

NOTE: THE TORQUE REGULATOR WILL NOT GIVE FULL CONTROL OVER THE ENTIRE RANGE OF THE TOOL. THE RANGE OF THE REGULATOR IS FROM FULL TORQUE TO APPROXIMATELY 50% OF FULL TORQUE VALUE.

TIP: If a lower torque level is required it may be achieved by reducing the mains air pressure to the tool.

NOTE: REPEATABILITY OF THE TOOL MAYBE AFFECTED BY THE USE OF THIS REGULATOR.

IMPORTANT: IF RUNNING THE TOOL WITH LUBRICATION, CHECK THAT THE LUBRO CONTROL UNIT IS SUPPLYING APPROXIMATELY SIX DROPS OF OIL PER MINUTE WHILE THE TOOL IS FREE RUNNING.

IF THE TOOL IS USED WITH AN INTERNAL TORQUE REGULATOR THE TOOL MUST BE CALIBRATED TO A PRE-SET TORQUE VALUE ON A SUITABLE CALIBRATION FIXTURE – IF IN DOUBT CONTACT YOUR DISTRIBUTOR.

SETTING TORQUE FOR RELEASING BOLT _____

NOTE: THIS PROCEDURE IS ONLY APPLICABLE TO BI-DIRECTIONAL TOOLS.

The tools are designed to give a slightly higher torque in counter-clockwise rotation. This may allow some tight bolts to be released without the need to set a higher air pressure.

1. Ensure the Clockwise/Counter-clockwise Selector is correctly set.
2. Pull trigger to loosen fastener.

TIP: Increase air pressure slightly if fastener will not release.

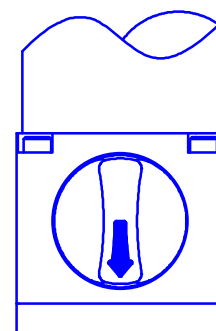


Figure 6



WARNING: EXCEEDING THE MAXIMUM AIR PRESSURE WILL CAUSE OVERLOADING AND MAY LEAD TO SERIOUS DAMAGE.



WARNING: CHANGING THE MAINS AIR PRESSURE AFTER SETTING THE PRESSURE REGULATOR WILL CHANGE THE STALL TORQUE VALUE.

OPERATING INSTRUCTIONS



WARNING: KEEP HANDS CLEAR OF THE REACTION ARM.



WARNING: WHEN USING THIS TOOL IT MUST BE SUPPORTED AT ALL TIMES IN ORDER TO PREVENT UNEXPECTED RELEASE IN THE EVENT OF FASTENER OR COMPONENT FAILURE.

A. TIGHTENING

1. Fit Pneutorque® with the correct size impact or high quality socket to suit fastener.
2. Ensure the Clockwise/Counter-clockwise Selector is correctly set (if fitted).
3. Rotate the Handle into a convenient position relative to the reaction arm. Fit the tool onto the fastener to be tightened with the reaction arm adjacent to the reaction point. See Figure 7.
4. Adopt a suitable posture to counteract normal or unexpected movement of the tool due to reaction forces.
5. Squeeze the Trigger partially to bring the Reaction Arm into contact with the reaction point.
6. Fully depress trigger and keep fully depressed until tool stalls then release trigger.
If the trigger is not fully depressed full torque will not be applied to the fastener.
7. Remove tool from fastener.

