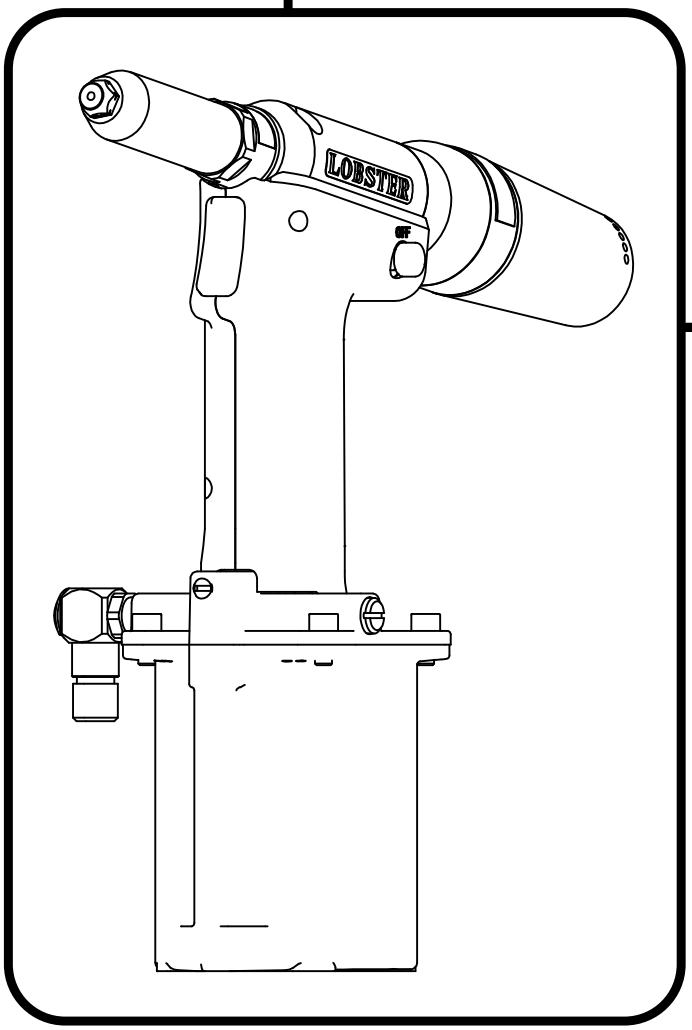
LOBSTER®

AIR RIVETER CE

INSTRUCTION MANUAL

BUILT-IN ON-DEMAND VACUUM SYSTEM

英語／ENGLISH



R1A1PL

CONTENTS

Professional model of air riveter to install blind rivets.

Thank you very much for purchasing "LOBSTER" air riveter.

・Before using this machine, thoroughly read this instruction manual to ensure proper operation.

・After reading this instruction manual, please keep these instructions.

This is Original instructions. (Original Instruction Manual is written in English language.)

MANUFACTURER

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No .RAM1PLS91011

● INTRODUCTION

Thank you very much for purchasing “LOBSTER” air riveter.

- These are the blind rivet tools which is only used for setting blind rivets. These tools are not designed for other purposes.
- This instruction manual shows how to use the tools safely, work properly, maintenance and inspection which will make tools more effectively.
- Please check the blind rivets specification and durability on customers side before using it.

1 IMPORTANT NOTICES

- Read this manual carefully before using this tool. Follow instructions in this manual for handling this tool, replacing accessories or replacing parts as needed.
- If you have any questions about this manual, contact the “LOBSTER” dealer where you purchased the tool.
- It is impossible to foresee all potential dangers and describe them in this manual. You must operate this tool paying attention to safety as well as observing the instructions in this manual.
- This manual is translated from Japanese, its original language. It is your own responsibility to achieve a full understanding of the contents of this manual before using the equipment described.
-

2 DISCLAIMER

- Our warranty does not apply to direct and indirect damages and lost income caused by the misuse, abuse, and unauthorized modification of the tool.
  We do not guarantee the strength or quality of blind rivet.
- We do not guarantee any damages and failures caused by any modifications without our written approval.
- We do not guarantee any damages and failures caused by use of parts other than our recommendation.

● IMPORTANT SAFETY INTRUCTIONS

◆ Be sure to read the following Important Safety Instructions carefully and make sure that you understand them thoroughly before using this tool.

◆ Always wear protective goggles while using the tool.
The rivets may jump out by accident and cause injuries.

◆ This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

◆ These Important Safety Instructions are divided into ⚠ WARNING and ⚠ CAUTION. The differences between these two levels are described below.

⚠ WARNING : Indicates a potentially hazardous situation which, if ignored, may result in death or serious injury to the operator.

⚠ CAUTION : Indicates a potentially hazardous situation which, if ignored, may result in moderate injury to the operator or physical damage.

Moreover, failure to follow the instructions marked with the ⚠ CAUTION symbol or cautions without a ⚠ CAUTION symbol which appear in the text of this manual may also have serious results in some cases. Always be sure to observe the instructions given in the Important Safety Instructions.

◆ After reading this manual, keep it in a safe place where it is easily accessible to all users.

⚠ WARNING

1. The air pressure should be kept within the range of 0.5 to 0.6 MPa (71 to 85 psi).
- If an air pressure which is greater than this is used, the tool may become damaged, and injury or damage to property may result.

2. Never look into the Nosepiece of the tool, and never point the Nosepiece toward other persons.
- If the tool is used while the cut mandrels are still inside the tool not being ejected, these mandrels may be ejected from the tool's Nosepiece during use and cause serious injury.

3. Always make sure that Tank Case Unit is attached to the tool before use.
- If you use the tool without Tank Case Unit, a spent mandrel may pop out when blind rivets are set and cause serious injury.

4. Do not use without the Mandrel Guard.
- If you use the tool without Mandrel Guard and forget to attach the Tank Case Unit, a spent mandrel may pop out when blind rivets are set and cause serious injury.

5. Wear protective glasses during use.
- Failure to do so may result in an accident or personal injury in case that a rivet or a piece of cut-mandrels jumps out toward you.

6. Make sure that the tool and the air source are connected securely.
- If the threads of the joints do not match or if the screws are loose, the air hose may become disconnected during use and injury may result.
- Use hose bands to securely connect the air hose joint and air hose. If they are not connected securely enough, the air hose may become disconnected during use and injury may result.

7. Turn off the air supply before disconnecting the tool from the air source.
- Compressed air may cause the air hose to whip around, and injury may result.

8. Check that all the tool parts are free from damage before use. Any damaged parts should be repaired before the tool is used.
- If the tool is used while any parts are still damaged, injury may result.
- If the tool is damaged by objects being dropped onto it, for instance, the damaged part may break and accident or injury may result.
- Don't pull and drag the tool by the air hose. It may trigger some damages on the tool body, breakage of Rotary Joint or some other defects and lead serious troubles with injuries.

9. If using in elevated locations, use a safety harness, and take care to avoid dropping rivets or the tool itself.
- Accident or injury may result if this practice is not followed.

⚠ CAUTION

1. **Before starting maintenance or disassembling the unit to replace parts, be sure to stop air supply.**
   • Performing maintenance or disassembly with air supplied may cause a part to jump out, oil to squirt out, or the unit to perform unexpected behavior, and may result in an accident or personal injury.
2. **Tighten the Oil Retaining Screw firmly before use.**
   • If the Oil Retaining Screw is loose or coming off during use, oil may squirt out resulting in an accident or personal injury.
3. **Do not operate the tool with the Frame Head removed.**
   • Your fingers or hands may become caught in the tool.
4. **Do not bring your face close to the exhaust ports.**
   • Pressurized air containing fine particles is discharged from the exhaust ports during use. Keep eyes away from this area.
5. **Avoid skin contact with substances such as hydraulic oil, lubricating oil and grease.**
   • Such substances may cause inflammation of the skin. If they come into contact with your skin, wash the affected area thoroughly.
6. **The parts to be used must be those supplied from us or recommended by us. Select and attach parts applicable to your rivet.**
   • Otherwise the unit may not produce maximum performance and may sometimes malfunction resulting in an accident or personal injury.
7. **Make sure that the workplace is safe, clean and organized.**
   • Accidents can easily occur in untidy workplaces.
   • If the cut mandrels are allowed to fall onto the floor, you may slip on them, and injury may result.
8. **Avoid uncomfortable postures while working.**
   • You may fall down and injury may result.
9. **Keep people who are not involved in work away from the workplace.**
   • Accidents or injury may result.
10. **Maintain the tool with proper care.**
    • Refer to the Instruction Manual for details on replacing parts and attachments, otherwise injury may occur.
11. **Keep the handgrip always dry and clean, and avoid adhesion of oil and grease.**
    • Otherwise the grip may slip from your hand resulting in falling of the unit.
12. **Do not leave the floor littered with spent mandrels.**
    • Spent mandrels are dangerous because their ends are sharp. Stepping on them is also dangerous easily causing a slip and fall accident.
13. **Use the tool carefully and concentrate on correct operation at all times.**
    • Use the tool with proper care, paying full attention to methods of handling and operation and surrounding conditions. Accidents and injury may result if this practice is not followed.
    • Use common sense at all times, otherwise accidents or injury may result.
    • When you are tired, do not use the tool, otherwise accidents or injury may result.
14. **Ask Lobtex to carry out any repair work required.**
    • Repair work should only be carried out by a qualified technician. Please contact your nearest “LOBSTER” distributor, representative, or direct to Lobtex Co., Ltd., Osaka. If the tool is repaired by someone without the necessary qualifications and experience, the tool may not perform to optimum standards, and accidents or injury may result.
15. **Do not attempt to modify the tool.**
    • Unauthorized modifications may cause malfunctions which can lead to accidents or injury.
16. **Only for EU countries, do not dispose of electric tools together with household waste material !**
    • In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.
17. **Important information and clue about the use are listed in main body label. When contents cannot read by contamination or by the damage of the label, please order a new label and put it.**
    • The new label could be ordered from us(Lobtex)via distributor.

