

AIR RIVETER (€

INSTRUCTION MANUAL

AR-011S AR-011M AR-011H

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Professional model of air riveter to install blind rivets.

- Thank you very much for purchasing "LOBSTER" air riveter. To ensure correct operation, please read this instruction manual carefully, and keep it in a safe place for later reference.
- This instruction manual contains information for models AR-011S, AR-011M and AR-011H. Be sure to refer to information that is applicable to the model you are using.
- This is Original instructions. (Original Instruction Manual is written in English language.)



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IMPORTANT SAFETY INSTRUCTIONS



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

Always wear eye-protection at all times during use. If this is not observed, the rivet shaft (cut-mandrel) may eject out when the rivets are cut and cause serious injury.

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.

The Important Safety Instructions are divided into **WARNING** and **ACAUTION**. The differences between these two levels are described below.

WARNING : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator.

CAUTION : Indicates a potentially hazardous situation which, if not avoided, may result in moderate injury to the operator or physical damage.

Moreover, failure to follow the instructions marked with the $\triangle CAUTION$ symbol or cautions without a $\triangle CAUTION$ 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 tool users.

- 1. The air pressure should be kept within the range of 0.49 to 0.59 MPa (5 to 6 kgf/cm², 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. Always attach the safety cap before use.
 - If this is not observed, the rivet shafts (mandrel) may eject out when the rivets are cut and cause serious injury.
- 3. Be sure to remove the frame head when adding hydraulic oil.
 - If the frame head is not removed before adding oil, excess oil may remain inside the tool, and damage to the tool or personal injury may result.

4. 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 not inserted far enough, 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.
- 5. 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.
- 6. 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 hose is damaged by objects being dropped onto it, for instance, the damaged part may rupture and accident or injury may result.
- 7. 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.

- 1. Always turn off the air supply before disassembling the tool for cleaning and maintenance purposes.
 - If the tool is cleaned or disassembled with the air supply connected, injury may result.

2. Do not use the tool with the frame head removed.

• Items such as fingers may become caught in the mechanism.

3. Do not bring your face close to the air outlet holes.

• Pressurized air containing fine particles is discharged from the air outlet holes during use. Keep eyes away from this area.

4. 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.

5. 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.

6. Avoid uncomfortable postures while working.

You may fall down and injury may result.

7. Keep people who are not involved in work away from the workplace.

• Accidents or injury may result.

8. Maintain the tool with due care.

- Refer to the Instruction Manual for details on replacing parts and attachments, otherwise injury may occur.
- Keep the grip clean and dry at all times, and never let it become greasy, otherwise injury may occur during use.

9. 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.

10. 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.

11. Do not attempt to modify the tool.

- Unauthorized modifications may cause malfunctions which can lead to accidents or injury.
- 12. 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.

NOMENCLATURE





TECHNICAL DATA

Model No.		AR-011S	AR-011M	AR-011H	
Weight	kg (lbs)	1.2 (2.65)	1.5 (3.31)	2.1 (4.64)	
Operating air pressure		0.49	\sim 0.59 MPa (5–6 kgf/c	cm², 71–85 psi)	
Dimensions (Length×	Height × Width) mm	217×259×60	225×271×80	257×312×90	
Air consumption per rive	ደ (c.ft.)	0.6 (0.021)	1.5 (0.053)	2.9 (0.102)	
Tool stroke mm (inch)		14 (35/64)	14 (35/64)	16 (41/64)	
Traction power at 0.59 MF	Pa kN (kgf)	3.8 (387)	9.1 (928)	14.0 (1,428)	
Applicable rivets ϕ mm(rivet diameters) ϕ inch		2.4, 3.2* 3/32, 1/8*	2.4, 3.2, 4.0, 4.8* 3/32, 1/8, 5/32, 3/16*	2.4, 3.2, 4.0, 4.8, 6.4* 3/32, 1/8, 5/32, 3/16, 1/4*	
Operating environment	Temperature	4° to 35 °C			
	Relative humidity	80%RH max. (no condensation)			
Sound Pressure level (Lpa)		77 dB			
Vibration	Emission value	0.0075 m/sec ²			
Air intake			Size of screw G1/4 ((PF1/4)	

* Stainless steel rivets can not be used.

