

TONE® PNEUMATIC SHEAR WRENCH

INSTRUCTION MANUAL

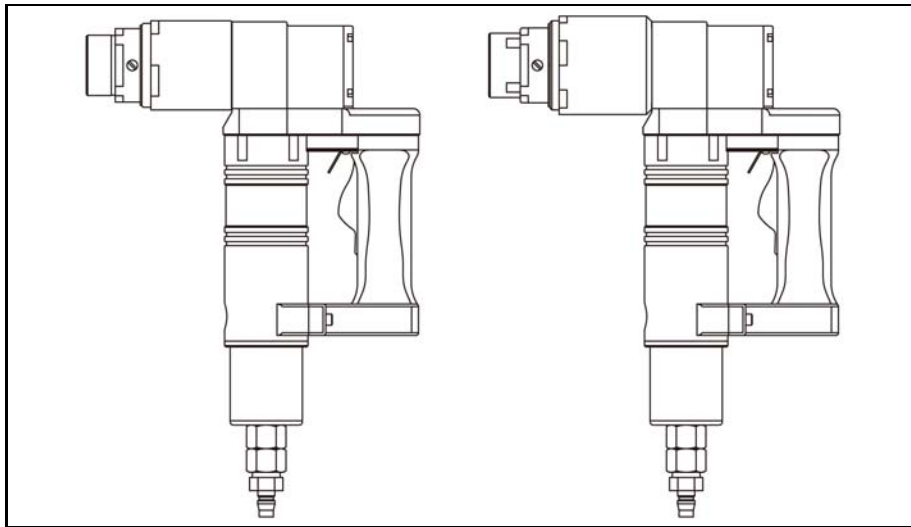
No. 0901

TO BE
PRESERVED

MODEL

PW200

PW220



CAUTION

Read and fully understand all the instructions before use.
Keep this manual in designated place for easy and quick reference.

The model mentioned on this manual is designed for use outside
□ Japan.

Warranty shall be void if above mentioned model is used in
Japan.



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- Specifications and the design are subject to change without notice. •

LeJeune Bolt Company

INTRODUCTION

Thank you for purchasing the LeJeune PNEUMATIC SHEAR WRENCH

- Upon receipt, check and confirm the following:
 - Check any transport damages.
 - Check for any loose or lost screws and bolts.
 - Check the model as per order.
 - Check all the accessories are contained. (see page 20)

If any problems are found, contact your LeJeune Bolt Company

- Read this instruction manual carefully before use. Full understanding of manual is essential to prevent personal injury or malfunction.
- Keep this manual in a bag attached to the back of metal case lid for easy and quick reference.
- If manual or warning label is lost or becomes illegible, or if additional manual is required, contact LeJeune Bolt Company.

If you have any questions about the products or the contents of this instruction manual, contact LeJeune Bolt Company.

- This manual is only applicable to outside of Japan.

SAFETY INSTRUCTIONS

This manual specifies three (3) basic safety instructions:



DANGER



WARNING



CAUTION

- Instructions are classified by degree of risk and described as follows:



DANGER

Danger is used to indicate threatening dangerous or unsafe practices which could imminently result in severe personal injury or death in the worst case.



WARNING

Warning is used to indicate hazardous or unsafe practices which could result in severe personal injury or death in the worst occasion.




CAUTION

Caution is used to indicate hazardous or unsafe practices which could result in personal injury or product or property damage.

Even if the risk is classified as **CAUTION**, risk could become more serious result depending on conditions. Make sure to follow all instructions when using..

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1. APPLICATION


- TONE PNEUMATIC SHEAR WRENCH is a pneumatic tool for tightening Tension Control Bolts/Nuts.

2.  PRECAUTIONS FOR USE

- To prevent accident, personal injury and etc, read and follow all instructions listed below.

 **DANGER**

- **Never use power source other than air compressor.**
Failure to follow this instruction such as use of high pressure gas invites explosion.

 **WARNING**

- **Use rated air pressure.**
Failure to follow this instruction may result in accident and personal injury.
- **Air hose must be regularly inspected.**
Stop using the wrench if there is a problem with the air hose.
Failure to follow this instruction may result in accident, personal injury or deficiency in wrench performance.