⚠ CAUTION

18. The production date of this product is shown brevity code below the tools.(on page5)

(Example)year: 20②⓪ month: ⑩ → B 0 0 ○○○○

↓↓ ↓ ↓

B 0 0 (Serial No.)

How to check manufactured date

A year/month of manufacture	1	2	3	4	5	6	7	8	9	10	11	12
An English character	A	B	M	N	K	W	T	Y	U	O	L	Z

19. This product is a tool for exclusive use of the professional business. When you are the one who uses this tools for the first time, please receive an instruction from the one who have already used this tools before, also please read the Instruction Manual carefully and understand the content.

- Wear protective goggles or safety glasses.
- When this product is damaged, please do not use.

20. This product is an exclusive tool for Blind Rivet fastening two boards by riveting. We do not design, manufacture or sell intending to other applications.

21. Please perform regular inspection and maintenance on this machine. As a guideline, inspect fastening every 30,000 blind rivets or once a year, and request repair if any abnormality is suspected.

22. Only persons who are well trained and qualified should use, adjust, and maintain this product.

23. Do not modify the tool. Any modification to the equipment impairs the validity of safety devices, leading to a higher risk to operators.

24. Slip, trips and falls are major causes of workplace injury. Be aware of slippery surfaces caused by use of the tool and also of trip hazards caused by the air line or hydraulic hose.

25. Proceed with care in unfamiliar surroundings. There can be hidden hazards, such as electrical or other utility cables.

26. This machine is not intended for use in potentially explosive atmospheres and is not insulated against contact with electric power.

27. Ensure that there are no electrical cables, gas pipes, etc., which can cause a hazard if damaged by use of the tool.

28. If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool, inform your employer and consult a physician.

29. Compressed air can cause severe injury.

- Be sure to disconnect the tool from the air supply source when it is not in use or before replacing or repairing it.
- Never direct air at yourself or anyone else.

28. Always check for damaged or loose hoses and fittings.

- Whipping hoses can cause severe injury.

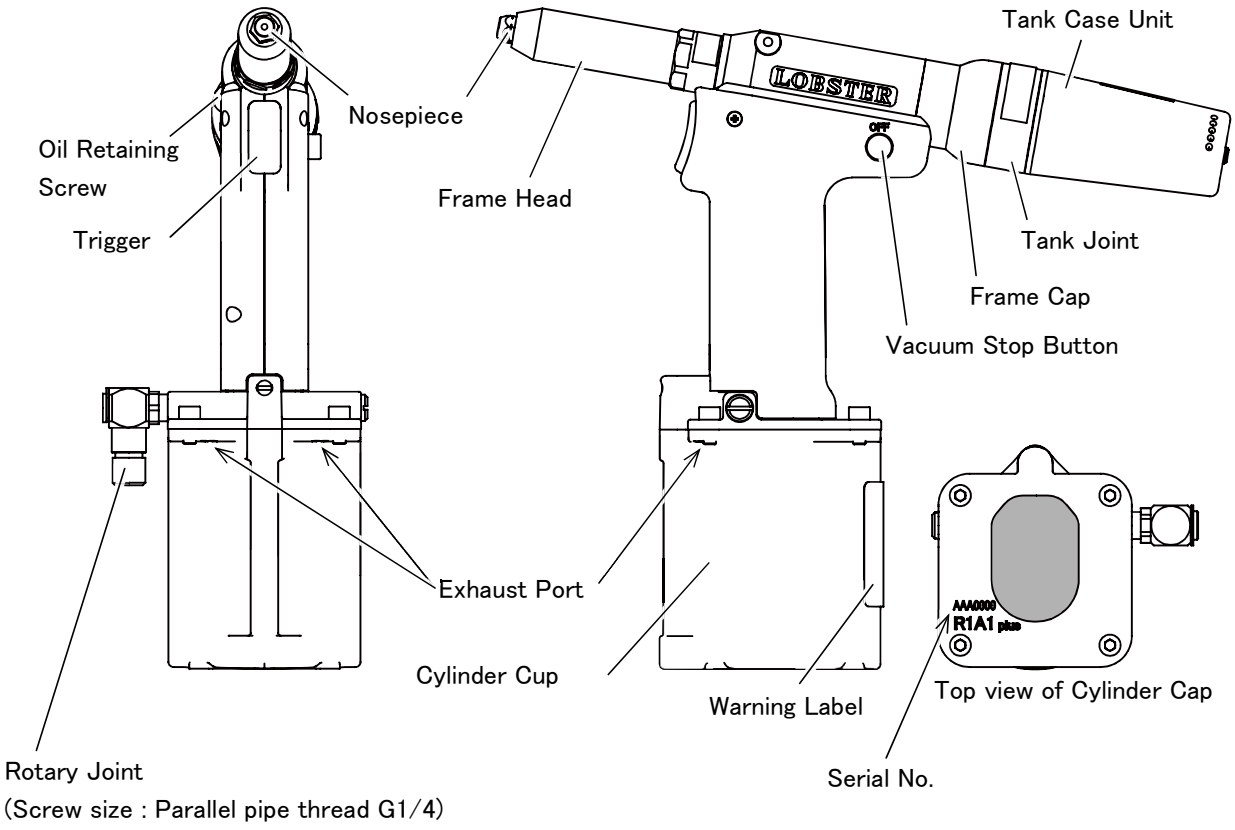
29. Always make sure there are no damages on hoses and no loose fittings.

30. Do not carry the pneumatic tool by holding the hose.

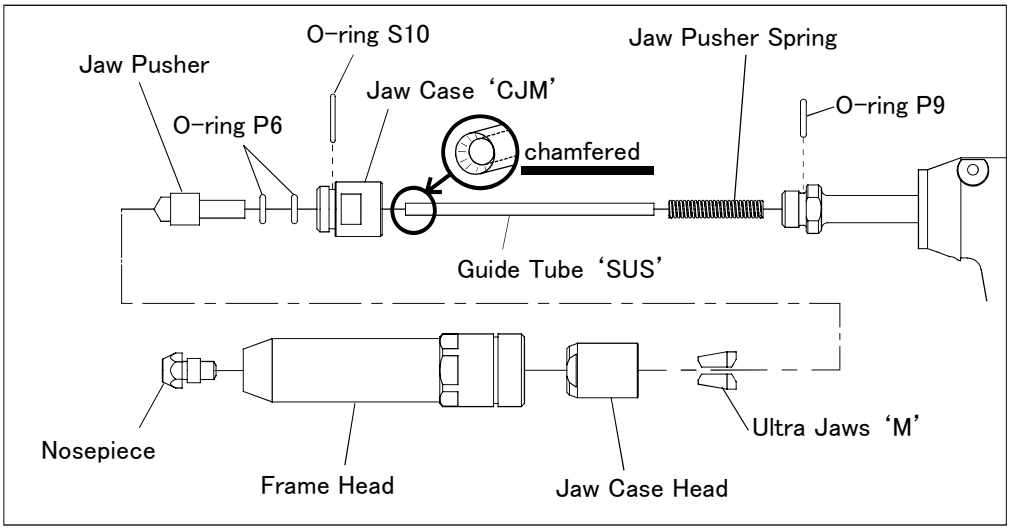
31. Preventative maintenance should be carried out, after a specified time of operation, a specified number of cycles/operations or a stated number of times per year.

32. When you handle oil or grease, obtain the material safety data sheet (SDS) from the supplier, and follow the described instructions.