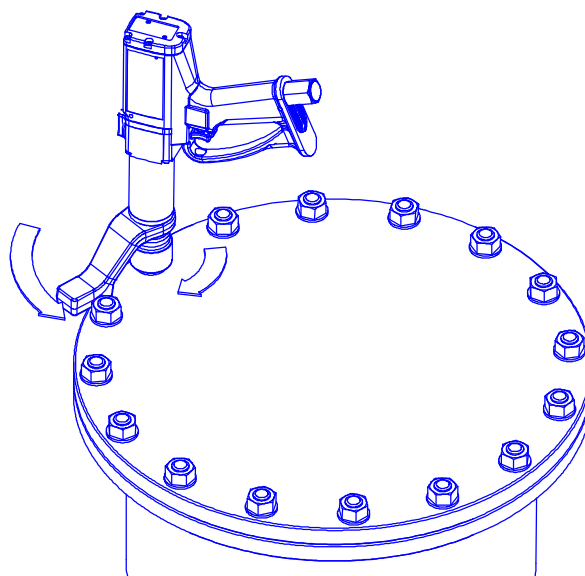


Figure 7

B. RELEASING

NOTE: ONLY FOR BI-DIRECTIONAL TOOLS

1. Fit the Pneutorque® with the correct size impact or high quality socket to suit the fastener to be released.
2. Ensure the clockwise/counter-clockwise selector is correctly set.
3. Rotate the handle into a convenient position relative to the reaction arm. Fit the tool onto the fastener to be released with the reaction arm adjacent to the reaction point. See Figure 8.
4. Adopt a suitable posture to counteract normal or unexpected movement of the tool due to reaction forces.
5. Squeeze the trigger partially to bring the reaction arm into contact with the reaction point.
6. Fully depress trigger and keep fully depressed until bolt releases.

TIP: If unable to release the bolt increase the air pressure to the tool. Do not use excessive air pressure.



WARNING: EXCEEDING THE MAXIMUM AIR PRESSURE WILL CAUSE OVERLOADING AND MAY LEAD TO SERIOUS DAMAGE.



WARNING: CHANGING THE MAINS AIR PRESSURE AFTER SETTING THE PRESSURE REGULATOR WILL CHANGE THE STALL TORQUE VALUE.

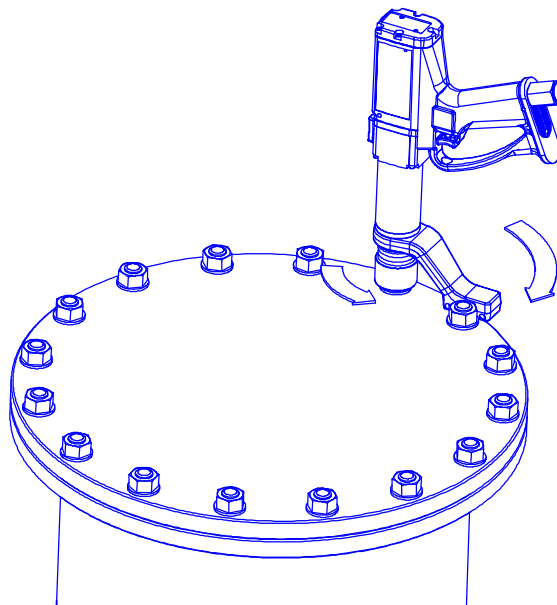


Figure 8

MAINTENANCE

To maintain optimum performance and safety, regular maintenance needs to be carried out. The only user maintenance required on these tools is the replacement of drive squares and the silencer. Any other maintenance or repairs should be carried out by Norbar or a Norbar approved agent and should form part of a service. Service intervals will depend on the type of usage of the tools and the environment in which they are being used.

AIR LUBRICATION:-

Add Shell Tellus 15 or equivalent good quality hydraulic oil to the Lubro unit.

NOTE: *The tools may be run without air lubrication to avoid the possibility of oil mist.*

GEARBOX:-

Under normal operating conditions it is not necessary to re-grease the gearbox. The gearbox contains Lubcon Turmogrease Li 802 EP or equivalent good quality grease.

SILENCER:-

The silencer (#18591) must be changed every 12 months. This may be more frequent for high tool usage or dirty environments.

TIP: Change silencer with tool upside down, as shown, to ensure internal parts (spring & valve) are kept in place.

1. Remove M4 screw (A) (#25381.10) using a 2.5mm hexagon key.
2. Remove pin (B) (#26284) using a pin punch.
3. Pull out air inlet tube (D) with base plate & silencer.
4. Remove silencer (E) from air inlet tube.
5. Fit new silencer (#18591) over air inlet tube.
6. Fit air inlet tube assembly (C, D & E) into handle against spring resistance.
7. Fit pin (B) with a hammer.
8. Fit screw (A) hand tight. Do not over tighten this screw as it is likely to break the base plate moulding.(0.5N.m MAX)

TIP: When refitting air inlet tube assembly into handle care should be taken to ensure correct alignment between air inlet tube & spring. It may be easier to fit the spring into air inlet tube first and secure with a small amount of grease.

