ASSEMBLY, INSTALLATION, AND REMOVAL OF CONTACTS AND MODULES

FOR MINI PNEUMATIC CONTACTS AND MODULES

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MINI PNEUMATIC RECEIVER CONTACT INSTALLATION AND REMOVAL

PART # 610 131 108

TOOLS REQUIRED
.050 Hex Wrench (for Mini Coax modules)
Flat Blade Screwdriver (for Mini Power hybrid modules)
Phillips Head Screwdriver (for iCon modules)
Mini Coax/Mini Power Receiver/ITA Contact Extraction Tool,
Part # 910 112 104

CONTACT INSTALLATION INSTRUCTIONS

NOTE: This contact is for 1/8 ID [4 mm] hose.

1. Slide hose onto contact, making sure that all barbs are covered by the hose (**Figure A**).

2. Insert contact into the module.
NOTE: Adjacent position loading may be limited by tubing with a wall thickness greater than 1/32" [0.8 mm].

CONTACT REMOVAL INSTRUCTIONS

1. Remove the module from the receiver frame.
NOTE: For more information concerning the process of removing the module from the receiver frame, see module installation and removal instructions in Section 2 of this User's Manual.

NOTE: Some Mini Pneumatic receiver modules are one piece modules. If your module does not have two screws holding the module together, skip to step 4.

2. Use the appropriate tool to remove the screws located at the top and bottom of the module.

3. Grasp the module halves and apply force in opposite directions, rocking the ends of the module while slightly pulling the top of the module away from the mating bottom section, until separated. Be sure to open both sides of the module simultaneously or contacts could be damaged.

4. Place the Mini Coax/Power Receiver/ITA Extraction Tool, Part # 910 112 104 (**Figure B**), over the contact to be removed/replaced. Use care to keep the tool perpendicular to the surface of the module, otherwise the tool or contact could be bent.

5. Once the extraction tool is seated and the retaining tabs on the contact are compressed, push the tool into the module. The contact will be pushed out of the rear of the module (**Figure C**).

DO NOT PUSH THE TOOL INTO THE MODULE UNTIL THE TIP OF THE EXTRACTION TOOL HAS FULLY SEATED INTO THE MODULE AND COMPRESSED THE RETAINING RING TABS ON THE CONTACT.

6. Replace the module cap using both hands to push the separated halves together. Replace and tighten the module retaining screws to a maximum torque of 2 in-lbs [0.23 Nm].

NOTE: The process shown here uses standard/90 series modules. The same process is used for modules from other series.

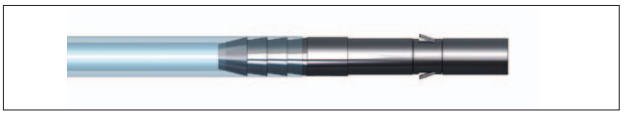


Figure A. Slide hose onto contact.

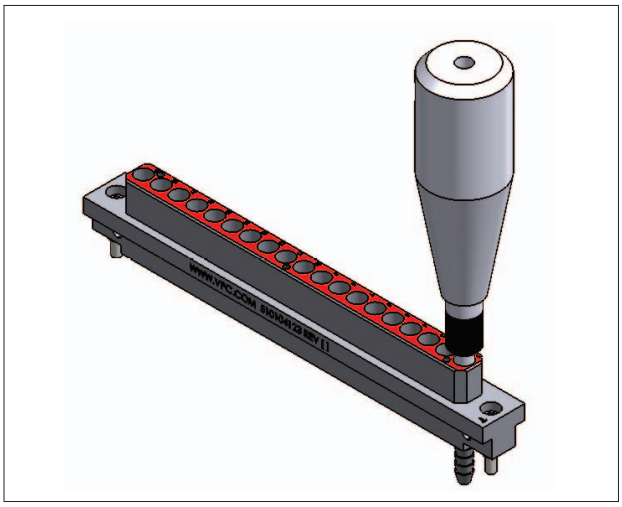


Figure B. Extraction Tool, Part # 910 112 104.