 **WARNING**

● **Use adequate air hose.**

- Use adequate air hose listed on page 19.
 - Use oil and abrasion resistant air hose.
 - Never use deteriorated or overlong air hose.
- Failure to follow these instructions may result in malfunction or deficiency in wrench performance.
-

● **Ensure air inlet fitting is securely connected.**

- There is a high risk of whipping air hose when hose is accidentally comes off the pneumatic wrench.
 - Air inlet fitting must be securely connected to the air hose and the pneumatic wrench.
 - Use adequate air inlet fitting listed on page 19.
- Failure to follow these instructions may result in serious accident and injury.
-

● **Beware of fall down accident when working at a high place.**

- Wear safety belt.
 - Provide safety net or canvas as safeguarding against falling items.
 - Confirm that no one is underneath the working site before operation.
 - Stop operation when physically or mentally tired.
- Failure to follow these instructions may result in fall down accident.

 **WARNING**

● **Avoid overloading.**

- Use pneumatic wrench and its accessories within the rated specification.

Overloading of the wrench and its accessories may result in damage of the wrench or its accessories; or accident or personal injury.

● **Properly install the socket as described in this manual.**

Incomplete installation may result in accident and personal injury.

See "CHANGING SOCKETS" on page 15 - 17

● **Avoid accidental starting.**

- Ensure the switch is in the off-position before connecting air hose.
 - Never carrying the wrench with your finger on the switch when air compressor is powered on.
- Failure to follow these instructions may result in accidental starting and personal injury.
-

● **Disconnect the air hose when:**

- not in use.
- changing accessories.
- inspection and maintenance.
- or other danger is foreseen.

Failure to follow these instructions may result in accidental starting and personal injury.

 **WARNING**

● **Never connect pneumatic wrench to electric power source.**

- Pneumatic wrench is not an insulated tool.
Failure to follow this instruction may result in serious accident and injury.

● **Do not disassemble or modify pneumatic wrench.**

Disassembly or modification made by unauthorized personnel may result in malfunction or personal injury.

Disassembly & Re-assembly work is permitted for following expendables:

Inner Socket, Outer Socket, Set Screws, Inner Socket Spring, Ejector Pin and Ejector Spring.

● **Store pneumatic wrench in the metal case and keep it in the designated place when not in use.**

- Store the wrench in lockable dry location to keep any unauthorized personnel away.

Failure to follow this instruction may result in malfunction or accident.

● **Immediately stop using and disconnect air hose from pneumatic wrench when unusual sound, vibration or smell is detected.**

- Contact your distributor immediately.
Failure to follow this instruction may result in serious injury.

 **WARNING**

● **Contact your distributor for repair service.**

Repair work should only be done by a qualified serviceman. Repair work done by an inexperienced person may cause accident, injury or malfunction.

● **Check the following items before operation.**

- Check for any deformation, crack or damage on wrench body, air hose, air inlet fitting and etc.

Do not use wrench if any problem is found on items listed above.

- Make sure that socket assembly is correctly installed on the wrench.

- Make sure that set screws are securely fastened.

Loose installation may result in accident and personal injury.

● **Immediately check the wrench when it is dropped down or banged.**

- Check for deformation, crack, damage and other abnormality. Stop using the wrench if any abnormality is found.

Continued use of faulty wrench may result in accident and personal injury.

 **CAUTION**

- **Keep work area clean.**
Cluttered areas and benches invite accidents.
- **Keep children away.**
Do not let children touch pneumatic wrench and air hose.
All visitors should be kept away from work area.
- **Secure work area.**
Keep body stance balanced and firm.
Never wrap the air hose.
Keep work area well lit.
- **Use suitable model for each application.**
Do not use pneumatic wrench beyond its capacity.
Do not use pneumatic wrench for purposes not intended.
- **Dress properly.**
Always wear gloves and non-slip safety shoes when
operating outdoor.
Always wear safety helmet.
- **Use genuine accessories or attachments
manufactured by Maeda Metal Industries, Ltd.**
- **Do not abuse air hose.**
Never carrying the pneumatic wrench by air hose.
Keep air hose away from heat, oil, sharp edges or moving
parts.

