

This document is an assembly aide, and not a replacement for the Engineering documentation. Consult the drawings and BOM.

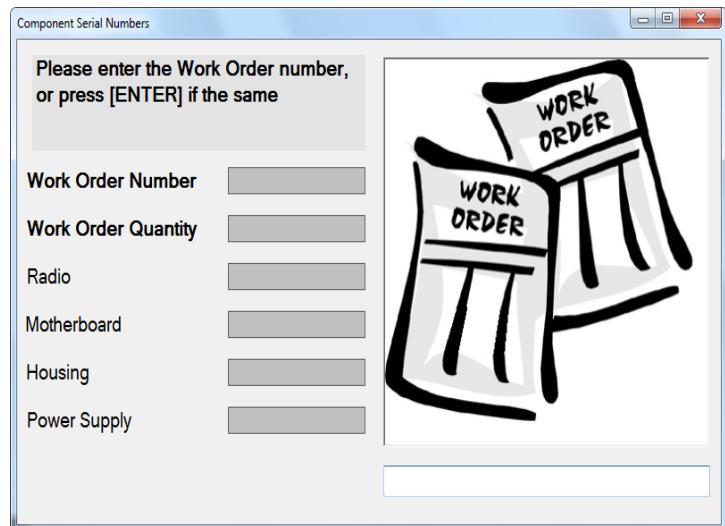
OSM Document Number: 00716154

Rev.	Description	Date	Drawn by	Released by
06	Updated Assembly process to include new automated program	11/17/15	uskg02	
07	Updated per change circle ADN170125	1/30/2019	J. Benton	T. Slagle

This document provides amplifying instructions for the assembly process. Each step number corresponds to a step on the product fitting instruction. This document should only be used to supplement the information that is provided in the fitting instructions. Product fitting instructions and testing procedures, doc. 00698684 and 00703624 respectively, should be the primary sources of information when assembling this product.

SETUP

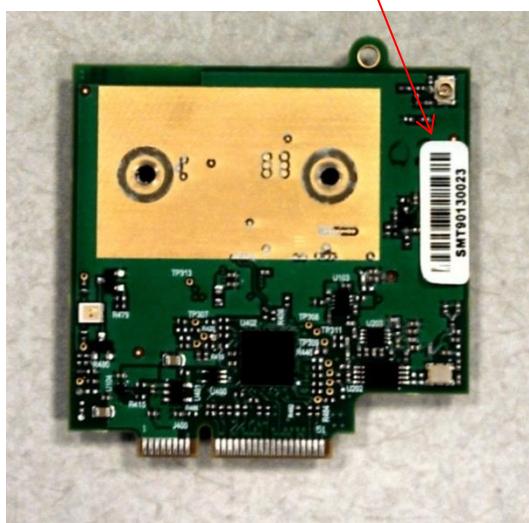
- Open shortcut for RAD-900 Serial Numbers application on programming station PC
- Enter work order number and quantity
- Enter serial numbers of radio, motherboard, housing, and power supply



STEP 1.

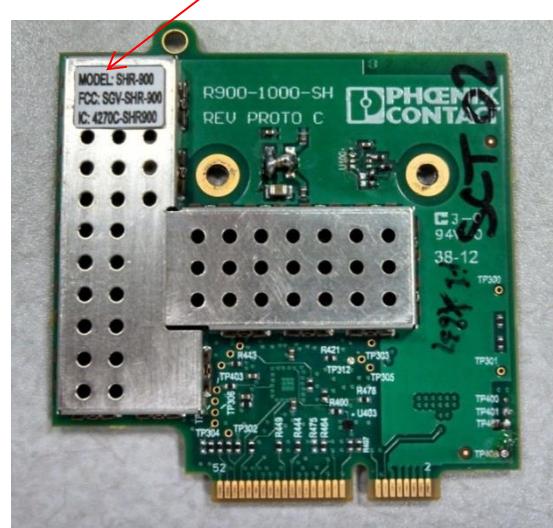
1.1

Scan barcode on PCBA



1.4 & 1.5

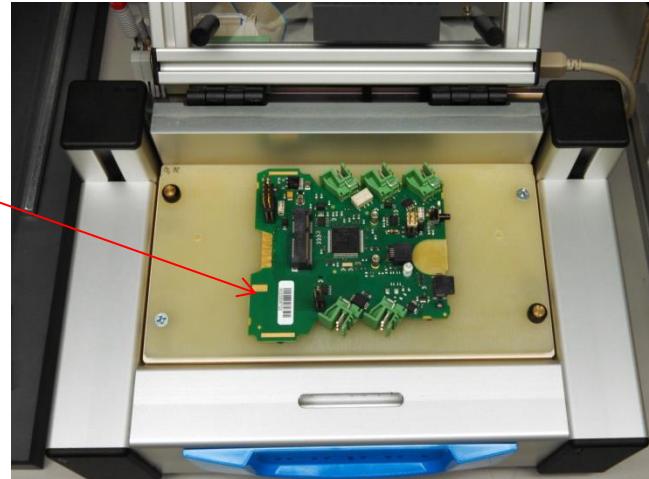
Print and apply FCC label



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STEP 2.