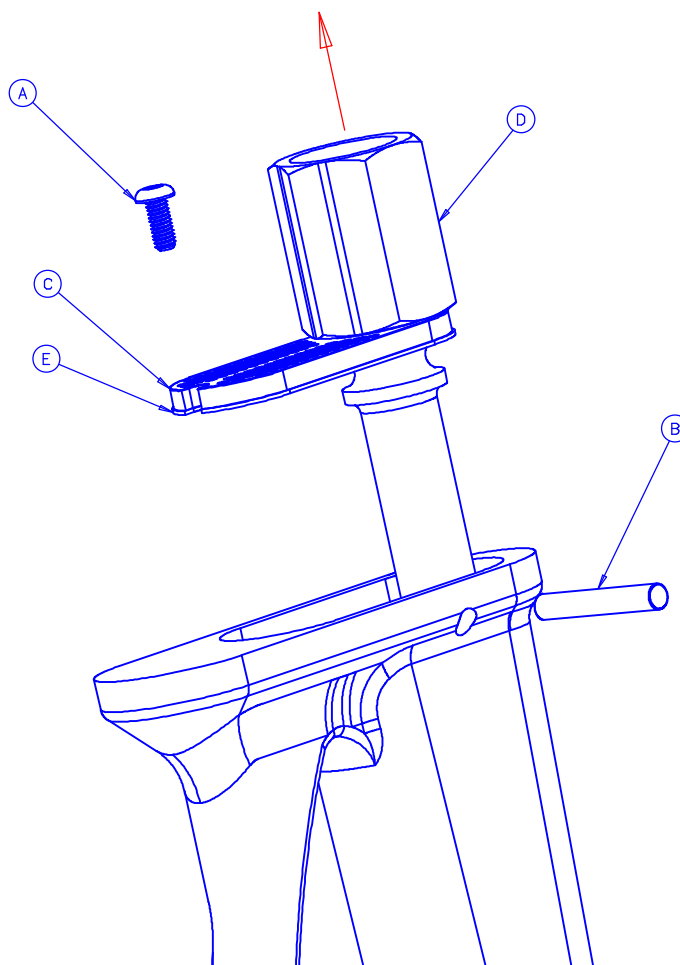


Figure 9

DRIVE SQUARE:-

To avoid internal damage (especially due to torque overload), the output drive square has been designed to shear first. This saves major internal damage and allows easy square removal.

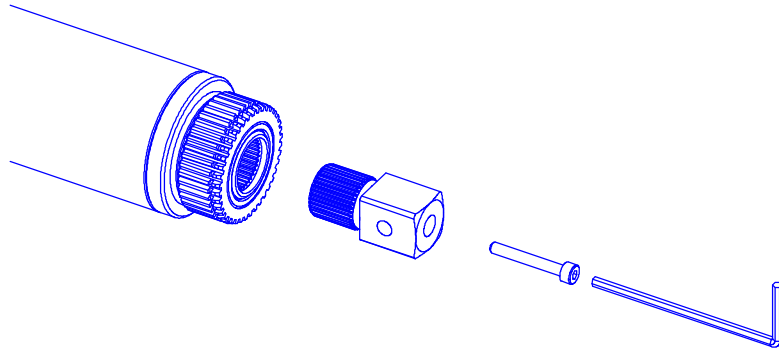


Figure 10

The drive square can be replaced with either a $\frac{3}{4}$ " drive square (#18544), or a 1" drive square (#18545). A new retaining screw (#25351.30) is supplied with the square.

To replace drive square:

1. Use 3mm hexagon key to remove screw.
2. Remove drive square.
3. Fit new drive square.
4. Fit new screw and tighten to 4 N.m - 5 N.m.

TIP: If the square has sheared it may be necessary to use pliers to remove the broken parts.

CLEANING:-

Keep the tool in a clean condition to aid safety. Do not use abrasives or solvent based cleaners.

SPECIFICATIONS

| MODEL | RANGE | | MAXIMUM OVERLOAD | TOOL SPEED (FREE RUNNING AT MAX. AIR PRESSURE) |
|---------------|---------|----------|------------------|---|
| | MIN | MAX | | |
| 18039 & 18041 | 120 N.m | 600 N.m | 660 N.m | 200 r/min |
| 18040 & 18042 | 200 N.m | 1000 N.m | 1100 N.m | 125 r/min |

| | |
|-----------------------------|--|
| Repeatability: | ± 5% |
| Air Supply: | Maximum pressure – 6.3 bar (For maximum torque capacity). |
| Recommended Lubrication: | Shell Tellus 15 for the Lubro Control Unit. |
| Temperature Range: | 0°C to +50°C (operating). -20°C to +60°C (storage). |
| Maximum Operating Humidity: | 85% Relative Humidity @30°C. |
| Case Materials / Finish: | Handle: Aluminium casting with epoxy powder finish. Direction Gearbox: Aluminium with epoxy powder finish. Annulus: Alloy steel with nickel plate finish. Reaction Plate: Alloy steel with epoxy powder finish. |