● NOMENCLATURE



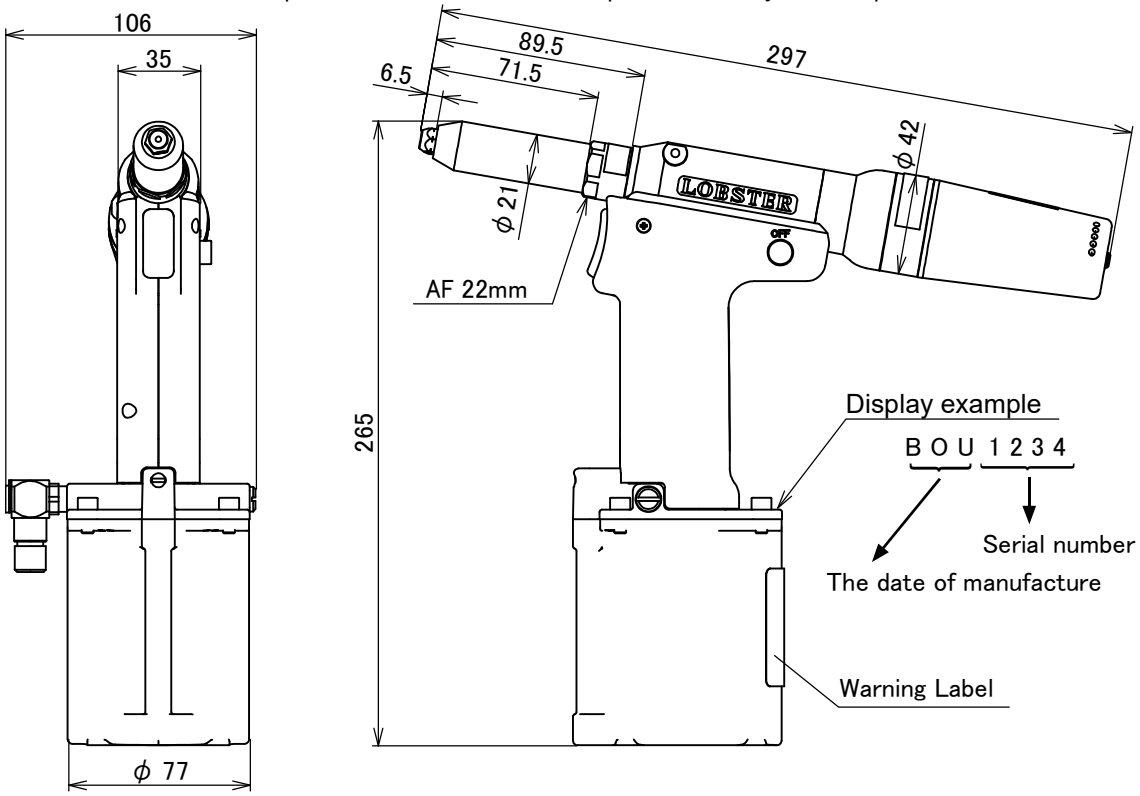
FRAME HEAD INTERNAL PARTS



● TECHNICAL DATA

Model No.		R1A1PL
Weight kg		1.14
Operating air pressure MPa		0.5 ～ 0.6
Dimensions (Length × Height × Width) mm		297 × 265 × 106
Air consumption per minute L/min (At air pressure 0.6 MPa)		82(on the occasion of vacuum is working)
Tool stroke mm		19
Traction power at 0.6 MPa		9(on the occasion of vacuum is working)
Applicable rivets(rivet diameters) ϕ mm		2.4・3.2・4.0・4.8
Operating environment	Temperature ℃	4 ～ 35
	Relative humidity %RH max	80%RH max. (No condensation)
Sound	Pressure level (Lpa)	75 dB
Vibration	Emission value (At air pressure 0.6 MPa)	Less than equal to 2.5m/sec2
Air intake (Rotary joint)		Size of screw G1/4 (PF1/4)

* Product specifications and design are subject to change for improvement without notice.
* Weight and dimensions given are standard values. Actual products may differ slightly from the values given.
* The warning label is located on the side of the Cylinder Cup.
* The production date of this product is indicated on the bottom of Cylinder Cup with brevity code. Please refer to the page 5 how to read its Serial No. .
* The serial number of this product is indicated on the top surface of Cylinder Cup with numbers.



■ Air consumption calculation method ■

Use the following calculation method to obtain the required air consumption, and select the compressor accordingly.

Required air consumption = Air consumption per minute

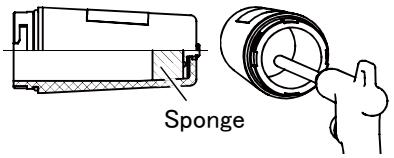
Make sure that this corresponds to the compressor discharge capacity (per minute).

● PREPARATION BEFORE USE

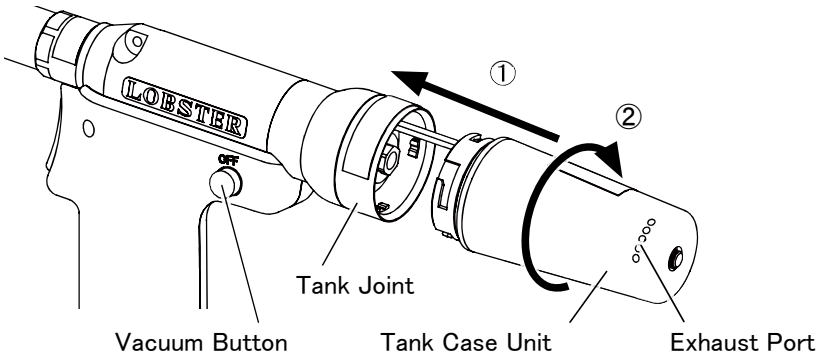
1 Set the Tank Case Unit to the Tank Joint.

⚠ WARNING

- Always make sure that Tank Case Unit is attached to the tool before use.
  If you use the tool without Tank Case Unit, a spent mandrel may pop out when blind rivets are set and cause serious injury.
- Blow air through the Sponge of the Tank Case Unit periodically to remove dust.
  If the Sponge becomes clogged, there is a risk that the vacuum do not function properly, and the mandrel of blind rivet that has been cut is not discharged, causing a fault of the equipment.

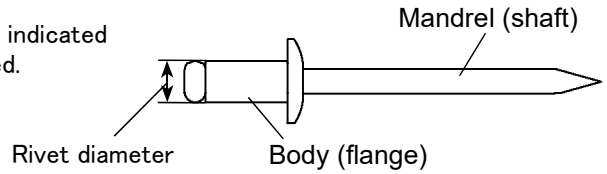


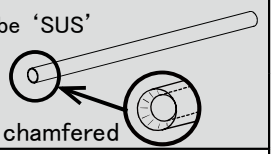
Align the notch on the Tank Case Unit with the protrusion on the inside of the Tank Joint, press the Tank Case Unit against the Tank Joint (①), and turn the Tank Case Unit clockwise (②) to attach it.



* When you turn the Vacuum Button ON, air comes out of the Exhaust Port on the side of the Tank Case Unit.
* The Exhaust Port can face to any of the 4 directions, so change the direction as your preference.

2 Replace the Nosepiece and the Guide Pipe Unit as indicated below to conform to the size of the rivet being used.
(Refer to “Jaw maintenance” on page 12.)



Rivet Dia.	Nosepiece	Guide Tube
2.4 mm	2.4 	Guide Tube ‘SUS’ (silver)  chamfered
3.2 mm	3.2 	
4.0 mm	4.0 	A Guide Tube is not necessary for 4.0mm and 4.8mm rivets. Be sure to remove the Guide Tube before use.
4.8 mm	4.8 	

* Shaded areas indicate parts which are installed in the tool as standard accessories.
* Applicable rivet size is marked on the hexagon part of Nosepiece.

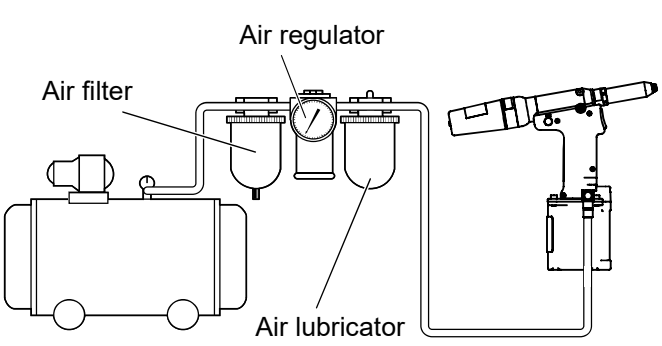
IMPORTANT

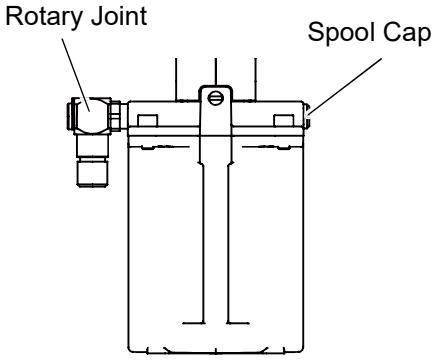
Be sure to replace the Nosepiece according to the blind rivet size you are using.
Even if the mandrel can be inserted into the Nosepiece, if it is the wrong size, it may clog inside.

When using the product after a long period of disuse, please perform maintenance and inspection carefully. (Refer to "Cleaning the Frame Head and Jaw Case Head section" on page 12.)
Please perform maintenance and inspection and activate the vacuum function before use.

A Guide Tube is not necessary for 4.0mm and 4.8mm rivets.
Be sure to remove the Guide Tube before use.

3 Set up the compressor, and be sure to install an air filter, air regulator and air lubricator (3-device set) between the compressor and the tool.





* Adjust the drip-feed amount of the air lubricator to the minimum setting.
* If moisture enters inside of the unit, it may freeze in cold temperature or accelerate degradation of O-rings and packings, resulting in malfunction of the unit. To avoid that, use an air dryer as necessary in addition to an air filter, regulator and an air lubricator (3-device set).
* If you attach the Rotary Joint to the opposite side, remove the Spool Cap and exchange the positions.

4 Use the air regulator to adjust the operating air pressure to 0.5 ~ 0.6MPa.

⚠ WARNING

- **The air pressure should be kept within the range of 0.5 to 0.6 MPa**

  If an air pressure which is greater than this is used, the tool may become damaged, and injury or damage to property may result.

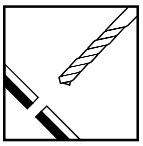
* If the diameter of your stainless rivet (NST, NST-A, NSS, NSS-A) is 4.8mm(3/16"), set the air pressure to 0.54 ~ 0.6 MPa (78 ~ 87 psi).
* If the air pressure is too high, damage to parts may occur. If the pressure is too low, some size of the rivet may not be correctly installed (cut).

● OPERATING THE AIR RIVETER

1 Select a suitable size of rivet for the workpiece to be riveted.

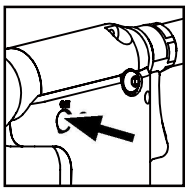
2 Replace the Nosepiece and Guide Pipe Unit with one which matches the size of the rivet to be used.
(Refer to “Preparation Before Use” on page 8.)

3 Drill a hole of appropriate size
(0.1 to 0.2mm larger than the diameter of the rivet) into the workpiece.



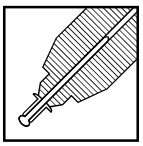
4 Make sure that the Tank Case Unit is set, and press the Vacuum Button fully from the “ON” marking side to start vacuuming.