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.

Manufacturing year of unit	Indicated on the bottom of Air Cylinder in cipher
Installation site of rated plate	Along the side of Air Cylinder
Installation site of caution plate	Along the side of Air Cylinder

* Rated plate and caution plate is identical.

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 rivet imes No. of rivets per minute

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

PREPARATION BEFORE USE



- 2.4 mm (3/32"), 3.2mm (1/8") and 4.0 mm (5/32") rivets can be used just by replacing the nosepiece.
- The tool is available to install 6.4 mm (1/4") rivets subject to • conversion of jaws, jaw case head, jaw pusher and nosepiece. (Refer to page 6)

RATOR
TTENTION:
sure is too high, damage
occur. If the pressure is
size of the rivet may not
stalled (cut)



Divet Die	AR-011S	AR-011M		AR-011H		
Rivet Dia.	Nose piece	Nose piece	Nose piece (Hole dia.)	Jaws	Jaw case head	Jaw pusher
2.4 mm (3/32")	2.4	2.4	2.4 (1.8 mm) 🔊	"M"	"M"	"M"
3.2 mm (1/8")	3.2	3.2	3.2 (2.3 mm) 🕥	A.		5
4.0 mm (5/32")		4.0	4.0 (2.9 mm) 🔊		62	
4.8 mm (3/16")		4.8	4.8 (3.3 mm)			
6.4 mm (1/4")			6.4 (4.3 mm)	"H"	"H"	"H"

Shaded areas indicate parts which are installed in the tool as standard accessories.

Nose Piece Selection

Conform the size to be used, and replace the nose piece with the corresponding one. Wrong size selection of the nose piece will cause jamming the spent mandrel inside.

OPERATING THE AIR RIVETER



<Operating temperature>

The ambient temperature for working is within the range of 4°C ~ 35°C (40°F~95°F).

MAINTENANCE

After long periods of use, debris from rivet shafts (mandrel) 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.



- Be careful not to leave out any parts, and tighten all connections securely.
- The jaws are consumable parts, and they should be replaced periodically.

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2 Cleaning and filling the cylinder

◎ If foreign materials build up in the cylinder, it will not operate smoothly and service life will be reduced.



NOTE:

 Be careful not to allow any debris or other foreign materials get into the hydraulic oil or the cylinder during disassembly and re-assembly.



- Store in a place which is well-ventilated and free from excessive dust and humidity, and where there is no danger that the tool will fall.
- If not using the tool for an extended period of time, carry out a maintenance inspection before storing it away. (Refer to pages 6 and 7 "Maintenance").
- To increase the working life of the tool, it is recommended that you give it periodic overhauls. Contact the place of purchase or your nearest "LOBSTER" dealer for any overhauls and repair work required.

TROUBLESHOOTING

If a problem occurs, check the following.

If the problem persists after checking the items in the table below, contact your nearest "LOBSTER" dealer or direct to us.

In making any enquires 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.

Symptom		Cause	Countermeasure
The rivet does not go in, or the shaft does	1	Incorrect combination of replacement parts being used.	Replace with the correct part which matches the rivet size. (Refer to page 4.)
not come out after	2	Nosepiece or frame head is loose.	Use a spanner A to tighten securely.
riveting.	3	Jaw case is incorrectly assembled.	Check the jaw case setting position. (Refer to page 6.)
	4	Contact surfaces between the jaws and the jaw case head (AR-011S: Jaw case) are not smooth.	Clean the jaws and inside the jaw case head, and apply "LOBSTER" brand jaw lube (or spray-type lubricating oil or the accessory hydraulic oil) to the backs of the jaws. (Refer to page 6.)
		The inside of the cylinder is dirty so that the air piston cannot return to its proper position.	Clean inside the cylinder, and apply grease inside the cylinder and to the O-ring. (Refer to page 7.)
		Oil filling was not performed correctly, so that there is excess hydraulic oil inside the tool.	Refill the hydraulic oil after remove the frame head. (Refer to page 7.)
Number of switch operations increases	1	The rivet length is not correct for the workpiece thickness.	Use rivets which match the workpiece thickness.
before riveting is	2	Compressor air pressure is incorrect.	Check the air pressure. (Refer to page 4.)
complete.	3	Jaw case is incorrectly assembled.	Check the jaw case setting position. (Refer to page 6.)
	4	Jaws are worn.	Replace the jaws. (Refer to page 6.)
	5	Insufficient hydraulic oil, causing a shorter stroke.	Add hydraulic oil. (Refer to page 7.)

