

Operating Instructions

Pneumatic Impact Wrenches “Torque-Limited”



WARNING

In order to reduce the risk of injury, the operating instructions and safety regulations must have been read and understood!



SL185-4TiD



SL150-4PD



SL175-4TD

Never use torque-limited impact wrenches without a torque wrench!



Please refer to the vehicle manufacturer's operating instructions, and apply the tightening torques specified there!



Please read the operating instructions in full and for your own safety follow all of the instructions contained therein.

Store the manual in a secure location.

Attention!

Remember that in accordance with the safety provisions of the Machinery Directive, a compressed air connection must not be made directly to the air inlet of the compressed air machine. Plug-in sleeves with pressed ends, screwed into the air inlet of the device provide the greatest level of safety.



Scope of delivery

Open the packaging and check the contents.

- 1 x compressed air device
- 1 x dehumidifier
- 1 x safety regulations
- 1 x EC Declaration of Conformity
- 1 x operating instructions
- 1 x technical specifications
- 1 x spare parts list

Function of “torque-limited” impact wrench

- The “torque-limited” impact wrench is a compressed air device and is used for releasing or tightening of screw connections on passenger car wheels. **For doing so, it is essential to check the wheel bolts with a torque wrench, since most manufacturers' specifications are above 90 Nm (e.g. 110 Nm for alloy wheels and 120 Nm for steel rims)!**
- Never use the “torque-limited” impact wrench for any other purpose.
- Please observe the safety regulations!

Application of “torque-limited” impact wrench

When working with compressed air devices, observe the safety regulations!

The structure of the “torque-limited” impact wrench is shown in detail in the spare parts list.

Essentially, the “torque-limited” impact wrench consists of the following main components:

1. Square drive shaft:

For mounting the socket. **Attention!** For impact wrenches, use only shock-resistant sockets!

2. Reversing switch:

For reversing the rotation of the square drive shaft.

3. Trigger

Starts the device.

Performance / torque information

Attention! Since the performance/torque is heavily dependent on the available flow pressure and its properties, it is not possible to guarantee repeat accuracy. The performance and available torque also depend to a large extent on the user and the duration of operation. It is therefore essential that only trained, qualified personnel work with these compressed-air devices.

Information for operation

- Connect device to the compressed air supply.
- The socket must slide tightly on the drive spindle.
- To release the socket, pull vigorously to overcome the clamping action of the socket catch. Soiling might result in the socket getting jammed. In this case it may be useful to spray a little lubrication oil into the mount, and to tap lightly on the socket with a rubber mallet. Make sure to clean all components after successful disconnection.
- The machine starts when the trigger is pulled. The machine stops when the trigger is released again.
- To reverse the rotation of the drive spindle, use the reversing switch. The direction of rotation is indicated on the device.
- To prevent an unwanted reaction torque, always check the position of the reversing switch before use.
- Use the reversing switch only when the drive spindle is standing still. **Attention!** Failure to observe this might destroy the drive assembly of the machine.
- Always hold the machine firmly by hand to ensure correct function.
- **Attention!** Use only shock-resistant sockets. Replace worn sockets immediately.
- The drive spindle, socket and screw/nut must always be aligned to ensure safe and proper function. Never use the “torque-limited” impact wrench on screw connections for which it is not designed, or that cannot be released. Doing so might destroy the impact wrench, socket or screw connection. Test the “torque-limited” impact wrench beforehand on a test screw connection in order to determine the required time for tightening a screw/nut.
- **After tightening wheel bolts/nuts, always use a torque wrench to check according to manufacturer's specifications. For these torque specifications, refer to the vehicle operating instructions.**
- Tightening or releasing torques depend on many factors: If the air flow pressure is below 6.2 bar, the tightening or releasing torque will also be reduced. Worn sockets and socket adapters will reduce the tightening and releasing torques. Tightening and releasing torques vary with different screw/nut sizes.

Technical specifications

Model	Square drive shaft [inch]	Torque operating range [Nm]	Air consumption* ³ [Nl/min]	Speed [per min]	Weight [kg]	Air inlet thread [inch]	Hand-arm vibration* ¹ ^a _{hd} [m/s ²]	Sound pressure* ² ^L _{pA} [dB(A)]	Sound power* ² ^L _{WA} [dB(A)]
SL150-4PD	½	Tightening: 70–90 Releasing: 850–1050	105	7000	1.9	¼	5.1	86.7	97.7
SL175-4TD	½	Tightening: 70–90 Releasing: 1150–1350	195	8600	2.1	¼	5.4	83.5	94.5
SL185-4TID	½	Tightening: 70–90 Releasing: 1150–1450	195	8600	2.1	¼	5.1	82.8	93.8

*¹ ISO 28927 (3 axes)

*² ISO 15744 / The requirement of ISO 3744 for a measurement in accuracy class 2: $K_2 < 2$ dB has been met.

*³ Air consumption depends heavily on the available pressures in the compressed air system, the air connections and the lines, the properties of the screw joint, and handling by the user.

For dimensioning of the pressure supply for compressed air tools, it is recommended to multiply the specified air consumption by 1.5, and for continuous operation / idling by 2.8.

The highest permissible continuous flow pressure / operating pressure directly at the machine should not exceed 6.2 bar / 90 psi. The flow pressure of 6.2 bar at the machine results from a static pressure of 8 bar at the service device minus approx. 1.8 bar pressure loss in the connection lines of min. 8 mm inside diameter and couplings of min. 7 mm inside diameter.

The values shown were calculated under lab conditions, but are not sufficient for risk analyses. The actual values may differ according to the actual conditions. The exact exposure and health risks for users will differ. Crucial factors are work practices, the condition of the screw joint, and the duration of use.

Since the measured values of the actual exposure on site are beyond are control, AirApp Power Tools GmbH accepts no liability for the consequences of any health risk.

This tool can trigger carpal tunnel syndrome if its use is not carefully controlled.

Further information on hand-arm vibrations are available online: <http://www.humanvibration.de>

Maintenance

When servicing the impact wrench/ratchet, observe the environmental regulations under local law.

To achieve a longer lifetime, the manufacturer recommends annual professional maintenance by trained, qualified personnel of your service partner.

If you have any questions, please contact the manufacturer.

Lubrication of the impact mechanism

Disconnect the impact wrench from the compressed air in order to prevent accidental activation.

The impact mechanism must be lubricated to ensure proper functioning of the mechanics.

1. Only use lubricating grease or oil approved by the manufacturer
2. Use a grease gun with the appropriate nozzle.
3. Before lubrication, remove external dirt.

The frequency of lubrication and quantity of lubricating grease or oil to be used depends on how the machine is used. A need for maintenance is indicated by decreasing performance of the machine. Maintenance must be carried out no later than that.

Lubrication of the motor

Disconnect the impact wrench from the compressed air in order to prevent accidental activation.

The motor requires lubrication to ensure proper functioning of the motor component group.

1. Use only mist lubricant approved by the manufacturer
2. Clean the air inlet of dirt before oiling
3. Insert mist lubricant (approx. 2–3 drops) into the air inlet, while keeping the trigger pressed
4. Allow the machine to idle briefly at the lowest power setting

Attention!

Maintenance of the impact wrench/ratchet may only be carried out by qualified personnel.

Repairs should only be carried out by the service partner of the manufacturer.

Disposal

When disposing of the device, comply with applicable local legislation. Remember that incorrect disposing of lubricants causes environmental damage.

We accept no liability or warranty for damage or injuries resulting from improper use or misuse or failure to comply with the safety information.

The device must only be used for the applications described.

Any other use is prohibited.