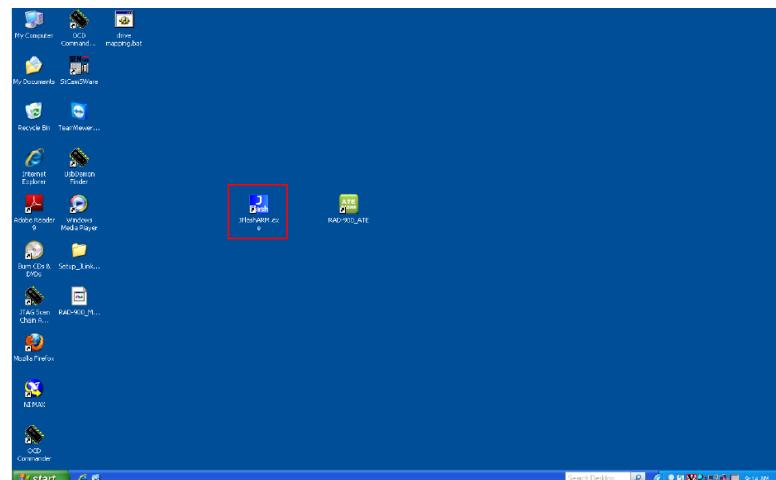
2.1 Scan barcode on motherboard



2.2 Install PCBA into firmware flashing fixture (TF7109).

Close lid. Ensure latch on lid engages.

2.2.1 Open JFlashARM.exe file on laptop desktop.

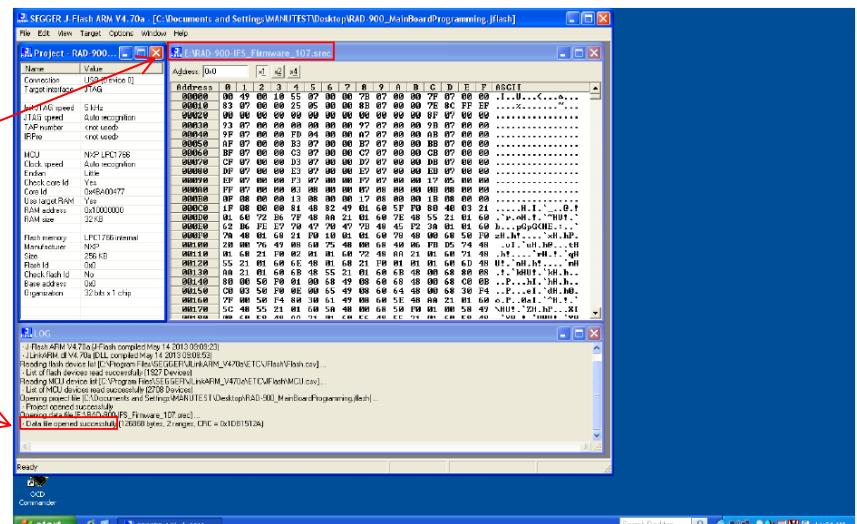


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STEP 2. cont.

2.2.2

When application opens, verify firmware revision against Doc# 00738544.

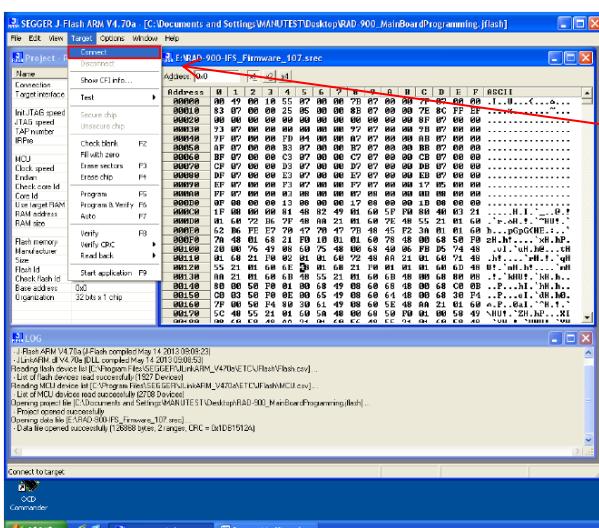


Data file opened successfully.

