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TWINAXIAL RECEIVER CONTACT ASSEMBLY
PART # 610 113 144

TOOLS NEEDED
Soldering iron (with thin tip)
Heat Gun

ASSEMBLY INSTRUCTIONS
1. Install 0.25” [6.35 mm] diameter clear tubing 0.75” [19.05 mm]
   long on wire. Install backshell on wire (Figure A).

2. Strip wire (Figure A).

3. Install one piece of 0.062” [1.57 mm] diameter clear tubing 0.25”
   [3.17 mm] long onto each wire (Figure B).

4. Solder blue wire onto center conductor (Figure C). VPC solders
   per IPC’s J-STD-001.

5. Solder white wire onto inner shield contact. Check for shorts
   (Figure C).

6. Clean terminals and push both pieces of shrink tubing over the
   solder joints and shrink.

7. Screw backshell onto connector until tight. Check dimension to
   make sure backshell is seated properly. Solder backshell to braid
   through hole on backshell and clean (Figure D).

8. Push clear tubing over backshell inspection hole and shrink
   (Figure E).
TWINAXIAL CONTACT ASSEMBLY

PART # 610 113 145

TOOLS NEEDED
Soldering Iron (with thin tip)
Heat Gun

ASSEMBLY INSTRUCTIONS
1. Install 0.25” [6.35 mm] diameter clear tubing 0.75” [19.05 mm] long on wire. Install backshell on wire (Figure A).

2. Strip wire (Figure A).

3. Install one piece of 0.062” [1.57 mm] diameter clear tubing 0.25” [6.35 mm] long onto each wire (Figure B).

4. Solder blue wire onto center conductor (Figure C). VPC solders per IPC’s J-STD-001.

5. Solder white wire onto inner shield contact. Check for shorts (Figure C).

6. Clean terminals and push both pieces of shrink tubing over the solder joints and shrink.

7. Screw backshell onto connector until tight. Check dimension to make sure backshell is seated properly. Solder backshell to braid through hole on backshell and clean (Figure D).

8. Push clear tubing over backshell inspection hole and shrink (Figure E).

Dimensions shown: [millimeters]  in  [inches]

Figure A. Install tubing and backshell. Strip wire.
Figure B. Install two pieces of tubing.
Figure C. Solder blue wire on to center conductor. Solder white wire onto inner shield contact.
Figure D. Ensure backshell is seated properly.
Figure E. Ensure clear tubing covers backshell inspection hole.
TWINAXIAL RECIPIENT CONTACT INSTALLATION AND REMOVAL

PART # 610 113 144

TOOLS REQUIRED

\( \frac{3}{8} \) " Wrench

CONTACT INSTALLATION INSTRUCTIONS

1. Assemble the contact to the respective wire.
   NOTE: For more information concerning the contact assembly process please see contact assembly instructions in Section 1 of this User’s Manual.

2. Install the contact into the module and insert lock washer (Figure A).

3. Use the \( \frac{3}{8} \) " wrench to tighten nut to 8 in-lbs [0.90 Nm] (Figure B).

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 4 of this User’s Manual.

2. Loosen nut using \( \frac{3}{8} \) " wrench.

3. Pull contact away from module.

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.
TOOLS REQUIRED

¾” Wrench

CONTACT INSTALLATION INSTRUCTIONS

1. Assemble the contact to the respective wire.
   NOTE: For more information concerning the contact assembly process please see contact assembly instructions in Section 2 of this User’s Manual.

2. Install the contact into the module and insert lock washer (Figure A).

3. Use the ¾” wrench to tighten nut to 8 in-lbs [0.90 Nm] (Figure B).

CONTACT REMOVAL INSTRUCTIONS

1. Remove the module from the receiver frame.
   NOTE: For more information concerning the process of removing the module from the ITA frame, see module installation and removal instructions in Section 4 of this User’s Manual.

2. Loosen nut using ¾” wrench.

3. Pull contact away from module.

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.

Figure A. Assemble contact, lock washer, and nut.

Figure B. Installed contact.
TWINAXIAL STANDARD/90 SERIES MODULE INSTALLATION AND REMOVAL

TOOLS REQUIRED

\(\frac{3}{32}\) 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 \(\frac{3}{32}\) 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.
TWINAXIAL 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 load evenly throughout the module.
### CROSS REFERENCE TABLES

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<thead>
<tr>
<th>RECEIVER CONTACT</th>
<th>STANDARD/90 SERIES RECEIVER MODULE</th>
<th>ICON RECEIVER MODULE</th>
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TWINAXIAL CONTACT ELECTRICAL SPECIFICATIONS

Electrical Specifications

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<td>IMPEDANCE</td>
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<tr>
<td>FREQUENCY RANGE</td>
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<td>CONTACT RESISTANCE</td>
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<td></td>
<td>Intermediate - less than 3 mOhms</td>
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<td></td>
<td>Outer Contact - less than 3.5 mOhms</td>
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<tr>
<td>DIELECTRIC BREAKDOWN</td>
<td>600 V RMS</td>
</tr>
<tr>
<td>MAX VSWR</td>
<td>1.1 : 1 @ 100 MHz</td>
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<td>CROSSTALK</td>
<td>Down less than 60 dB @ 500 MHz</td>
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Mechanical Characteristics

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Material

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