＊ If the Vacuum Button is not fully pressed, vacuuming power will be lower.

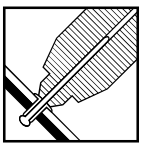


5 Insert the mandrel of rivet into the end of riveter.

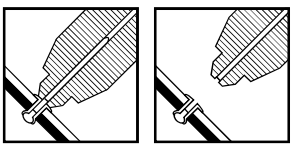
＊ Some rivets have mandrels with sharp ends. Be careful not to injure your fingers on these ends.



6 Insert the head of the rivet into the hole.



7 Lightly fit the end of riveting tool to the base material. Make sure that there is no space in the base material and other things, and then activate the trigger. The rivet will be installed into the workpiece.

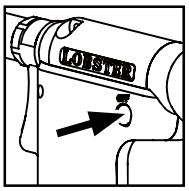


8 Release the trigger. The cut mandrel (shaft) will then be drawn into the Tank Case Unit.

＊ Make sure that the cut mandrel has been completely removed before proceeding to the next riveting.

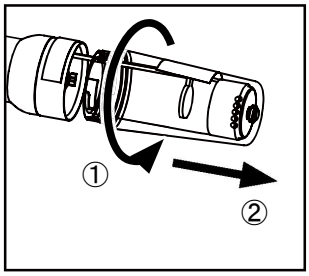
9 When the tank is about half full of spent mandrels, press the Vacuum Button from the “OFF” marking side to stop vacuuming.

＊ If the tank becomes over half full, cut mandrels may be obstructed by those inside the tank and may not normally be collected, causing them to be left in the ejection pathway.
That will result in clogging of cut mandrels and air leakage from the Nosepiece making the unit to be unusable.

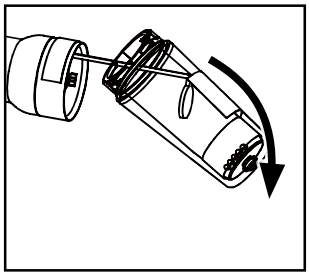


10 Follow the step below to remove the Tank Case Unit.

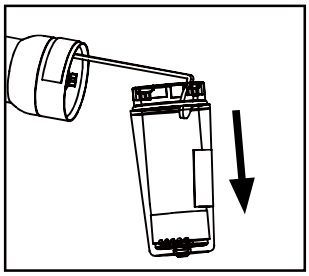
1. Turn the Tank Case Unit counterclockwise to release it (①), then pull it out slightly (②).



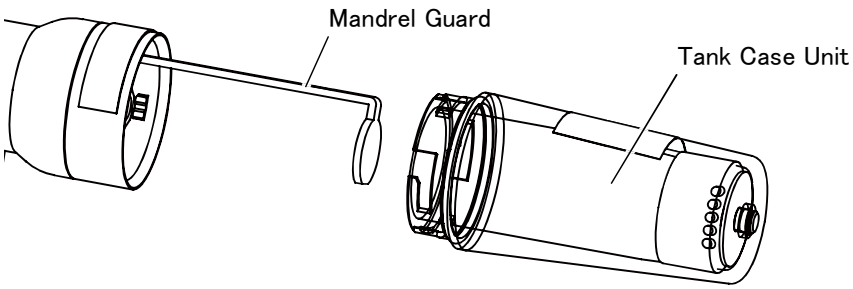
2. Remove the Tank Case Unit like tracing an arc, keeping its inner wall aligned with the Mandrel Guard throughout the process.



3. Pull the Tank Case Unit carefully, not to drop the mandrel.



＊When the Tank Case Unit is about half full of spent mandrels, discard the mandrel. Too many mandrels will cause spillage when removing the Tank Case Unit.
＊When removing the Tank Case Unit, align the inner wall of the Tank Case Unit with the Mandrel Guard to avoid scraping out the mandrel.
＊By taking the spent mandrels to a trash can or other proper place ,the work can be done more smoothly.



● MAINTENANCE

After long periods of use, debris from cut mandrels and other foreign materials tend to build up in various parts of the tool, and the hydraulic oil level also drops, both of which can lead to operating problems.
The tool should be cleaned periodically.

1 Jaw maintenance

* If debris builds up, the jaws will not move smoothly and normal operation will not be possible.
* The jaws should be cleaned on average once every 3,000 riveting operations.

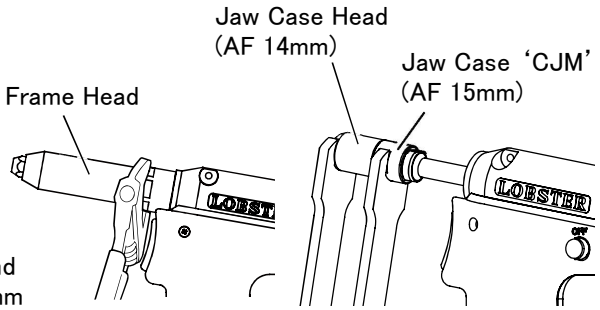
⚠ CAUTION

- Before starting maintenance or disassembling the unit to replace parts, be sure to stop air supply.
  Performing maintenance or disassembly with air supplied may cause a part to jump out, oil to squirt out, or the unit to perform unexpected behavior, and may result in an accident or personal injury.
- Jaws are consumable items and must be replaced periodically.
  This tool uses Ultra Jaws that are highly durable. When replacing, please order "Ultra Jaws 'M'".
- Never loosen the oil stopper screw for any purpose other than refueling.
  Hydraulic oil may leak or air may get in to the tool.
- Do not operate the tool with the Frame Head removed.
  Items such as fingers may become caught in the mechanism.

DISASSEMBLY

1 Turn off the air supply.

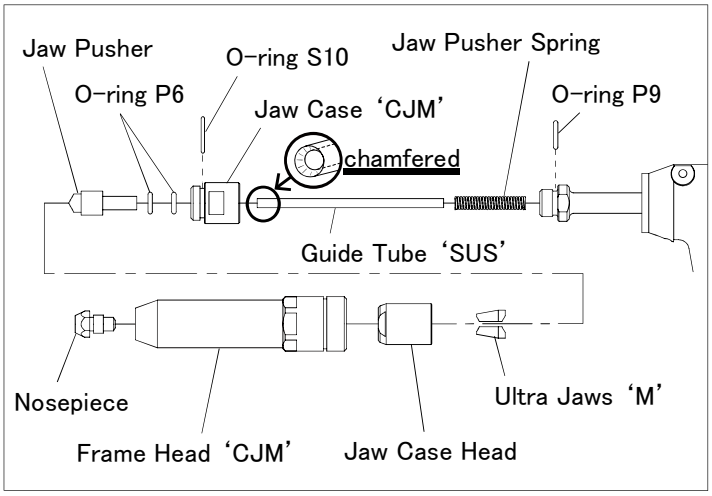
2 Remove the Frame Head 'CJM' using a wrench or spanner (AF 22 mm).



3 Loosen and remove the Jaw Case Head and Jaw Case 'CJM' using spanners (AF 14 mm and AF 15 mm) or other tools.

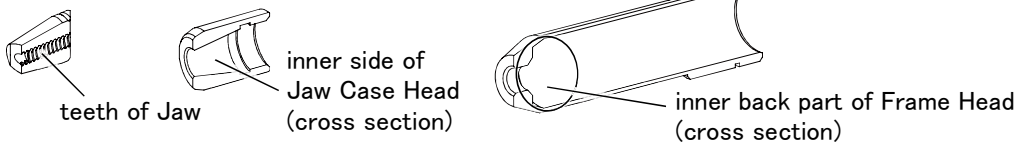
The following parts will be removed.

- Ultra Jaws 'M'
- Jaw Pusher
  (With two O-ring P6)
- Jaw Case 'CJM'
  (With O-ring S10)
- Guide Tube 'SUS'
- Jaw Pusher Spring



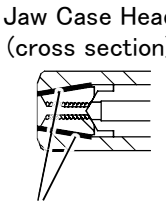
CLEANING

4 Wash and clean the parts using a brush and kerosene or such other things.
Be sure to clean teeth of Jaw, innser back part of Frame Head, and inner side of Jaw Case Head in particular, as they are apt to get dusty.

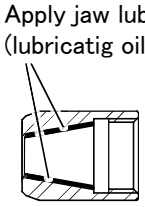


RE-ASSEMBLY

5 Assemble the parts in reverse order of disassembly and fully tighten the Jaw Case Head.
In the end, attach the Frame Head‘CJM’.



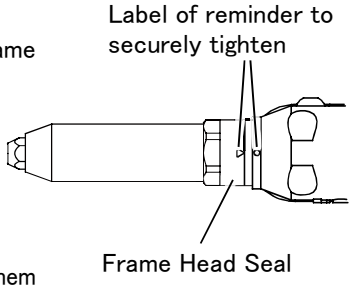
＊ Apply lubricant to the back of the Jaws (conical surface) and the inside of the Jaw Case Head (conical surface), and fit the Jaw into the Jaw Case Head.



＊ Assembling the Guide Tube will be smoother if you turn and insert the Guide Tube.

＊ Be sure to assemble all of the parts and fasten the fastening sections firmly.

＊ Jaw Case Head, Ultra Jaws‘M’, Jaw Pusher, O-ring, Jaw Case‘CJM’, Guide Tube‘SUS’, and Jaw Pusher Spring are consumable items. Replace them on a regular base.



＊ Please check periodically whether there is any slack of the Frame Head during work.
If you work after the Frame Head is loosened, damage to the parts may occur.

＊ R1A1 is installed highly durable Ultra Jaws‘M’.
Be sure to specify Ultra jaws‘M’as replacement parts for this model.

