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D. Air Module

AW2

1. Product Overview

9121-AW2-M	Air Module, (3) 1/8 NPT, (2) 1/4 NPT Pass-Through, Master
9121-AW2-T	Air Module, (3) 1/8 NPT, (2) 1/4 NPT Pass-Through, Tool

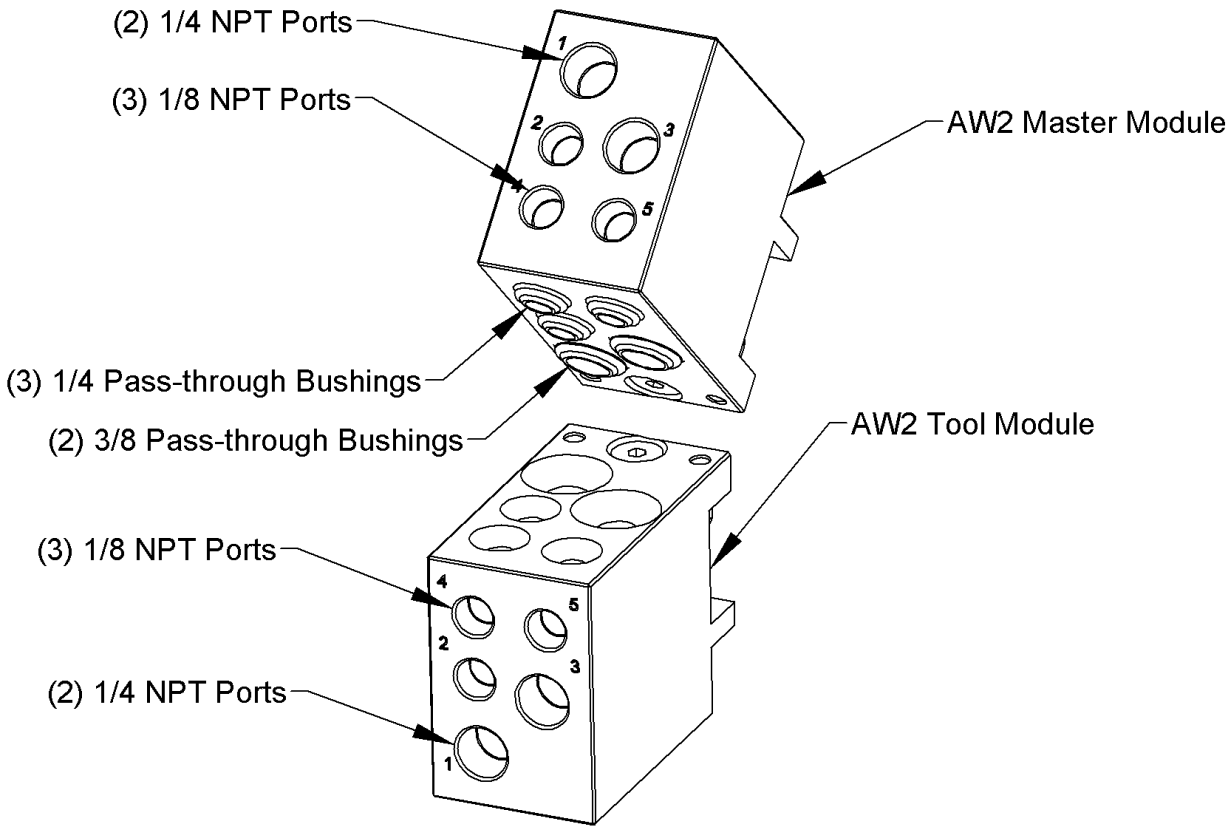


Figure 1.1—AW2 Air Module (Typical)

2. Installation

The air modules are typically installed by ATI prior to shipment. The steps below outline the field installation or removal as required.

DANGER: Power and air should always be removed prior to maintenance or repair.

CAUTION: Air supply should be clean, dry, and non-lubricated. Supply pressure should not exceed 100 psi and should be filtered 50 micron or better. Connection lines should be properly strain-relieved.

2.1 Installation

1. It may be necessary to clean the mounting surface on the tool changer prior to installing the module in order to remove any debris that may be present.
2. Align the module to the holes in the mounting rail using the dowels that are pressed into the module housing. Push the module up flush with the mounting surface. Screw in to the socket flat head screw and tighten to 44 in-lbs. using a hex key.
3. Connect customer plumbing to the module.

2.2 Removal

1. All customer plumbing connections to the module need to be purged and disconnected.
2. Remove the socket head cap screws and pull the module off the tool changer.

3. Operation

The air modules are designed to pass air utilities from the Master to the Tool for use by the customer's tooling.

4. Maintenance

Once installed, the operation of the air modules is generally trouble free. Periodically, the condition of the air ports should be checked. Replace any damaged or degraded components as necessary. Any contamination in or around the mating surfaces of the modules should be removed with industrial contact cleaner. During inspection, ensure that the fasteners attaching the modules to the tool changer are secure.

The modules may be field serviced as needed.

DANGER: Power and air should always be removed prior to maintenance or repair.

5. Troubleshooting

Problem	Cause	Remedy
Air Leakage	Damaged/Worn seals	Replace seals.
	Corrosion	Consult ATI for assistance.
Poor Flow	Flow path blockage	Inspect valve components and supply/return lines for blockage, clean/repair as necessary.
Modules Won't Couple	Bent dowel pin	Replace stem, dowels as necessary. Check module attachment to tool changer. Check robot program and ensure parallel approach trajectory during tool changer coupling.

6. Recommended Spare Parts

See Drawings in Section 8 of this manual.

7. Specifications

Part Number	# Ports	Port Size	Cv	
AW2	3	1/8”	1.0	Maximum pressure of 100psi (6.9bar), Nitrile seals, Self-sealing on Master and Tool (cannot operate under a vacuum).
	2	¼”	2.4	
Weight		0.9 lbs (0.4 kg) 0.9 lbs (0.4 kg)		Master Tool

8. Drawings

Drawings are available on the ATI website or by contacting an ATI representative.