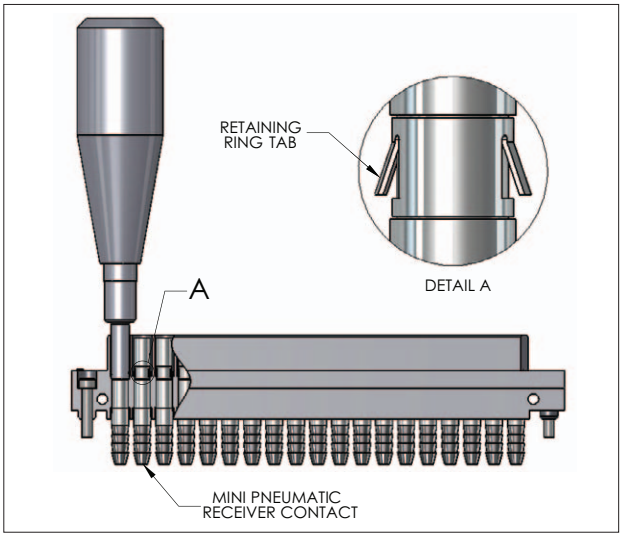


Figure C. Fully seat the extraction tool before pressing down.

NOTE: If you are using a hybrid module, you may need to reference the User's Manual for the other contact type for extraction instructions.

MINI PNEUMATIC ITA CONTACT INSTALLATION AND REMOVAL

PART # 610 132 106

TOOLS REQUIRED
Mini Coax/Mini Power Receiver/ITA Contact Extraction Tool,
Part # 910 112 104

CONTACT INSTALLATION INSTRUCTIONS

NOTE: This contact is for $^{1}/_{8}$ ID [4 mm] hose.

1. Slide hose onto contact, making sure that all barbs are covered by the hose (**Figure A**).

2. Insert contact into the module.
NOTE: Adjacent position loading may be limited by tubing with a wall thickness greater than $^{1}/_{32}$" [0.8 mm].

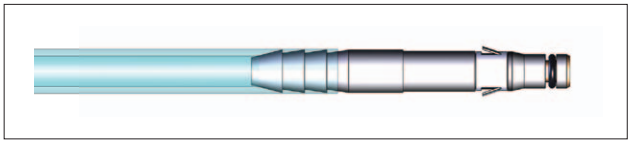


Figure A. Slide hose onto contact.

CONTACT REMOVAL INSTRUCTIONS

1. Remove the module from the ITA frame.
NOTE: For more information concerning the process of removing the module from the ITA frame, see module installation and removal instructions in Section 2 of this User's Manual.

2. Place the Mini Coax/Mini Power Receiver/ITA Extraction Tool, Part # 910 112 104 (**Figure B**) over the contact to be removed/replaced. Use care to keep the tool perpendicular to the surface of the module as not to bend the tool or the contact to be removed. Rotate the tool slightly while pushing it into the counter bore on the mating side of the module.

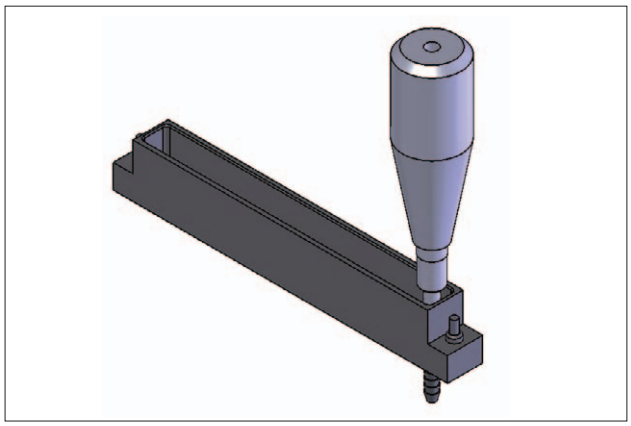


Figure B. Extraction Tool, Part # 910 112 104.

3. Once the extraction tool is seated properly and the retaining ring tabs on the contact are compressed, push the tool into the module. The contact will be pushed out of the rear of the module (**Figure C**).

DO NOT PUSH THE TOOL INTO THE MODULE UNTIL THE TIP OF THE EXTRACTION TOOL HAS BEEN FULLY SEATED INTO THE MODULE AND COMPRESSED THE RETAINING RING TABS ON THE CONTACT.

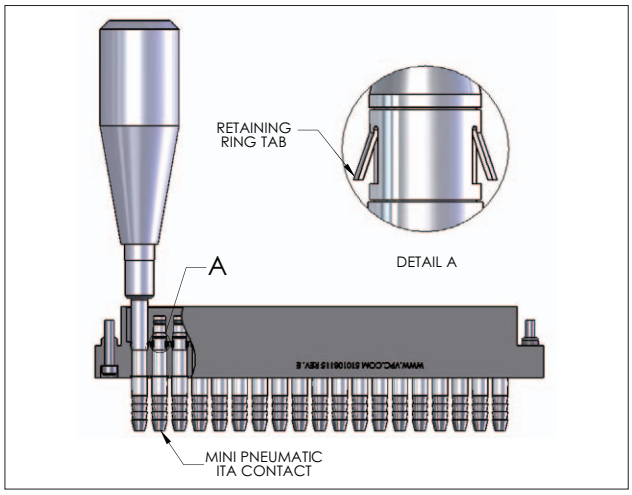


Figure C. Fully seat the extraction tool before pressing down.

