



Model No.: SFC-ED Torque Tool

Serial No.:

SFC Ref No.:



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1. INTRODUCTION

The SFC-ED Pneumatic Torque Tool is a handheld, air driven, non-impacting torque delivery tool, which is an efficient portable valve actuator. The SFC-ED Pneumatic Torque Tool must always be used with the following:-

- A Clean Dry Air Supply with a minimum flow of 19L/Sec (40 CFM)
- Lubro Control Unit (with filter regulator lubricator)

2. TRAINING REQUIREMENTS

Training on the correct use of the SFC-ED Pneumatic torque Tool and SFC-ED Lubro Control Unit is available on request.

GENERAL SAFETY

The improper use of pneumatic equipment is unsafe and may result in personal injury. It is imperative that each operator has read, understood and complies with all instructions in this User Guide. Good communication must be established to prevent accidents or complications on site.

Operators must be equipped with the following personal protective equipment (PPE):

- Eye Protection (Safety Glasses/Goggles), Safety Footwear (Steel Toe Cap Boots) and Gloves.
- All pneumatic equipment and ancillary products should be inspected for damage and irregularities prior to use.
- Before use, check the pneumatic hoses have not been damaged in any way: Check the hose is not cut, split or kinked.
- Take care not to stand on, run over or trip over pneumatic hoses.
- Where possible, try to avoid placing lines across walkways, ladders etc and that personnel who are likely to pass through the working area are made aware of the potential hazard.
- Direct the tool exhaust away from operator/personnel.
- To prevent entanglement with rotating parts, operators must not wear loose items e.g. clothing, ties, jewellery and long hair must be tied back.
- Keep hands, fingers and body parts clear of the reaction arm at all times as trapping can result in serious personal injury.



3. SFC-ED TOOL MODELS COVERED BY MANUAL

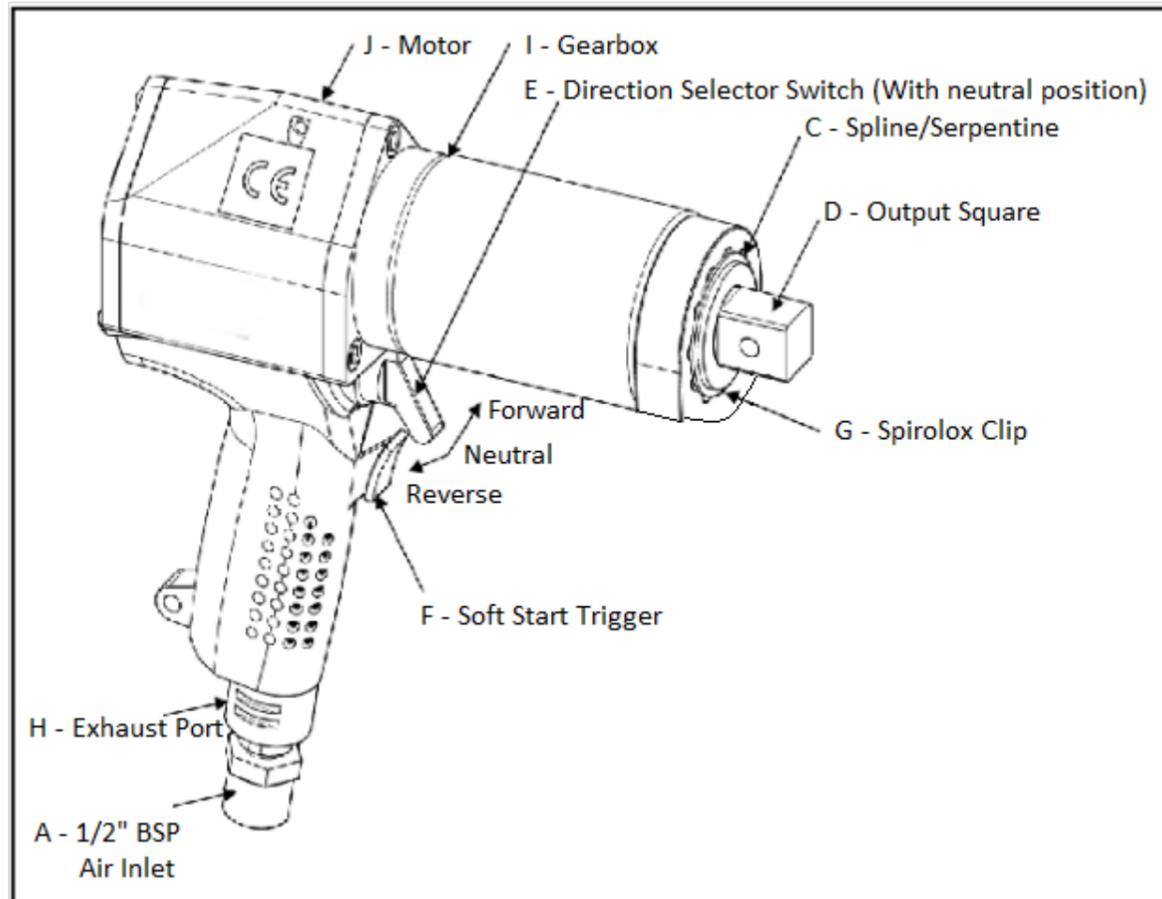
Model	Weight (Kg)	Speed (RPM)		Torque Range (Nm)		Square Drive
		Single	Auto 2	Minimum	Maximum	
SFC-ED 1	2.5	290	N/A	20	100	3/4"
SFC-ED 5	2.7	55	N/A	80	500	3/4"
SFC-ED 10	3.5	30	N/A	150	950	3/4"