＊ If the O-ring behind the Jaw Pusher are damaged, please replace them with new ones. The O-ring function as cushions, and continued use without them may result in damage to internal components.

2 Replacement of the Nosepiece

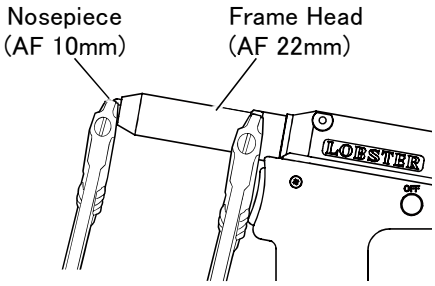
＊ If the Nosepiece is damaged, replace it with a new one.

＊ If you change the rivet size, replace with an applicable Nosepiece.

DISASSEMBLY

1 Turn off air supply.

2 Remove the Nosepiece from the Frame Head using a wrench or spanner.



RE-ASSEMBLY

3 Firmly set a Nosepiece applicable to the rivet size to the Frame Head.

＊Please check periodically whether there is any slack of a Nosepiece during work.
＊If you work after the Nosepiece is loosened, damage to the parts may occur.

3 Replacement of the Tank Case Sponge

＊ If power of vacuuming rivets becomes lower or the tank case sponge is damaged, replace with
＊ a new tank case sponge.

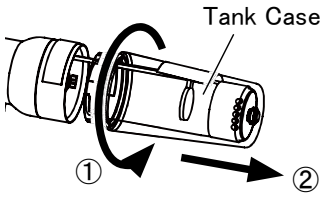
⚠ CAUTION

● Before starting maintenance or disassembling the unit to replace parts, be sure to stop air supply. Performing maintenance or disassembly with air supplied may cause a part to jump out, oil to squirt out, or the unit to perform unexpected behavior, and may result in an accident or personal injury.

DISASSEMBLY

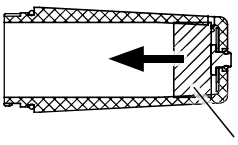
1 Turn off air supply.

2 Remove the Tank Case Unit by turning it in a counterclockwise direction.



3 Remove the Tank Case Sponge in the direction of the arrow.

Cross-section view of Tank Case Unit



RE-ASSEMBLY

4 Assemble the tank case sponge and Tank Case Unit in reverse order of disassembly.

＊ Tank case sponge is a consumable item. Replace it on a regular base.

4 Cleaning and Oil Supply of Air Cylinder section

* Accumulated dusts in the Air Cylinder section will adversely affect smoothness and durability.
* If hydraulic oil becomes less causes insufficient stroke, supply hydraulic oil in the following procedure. If stroke becomes insufficient soon after supplying hydraulic oil, the cause may be abrasion of seal. In that case, please ask it for repair.

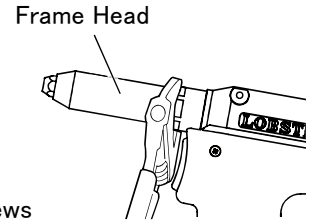
⚠ CAUTION

- Before starting maintenance or disassembling the unit to replace parts, be sure to stop air supply.
  Performing maintenance or disassembly with air supplied may cause a part to jump out, oil to squirt out, or the unit to perform unexpected behavior, and may result in an accident or personal injury.
- Avoid skin contact with substances such as hydraulic oil, lubricating oil and grease.
  Such substances may cause inflammation of the skin. If they come into contact with your skin, wash the affected area throughly.

DISASSEMBLY

1 Turn off air supply.

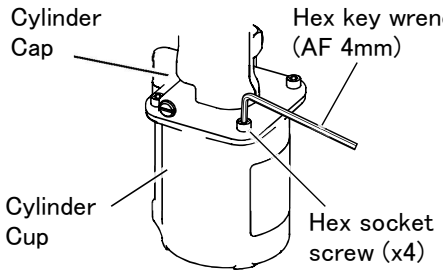
2 Remove the Frame Head using a wrench or spanner (AF 22mm).

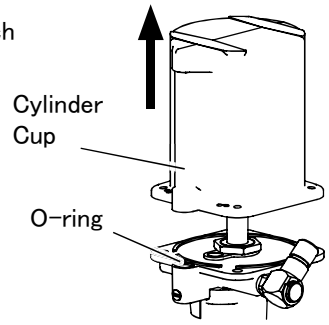


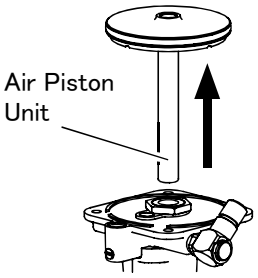
3 Using a hex key wrench (AF 4mm) remove the 4 hex socket screws on the top surfase of Cylinder Cap.

4 Turn the unit and keep it straight up as the Cylinder Cup comes to the top, and pull out the Cylinder Cup upward.

5 Pull out the Air Piston Unit upward.







* Keep the Frame Head removed during work. Otherwise the position of Oil Piston become too low due to excess oil, then, the parts may break.
* Tilting the main body may cause the hydraulic oil to spill out. Keep it standing up during work.

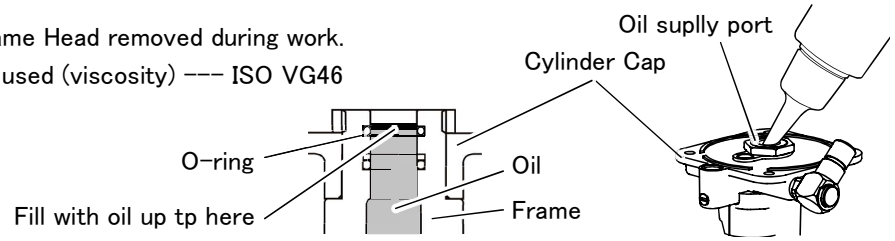
CLEANING

6 Clean each part using a waste cloth and brush.

FILLING OIL

7 Supply LOBSTER hydraulic oil (B10012 : separately sold) from the oil supply port of Cylinder Cap until the oil comes to a bit upper line from O-ring of Frame.

* Keep the Frame Head removed during work.
* Hydraulic oil used (viscosity) --- ISO VG46

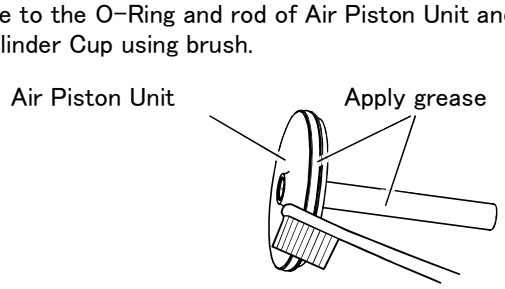


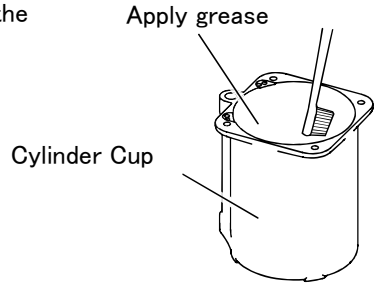
⚠ CAUTION

- Avoid skin contact with substances such as hydraulic oil, lubricating oil and grease.
  Such substances may cause inflammation of the skin. If they come into contact with your skin, wash the affected area throughly.
- Maintain the tool with due care.
  Refer to the Instruction Manual for details on replacing parts and attachments, otherwise injury may occur.

RE-ASSEMBLY

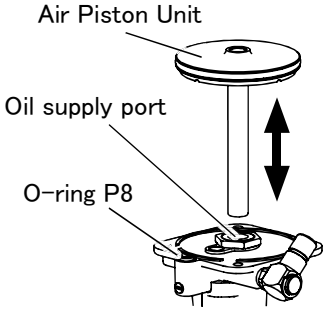
8 Apply grease to the O-Ring and rod of Air Piston Unit and to the inside of Cylinder Cup using brush.





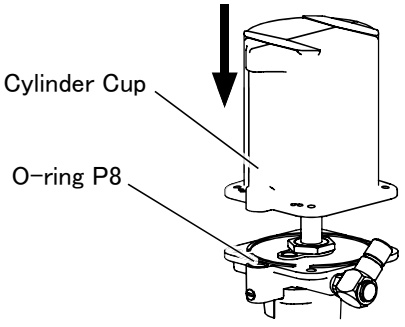
* Before assembling, be sure to apply lubricant such as grease to each sliding section.
* Recommended grease is Grease grade 1~2.

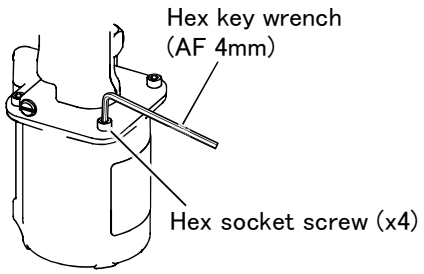
9 Push and insert the Air Piston Unit into the oil supply port and manually perform a piston motion for several times. Wipe off hydraulic oil spilling out of the oil supply port.



10 Attach the Cylinder Cup on the Air Piston Unit, and keeping pressing it down tighten the 4 hex socket screws.

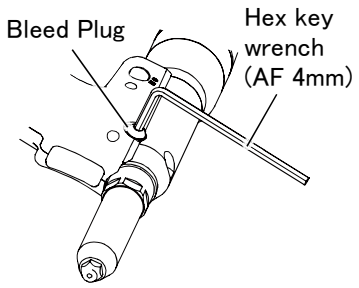
* Assemble in reverse order of disassembly.
* Make sure the O-ring P8 is surely set in the counterbore.