HYDRAULIC OIL REQUIREMENTS

Use only clean hydraulic oil, as the viscosity of the oil used will affect tool performance.

"LOBSTER" brand Hydraulic Oil is supplied in a plastic filler bottle with the tool, and can also be obtained from your "Lobster" dealer or agent in your town. If this is not possible, a good quality mineral oil with the following properties should also be used.

Viscosity ISO	: VG46
Viscosity Index	: 113
Viscosity at 40°C	: 46 c.s.t.
Viscosity at 100°C	: 7.06 c.s.t.
Flash Point	: 228

RECOMMENDED OILS are:

Shell Tellus No. 46 Esso Teresso No. 46 Mobil D.T.E. 25 Oil (Medium) **英語/ENGLISH**



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AR-011S PARTS TABLE

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Index No.	Part name	Code No.	Index No.	Part name	Code No.
1-A	Nosepiece 'S' 2.4 (3/32)	10027	26	Color for Valve Pusher	10154
1-B	Nosepiece 'S' 3.2 (1/8)	10028	27	O-Ring P-6	10150
2	Frame Head	10170	28	Valve	10125
3	Jaw Case	10173	29	Valve Spring	10126
4	Jaws 'S'	10032	30	O-Ring S-14	10152
5	Jaw Pusher	10132	31	Nipple	10127
6	Jaw Pusher Spring	10133	32	Trigger (Long)	16363
7	Lock Washer	10148	33	Trigger Connector Rod	10120
8	Jaw Case Lock Nut	10113	34	Trigger Lever	10175
9	Frame unit (Include 10 & 11)	14029	35	Spring Pin 3×7.2	23595
10	O-Ring P-12	10128	36	Spring Pin 3×22	10144
11	B-Ring P-12	10129	37	Spring Pin 3×18	10145
12	Oil Piston	10171	38	Air Piston Unit (w/bumper)	14342
13	O-Ring P-22	10180	39	Bumper	10172
14	B-Ring P-22	10181	40	O-Ring P-44	10182
15	Return Spring	14200	41	O-Ring G-50	10421
16	O-Ring S-24	10185	42	Air Cylinder Cap	10018
17	Hanger Clip	10106	43	Spanner 'A'	10183
18	Frame Cap	10169	44	Spanner 'B'	10142
19	Safety Cap	10015	46	Air Hose Joint 1/4	10140
20	Safety Cap Nut	10108	47	Air Hose Joint Nut 1/4	10139
21	Air Cylinder	14065	48	Hydraulic Oil (in a bottle)	10012
22	Frame Lock Nut	10348			
23	O-Ring P-7	10149			
24	Valve Pusher	14090			
25	Valve Pusher Spring	10179			

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ORDERING PARTS

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

Model	Part Name	Code No.	Qty.	* When parts are modified for
AR-011S	Jaws (pair) 'S'	10032	1	improvement, the older parts are kept
AR-011S	Frame head	10170	1	