NOTE: The process shown here uses standard/90 series modules. The same process is used for modules from other series.

NOTE: If you are using a hybrid module, you may need to reference the User's Manual for the other contact type for extraction instructions.

MINI PNEUMATIC STANDARD/90 SERIES MODULE INSTALLATION AND REMOVAL

TOOLS REQUIRED
$^{3}/_{32}$ Allen Wrench

INSTALLATION INSTRUCTIONS

1. Place the module in the receiver or ITA until the upper and lower module screws touch the mating holes in the inner frame. Ensure that Position 1 is located at the top for systems in which the modules are oriented vertically or to the left for systems in which the modules are oriented horizontally.

2. Using a $^{3}/_{32}$ Allen wrench, tighten the top screw 1 to 2 full revolutions, while pushing lightly against the face of the module.

3. Maintain this pressure while tightening the bottom screw 1 to 2 full revolutions.

4. Repeat this sequence until the module is seated. Torque the screw to 4 in-lbs [0.45 Nm].

REMOVAL INSTRUCTIONS

1. To remove, loosen the top screw 1 to 2 full revolutions. Loosen bottom screw 1 to 2 full revolutions.

2. Repeat this sequence until the module is separated from the receiver or ITA.

NOTE: For optimum performance and system longevity, distribute the contact load evenly throughout the module.

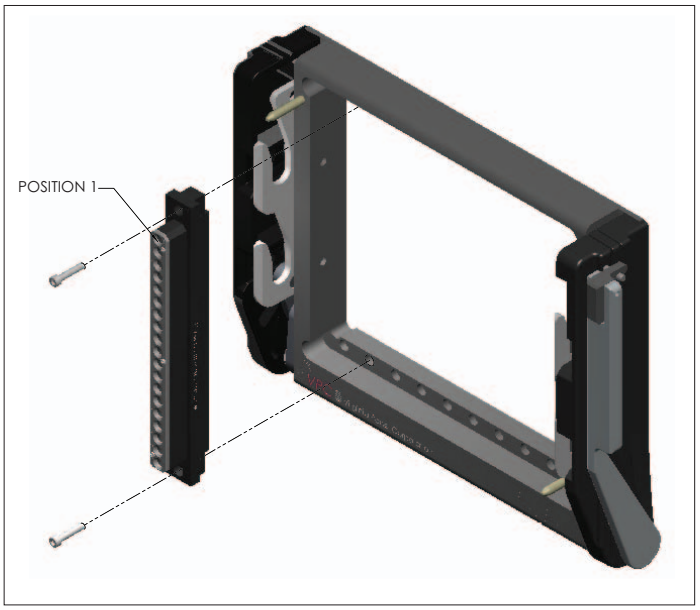


Figure A. Receiver Module.

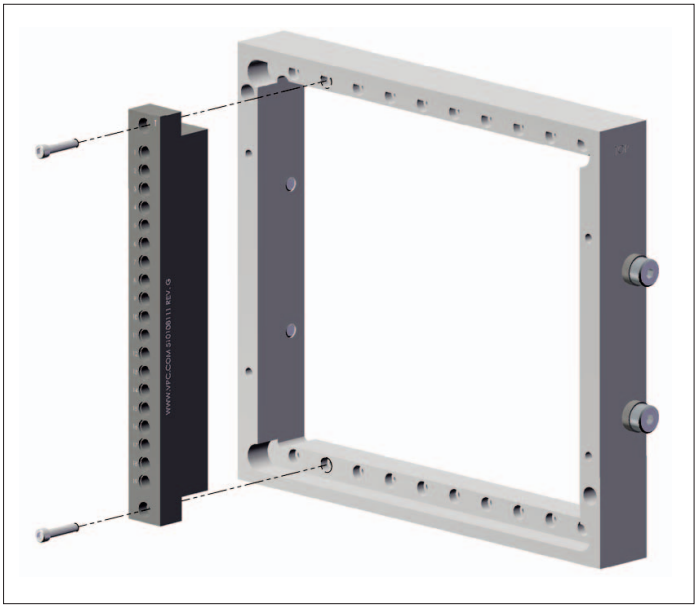


Figure B. ITA Module.