2.2.3

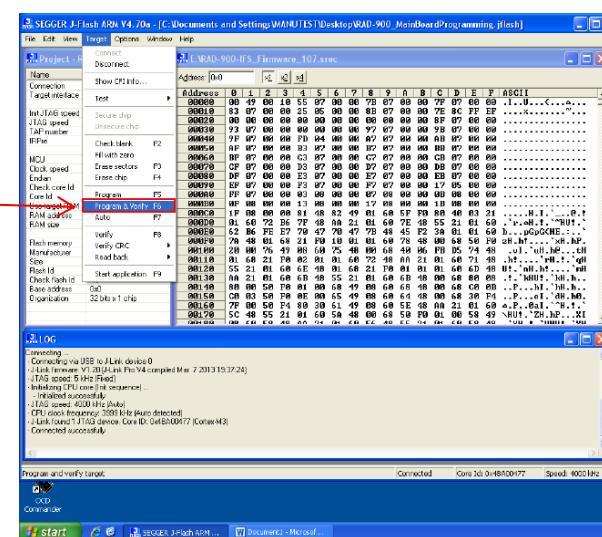
Select “Connect” on the Target pull down menu.

Text box will indicate if connection was successfully made.



2.2.4

Select “Program and Verify” on the Target pull down menu.

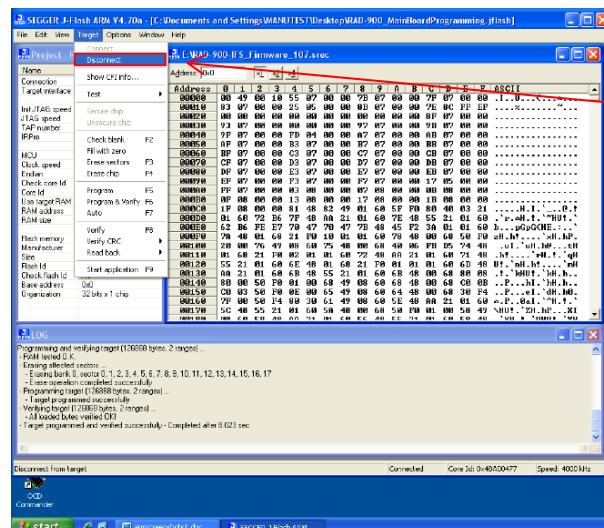
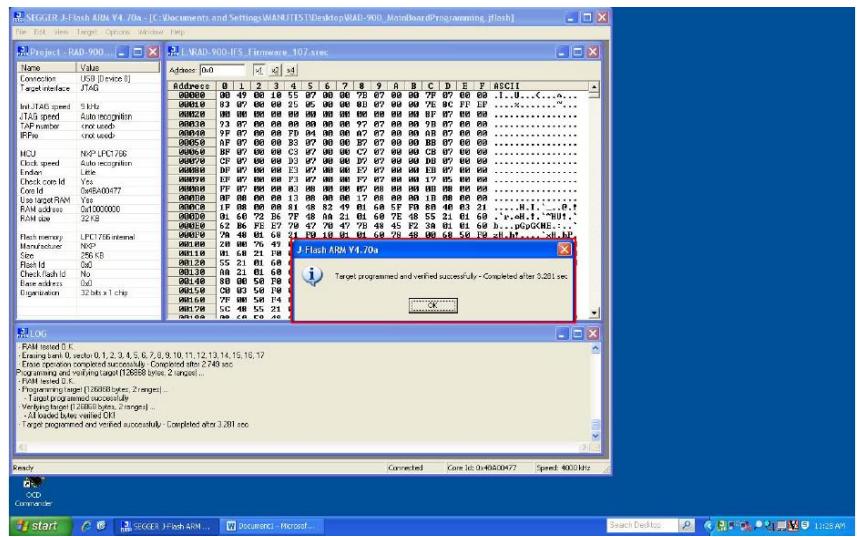


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STEP 2. cont.

2.2.5

Click OK after programming and verification is complete.



2.2.3

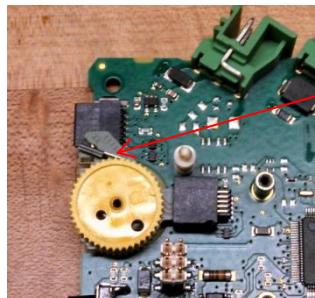
Select “Disconnect” on the Target pull down menu.

Text box will indicate when disconnection is complete.

