

## EJA series —Air Booster Nozzles—

## Instruction Manual

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**Introduction:**

Thank you for purchasing this spray nozzle from H. Ikeuchi & Co., Ltd.

This manual gives detailed instructions for the basic handling, maintenance and cautions of the spray nozzle.

H. Ikeuchi & Co., Ltd. reserves the right under its product improvement policy to change parts, when altered, without reference to the illustrations and notes in this manual.

Please take note that due to our continuous efforts to improve our products, the details in this manual may differ slightly from the actual product.

Thank you for your understanding

After reading, keep this manual in a handy place for quick reference.

**Safety Precautions:**

Prior to use, read this manual to familiarize yourself with the proper operation of the nozzle for best performance.

H. Ikeuchi & Co., Ltd. takes no responsibility for any accidents and/or injuries resulting from improper handling, installation and/or operation.



Wear safety gloves.

The screw thread or nozzle edges may cause injury.



Ensure that the nozzle is firmly installed.

Untightened or loose screws may cause the nozzle to detach or fall off during operation and lead to serious accidents.

## 1. Suggestions & Cautions

- (1) Install nozzles as the final installation step after all piping installation is completed and the entire piping system is cleaned .

- Never install a nozzle during installation work of the plant or equipment.
- Use larger size pipes and valves to prevent pressure drop.
- Use new pipes. Dust and foreign particles in old pipes may clog nozzles.
- Chips or seal tape inside a pipe may also clog nozzle. Purge all pipes before installing nozzles.
- Flush the pipes thoroughly to purge foreign particles before installing nozzles.

Flushing should be at or near the maximum flow rate, such that turbulent flow occurs in the piping to promote cleaning.

- If a nozzle is clogged, the nozzle performance deteriorates. Use of strainers is recommended to prevent nozzles from clogging.

- (2) The edges of threads or some parts may be sharp.

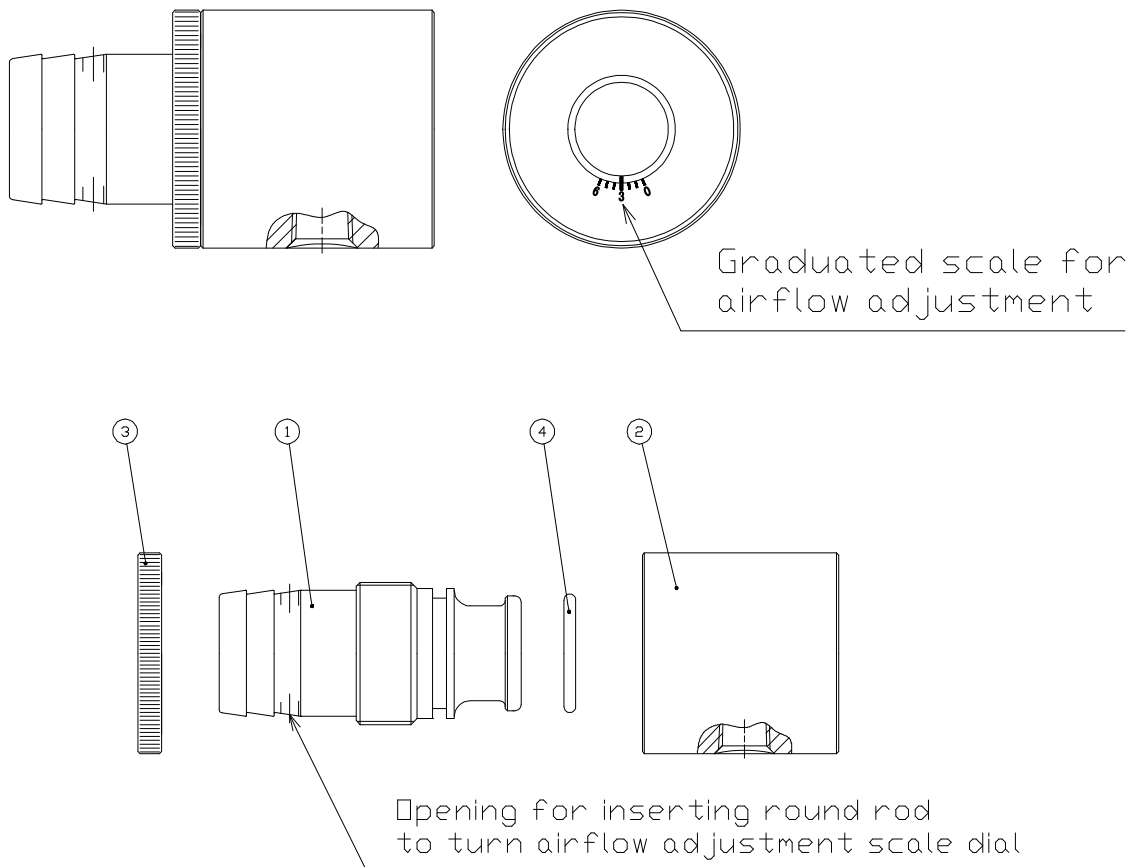
Wear safety gloves to protect hands.

