

**Sapsons**<sup>®</sup>

**PNEUMATIC TORQUE WRENCHES**



**SAPSONS INDUSTRIAL EQUIPMENTS PVT. LTD.**

## OPERATING INSTRUCTIONS

### AIR PRESSURE REGULATOR

To increase air pressure (and torque), turn the "T" handle clockwise  
**NOTE: THE TOOL MUST ALWAYS BE RUNNING WHEN SETTING AIR PRESSURE**

PRESSURE GAUGE

### 1/2" NPT INLET

Install your air supply to the 1/2" NPT female port in the regulator. A minimum 1/2" air line must be used capable of 100psi at 30 cfm.

Always set air pressure with tool running

### REGULATOR CAGE SETUP

#### TOOL STORAGE

#### 1/2" NPT OUTLET

Install the supplied airline to the 1/2" NPT outlet port on the automatic oiler. The quick connect fitting at the opposite end of the hose will be attached to the RAD<sup>®</sup> tool.

AIR FILTER

#### AUTOMATIC OILER

Fill the automatic oiler with air tool oil only. Fill from the top, or by removing and filling the bowl, then reinstalling from the bottom.

#### FILTER DRAIN VALVE

(bottom of air regulator and filter, accessed from under cage assembly)

**NOTE: AIR SUPPLY MUST BE A MINIMUM OF 100psi @ 30-50cfm**

**IMPORTANT: DO NOT OPERATE THE TOOL BEFORE READING THESE INSTRUCTIONS. IF BREAKDOWN, MALFUNCTION OR DAMAGE OCCURS, DO NOT ATTEMPT TO REPAIR, PLEASE CONTACT US IMMEDIATELY.**

**PNEUMATIC TORQUE WRENCHES** are reversible, non-impacting, torque controlled tightening tools and must always be operated with the following:

- Clean dry air supply with a minimum flow of 100psi and 30cfm and 1/2" air line
- Cage Assembly with lubricator and regulator
- Impact Sockets
- Proper Reaction Arm

Where the intended usage is not with threaded fasteners, the safety of operation must be evaluated and appropriate precautions taken. New World Technologies Inc. will be pleased to advise you, should you have any questions.

These tools contain alloy components which may cause a hazard in certain explosive environments.

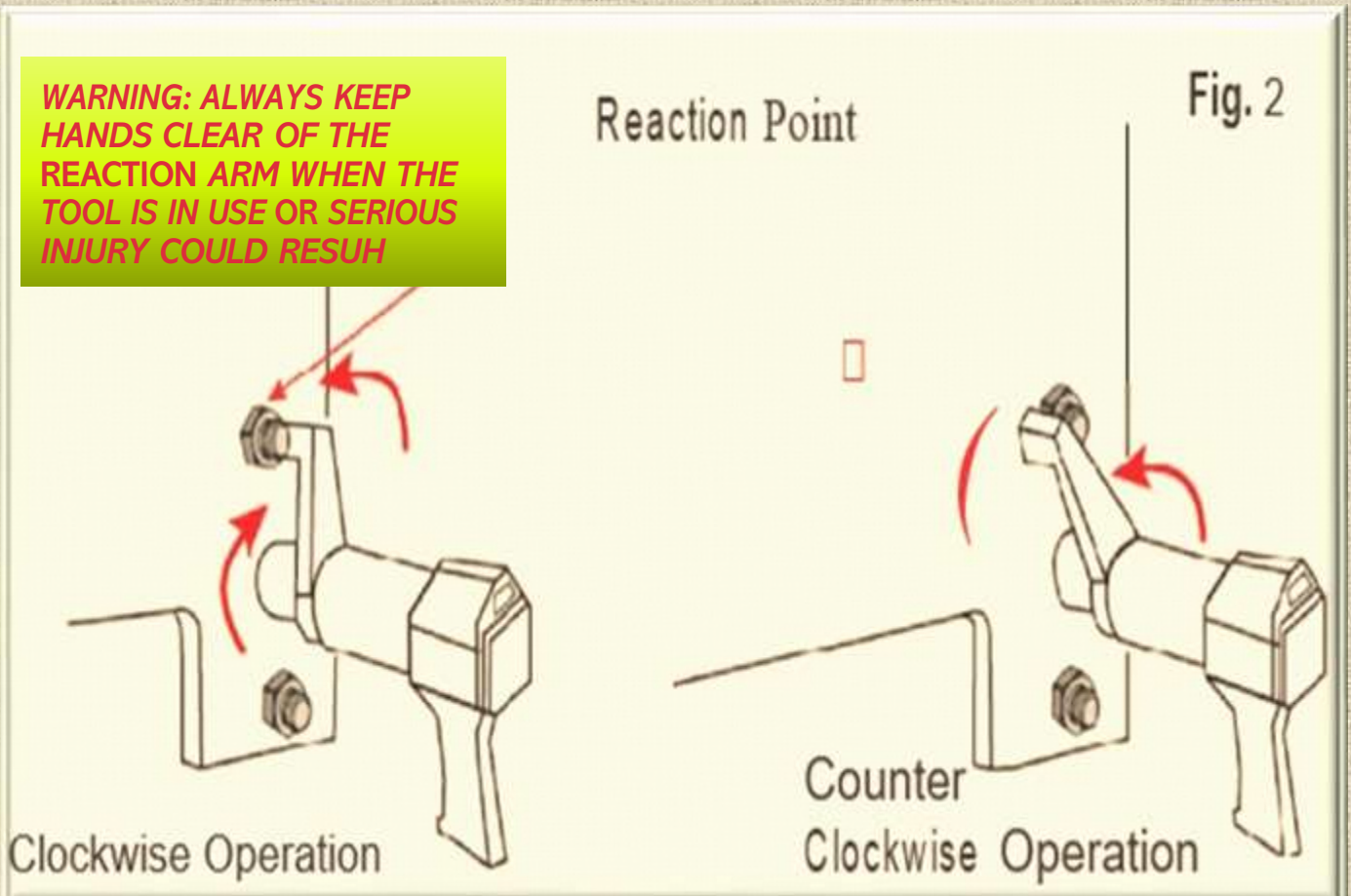
Please call New World Technologies Inc. for further information.