RE-ASSEMBLY

11 After assembled Frame Head with Frame A, turn the unit as the Bleed Plug (hex socket bolt) comes to the upper side. Then, loosen it using a hex key wrench (AF 4mm) in order to let excessive hydraulic oil and air (bubble) out.
After making sure that hydraulic oil no longer comes out, tighten the Bleed Plug again.



* Note that hydraulic oil may squirt out when you loosen the Bleed Plug.
* The work should be done by necessity after feeding hydraulic oil. Otherwise there may be detrimental to the tool in loading rivet or breakage of Frame.

12 Wipe off hydraulic oil adhering to the main body or spilling out before use.

* During disassembly/assembly, be careful to prevent cutting dusts of metal and other objects from getting into the hydraulic oil and Air Cylinder.

5 Cleaning and Oil Supply of Air Valve

* If the Air Valve is clogged with cut swarf, it has adverse influence on smooth operation and durability.

⚠ CAUTION

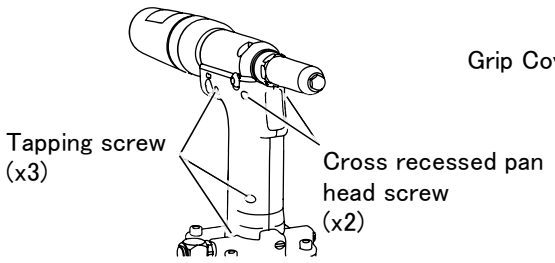
- Before starting maintenance or disassembling the unit to replace parts, be sure to stop air supply.
  Performing maintenance or disassembly with air supplied may cause a part to jump out, oil to squirt out, or the unit to perform unexpected behavior, and may result in an accident or personal injury.
- Avoid skin contact with substances such as hydraulic oil, lubricating oil and grease.
  Such substances may cause inflammation of the skin. If they come into contact with your skin, wash the affected area thoroughly.

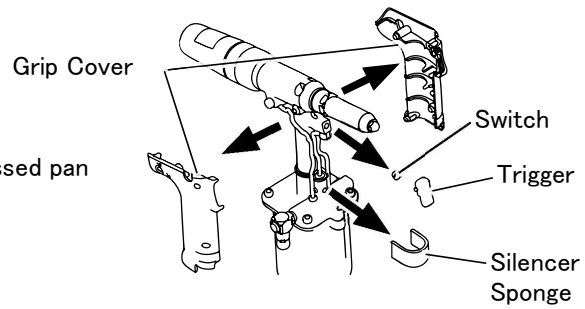
DISASSEMBLY

1 Turn off the air supply.

2 Remove cross recessed pan head screws (2 pieces) and tapping screws (3 pieces) on the side of the Grip Cover by using a Phillips screwdriver.

3 Remove the Grip Cover, Trigger, Switch, and Silencer Sponge in this sequence.

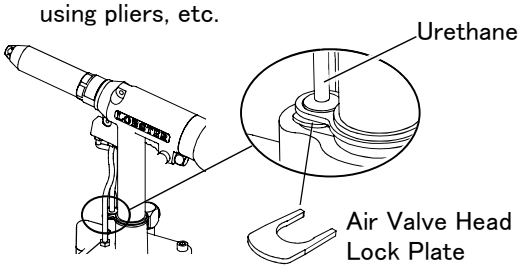


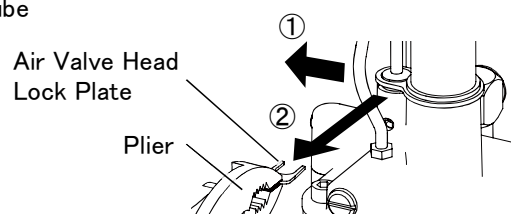


DISASSEMBLY

4 While moving the Urethane Tube forward by pushing it with a finger, remove the Air Valve Head Lock Plate by using pliers, etc.

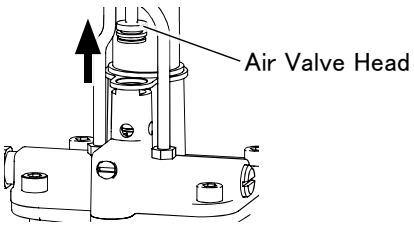
＊ Also, if the Air Valve Head Lock Plate is mounted in the direction opposite to that in the figure below, push the tube to move it aside in the same manner, and remove the plate by using pliers, etc.

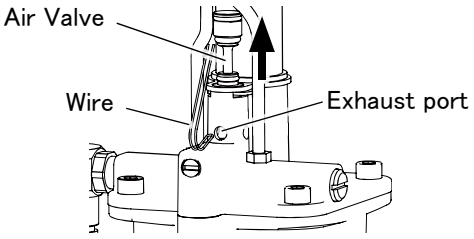




5 Remove the Air Valve Head, and pass a wire that has been bent like a hook through the exhaust port to raise the Air Valve to remove it.

＊ When removing the Air Valve, be careful not to damage the O-ring with the wire.

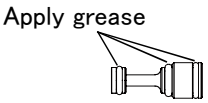




RE-ASSEMBLY

6 Apply grease to the O-ring of the Air Valve.

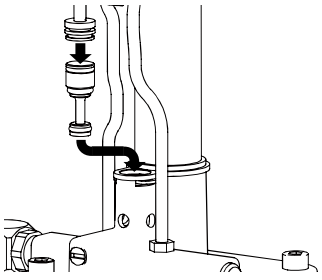
※Recommended grease is Grease grade 1 ～ 2.

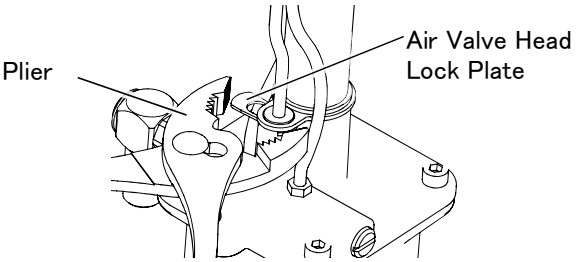


7 Attach the Air Valve and the Air Valve Head, and mount the Air Valve Head Lock Plate to the body by pinching it with pliers, etc.

＊ Push the Air Valve Head securely to the end.

＊ When mounting the Air Valve Head Lock Plate, move the Urethane Tube aside by pushing it with a finger.

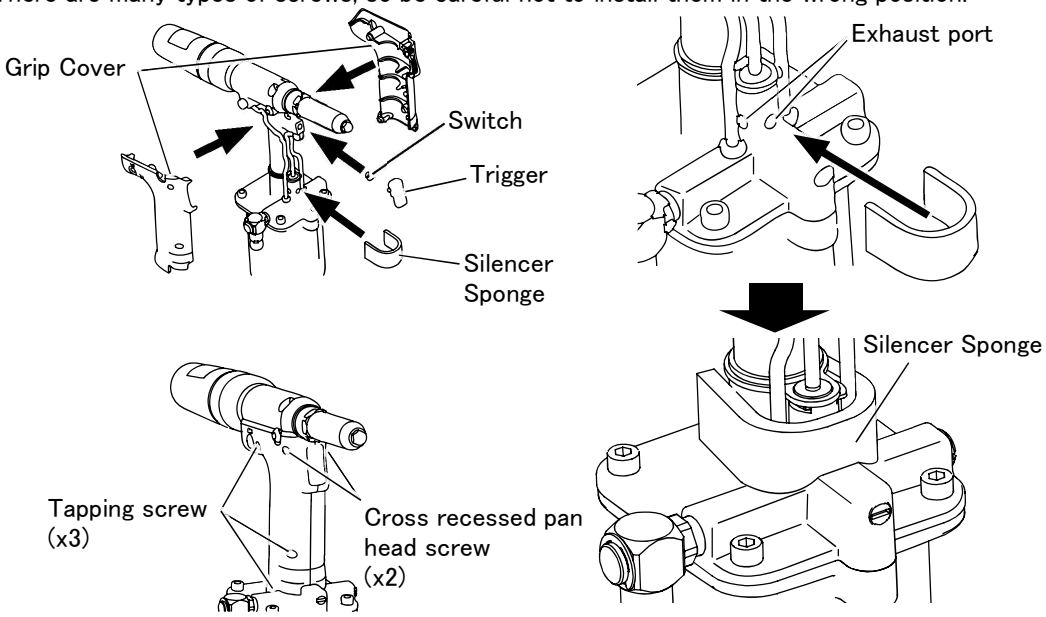




RE-ASSEMBLY

8 Mount the parts to the frame by following the procedure of **3** in reverse, and tighten the cross recessed pan head screws and the tapping screws by using a Phillips screwdriver.

* Attach the Grip Cover with the Silencer Sponge around the body.
* There are many types of screws, so be careful not to install them in the wrong position.



6 Replacement of the Mandrel Guard

※If the Mandrel Guard is deformed or damaged, replace it with a new one.
If you use the tool without Mandrel Guard and forget to attach the Tank Case Unit, a spent mandrel may pop out towards you and may cause serious injury.

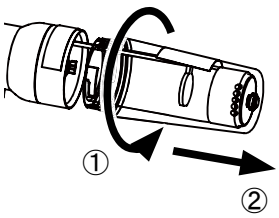
⚠ CAUTION

- Before starting maintenance or disassembling the unit to replace parts, be sure to stop air supply.
  Performing maintenance or disassembly with air supplied may cause a part to jump out, oil to squirt out, or the unit to perform unexpected behavior, and may result in an accident or personal injury.
- Avoid skin contact with substances such as hydraulic oil, lubricating oil and grease.
  Such substances may cause inflammation of the skin. If they come into contact with your skin, wash the affected area thoroughly.