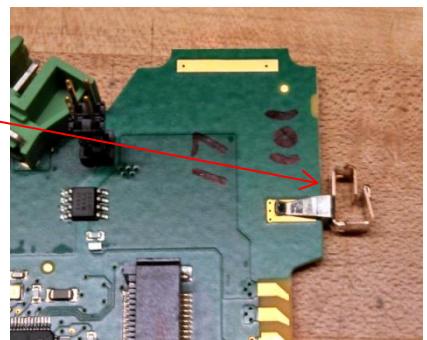
Remove PCBA from firmware flashing fixture and proceed to Step 2.3

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STEP 2. cont.



Parts installed upside down

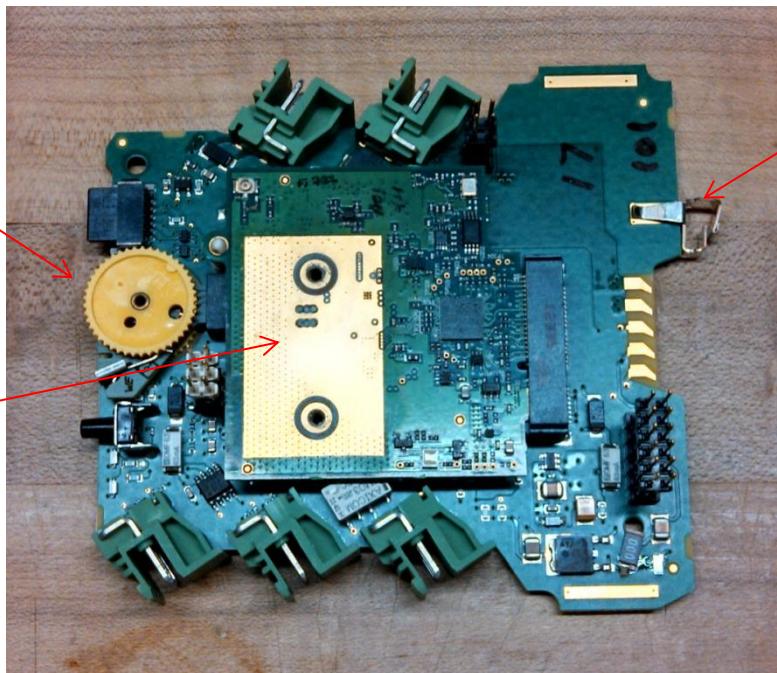


Incorrectly installed click wheel.

Incorrectly installed ground clip.

2.3 Install click wheel

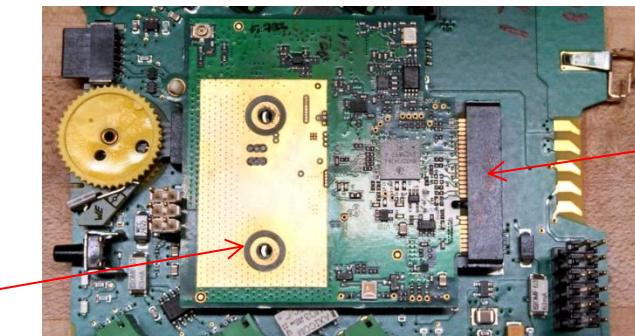
2.3 Install radio module



2.3 Install PE clip

Correct part after assembly step two.