 **CAUTION**

- **Keep air motor well ventilate.**
Do not block exhaust vent.
- **Never put any items into exhaust vent.**
Water, mud or other substances entering an exhaust vent
may result in malfunction of the wrench.
- **Maintain pneumatic wrench.**
Keep the wrench handle clean, dry and free of oil or
grease.
- **Use quality Filter/Regulator/Lubricator Unit.**
Place F/R/L Unit as close as possible to the operating
pneumatic wrench.
Failure to follow this instruction may result in
accident, malfunction or deficiency in wrench
performance.
- **Beware emission of an air-oil mixture.**
Do not directly expose eyes, ears and nose to emission
of an air-oil mixture.
Failure to follow this instruction may result in
accident, injury or illness.
- **Observe local laws and rules concerning noise
level.**

3. BEFORE USE

1. Inspection

WARNING

- **Ensure the air hose is not connected to the wrench before inspection.**

Accidental starting invites personal injury.

- Check for any deformation, crack or damage on wrench body, air hose, air inlet fitting and etc.
Do not use wrench if any problem is found on items listed above.
- Make sure that socket assembly is correctly installed on the wrench.
- Make sure that set screws are securely fastened.
Loose installation may result in accident and personal injury.
See "CHANGING SOCKETS" on page 15 - 17

2. Equipments

Air Compressor

- Use sufficient air compressor. 7.5kW per wrench is required.

Air Hose

- Use 1/2" bore air hose with a maximum length of 5m.
- Oil and abrasion resistant air hose must be used.

Air Inlet Fitting

- Use Nitto Kohki part 40SH or 200-40SH or equivalent.

Filter/ Regulator/Lubricator Unit

- F/R/L Unit must be placed as close as possible to operating pneumatic wrench.
- Use a quality F/R/L Unit that meets airflow requirements.

CAUTION

- **Supply dry air below 10□ (50□) .**

Air supply over 10□ (50□) may result in malfunction or deficient in wrench performance.

- **Use a quality Filter to remove dirt.**

Not using filter may result in accident, malfunction or deficiency in wrench performance.

- **Use a quality Regulator for proper air pressure setting.**

Air pressure must be at 0.6 Mpa (90psi).

Improper pressure setting may result in accident, malfunction or deficiency in performance.

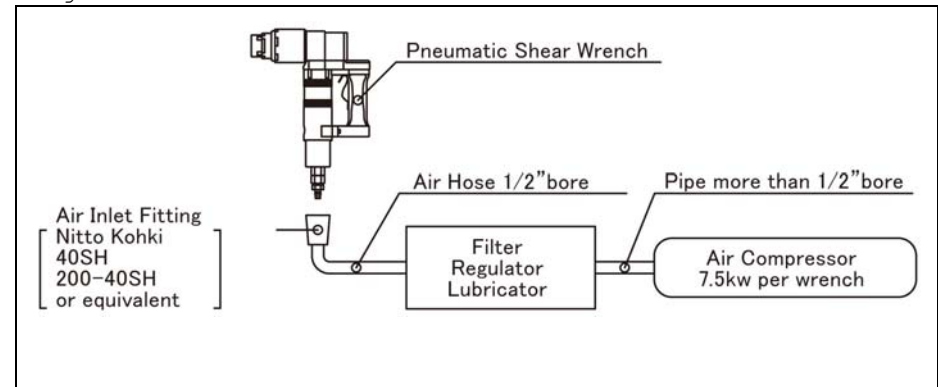
- **Use a quality Lubricator to feed air motor oil into pneumatic wrench.**

Use additive-free turbine oil ISO VG32 or equivalent. Feed 5 drops per minute.

Insufficient lubrication will invite air motor seizing, accident, malfunction or deficient in wrench performance.