- (3) Operate nozzle under the specified pressures.

Refer to our published flow-rate diagram.

- (4) Do not damage or scratch nozzles.

## 2. Components of Nozzle



No.	Component	Material
1	BODY	S303
2	ADAPTOR	S303
3	LOCK NUT	S303
4	O-RING	NBR

Note:(1) Lifetime of nozzle components varies depending on operational conditions. Replace consumable parts when corrosion or wear of components is found to significantly affect nozzle performance.

(2) Dimensions and materials may be changed depending on part number of the nozzle.

(3) In our material code, "S" represents "stainless steel".

(Example) S303 represents stainless steel 303.

### 3. Disassembly (Please refer to parts list on the previous page)

- (1) Insert a round rod and fix it in the opening for inserting round rod of the body①.

Loosen the lock nut③ by hand to remove it. (A round rod shall be prepared by the customer.)

- (2) Loosen the adaptor② by hand to remove it.

- (3) Pull out the round rod from the body①.

- (4) Remove the O-ring④ from the body①.

Note: Disassembled parts should be stored free from dust and not subjected to physical shock.

### 4. Assembly

- (1) Attach the O-ring④ to the groove of the body①.

- (2) Insert a round rod and fix it in the opening for inserting round rod of the body①.

Screw the adaptor② to the body①.

- (3) After the adaptor② is completely screwed to the body①, loosen the body① to align the marking line with the graduated scale for airflow adjustment “3” of the adaptor②.

- (4) Pull out the round rod and screw the lock nut③ to the body①.

Insert the round rod into the opening again, then tighten the lock nut③ by hand so as not to loosen the body①.

- (5) Pull out the round rod from the body①.

Note: Remove dust or foreign particles on the parts with a brush.

(Take great care not to scratch or damage these critical parts.)

## 5. Airflow adjustment

The following procedure describes the adjustment of the airflow from the position where the marking line of the body① is aligned with the graduated scale for airflow adjustment “3” of the adaptor②.

- (1) Insert a round rod and fix it in the opening for inserting round rod of the body①, and loosen the lock nut③ a little by hand.
- (2) Turn the adaptor② by hand to the desired scale for airflow.

For air pressure and air consumption at each graduated scale, refer to the flow-rate diagram (separate sheet).

- (3) Tighten the lock nut③ by hand.
- (4) Pull out the round rod from the body①.

## 6. Troubleshooting

Trouble	Probable Cause		Solution	Remarks
No spray	Control	<ul style="list-style-type: none"> <li>• Controller is not switched on.</li> <li>• Valves are not opened.</li> </ul>	<ul style="list-style-type: none"> <li>• Switch it on.</li> <li>• Open valves.</li> </ul>	
	Nozzle	<ul style="list-style-type: none"> <li>• Nozzle or Pipe is clogged.</li> <li>• Nozzle or Pipe is clogged due to damage.</li> <li>• No gap is made between body and adaptor because of overtighten.</li> </ul>	<ul style="list-style-type: none"> <li>• Check and clean nozzle or pipe.</li> <li>• Replace or repair damaged part.</li> <li>• Clean them.</li> <li>• Adjust the gap in accordance with “5. Airflow adjustment” .</li> </ul>	
Air leak	Handling	<ul style="list-style-type: none"> <li>• Nozzle or Pipe is cracked.</li> <li>• Nozzle or Pipe is corroded.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace cracked part.</li> <li>• Replace corroded part.</li> </ul>	
Irregular spray	Not spraying normally	<ul style="list-style-type: none"> <li>• Nozzle or Pipe is clogged.</li> <li>• Nozzle tip is corroded.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean nozzle or pipe.</li> <li>• Replace corroded part.</li> </ul>	

## 7. Disposal

Disposal should be practiced according to the regulations and codes of local authorities, or ask a professional disposer.

## 8. Inquiry

For parts or troubles, contact our local sales office or the following.



“The Fog Engineers”  
**H. IKEUCHI & CO., LTD.**

Daiichi Kyogyo Bldg., 1-15-15, Awaza, Nishi-ku,  
Osaka 550-0011 Japan

Tel: +81-6-6538-4015 Fax: +81-6-6538-4022

e-mail: [overseas@kirinoikeuchi.co.jp](mailto:overseas@kirinoikeuchi.co.jp) <http://www.kirinoikeuchi.co.jp/eng/>