DISASSEMBLY

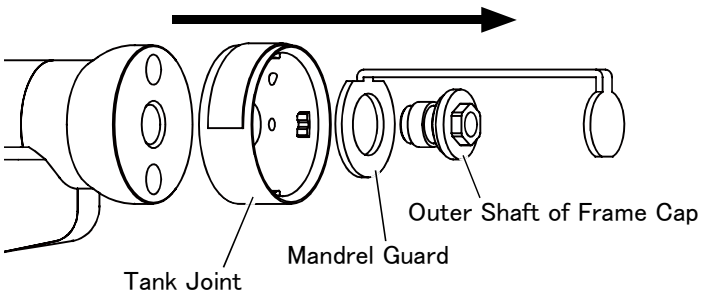
1 Turn off the air supply.

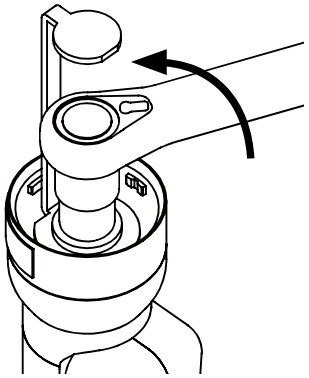
2 Remove the Tank Case Unit by turning it in a counterclockwise direction.



DISASSEMBLY

3 Loosen the Outer Shaft of Frame Cap and remove the Mandrel Guard and the Tank Joint by using socket wrench, etc.





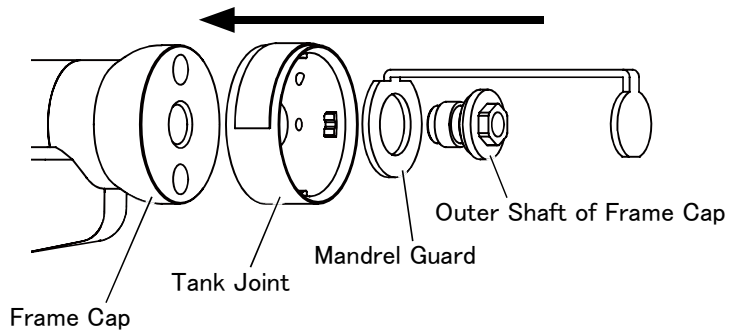
CLEANING

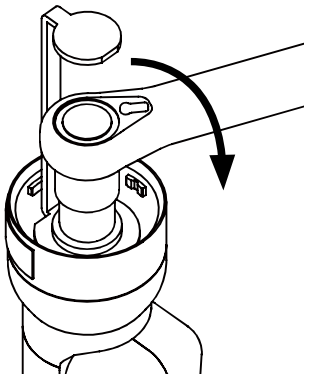
4 Clean each part using a waste cloth and brush.

RE-ASSEMBLY

5 Secure the Tank Joint and the Mandrel Guard to the Frame Cap with the Outer Shaft of Frame Cap, then tighten the Outer Shaft of Frame Cap to 8N・m by using socket wrench, etc.

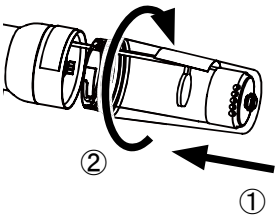
＊ If the tightening torque is too low, it may come loose, and if it is too high, it may cause damage or malfunction of the parts.





6 Align the notch on the Tank Case Unit with the protrusion on the inside of the Tank Joint, press the Tank Case Unit against the Tank Joint (①), and turn the Tank Case Unit clockwise (②) to attach it.

＊ Always attach the Tank Case Unit before use.
If you use the tool without Tank Case Unit, a spent mandrel may pop out when blind rivets are set and cause serious injury.



● TROUBLE SHOOTING

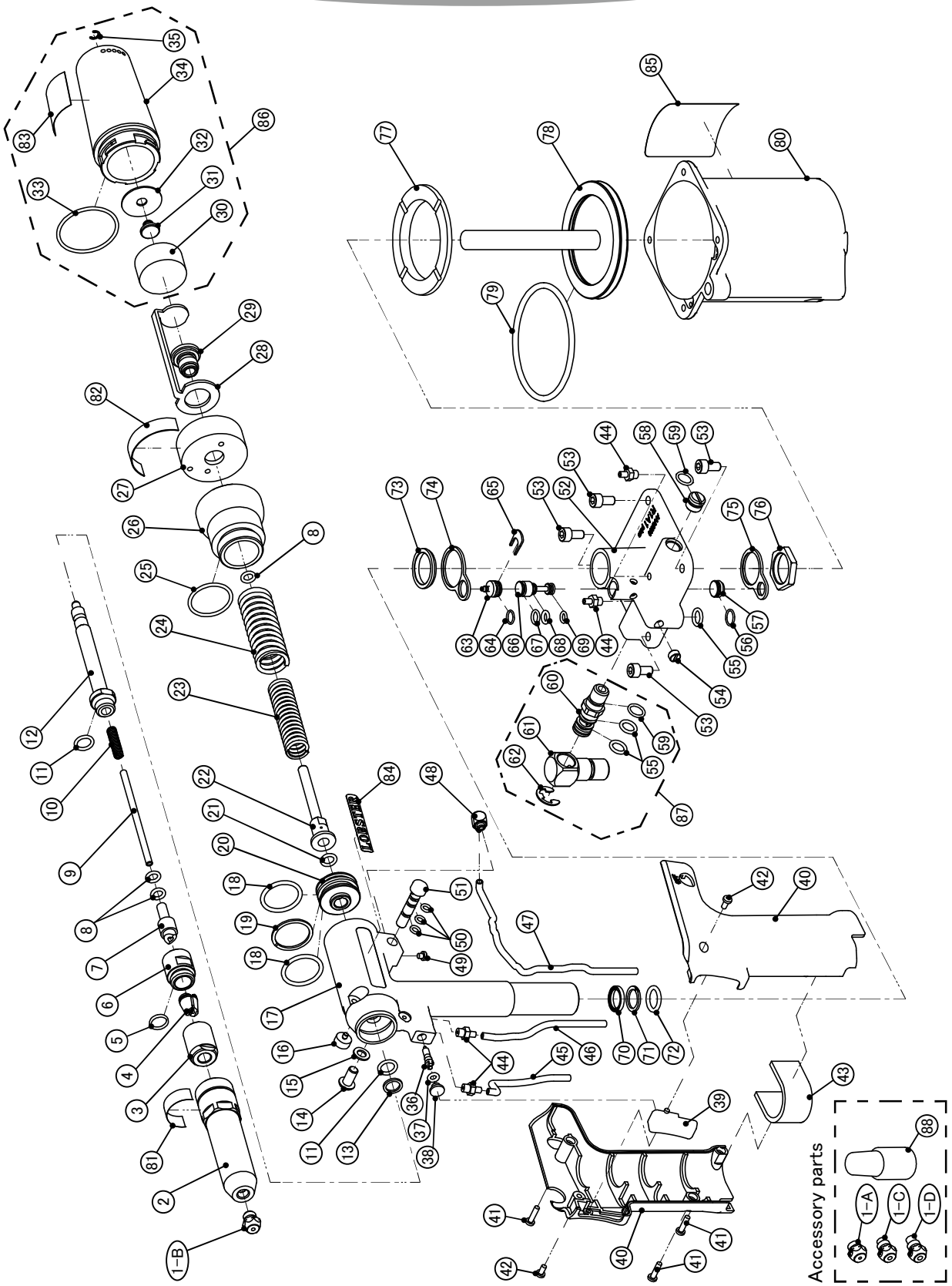
If a problem occurs, check the followings. If the problem persists after checking the items in the table below, contact your nearest “LOBSTER” dealer or direct to us.

In making any enquiries about this product or requests for repair work, first check the troubleshooting items below, and then make a note of the model number, the usage conditions and the trouble symptoms in as much detail as possible. If you can provide this kind of information, it will contribute to reducing the amount of time required for delivery or repairs to be completed.

Trouble		Couse	Countermeasure
The rivet does not go in, or the cut mandrel does not come out after riveting.	1	Wrong type of Nosepiece or Guide Tube‘SUS’.	Replace with the correct part which matches the rivet size. (Refer to page 8.)
	2	Nosepiece or Frame Head is loose.	Use a spanner or similar to tighten securely.
	3	Jaw Case is incorrectly assembled.	Check the assembly procedure of parts inside the Jaw Case. (Refer to pages 12–14.)
	4	Contact surface between Jaws and Jaw Case‘Head’ are not smooth. (friction).	Clean the Jaws and the inside of Jaw Case Head, and apply “LOBSTER” brand lubricant oil to the back of Jaws. (Refer to pages 12–14.)
	5	Oil filling was not performed correctly, so that there is excess hydraulic oil inside the tool.	Loosen the Oil Retaining Screw to allow the excess hydraulic oil to drain out.(Refer to pages 15–17.)
	6	Mandrels clog up the Jaw Pusher or the machine.	Eliminate the mandrels clogging in the Jaw Case or the Guide Pipe Unit. (Refer to pages 12–14.)
Rivet working does not complete with one trigger operation	1	The rivet length is not correct for the workpiece thickness.	Use rivet which match the workpiece thickness.
	2	Compressor air pressure is incorrect.	Increase air pressure. (By making air pressure more than maximum 0.6 MPa or more will lead to damage to parts. If the rivet does not break even with the maximum air pressure, that rivet cannot be used.) (Refer to page 9.)
	3	Jaw Case is incorrectly assembled.	Check the assembly procedure of parts inside the Jaw Case. (Refer to pages 12–14.)
	4	Jaws are worn.	Replace the Jaws. (Refer to pages 12–14)
	5	The Jaw Pusher Spring has been worn.	Replace Jaw Pusher Spring (Refer to pages 12–14.)
	6	Insufficient hydraulic oil, causing a shorter stroke.	Add hydraulic oil. (Refer to pages 15–17.)
Piston does not operate, or returns very slowly, or operation is not smooth.	1	Insufficient and excess pressure of supplied air.	Adjust to obtain an appropriate pressure of supplied air. (Refer to page 9.)
	2	The inner diameter of the air hose is too small, resulting in insufficient air flow.	Replace the air hose with one that has a larger inner diameter.
The suction power is weak and the cut mandrels (shafts) cannot be drawn out.	1	The Vacuum Button is not fully pressed.	Press the Vacuum Button until it stops.
	2	Too many cut mandrels in the Tank Case Unit.	Remove the Tank Case Unit and discard the cut mandrels.
	3	Mandrels clog up the Jaw Pusher or the machine.	Eliminate the mandrels clogging in the Jaw Case or the Guide Tube. If the mandrel is clog deep inside the tool, do not try to force it out, send the tool in for repair. (Refer to pages 12–14.)
	4	The Guide Tube is not applicable to the size of rivet used.	Attach or remove the Guide Tube according to the rivet diameter. (Refer to page 8.)
	5	The Sponge of the Tank Case Unit is clogged with dirt and dust.	Blow air through the Sponge of the Tank Case Unit. (Refer to page 8.)