MINI PNEUMATIC ICON MODULE INSTALLATION AND REMOVAL

TOOLS REQUIRED
Phillips Head Screwdriver

INSTALLATION INSTRUCTIONS

NOTE: The receiver strain relief plate or the ITA cover may need to be removed prior to installing or removing an iCon module. Please refer to the appropriate User's Manual for instructions on how to perform these steps.

1. Place the module in the receiver or ITA until the upper and lower module screws touch the mating holes in the inner frame. Install modules such that Position 1 is located at the top of the ITA/ receiver frame.

2. Using a Phillips head screwdriver, tighten the top screw 1 to 2 full revolutions, while pushing lightly against the face of the module.

3. Maintain this pressure while tightening the bottom screw 1 to 2 full revolutions.

4. Repeat this sequence until the module is seated. Torque the screw to 1.5 in-lbs [0.16 Nm].

REMOVAL INSTRUCTIONS

1. To remove, loosen the top screw 1 to 2 full revolutions. Loosen bottom screw 1 to 2 full revolutions.

2. Repeat this sequence until the module is separated from the receiver or ITA.

NOTE: For optimum performance and system longevity, distribute the contact load evenly throughout the module.

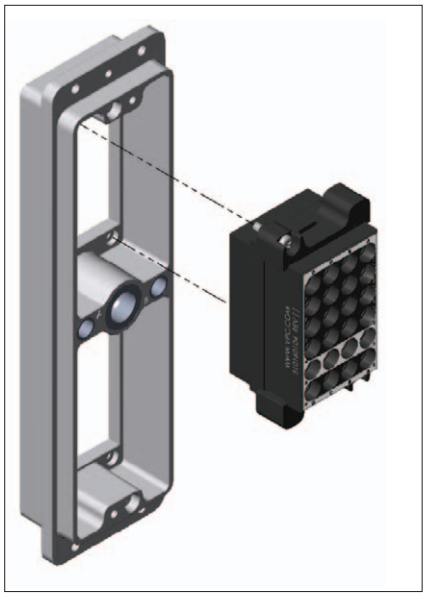


Figure A. Receiver Module.

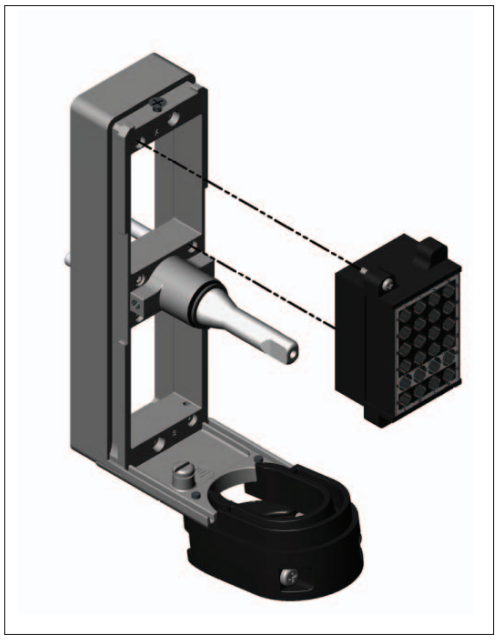


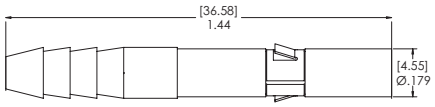
Figure B. ITA Module.

CROSS REFERENCE TABLES

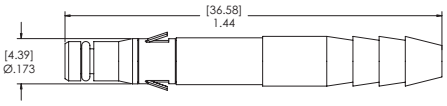
	STANDARD/ 90 SERIES RECEIVER MODULES					ICON RECEIVER MODULES			EXTRACTION
RECEIVER CONTACTS	510 104 120	510 104 123	510 104 150	510 104 206	510 104 243	510 160 102	510 160 103	510 160 104	910 112 104
610 131 108	X	X	X	X	X	X	X	X	X

	STANDARD/ 90 SERIES ITA MODULES					ICON MODULES			EXTRACTION
ITA CONTACTS	510 108 111	510 108 115	510 108 132	510 108 178	510 108 210	510 161 102	510 161 103	510 161 104	910 112 104
610 132 106	X	X	X	X	X	X	X	X	X

MINI PNEUMATIC CONTACT ELECTRICAL SPECIFICATIONS



Receiver Contact
Part # 610 131 108



ITA Contact
Part # 610 132 106

Dimensions shown: [millimeters]
inches

Contact Specifications

PRESSURE/VACUUM RATED	100 psi (6.9 bar)

Mechanical Characteristics

CYCLE LIFE	20,000

Material

CONTACT BODY	Nickel-Plated Brass