Thru holes should align with standoffs



Board edge contacts should be fully inserted

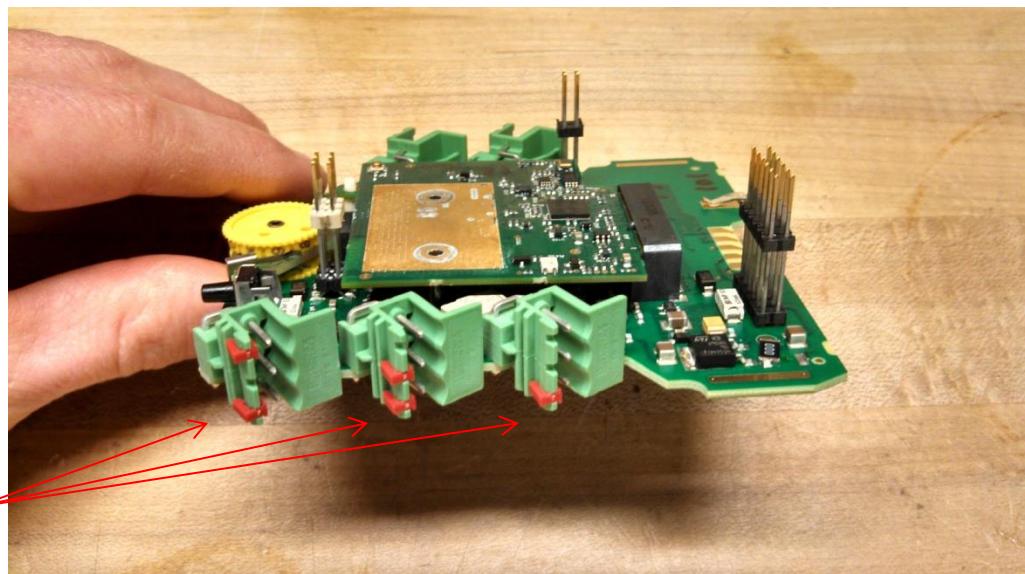
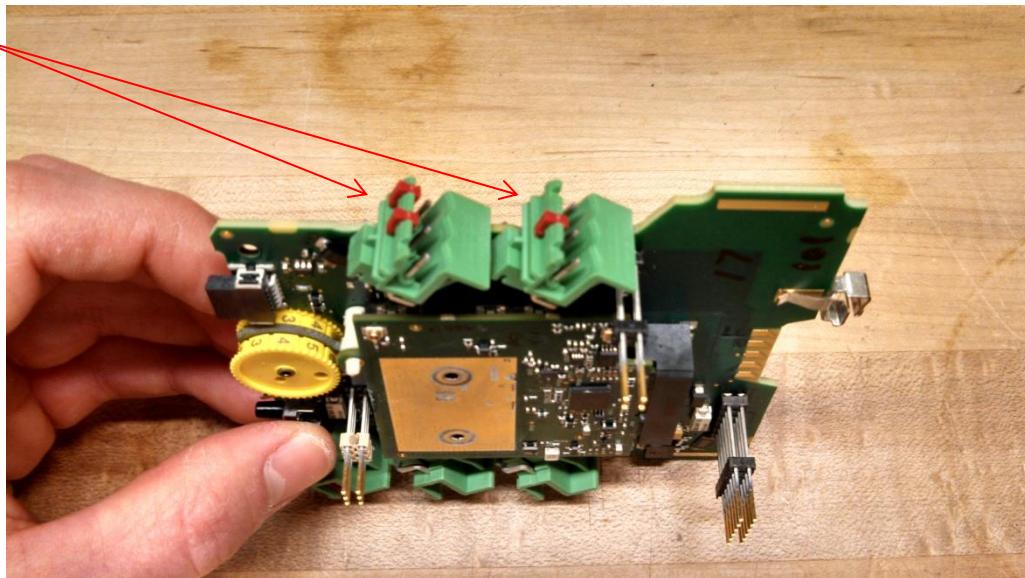
Incorrectly installed daughter board.

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STEP 3.

3.1

Install
coding



3.1

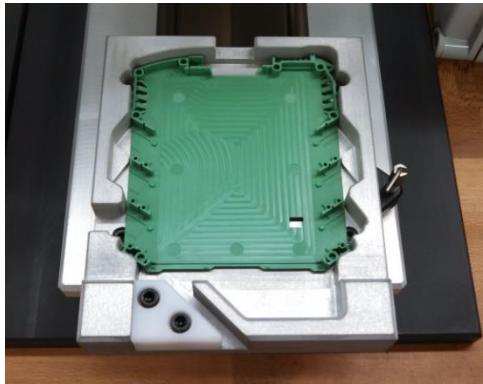
Install
coding

Correct part after assembly step three.

