



End of Arm Tool

General Maintenance Guidelines

Phone: (216) 535-4848

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www.EMInc.com

Safety Notes



Always disconnect the power and air supply to the End of Arm Tool prior to performing any maintenance.



Remove the EOAT from the robot prior to performing any maintenance.



Always use proper safety Lock Out-Tag Out procedures when making any adjustments to the EOAT (while the EOAT is mounted to the robot).



Supply all components with the recommended operating air pressure. Reference technical specification documents for further information.

Framing/Structure

- Most End of Arm Tools are constructed from aluminum profile, aluminum plates, connectors, clamps, and brackets. Ensure all fasteners are secured with lock washers.
- Over time, fasteners can become loose through use and exposure to vibration. Periodically check all fasteners to ensure they are tight and secure.
- Fasteners and lock washers should be replaced as needed.
- Wipe down all components and keep the End of Arm Tool clear of debris.
- Replace framing components as needed in the event they become bent, damaged or worn.



Vacuum Cups

- Periodically inspect cups for wear. Regularly clean the contact surface of the vacuum cup to remove contaminants.
- Use warm, soapy water to clean (a mild dish detergent works best). **DO NOT USE** alcohol, alcohol based cleaners, or other harsh cleaners that may dry out the cup material and promote cracking.
- Vacuum cups will wear over time and should be replaced as needed.
- Inspect seals between the cups, nipples and mounting members. Replace if the components do not seal properly.
- Clean filters in cups or nipples if supplied.
- To prevent loss to the vacuum circuit, always use the recommended nipple for each vacuum cup.



BEFORE



AFTER



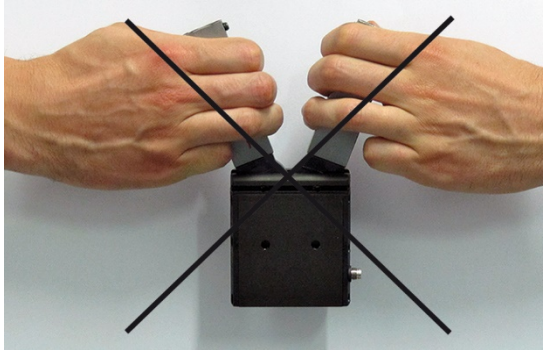
*this method can be used for HNBR and Silicone Pads.

Suspensions

- Keep suspensions clear of contaminants and debris.
- With external spring suspensions, keep the springs clear of debris and replace if damaged.
- When securing fittings and vacuum cup nipples to the suspension, always use a wrench on the suspension to counter-act the rotational forces to prevent damage to the non-rotating mechanisms.
- Ensure the tubing entering the fitting is loose enough to allow unrestricted compression and extension of the suspension.

Electric Grippers & Actuators

- Do not attempt to open or close electric grippers or actuators manually.



Pneumatic Grippers

- Periodically inspect the grippers for their performance. Regularly clean these components to reduce the buildup of contaminants.
- Inspect the fingers or jaws that come in contact with the work piece for wear or debris. Clean or replace as needed.
- Periodic lubrication of internal moving parts and seals can extend the life of a gripper. Inspect and clean every 5,000,000 cycles. Seal kits are available. Reference the appropriate technical specification sheet for more information.
- In facilities with heavy debris and contaminants, more frequent inspections and servicing may be required.
- Common replacement parts for many of our pneumatic grippers can be found online by visiting the product page (shown here).

1679 Senex Mini Sprue Gripper - Normally Open

- Higher grip force than other similarly sized sprue grippers.
- Curved fingers hold small part medium sprues firmly.
- 10mm diameter mounting post with 100mm post allows this gripper to be used with standard mounting and air connection components.
- ABS and PC are just a few of the materials this gripper can be used.

Item #1679 FE 80443
 \$99.00 each

Available in Stock
 1000 in Stock

Technical Specifications:
 340 Degree Open

Overview | Technical Specifications | Dimensional Drawing

- 1679
- Normally Open
- 3/8" Inner Aperture Sprue
- 14 1/2" Lx 1" Hx 1" W (at resting length) (measured at jaw point only)

Related Items

- 100 Threaded Hole HD Push-On Fingers for Mini 7600
 Item # 100-0100-0100
 \$3.58 each
- 104 Threaded Hole HD Push-On Fingers for Mini 7600
 Item # 104-0100-0100
 \$5.48 each
- 118 Threaded Hole HD Push-On Fingers for Mini 7600
 Item # 118-0100-0100
 \$3.58 each
- 128 Threaded Hole HD Push-On Fingers for Mini 7600
 Item # 128-0100-0100
 \$3.58 each



Parts for 1679 Senex Mini Sprue Gripper - Normally Open

NO.	PART NO.	DESCRIPTION	QTY	PRICE	EXT.
1	1679-0100-0100	Replacement Main Spring	1	\$3.44	\$3.44
2	1679-0100-0100	Replacement Piston Top	1	\$3.58	\$3.58
3	1679-0100-0100	Replacement Piston Bottom	1	\$3.58	\$3.58
4	1679-0100-0100	Head 606	1	\$3.58	\$3.58
5	1679-0100-0100	Head 606	1	\$3.58	\$3.58
6	1679-0100-0100	Head 606	1	\$3.58	\$3.58
7	1679-0100-0100	Head 606	1	\$3.58	\$3.58
8	1679-0100-0100	Head 606	1	\$3.58	\$3.58
9	1679-0100-0100	Head 606	1	\$3.58	\$3.58
10	1679-0100-0100	Head 606	1	\$3.58	\$3.58

