

## SAFETY

RAD® tools use pressurized air to develop very large forces to tighten and loosen threaded fasteners. For your safety and that of others, **WARNING LABELS** and **ATTENTION LABELS** are prominently attached to the carrying cages, reaction accessories, and tools.

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

RAD® 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 contact 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" airline to the 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 in place.

**RAD® TOOLS ARE SAFE AND RELIABLE. NOT FOLLOWING PRECAUTIONS AND INSTRUCTIONS OUTLINED HERE CAN RESULT IN INJURY TO YOU AND YOUR FELLOW WORKERS.**

**GLOBAL MINING PRODUCTS INCORPORATED IS NOT RESPONSIBLE FOR ANY SUCH INJURY.**



**GLOBAL MINING  
PRODUCTS**  
Quality, Service, Value

[www.globalminingproducts.com](http://www.globalminingproducts.com) Ph: 1-877-576-2855

## RAD® TOOL WARRANTY

### NEW TOOL WARRANTY

Any new tool branded with the RAD® name and purchased from Global Mining Products Inc., or through one of its authorized distributors or agents, is warranted to the original purchaser against defects in materials and workmanship for a period of one (1) year from the date of original calibration. Under the terms of this warranty, Global Mining Products Inc., at its option & F.O.B. either its factory or an authorized service center, will replace or repair for the original purchaser, free of charge, any part or parts, found upon examination by Global Mining Products Inc., to be defective in material or workmanship or both. If any product or part is replaced or repaired under the terms of this warranty, that product or part will carry the remainder of the warranty from the date of original calibration.

### REPAIRED TOOL WARRANTY

Once a tool is beyond its new tool warranty, Global Mining Products Inc., for a period of three (3) months from the date of repair, will replace or repair for the original purchaser, free of charge, any part or parts, found upon examination by Global Mining Products Inc., to be defective in material or workmanship or both. If any product or part is replaced or repaired under the terms and conditions of this warranty, that product or part will carry the remainder of the warranty from the date of original repair.

To qualify for the above mentioned warranties, written notice to Global Mining Products Inc. must be given immediately upon discovery of such defect, at which time Global Mining Products Inc. will issue an authorization to return the tool. The defective item must promptly be returned to Global Mining Products Inc. all freight charges prepaid. When returning a tool, the reaction arm/s being used with the tool must also be returned.

Global Mining Products Inc: Ph: 877-576-2855 | E: [sales@globalminingproducts.com](mailto:sales@globalminingproducts.com)

### EXCLUSIONS FROM WARRANTY

At Global Mining Products Inc.'s sole judgment, tools or accessories that have been altered, damaged, misused, abused, badly worn due to excessive utilization, lost, or improperly maintained will NOT be covered under the terms of this warranty.

Tools returned without the reaction arm/s will not be covered under the terms of this warranty. Consumable parts and accessories (such as extensions, reaction blanks/arms) are not covered under this warranty.

Tools that have been relabeled without prior written consent of Global Mining Products Inc. will not be covered under this warranty.

Equipment and accessories not manufactured by Global Mining Products Inc. (measuring equipment, etc.) are warranted only to the extent of the original manufacturer's warranty.

\*There is no other express warranty. Implied warranties, including those of merchantability and fitness for a particular purpose are limited to one year from date of calibration and to the extent permitted by law. Liability for consequential damages under any and all warranties are excluded to the extent exclusion is permitted by law.



## USER MANUAL



If additional copies of CBT's are required please contact:  
**Global Mining Products Inc.**  
Toll Free: 1-877-576-2855

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### ALSO AVAILABLE



ELECTRONIC



DIGITAL BATTERY



DIGITAL ELECTRIC

## REGULATOR CAGE SETUP



### AIR PRESSURE REGULATOR

To increase air pressure (& torque), turn the "T" handle clockwise.

**NOTE: THE TOOL MUST ALWAYS BE RUNNING WHEN SETTING AIR PRESSURE.**

### 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.

### LIQUID FILLED PRESSURE GAUGE

### WARNING LABELS

### FILTER DRAIN VALVE

(bottom of air regulator and filter)

### AIR FILTER

### RAD® 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® Tool.

### 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.

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

### TOOL SETUP

C (Spline or Serpentine)

D (Output Square Drive)

E (Forward and Reverse Switch)

F (Trigger)

B (Reaction Arm)

A (Air Inlet)

## RAD® TOOL OPERATING INSTRUCTIONS

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

**RAD® 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. Global Mining Products 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 Global Mining Products Inc. for further information.

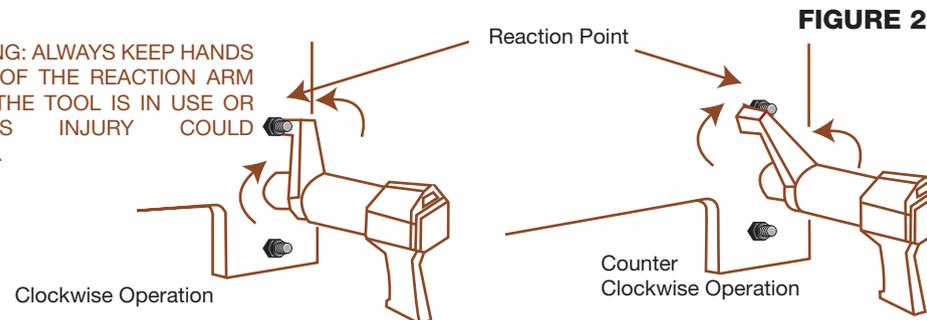
### Assembly

1. Blow out hoses before connecting.
2. Connect the wrench Air Inlet (A) 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 1/2".
4. Check oil level in lubricator and fill to correct level.
5. Attach Reaction Arm (B) to Spline (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).

**WARNING:** ALWAYS KEEP HANDS CLEAR OF THE REACTION ARM WHEN THE TOOL IS IN USE OR SERIOUS INJURY COULD RESULT.



### Setting Torque for Bolt Tightening

Every RAD® Torque wrench is supplied with a Torque Chart which relates torque output to air pressure.

### Set the torque as follows:

1. Ensure the Forward/Reverse (E) is set to "Forward".
2. Establish the air pressure required using the Torque Chart, provided with the tool.
3. Adjust the regulator until the correct pressure is shown on the gauge.

**DO NOT EXCEED MAXIMUM AIR PRESSURE SETTING ON THE TORQUE CHART!**

**IMPORTANT:** THE WRENCH MUST BE FREE RUNNING WHILE ADJUSTING THE AIR PRESSURE TO GIVE THE CORRECT SETTING.

### Setting Torque for Bolt Loosening

1. Ensure that Forward/Reverse switch is set to "Reverse".
2. Establish maximum air pressure from the Torque Chart and set the air pressure the same as with tightening.

**WARNING:** EXCEEDING THE MAXIMUM AIR PRESSURE WILL OVERLOAD THE WRENCH AND MAY CAUSE SERIOUS DAMAGE!

### 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 (F) 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.

