

REGULATOR CAGE

AIR PRESSURE REGULATOR

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

NOTE: THE TOOLS 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 30cfm.

TORQUE CHART

Always set air pressure with tool running

WARNING LABELS

FILTER DRAIN VALVE

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

RAD® TOOL STORAGE

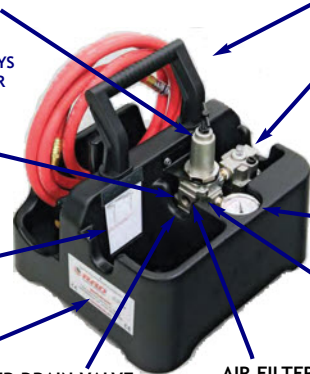
1/2" NPT OUTLET

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.

LIQUID FILLED PRESSURE GAUGE

AUTOMATIC OILER

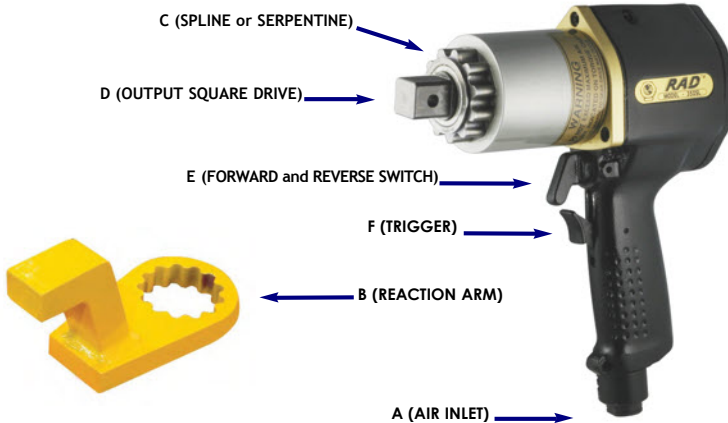
Fill the automatic oiler with air tool oil only. Fill from the top, or by removing and filling the bowl, then reinstalling from the bottom.



AIR FILTER

NOTE: AIR SUPPLY MUST BE A MINIMUM OF 90psi @ 30cfm

TOOL SET UP



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, PLEASE CONTACT MAXPRO CORPORATION 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 90psi and 30cfm and 1/2" air line
- Basket 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. Maxpro Corporation 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.

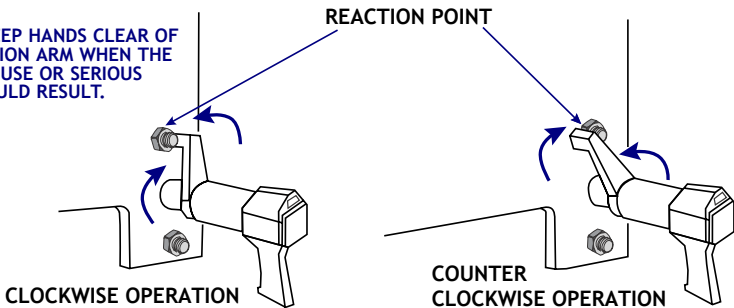
Assembly

- 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 Spine 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)

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 an 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.

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 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 or blank 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.**

MAXPRO CORPORATION IS NOT RESPONSIBLE FOR ANY SUCH INJURY.

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