NOISE & VIBRATION LEVELS

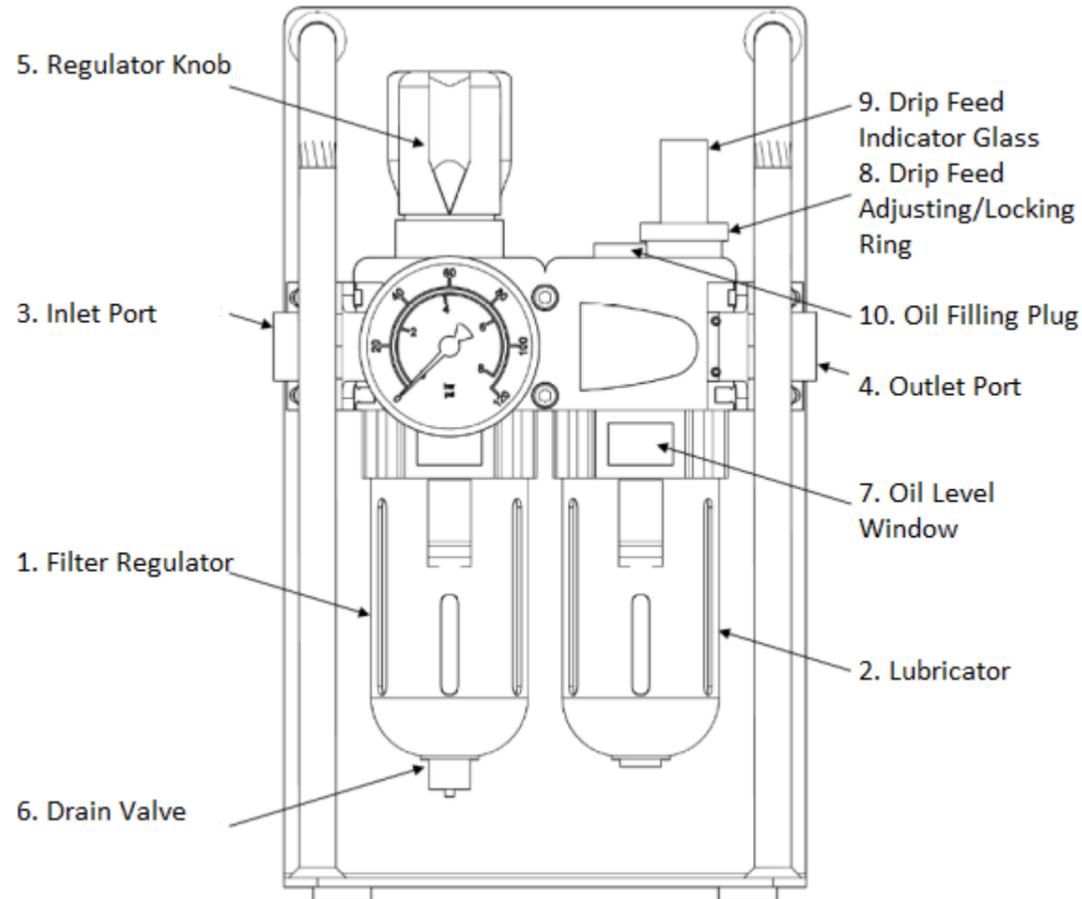
NOISE: Equivalent continuous A weighted sound pressure level is less than 85 dB(A).

