SI-1420T / SI-1422T

PNEUMATIC TOOLS SHINANO INC.

INSTRUCTION MANUAL FOR AIR IMPACT WRENCH

Safety Precautions

To ensure safe operation of this pneumatic tool, always adhere to the following safety standards:

■Work Area and Apparel
Always wear approved safety goggles, a dust mask, ear protectors (hearing protection), and safety shoes during operation.
Do not wear loose-fitting clothing, ties, necklaces, or unconfined long hair, as they can be caught in the rotating parts.
Never operate this tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or high dust levels.
Sparks generated during operation can ignite dust or fumes.

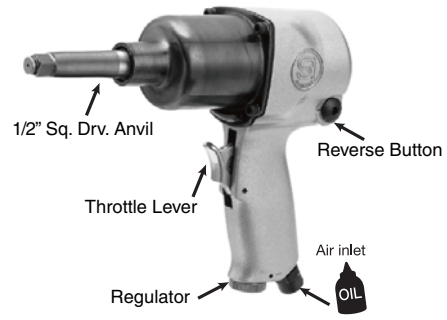
■Air Supply & Pressure Management
Do not exceed the maximum operating air pressure of 0.63 MPa (90 PSI).
Excessive air pressure can cause tool bursting or abnormal high-speed rotation, resulting in severe danger.
Ensure the air supply line is equipped with an air filter to remove moisture/debris and a lubricator for continuous tool oiling.

SI-1420T



Accessories : Safety instructions (1)

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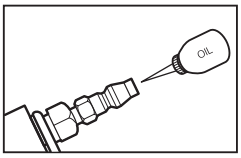
Accessories : Safety instructions (1)

Air Supply & Connection

Dry & Clean Air: Ensure the air compressor delivers clean, dry air.
Moisture and dust in the air line will cause rust and damage the internal motor components.
Hose Connection: Clean the air hose and fittings before connecting them to the tool.
FRL Unit: The use of an air filter-regulator-lubricator (FRL) unit is highly recommended to maintain tool longevity and performance.

Daily Lubrication

If an automatic line lubricator is not used, inject 1 to 2 drops of high-grade pneumatic tool oil (ISO VG32 turbine oil) directly into the air inlet before and after each use.
Run the tool at free speed for a few seconds to distribute the oil evenly inside the motor.



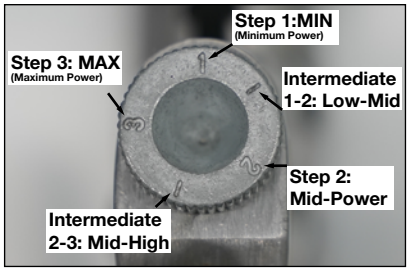
Operating Instructions

CAUTION: Always disconnect the air hose from the tool before installing, removing, or adjusting the sockets to prevent accidental startup.

1. Socket Installation & Removal
Always use impact-rated sockets. Never use standard hand-tool sockets, as they may shatter under impact load and cause serious injury.
Align the impact socket with the 3/8" square drive of the tool and press it firmly until it locks completely securely in place.
Verification: Hand-test the socket by giving it a light pull to ensure it is completely locked in place.
Visually check that the socket is aligned straight along the center axis before operation.
Removal: Disconnect the air supply, then pull the socket straight off the anvil.

2. Forward/Reverse Operation & Torque Adjustment
Push-Button Mechanism: This model features a push-button action for reverse operation.
Press the button to switch the rotation direction for loosening (Reverse), and reset or switch back for tightening (Forward) according to your work objective.
Built-In 5-Step Air Regulator: This model features a built-in air regulator (output adjustment dial) with 5 adjustment settings.
Adjust the dial to the appropriate power and torque level (from Min to Max across 5 steps) suited for the size of the bolt/nut and the hardness of the material.

3. Tool Handling & Operation
Hold the tool securely with a firm grip to withstand the reaction force during operation.
Align the socket straight and accurately onto the nut or bolt head.
Trigger Operation: Pull the throttle trigger to operate the tool, and release it to stop.
As soon as the nut is fully run down or loosened, release the trigger immediately.
Wait until the tool stops rotating completely before lifting the socket off the nut/bolt head and putting the tool down.H



5-Step Air Regulator



Forward/Reverse Button

Maintenance & Storage

Post-Use Cleaning: Remove the socket after use. Clean the tool body and air inlet area with a dry cloth or clean compressed air to remove accumulated chips,grease, and dust.
Moisture Drainage: Drain the compressor tank and air line water traps daily.
Moisture entering the tool internals causes rust and premature motor failure.
Storage: Store the tool in a dry, safe environment. If the tool is to be stored for an extended period, apply a generous amount of air oil into the inlet, run it for 2-3 seconds to coat internal components, and wrap it securely.
Ensure that dust and debris do not enter through the air inlet during storage, as this can cause a drop in power or malfunctions.

SI-1420T / SI-1422T Specifications

Model Number	Free Speed rpm	Anvil Size in./(mm)	Max Torque Nm/(ft-lb)	Working Torque Nm/(ft-lb)	Bolt Cap mm/(in.)	Weight kg/(lb)	Noise Level dBA/(power)	Vibration a/k m/s^2	Avg.Air Consumption CFM	Hose Size mm/(in.)
SI-1420T	6,000	1/2"/ (12.7)	500/(369)	0-400/(0-295)	18/(11/16)	2.55/(5.62)	91/(102)	7.3/(1.2)	4.0/(1.9)	10 / (3/8")
SI-1422T	6,000	1/2"/ (12.7)	480/(354)	0-360/(0-266)	18/(11/16)	2.65/(5.82)	92/(103)	8.2/(1.3)	4.0/(1.9)	10 / (3/8")

Noise levels according to ISO 15744:2008,ISO 11203:2009 Vibration level according to ISO 28927

⚠ WARNING

- Avoid using the tool for the other purpose than the usage, and do the impossible operation beyond the ability.
- Be sure to employ the impact socket. Furthermore, neither use the damaged socket nor the different size socket.
- For replacement of impact socket, be sure to dismount the air hose.

⚠ CAUTION

- Avoid unnecessary idling run, which will encourage to wear and result in trouble.
- The air tool is a precious tool. Be careful not to throw or drop the tool, or give a strong shock thereto.
- After operations, be sure to prevent dusts from entering at the air inlet. This may result in power down.
- Operate the tool within the air pressure of 0.63MPa (6.5kg/cm^2). If operated in high pressure, the maximum allowance speed will be exceeded, which may result in damage of components.

AIR SUPPLY

Pressure at the working	**0.63MPa (90PSI 6.3bar)**
Max Hose Length	**10m (30ft)**
Lubrication	**Daily Lubricating oil**