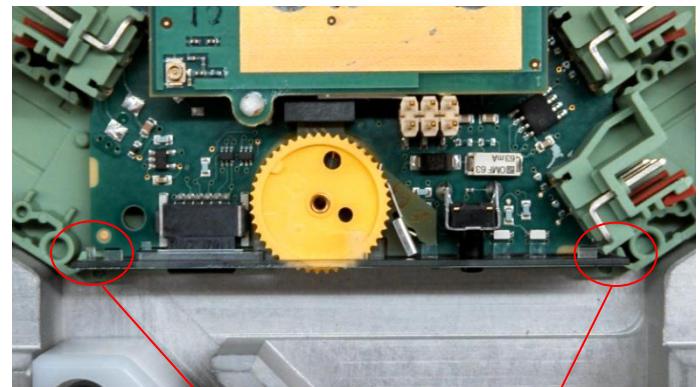
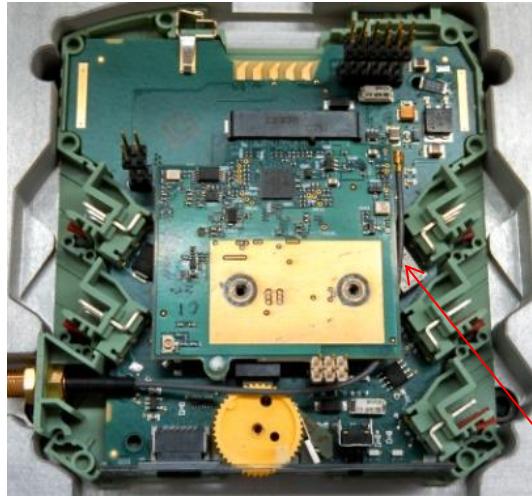
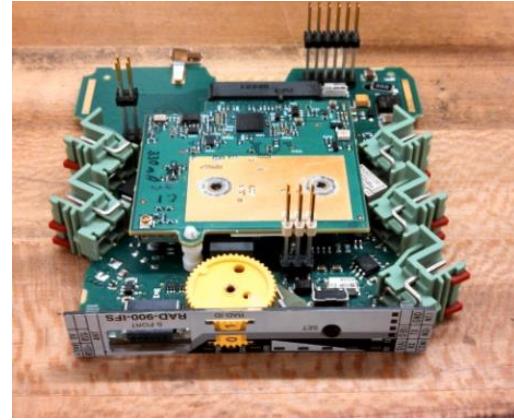
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STEP 4.

4.1 Scan barcode and install into tool no. A6118

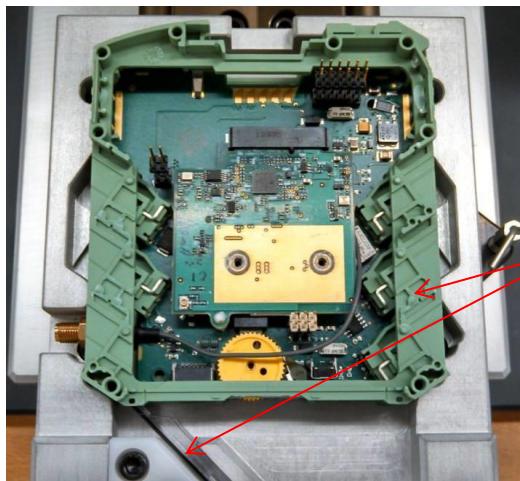


4.3 Install face plate prior to placing board on housing half in fixture

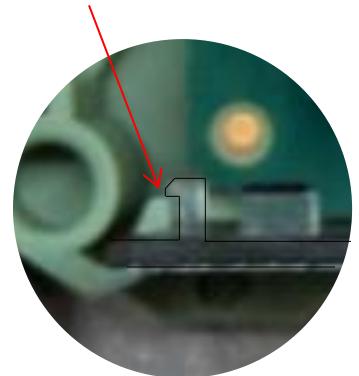


Tuck antenna cable under radio module so it will stay clear of middle housing during the press operation

4.3 Load motherboard and face plate into fixture ensuring face plate latches are engaging housing features



4.3 Load face plate cover and middle housing then actuate press

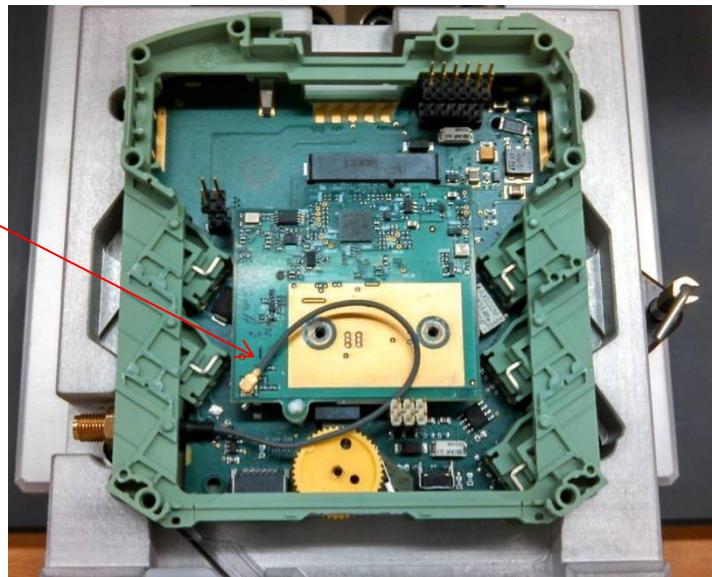


Correct part after assembly step five.

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STEP 5.