Other End Effectors – Cylinders, Slides, Rotary Actuators

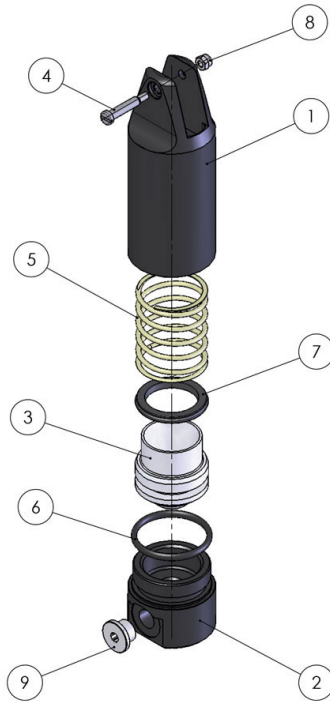
- Periodically inspect and clean.
- Check performance of device for proper operation and alignment.
- Replace seals and other wear items as needed.
- Lubricate as indicated on their respective technical specification sheet.

Air Nippers and Blades

NOTE: Nipper blades and knives are extremely sharp and can cause injury. Always handle with extreme care and use the appropriate blade/knife guards while the tool is not in use.

- Regularly inspect the nipper bodies and blades. Regularly clean these components to reduce the buildup of contaminants (including inside of the nipper body/blades).
- Nipper blades can wear over time, regularly inspect the blade conditions and cut quality of the part. Replace/recondition blades as needed.
- Discontinue use of blades if chips or cracks are observed on the nipper blade.
- Periodic lubrication of the internal moving parts and seals can extend the life of a nipper. Inspect and clean every 5,000,000 cycles. Seal kits, rebuild kits, and extra springs are available.
- Self-sharpening/reconditioning is not recommended. Please contact EMI for blade reconditioning services.

Nipper rebuild kits can be found online at www.EMICorp.com and navigate to the End of Arm Tooling products section. Rebuild components can be found at the bottom of each product page. This example shows the internal components for a GN-10 nipper, Quick# 1902.



Parts for 1902 Gimatic Nipper Round Body Size 10

Enter the quantity for each needed part and click add to cart

Add to Cart

Print Parts List

No.	Part No.	Item Description	Qty Req.	Price	Qty
3	GN 10 03	Piston for Gimatic Nipper GN-10	0	\$25.69 Each	<input type="text"/>
5	GSN GN 10S MS	6561 Main Spring for Gimatic Nipper GN-10(S)	0	\$2.72 Each	<input type="text"/>
6,7	KIT1 GN10S	Seal Kit for Gimatic Nipper GN-10S, GN-10	0	\$2.86 Each	<input type="text"/>
4	GSN GN10S BMP	2595 Blade Mounting Pin for GN10S	0	\$4.20 Each	<input type="text"/>
8	GSN GN5135 BMN	2598 Blade Mounting Nut for GN 05(S) & GN10(S)	0	\$0.50 Each	<input type="text"/>
9	107 G1 8	Internal Hex Threaded Plug	0	\$2.41 Each	<input type="text"/>
4,5,6,7,8	GSN GN10 RK	2076 Rebuild Kit for Gimatic GN-10 & GN-10S	0	\$7.10 Each	<input type="text"/>

Add to Cart

Print Parts List

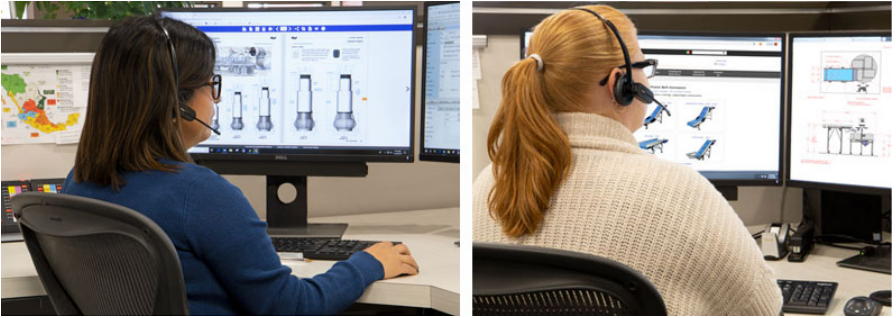
Tubing & Air Connections

- Minimum recommended size tubing for vacuum applications: OD Ø6mm (ID Ø4mm)
- Minimum recommended size tubing for compressed air (positive relative pressure) components: OD Ø4mm (ID Ø2.4mm)
- Soft Polyurethane Tubing is not recommended for vacuum applications as it could collapse in a vacuum environment.
- Inspect all air fittings and connections for leaks. Tighten or replace components if damaged or as necessary.
- Inspect tubing for wear, blisters, cracks, or leaks. When possible, keep tubing away from moving parts that can cause wear.
- Tubing should be cut at a 90° angle when in use with push-in fittings.
- Always use the recommended tubing with the respective air fitting.

Sensors

- If the EOAT has sensors, regularly check for their proper operation. Replace as necessary.
- Clear photo eyes and fiber optics of debris for optimal operation.
- Check wiring for damage from wear or other elements.
- Check connections from sensor to junction box and connectors. Secure if needed.

Contact & Support



For replacement components, questions, comments or concerns, please contact EMI's customer service using the following methods:

Contact Information:

(216) 535-4848

Sales@EMICorp.com

28300 Euclid Ave, Wickliffe, OH 44092

EMI website: www.EMICorp.com

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