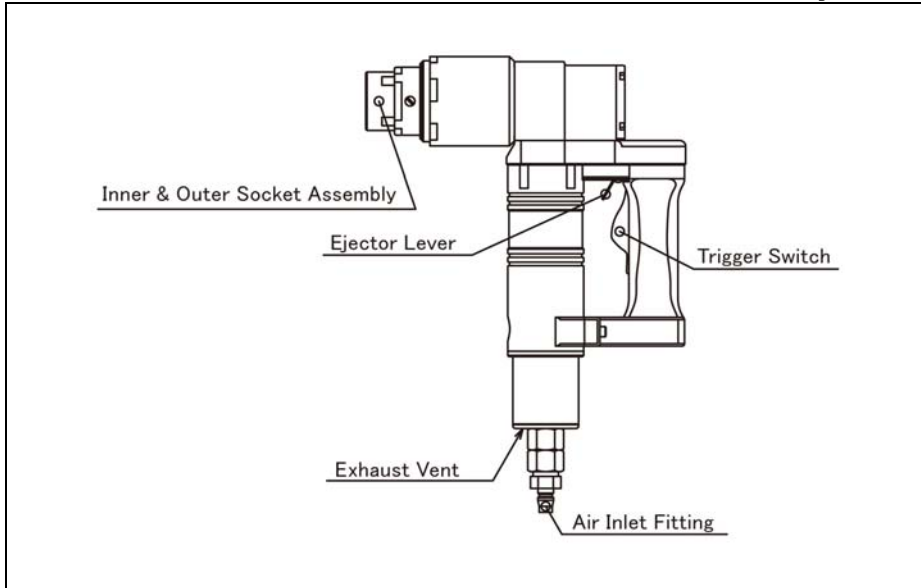
■ Basic System Setup ■

□ Figure 1□



4. PART NAME

□Figure 2□



5. OPERATING PROCEDURE

⚠ WARNING

- **Keep others a safe distance from work area.**
 - Do not throw pintail away. Collect pintail in designate bag during operation.
- Failure to follow this instruction may result in accident and personal injury.

⚠ CAUTION

- **Beware emission of an air-oil mixture.**
- Do not directly expose eyes, ears and nose to emission

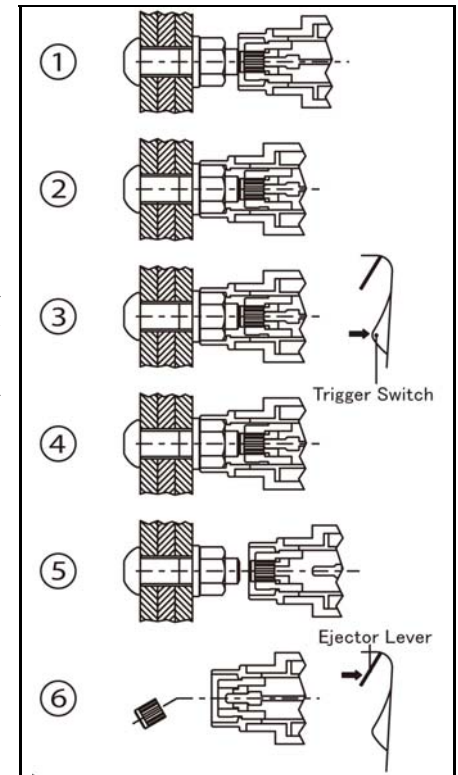
⚠ CAUTION

of an air-oil mixture.
Failure to follow this instruction may result in accident, injury or illness.

- **Snug tight by using snug tightening wrench like TONE SNUG MASTER is required before using pneumatic wrench.**

□Figure 3□

- (1) Slide Inner Socket over the bolt pintail.
- (2) Slide Outer Socket over the nut.
- (3) Squeeze trigger switch to start tightening.
- (4) Rotating speed gradually shows down as the tightening proceeds, then bolt pintail shears off when designated torque is reached.
- (5) When tightening is completed, remove pneumatic wrench from bolt/nut assembly. Sheared-off bolt pintail remains in Inner Socket.
- (6) Pull Ejector Lever to eject bolt pintail. Keep pintail in designated bag.



6. CHANGING SOCKETS

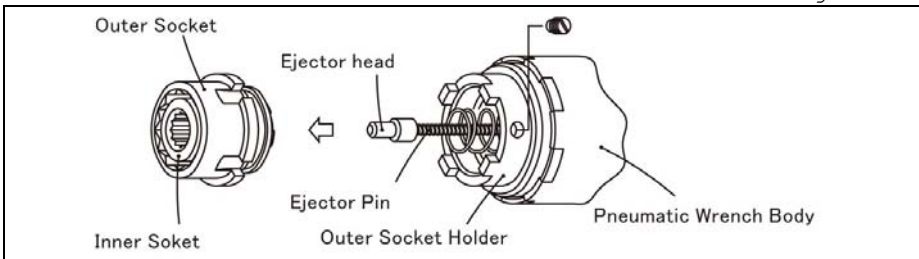
WARNING

- **Release ejector pin by pulling ejector lever before changing sockets.**

Accidental ejector pin release invites blindness or injury.