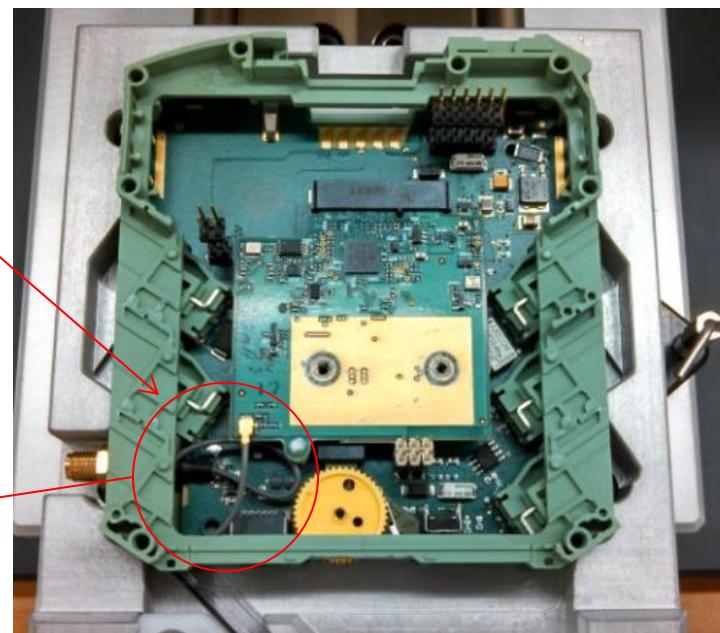
Cable should be coiled
in lower left corner



Incorrectly connected antenna cable.

5.1 & 5.2

Coil cable 360° counter
clockwise and tuck into
corner then secure to
connector



Correct part after assembly step six.

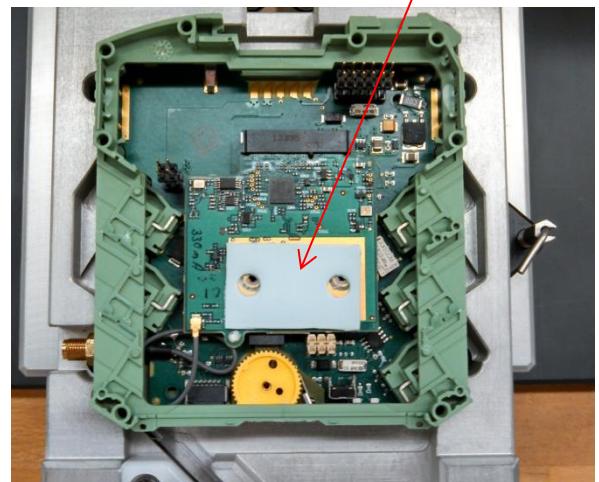
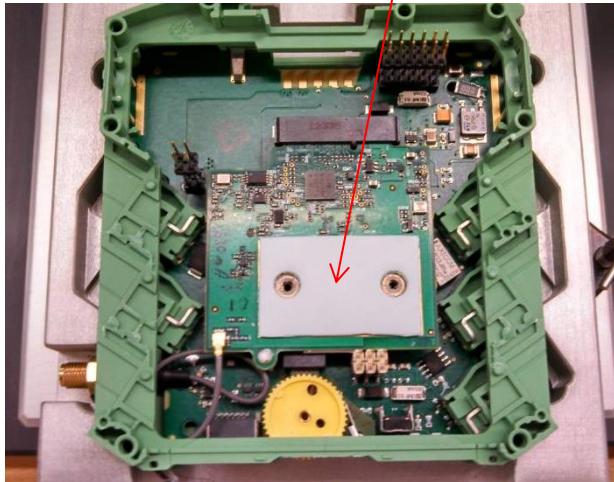
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STEP 6.

6.1

Install thermal pad

Thermal pad should be centered on copper pad and aligned with thru holes



Incorrect thermal pad installation.