VIBRATION: Vibration level at handle does not exceed 2.5m/sec.

4. SFC-ED TOOL FEATURES



5. TYPICAL SFC-ED LUBRO UNIT PARTS LAYOUT



SFC-ED Lubro Layout may differ than that shown (image for indication only)

6. SFC-ED LUBRO PRE-CHECK

Check oil level in lubricator and fill to correct level if required. To fill the lubricator with oil:

- Remove the oil filling plug (10) using a 6mm Allen key
- Pour the specified oil into the lubricator, fill to maximum level as indicated on the oil level window (7) and replace the plug

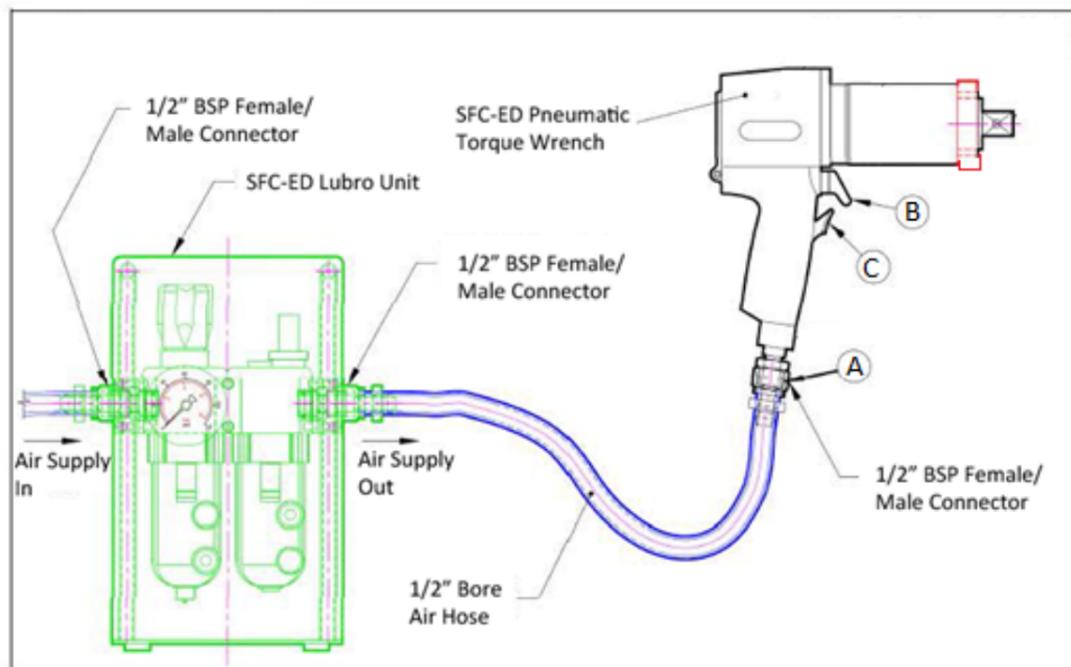
LUBRICATION: SFC-ED Lubro and Air Motor: - ISO 32 or Equivalent Good Quality Hydraulic Oil. **Do Not Use Synthetic Oils or Anti-Freeze Solution**



ASSEMBLY

Please refer to "Typical SFC-ED Lubro Unit Parts Layout" (Previous Page) & Figure below for the following points:-

- Blow out all hoses before connecting. Visually inspect hoses for damage before use. If using non-SFC supplied hose please ensure hose is correctly rated.
- Before connection to SFC-ED tool, ensure the direction selector switch (B) is in the neutral (middle) position.
- Connect the tool air inlet (A) to the outlet side of the SFC-ED lubro control unit, observing air flow direction arrows.
- Connect air supply to inlet side of the SFC-ED lubro control unit using a minimum hose size of ½" bore (12mm). Avoid using ½" bore hoses longer than 5 metres from the supply to the SFC-ED lubro control unit as this will reduce the performance of the tool. Ensure the connectors are securely fastened.
- Make All Connections To The Tool Before Turning on The Air Supply.