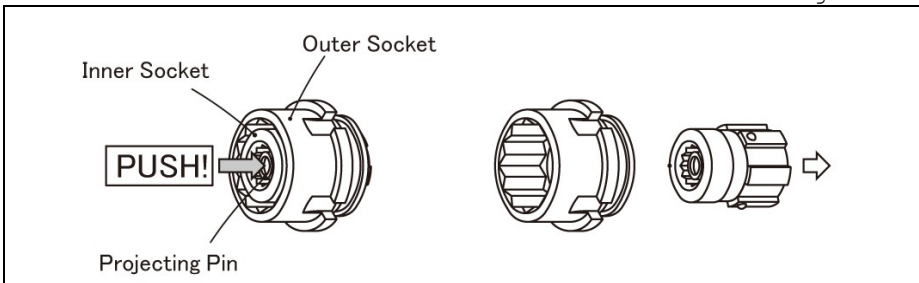
- (1) Remove inner & outer socket assembly from pneumatic wrench by unscrewing set screws (Figure 4). Do not remove set screws completely from outer socket holder.

□Figure 4□



- (2) Remove inner socket from outer socket by pushing projecting pin using screwdriver or TC bolt (Figure 5).

□Figure 5□



- Projecting pin is a doughnut-shaped pin in the inner socket.

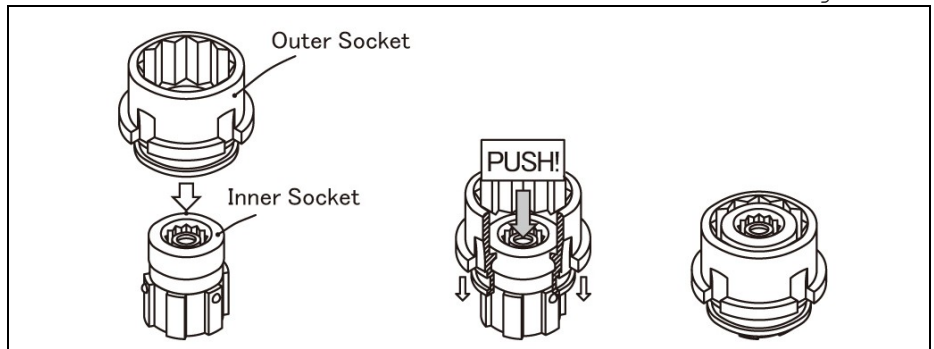
- (3) Select adequate inner & outer socket assembly of the bolts being tightened.

i.e. Use TONE genuine 5/8" inner & outer socket assembly for tightening

5/8" TC bolt/nut assembly

- (4) Place the inner socket vertically then slide the outer socket over the inner socket. Push projecting pin down using screwdriver or pintail of the TC bolt and inner & outer socket will properly assembled (Figure 6).

□Figure 6□



- (5) Set inner & outer socket assembly to pneumatic wrench body and completely remove the gap between socket assembly and wrench body.

The gap can be removed by turning & pushing down screwdriver or TC bolt into the inner socket.

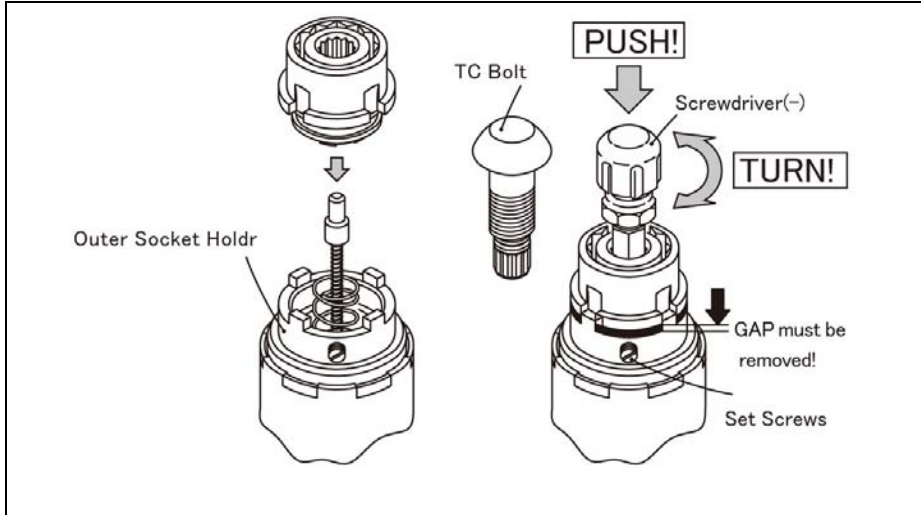
Fasten the set screws only after gap is completely removed.