| TYPE | MODELS | WEIGHT | DIMENSIONS |
|--------------------------|-----------|----------------|---------------------------|
| Forward (Clockwise) only | 180XX.F06 | 3.8 kg (8.8lb) | 345mm x 55mm wide x 255mm |
| Bi-directional | 180XX.B06 | 4.0 kg (9.3lb) | 385mm x 55mm wide x 255mm |

| | |
|------------------------------|--|
| Maximum Vibration at Handle: | < 2.5m/s ² Tested in accordance with ISO 8662-7 Hand Held portable tools – Measurement of vibrations at the handle. |
| Sound Pressure Level: | 83 dBA measured at 1m equivalent continuous A weighted sound. Tested to BS ISO 3744: 1994 Acoustics – Determination of sound power levels of noise sources using sound pressure – Engineering method in an essentially free field over a reflecting plane. Test conducted in free running condition with a supply pressure of 6.3 bar. |
| Environment: | Indoor use within a light industrial environment. |
| Machinery Directive: | In conformance with: BSEN 792-6:2000 Hand-held non-electric power tools. Safety requirements. Assembly power tools for threaded fasteners. |

Due to continuous improvement all specifications are subject to change without prior notice.

Declaration of Conformity

Manufactured by Norbar Torque Tools Ltd.,
Beaumont Road, Banbury, Oxon, OX16 1XJ

The Directives covered by this Declaration

Safety of Machinery Directive, 98/37/EEC

The Equipment Covered by this Declaration

Equipment: 52mm Stall Tool.

Model No.(s): 18039.F06, 18039.B06,
18040.F06, 18040.B06,
18041.F06, 18041.B06,
18042.F06, & 18042.B06.

The Basis on which Conformity is being Declared

The equipment identified above is in compliance with the protection requirements of the above directives, and the following standards have been applied:-

EN 792-6:2000 Hand-held non-electric power tools – Safety requirements
Pt 6: Assembly power tools for threaded fasteners

The technical documentation required to demonstrate that the products meet the requirements of the above Directives has been compiled and is available for inspection by the relevant enforcement authorities. The CE mark was first applied in: 2002.

Signed:  **Full Name:** Trevor Lester

Date: 17th June 2005 **Authority:** Compliance Engineer

TROUBLE SHOOTING

The following is only a guide, for more complex faults please contact your local Norbar distributor or Norbar directly.

| PROBLEM | LIKELY SOLUTIONS |
|--|---|
| Tool output does not rotate when trigger pulled. | Check air supply is functioning & connected. Check air pressure setting (at least 1 bar). Check correct setting of direction knob. Output drive square sheared, needs replacing. Gear train or air motor is damaged |
| Drive square sheared. | See maintenance section to replace. |
| Tool does not stall. | Tool has not achieved torque, increase air pressure. Fastener sheared or thread stripped. Gear train or air motor is damaged |

GLOSSARY OF TERMS

| WORD OR TERM | MEANING |
|--------------------|---|
| Air pressure graph | Graph supplied with Stall only tool to show air pressure setting against required torque. |
| Bi-directional | Tool capable of Clockwise & Counter-clockwise square rotation. |
| Lubro Control Unit | Unit to provide filtering and lubrication along with pressure regulation. Not supplied with tool. |
| Oil free air | Regulated air without oil lubrication. |
| Pneutorque® | Product name. |
| Reaction Arm | Device to counteract applied torque. |
| Calibration device | Torque calibration system comprising of suitable torque transducer and display capable of measuring peak torque along with a suitable run down fixture or test fastener. Alternatively use the torque transducer on the fastener being tightened. |



1204 E. Maple Rd.
Troy, MI 48083

(800) 852-1368
FAX (800) 582-9015

CORPORATE HEADQUARTERS
1000 S.E. Pine St.
Portland, OR 97216

(800) 852-1368
FAX (800) 582-9015

Ave. Morones Prieto 2110 Pte.
Col. Loma Larga
Monterrey, NL CP 64710, Mexico
52-81 1001-1600
FAX 52-81 1001-1630