## Assembly :

- 1) Blow out hoses before connecting.
- 2) Connect the wrenched Air Inlet - to the outlet side of the Cage Assembly, observing airflow direction.
- 3) Connect air supply to inlet side of the Cage Assembly using a minimum hose size of  $\frac{1}{2}$ "
- 4) Check oil level in lubricator and fill it to correct level.
- 5) Attach Reaction Arm (8), to Spline or Serpentine (C) adjacent to the Output Drive (D) of the wrench and secure with circlip.

**WARNING : TO AVOID HAZARD FROM WHIPPING AIR HOSES, MAKE ALL CONNECTIONS TO THE TOOL BEFORE TURNING ON THE AIR SUPPLY.**

When the tool is in operation the Reaction Arm rotates in the opposite direction to the Output Square Drive and must be allowed to rest squarely against a solid object or surface adjacent to the bolt to be tightened. (See figure 2)





### Operating the Wrench:

- 1) Fit the wrench with the correct size impact socket to suit the bolt to be tightened.
- 2) Check that the Forward/Reverse switch is set correctly.
- 3) Rotate the handle to a convenient position relative to the Reaction Arm.
- 4) Fit the tool onto the bolt to be tightened with the Reaction Arm adjacent to the reaction point. (see figure 2)
- 5) Squeeze the Trigger (IF) partially to bring the Reaction Arm into contact with the reaction point.

**WARNING: KEEP HANDS CLEAR OF THE REACTION ARM!**

**WARNING: IN USE, THIS TOOL MUST BE SUPPORTED AT ALL TIMES IN ORDER TO PREVENT UNEXPECTED RELEASE IN THE EVENT OF A FASTENER OR COMPONENT FAILURE!**

- 6) Fully depress Trigger and keep fully depressed until wrench stalls. If the Trigger is released before the wrench stalls, full torque will not be applied to the bolt.
- 7) Release trigger and remove the tool from bolt.



## **SAFETY**

**MAKE SURE YOU OBSERVE THE DIRECTIONS  
ON THE WARNING LABELS AT ALL TIMES.**

Tools have been designed with safety in mind however, as with all tools you **MUST** observe all general workshop safety practices, and specifically the following:

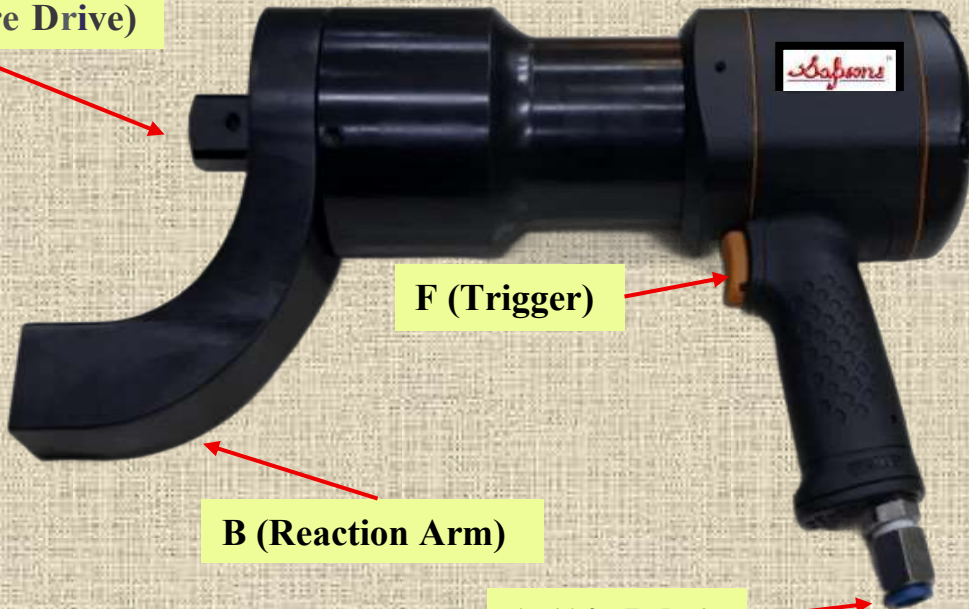
- Before using your new tool, get familiar with all its accessories and how they work.
- **ALWAYS** wear safety goggles when the tool is in operation.
- Make sure the reaction arm is in contact with a solid compact point before you operate the "tool".
- Keep your body parts clear of the reaction arm and the contact point.
- Set your air pressure while the tool is running,
- Refer to the enclosed torque chart to set the correct air pressure regulator setting for a required torque.
- **NEVER** exceed the maximum air pressure shown on the torque chart.
- **ALWAYS** use the regulator and oiler that is supplied. Failure to do this voids the warranty and can place you in danger.
- Be sure to use a minimum 1/2" airing to cage assembly as this will allow for adequate air flow.
- Make sure the reaction arm snap ring is securely in place to hold the reaction arm or blank in place.

**SAPSONS<sup>®</sup> TOOLS ARE SAFE AND RELIABLE. NOT FOLLOWING PRECAUTIONS  
AND INSTRUCTIONS OUTLINED HERE CAN RESULT IN INJURY TO YOU AND YOUR  
FELLOW WORKERS**

**NEW WORLD TECHNOLOGIES INCORPORATED IS NOT RESPONSIBLE FOR SUCH ANY  
INJURY.**

**TOOL SETUP**

**D (Output Square Drive)**



**F (Trigger)**



**B (Reaction Arm)**



**A (Air Inlet)**



**C (Spline or Serpentine)**



**E (Forward and Reverse Switch)**



## DETAILS FOR SELECTION

Model No.	Min. Torque		Max. Torque		Free Speed	Square Drive	Weight	
	Ft/Lbs	Nm	Ft/Lbs	Nm	Rpm	Inch	Kg.	Lbs
N-150-P	30	45	130	180	42	1/2" / 3/4"	6.0	13.2
N-500-P	125	170	500	680	25	1/2" / 3/4"	7.0	15.5
N-750-P	185	250	750	1020	15	3/4" / 1"	7.0	15.5
N-1000-P	250	340	1040	1400	9	3/4" / 1"	7.0	15.5
N-2000-P	560	750	2200	3000	6	1" / 1.1/2"	10.0	22
N-3000-P	750	1010	3000	4050	3	1" / 1.1/2"	11.0	24.3
N-4000-P	1000	1350	4000	5400	2.5	1.1/2"	13.60	30
N-5000-P	1200	1650	4800	6500	2	1.1/2"	13.60	30
N-6000-P	1630	2200	6000	8100	1.5	1.1/2"	13.60	30

### MORE PRODUCT LIST:

- FLANGE FACING MACHINES
- PLATE BEVELLING MACHINES
- PNEUMATIC EXPANSION DRIVES
- ELECTRIC EXPANSION DRIVES
- ELECTRIC CONTROL PANNELS
- PNEUMATIC TORQUE TOOL
- NUT SPLITTERS
- TUBE TOOL

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