Operating Instructions
Preset Torque Wrenches - LTC/LTCR/LTCS Series

Sturtevant Richmont preset torque wrenches are designed and manufactured to provide consistent user-selectable torque in high-cycle applications. They meet ASME B107.14 and ISO 6789 specifications of ± 4% indicated Value accuracy from 20% to 100% of tool capacity.

The ratcheting and square drive tools (SDR & SD Series) operate and deliver torque in the clockwise (CW) direction only, as shown by the arrow on the case. The wrench can be used in the counter-clockwise (CCW) direction within the capacity of the tool, but will not indicate torque. The interchangeable head tools (LTC Series) may be used in either direction with the same accuracy by removing the head and mounting it in the opposite direction.

S/R preset torque wrenches signal that the preset torque has been attained by emitting a distinct audible and tactile impulse (click).

Preset torque wrenches do not have increments and must be set using a torque tester. These wrenches can be set using any unit of torque measurement.
Caution

Always wear safety glasses when working with hand tools.
Be sure fastener engagement device fully engages fastener before applying torque.
Cheater bars should never be used to increase leverage on the torque wrench.
Never use a torque wrench beyond its rated capacity.
Use tool only for purpose intended.

Torque Setting

Required Equipment
1. Torque tester accurate to ± 1% Indicated Value accuracy or greater.

Procedure
1. Insert CART tool into rear of wrench so that the Adjusting Key engages the Adjusting Plug and the Locking Key engages the Lock Plug.
2. Engage tester with tool. Interchangeable Head or socket may be required.
3. Rotate Locking Key CCW to disengage Lock Plug from Adjusting Plug.
4. Grasp the vinyl grip of the wrench and load the tool to determine the current setting on the tester.
   A. If current setting is below the desired torque, rotate the Adjusting Key CW to raise torque.
   B. If current setting is above the desired torque, rotate the Adjusting Key CCW to lower torque.
   C. If current setting is at the desired torque, go to the next step.
5. Hold the Adjusting Key in place and turn the Locking Key until the plugs are seated firmly together.
6. Recheck wrench to assure torque setting was not inadvertently changed when the plugs were locked in place. If tool is still at desired setting, it is ready for use. If not, repeat this procedure.

Torque Wrench Use
1. Attach appropriate fastener engagement device (S/R Interchangeable Head, socket, etc.) to the wrench. Note: It is imperative the fastener engagement device maintain the same lever length as was used during presetting. Failure to maintain lever length will cause the applied torque to differ from the preset torque.
2. Engage the fastener while holding the wrench perpendicular to the axis of the fastener.
3. Grasp the center of the grip and with a steady force pull (or push) in the direction marked on the case.
4. Continue to pull (push) until an audible/tactile impulse (click) is experienced.
5. Stop applying force immediately to prevent overtorking.

Use of Extensions and Adapters
Any style or type of device added to the wrench that changes the lever length will have an effect on torque output. Always set the desired torque with the extension or adapter in place.

Care and Cleaning
Clean the wrench with a soft damp cloth. Do not immerse the wrench in cleaning fluids. If the wrench is to be stored for an extended period of time, adjust the tool to 20% of capacity before storing it. Always store wrench in a clean and dry environment.

Certification, Service and Repair
Repair parts may be ordered from your S/R distributor.

Factory repair and presetting are available. We can also provide certification by our ISO/IEC 17025 Accredited calibration laboratory. These can be obtained by contacting us using the information provided on the front.