＊ The viscosity of the hydraulic oil affects the performance of riveter, so be sure to use LOBSTER hydraulic oil.

● R1A1PL EXPLODED VIEW



● R1A1PL PARTS LIST

Index No.	Part name	Code No.	Material
1-B	Nosepiece 3.2	10028	Steel
2	Frame Head	72054	Steel
③	Jaw Case Head	10116	Steel
④	Ultra Jaws (pair) 'M'	10281	Steel
⑤	O-ring S10	10151	Rubber
⑥	Jaw Case 'CJM'	64054	Steel
⑦	Jaw Pusher	63410	①
⑧	O-ring P6	10150	Rubber
⑨	Guid Tube 'SUS'	64875	Stainless
⑩	Jaw Pusher Spring	63222	Steel
11	O-ring P9	10219	Rubber
12	Oil Piston 'A'	67631	Steel
13	B-ring P9	13012	Plastic
14	Bleed plug	63213	Steel
15	Sealing Washer	63209	②
16	Vacuum Stop Button	72040	Aluminum
17	Frame	72059	Aluminum
18	O-ring P22	10180	Rubber
19	B-ring P22	10181	Plastic
20	Oil Piston Flange 'A'	67632	Steel
21	O-ring P7	10149	Rubber
22	Oil Piston Backward Axis 'A'	63190	Steel
23	Return Spring IN	63241	Steel
24	Return Spring OUT	63242	Steel
25	O-ring S25	63243	Rubber
26	Frame Cap	72062	Aluminum
27	Tank Joint	72042	Plastic
28	Mandrel Guard	72068	Stainless
29	Outer Shaft of Frame Cap	72056	Steel
㉚	Tank Case Sponge	63252	Plastic
31	Screw for Inner Surface of Tank Case	63231	Steel
32	Inner Surface of Tank Case	63230	Stainless
33	O-ring S36	63234	Rubber
34	Tank Case	63215	Plastic
35	Crescent Type Retaining ring 21	29187	Steel
36	Valve Core	63203	③
37	O-ring P4	10454	Rubber
38	Switch	63204	Plastic
39	Trigger	72041	Plastic
40	Grip Cover LR	72451	Plastic
41	Tapping Screw for Synthetic Resin M3x12	63251	Steel
42	Cross recessed pan head screw M3x6	63250	Steel
㊸	Silencer Sponge	63968	Plastic
44	Barb Coupling for Soft Tube	43732	Brass

Index No.	Part name	Code No.	Material
45	Urethane Tube 70	63211	Plastic
46	Urethane Tube 87	63210	Plastic
47	Urethane Tube 153	63212	Plastic
48	Barb Elbow for Soft Tube	63226	Brass
49	Cross Recessed Pan Head Screw M3x3	63247	Steel
50	O-ring S4	29664	Rubber
51	Vacuum Stop Valve	72049	Aluminum
52	Cylinder Cap	72066	Aluminum
53	Hex Socket Bolt M5x10	64409	Steel
54	Stop Screw Mass Production	63245	Plastic
55	O-ring P8	10336	Rubber
56	O-ring SS9	63182	Rubber
57	Valve Cap	63177	Plastic
58	Spool Cap	72065	Aluminum
59	O-ring S9	63180	Rubber
60	Spool Connector	63185	Aluminum
61	Rotary Joint	63184	Aluminum
62	E-type Retaining Ring 8	63186	Steel
63	Air Valve Head	63979	Stainless
64	O-ring SS7.5	63181	Rubber
65	Air Valve Head Rock Plate	63961	Steel
66	Air Valve	63174	Aluminum
67	O-ring S7	12114	Rubber
68	O-ring P5	12120	Rubber
69	O-ring S5	10276	Rubber
70	Hydraulic packing NMY12	69532	Rubber
71	B-ring P12	10129	Plastic
72	O-ring P12	10128	Rubber
73	Bush	64871	Steel
74	Air Valve Head Retainer R1A2	63960	Steel
75	Air Valve Head Retainer	63183	Steel
76	Frame Fixing Nut	63228	Steel
77	Cushion Rubber	63178	Rubber
78	Air Piston Set	72047	④
79	O-ring G70	10080	Rubber
80	Cylinder Cup	63220	⑤
81	Frame Head Seal	64598	Plastic
82	Tank Attaching Seal	67461	⑥
83	Caution Label	22040	⑥
84	LOBSTER Logo Seal	72067	Plastic
85	Warning Label	61075	⑥
86	Tank Case Unit	63277	⑦
87	Rotary Joint Unit	63261	⑧

Accessory parts

Index No.	Part name	Code No.	Material
1-A	Nosepiece 2.4	10027	Steel
1-C	Nosepiece 4.0	10029	Steel
1-D	Nosepiece 4.8	10030	Steel
88	Lubricating Oil	–	Plastic,Oil

Separately sold

Index No.	Part name	Code No.	Material
–	"LOBSTER" hydraulic oil	10012	Plastic,Oil
–	"LOBSTER" lubricant oil JO-50	JO50	Plastic,Oil

Material
① : Steel , Rubber
② : Stainless , Rubber
③ : Brass , Stainless , Plastic , Rubber
④ : Aluminum , Steel
⑤ : Aluminum , Plastic , Paper
⑥ : Plastic , Paper
⑦ : Plastic , Steel , Rubber , Stainless , Paper
⑧ : Aluminum , Steel , Rubber

* Parts with circled Index No. are consumable parts. They should be replaced periodically.
* Index No.7 (Jaw Pusher) includes two Index No.8 (O-ring P6).
* Index No.34 (Tank Case) includes Index No.83 (Caution Label).
* Index No.80 (Cylinder Cup) includes Index No.85 (Warning Label).
* Index No.6 (Jaw Case 'CJM') should be attached Index No.5 (O-ring S10).
* Index No.12 (Oil Piston 'A') should be attached Index No.11 (O-ring P9).

● STORAGE

- Store in a place which is well-ventilated and free from excessive dust and humidity, and where there is no danger that tool will fall.
- If the tool will not be used for a long period of time, inspect the parts as shown in "Maintenance" on pages 12 to 20 prior to storing the tool.
- To increase the working life of the tool, it is recommended that you perform the periodic overhauls. Contact the place of purchase or your nearest "LOBSTER" dealer for any overhauls and repair work required. (A charge will be made for this service.)

● ORDERING PARTS

Indicate the tool model, part name, code no. and quantity as shown below when ordering.

Model	Part name	Code No.	Qty.
R1A1PL	Ultra Jaws 'M'	10281	1
R1A1PL	Frame Head	72054	1

* When parts are modified for improvement, the older parts are kept in stock for a period of five years.

WARRANTY & SERVICE

LOBSTER® WARRANTS THAT GOODS COVERED BY THIS MANUAL WILL CONFORM TO APPLICABLE SPECIFICATIONS AND DRAWINGS AND THAT SUCH GOODS WILL BE MANUFACTURED AND INSPECTED ACCORDING TO GENERALLY ACCEPTED PRACTICES OF COMPANIES MANUFACTURING INDUSTRIAL TOOLS. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FOREGOING.
THE LIABILITY OF LOBSTER® ON PARTS FOUND TO BE DEFECTIVE IS LIMITED TO RE-WORK OR THE REPLACEMENT OF SUCH GOODS AND IN NO CASE TO EXCEED THE INVOICE VALUE OF THE SAID GOODS. UNDER NO CIRCUMSTANCES WILL LOBSTER® BE LIABLE FOR DAMAGES OR COSTS INCURRED BY THE BUYER OR SUBSEQUENT USER IN RE-PAIRING OR REPLACING DEFECTIVE GOODS.

ROUTINE MAINTENANCE AND REPAIR OF LOBSTER® RIVET TOOLS CAN BE PERFORMED BY AN AVERAGE MECHANIC.
HOWEVER, IF YOU HAVE A LOBSTER® RIVET TOOL THAT IS IN NEED OF MAJOR REPAIR WE RECOMMEND THAT IT BE SENT DIRECTLY TO US POSTAGE PAID FOR SERVICE AT A REASONABLE CHARGES.

MANUFACTURER

LOBTEX CO., LTD.

OSAKA, JAPAN

MEMO