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AR-011M PARTS TABLE

Index No.	Part name	Code No.	Index No.	Part name	Code No.
1-A	Nosepiece 'S' 2.4 (3/32)	10027	27	Air Cylinder	10102
1-B	Nosepiece 'S' 3.2 (1/8)	10028	28	Bumper	29736
1-C	Nosepiece 'S' 4.0 (5/32)	10029	29	Spring Pin 3×22	10144
1-D	Nosepiece 'S' 4.8 (3/16)	10030	30	Spring Pin 3×18	10145
2	Frame Head	10105	32	Frame Lock Nut	10112
3	Jaw Case Head	10116	33	O-Ring P-7	10149
4	Jaws 'M'	10117	34	Valve Pusher	10123
5	Jaw Pusher	10132	35	Valve Pusher Spring	10124
6	O-Ring S-10	10151	36	Color for Valve Pusher	10154
7	Jaw Case	10115	37	O-Ring P-6	10150
8	Jaw Pusher Spring	10133	38	Valve	10125
9	Lock Washer	10148	39	Valve Spring	10126
10	Jaw Case Lock Nut	10113	40	O-Ring S-14	10152
]]	O-Ring P-12	10128	41	Nipple	10127
12	B-Ring P-12	10129	42	O-Ring P-60	10134
13	Frame unit (Include 11 & 12)	10101	43	Air Piston Unit	14168
14	Oil Piston	10109	44	O-Ring G-70	10080
15	O-Ring P-22A	10130	45	Air Cylinder Cap	10011
16	B-Ring P-22A	10131	46	Spanner 'A'	10141
17	Return Spring	14200	47	Spanner 'B'	10142
18	O-Ring S-26	10153	49	Air Hose Joint 1/4	10140
19	Hanger Clip	10106	50	Air Hose Joint Nut 1/4	10139
20	Frame Cap	10104	51	Hydraulic Oil (in a bottle)	10012
21	Safety Cap	10015			
22	Safety Cap Nut	10108			
23	Trigger (Long)	13121			
24	Trigger Connector Rod	10120			
25	Trigger Lever	10119			
26	Spring Pin 3×7.2	23595			

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ORDERING PARTS

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

Model	Part Name	Code No.	Qty.	* When parts are modified for
AR-011M	Jaws (pair) 'M'	10117	1	improvement, the older parts are kept
AR-011M	Frame head	10105	1	





AR-011H PARTS TABLE

Index No.	Part name	Code No.	Index No.	Part name	Code No.
1-A	Nosepiece 'M' 2.4 (3/32)	10213	25	Trigger Lever	10119
1-B	Nosepiece 'M' 3.2 (1/8)	10214	26	Spring Pin 3×7.2	23595
1-C	Nosepiece 'M' 4.0 (5/32)	10215	27	Air Cylinder	10188
1-D	Nosepiece 'M' 4.8 (3/16)	14350	28	Bumper	29736
1-E	Nosepiece 'H' 6.4 (1/4)	10226	29	Spring Pin 3×22	10144
2	Frame Head	10191	30	Spring Pin 3×18	10145
3-A	Jaw Case Head 'M'	20528	31	Slotted Pin 4×31	14154
3-B	Jaw Case Head 'H'	10223	32	Frame Lock Nut	10112
4-A	Jaws 'M'	10117	33	O-Ring P-9	10219
4-B	Jaws 'H'	10201	34	Valve Pusher	10205
5-A	Jaw Pusher 'M'	10209	35	Valve Pusher Spring	10206
5-B	Jaw Pusher 'H'	10224	36	Color for Valve Pusher	10222
6	O-Ring S-14	10152	37	O-Ring S-6	10220
7	Jaw Case	10198	38	Valve	10125
8	Jaw Pusher Spring	10210	39	Valve Spring	10126
9	Lock Washer	10148	40	Nipple	10127
10	Jaw Case Lock Nut	10113	41	O-Ring P-70	10212
11	O-Ring P-12	10128	42	Air Piston Unit	14164
12	B-Ring P-12	10129	43	O-Ring G-80	10211
13	Frame unit (Include 11 & 12)	10187	44	Air Cylinder Cap	10059
14	Oil Piston	10195	45	Spanner 'A'	10217
15	O-Ring P-24	10207	46	Spanner 'B'	10218
16	B-Ring P-24	10208	48	Air Hose Joint 1/4	10140
17	Return Spring	14139	49	Air Hose Joint Nut 1/4	10139
18	O-Ring S-28	10221	50	Hydraulic Oil (in a bottle)	10012
19	Hanger Clip	10192			
20	Frame Cap	10190			
21	Safety Cap	10072			
22	Safety Cap Nut	10194			
23	Trigger (Long)	13126			
24	Trigger Connector Rod	10202			

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ORDERING PARTS

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

Model	Part Name	Code No.	Qty.	* When parts are modified for improvement, the older parts are kept in stock for a period of five years.
AR-011H	Jaws (pair) 'H'	10201	1	
AR-011H	Frame head	10191	1	

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

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