7. TORQUE REACTION

All valve movement is fully controlled by the Torque Reaction Device, providing complete protection from potential 'kick'.

8. SETTING TORQUE

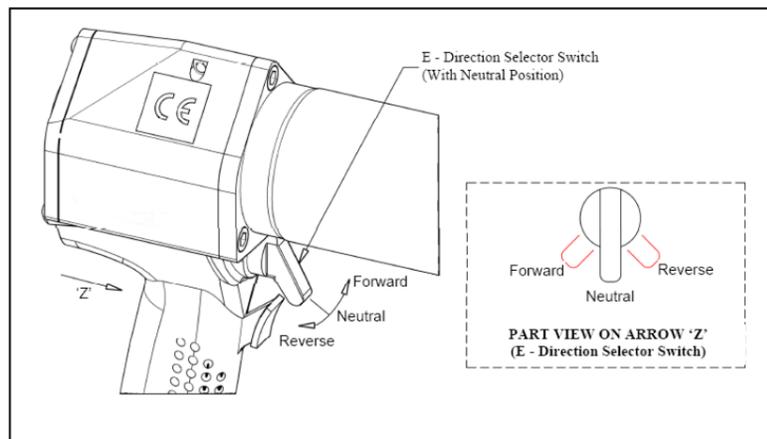
Every SFC-ED Tool is supplied with an individual air pressure calibration graph which relates torque output to air pressure. Set the torque output as follows:-

- 1 Ensure direction selector switch (B) is set to "Forward".
- 2 Identify the air pressure required using the air pressure calibration graph.
- 3 Adjust the SFC-ED Lubro Control Unit regulator knob (5) (see "Typical SFC-ED Lubro Unit Parts Layout" section) whilst free running the SFC-ED tool until the correct pressure is shown on the SFC-ED Lubro pressure gauge. Do not exceed the maximum air pressure setting of the air pressure calibration graph.

INFORMATION: While the tool is free running check that the SFC-ED lubro control unit is supplying approximately six drops of oil per minute. View flow rate through indicator sight glass (9) (see "Typical SFC-ED Lubro Unit Parts Layout" section)

To adjust the SFC-ED Lubro oil flow lift the adjusting ring (8) and turn to suit (clockwise to decrease flow, anti-clockwise to increase flow). Push the locking ring down to lock the adjustment.

- 4 When the air pressure is set, return the forward/reverse switch (B) to the neutral position and keep in this position until the tool is positioned on the fastener.



9. OPERATING THE TOOL

1. Check that the SFC-ED Lubro Unit is collected to the torque tool.
2. Fit the tool into the universal, 'bolt-on', handwheel drive plate.
3. Move the direction selector switch (B) from the neutral position and into either forward or reverse as required.
4. Squeeze the soft start trigger (C) to activate the tool and apply the torque.
5. Fully press the soft start trigger (C) and keep pressed until the tool stalls, indicating either a fully open/closed valve.
6. Remove torque tool from valve.

IMPORTANT: If breakdown, malfunction or damage occurs do not attempt to repair, contact Smith Flow Control Limited

10. MAINTENANCE AND RECALIBRATION

To prevent premature failure and ensure confidence in torque supply, it is recommended that this equipment is serviced and calibrated at least on an annual basis.

Check oil level in lubricator and fill if required (See "SFC-ED Lubro Pre-Check" Page for details)

11. WARRANTY

SFC-ED tools come with a one year (1) conditional warranty.

SFC-ED Tools are guaranteed against manufacturer and material defects, but not against abuse, misuse or neglect by the user.

12. CONTACT

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