air inlet to flush motor set, and then drop SAE#10 motor oil to lubricate it.</li> <li>1b. Disassemble tool and repair it.</li> <li>2. Check the air compressor meter and adjust the compressor regulator.</li> <li>3. Lubricate the tool with SAE#10 motor oil or sewing machine oil.</li> <li>4. Do the same as point 3.</li> <li>5. Replace ball bearing.</li> </ol> |
| Reduced torque                          | <ol style="list-style-type: none"> <li>1. Lack of lubrication.</li> <li>2. Regulator set in wrong position.</li> <li>3. Low pressure.</li> <li>4. Worn impact mechanism.</li> </ol>                         | <ol style="list-style-type: none"> <li>1. Lubricate the tool.</li> <li>2. Adjust the regulator to correct position.</li> <li>3. Check the pressure of air inlet to see if it is at correct number 90 PSI.</li> <li>4. Replace parts.</li> </ol>   |
| Doesn't impact totally but can run free | <p style="text-align: center;">Serious worn parts or damaged parts of impact set.</p>   | <p style="text-align: center;">Disassemble tool and replace parts.</p>  |
| Self-running                            | <p>Trigger system:.</p> <ol style="list-style-type: none"> <li>1. Valve stem can't remove back.</li> <li>2. Rusty or deformed steel ball.</li> <li>3. Rusty or cracked spring.</li> </ol>                   | <p style="text-align: center;">Replace parts.</p>   |
| Moisture blowing out of tool            | <ol style="list-style-type: none"> <li>1. Water in tank.</li> <li>2. Water in the air lines/hoses.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Drain tank. Oil tool and run until no Water is evident. Oil tool again and run 1-2 seconds.</li> <li>2a. Install a water separator/filter.<br/>NOTE: Separators only work properly when the air passing through the separator is cool. Locate the separator/filter as far as possible from the compressor.</li> <li>2b. Install an air dryer.</li> </ol>                                      |



# ATD-2102



| ITEM# | ORDERING PART# | PART DESCRIPTION |
|-------|----------------|------------------|
| 1     | PRT2102-01     | HAMMER CASE      |
| 2     | PRT2102-02     | GREASE FITTING   |
| 3     | PRT2102-03     | ANVIL BUSHING    |
| 4     | PRT2102-04     | FRONT GASKET     |
| 5     | PRT2102-05     | ANVIL COLLAR     |
| 6     | PRT2102-06     | O-RING           |
| 7     | PRT2102-07A    | ANVIL            |
| 7     | PRT2102-07B    | 2" ANVIL         |
| 8     | PRT2102-08     | HAMMER PIN       |
| 9     | PRT2102-09     | HAMMER           |
| 10    | PRT2102-10     | HAMMER CAGE      |
| 11    | PRT2102-11     | REAR WASHER      |
| 12    | PRT2102-12     | BALL BEARING     |
| 13    | PRT2102-13     | FRONT END PLATE  |
| 14    | PRT2102-14     | ROTOR            |
| 15    | PRT2102-15     | ROTOR BLADE      |
| 16D   | PRT2102-16     | CYLINDER         |
| 17    | PRT2102-17     | VALVE SLEEVE     |
| 18    | PRT2102-18     | BALL BEARING     |
| 19    | PRT2102-19     | SPRING PIN       |
| 20    | PRT2102-20     | REVERSE VALVE    |
| 21C   | PRT2102-21     | SPRING           |
| 22    | PRT2102-22     | STEEL BALL       |
| 23    | PRT2102-23     | REAR GASKET      |

| ITEM# | ORDERING PART# | PART DESCRIPTION    |
|-------|----------------|---------------------|
| 24    | PRT2102-24     | WASHER              |
| 25    | PRT2102-25     | AIR CHANNEL GASKET  |
| 26    | PRT2102-26     | MOTOR HOUSING       |
| 27D   | PRT2102-27     | TRIGGER             |
| 28    | PRT2102-28     | O-RING              |
| 29    | PRT2102-29     | SPRING PIN          |
| 30    | PRT2102-30     | SCREW               |
| 31    | PRT2102-31     | SPRING PIN          |
| 32    | PRT2102-32     | BUSHING             |
| 33    | PRT2102-33     | VALVE STEM          |
| 34    | PRT2102-34     | SPRING              |
| 35    | PRT2102-35     | EXHAUST DEFLECTOR   |
| 36    | PRT2102-36     | O-RING              |
| 36B   | PRT2102-36B    | O-RING              |
| 37    | PRT2102-37     | WASHER              |
| 38    | PRT2102-38     | AIR INLET (1/4" PF) |
| 39    | PRT2102-39     | O-RING              |
| 40    | PRT2102-40     | VALVE SLEEVE GASKET |
| 41B   | PRT2102-41     | INSERTS RECOIL      |
| 42B   | PRT2102-42     | O-RING              |
| 43D   | PRT2102-43     | SQUARE RING         |
| *     | PRT2102-SK     | SEAL KIT            |
| *     | PRT2102-HK     | HARD KIT            |

**PRT2102-SK CONTAINS ITEMS:**

4, 15(X6), 20, 21C, 23, 28, 33, 34, 36, 36B, 39 & 42B

**PRT2102-HK CONTAINS ITEMS:**

5, 6, 8(X2), 9(X2) & 10