⚠ WARNING

- **There should be no gap between the socket assembly and the pneumatic wrench.**

The gap invites accident or breakage of the sockets or the wrench body.

□Figure 7□



7. INSPECTION & MAINTENANCE

⚠ WARNING

- **Disconnect air hose from pneumatic wrench before inspection and maintenance.**

Accidental starting invites serious injury.

- (1) Clean dust and debris from the sockets periodically.
- (2) Use only a damp cloth to clean your wrench and sockets since certain cleaning agents and solvents are harmful to those parts. Some of these include: benzene, thinner, gasoline and etc.
- (3) Never put solvents into the exhaust vent.
- (4) Store pneumatic wrench in the metal case after operation and keep it dry.
- (5) Ejector pin must be regularly inspected and replaced when it wears down. Sheared bolt pintail will not be ejected from inner socket with worn ejector pin (Figure 4).

⚠ WARNING

- **Replace the inner socket when sheared bolt pintail is came off the inner socket without pulling the ejector lever.**
 - There is a risk of unexpected bolt pintail ejection when inner drive of the inner socket is worn down. The inner socket must be immediately replaced.Failure to follow this instruction may result in serious accident and injury.

- (7) Overhaul must be carried out every **6 months** or **30,000 tightening**, whichever comes first.

Contact your distributor for overhaul.

8. FEATURES

- Explosion protection
- TONE style grip
- Bolt/Nut Anti-Defacement mechanism
- Silencer

9. SPECIFICATIONS

MODEL	PW200	PW220
Max Air Pressure	0.6MPa [90psi]	
Max Air Consumption	1.2m ³ (normal)/min [42CFM]	
Rated Max Torque	375Nm [277 lbf ^{ft}]	610Nm [450 lbf ^{ft}]
No-load Speed	75min ^{□□} [rpm]	50min ^{□□} [rpm]
Sound Pressure Level	85dB(A)	
Adaptable Bolt Diameter	Tension Control Bolt <input type="checkbox"/> S10T <input type="checkbox"/>	
	M16	M16, M20
	Tension Control Bolt <input type="checkbox"/> A325 <input type="checkbox"/>	
	1/2", 5/8", 3/4"	1/2", 5/8", 3/4", 7/8"
External Dimensions	Outer Dia: 68mm Length: 255mm Height: 358mm	Outer Dia: 75mm Length: 268mm Height: 362mm
Wrench Weight	5.8kg [12.8 lbs]	6.3kg [13.9 lbs]
Air Compressor	7.5kW per wrench is required	
Air Temperature	below 10 ^{□□} 50°F [□]	
Air Hose	1/2" bore with a maximum length of 5m oil and abrasion resistant air hose must be used	
Air Inlet Fitting	Nitto Kohki part 40SH or 200-40SH or equivalent	

Air Motor Oil	Additive-free turbine oil ISO VG32 or equivalent
	Feed 5 drops per minute

- Wrench weight excludes sockets and air hose

10. ACCESSORIES

MODEL	ACCESSORIES	Q'TY
PW200	○ Ejector Pin	1
	○ Ejector Spring	1
	○ Inner Socket Spring	1
	○ Screwdriver (-)	1
PW220	○ Instruction Manual	1
	○ Metal Case	1

- Sockets sell separately

11. AFTER SALES SERVICE

- Please contact your distributor for details of available services.
- Please provide model, serial number, date of purchase and details of failure when contacting your distributor.

CAUTION

- Do not use pneumatic wrench when malfunction, deficiency in wrench performance, personal injury or property loss is foreseen.