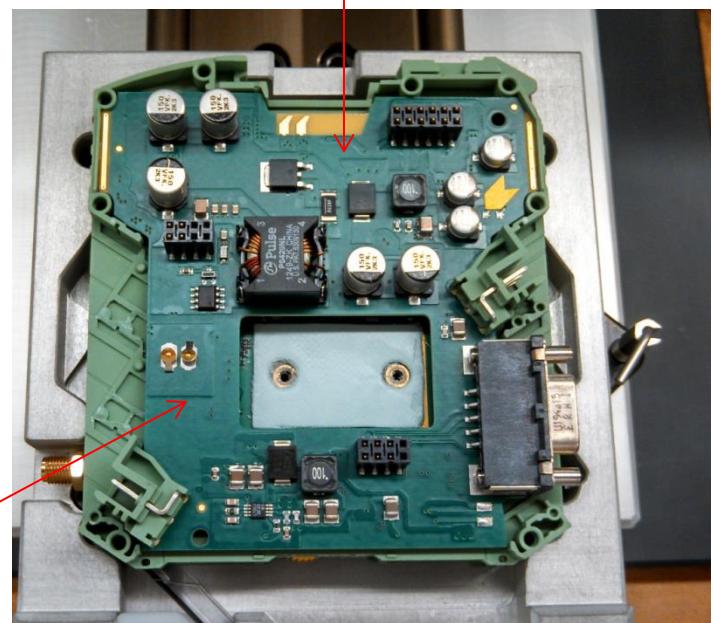


6.2

Remove backing from thermal pad

6.4

Install power supply board



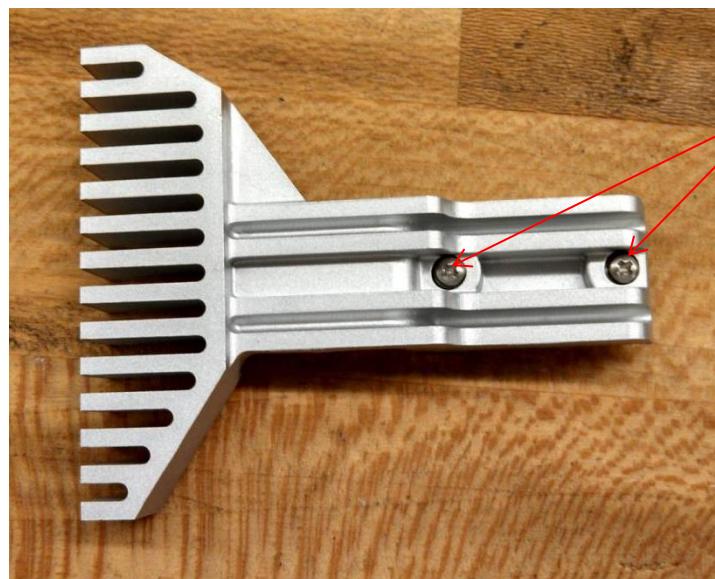
6.3

Scan barcode on power supply board

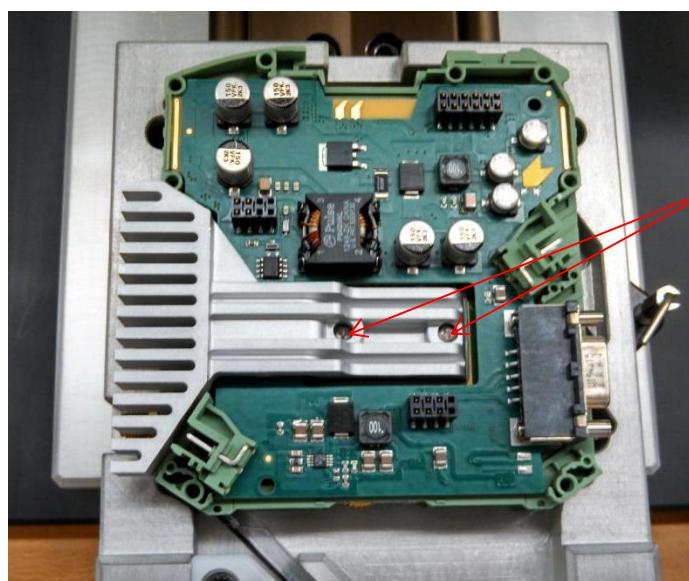
Correct part after assembly step seven.

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STEP 7.



7.1 Drop screws into thru holes on heat sink prior to installation on PCBA



7.2 Torque screws to 0.5 N*m (4.4 lb*in)

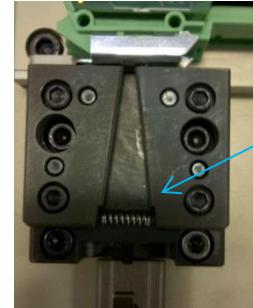
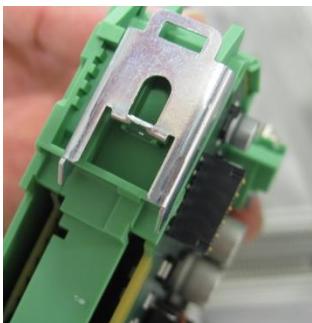
Correct part after assembly step eight.

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STEP 8.

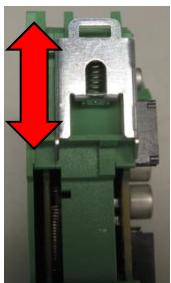
8.1

Assemble DIN clip to
Housing Assy

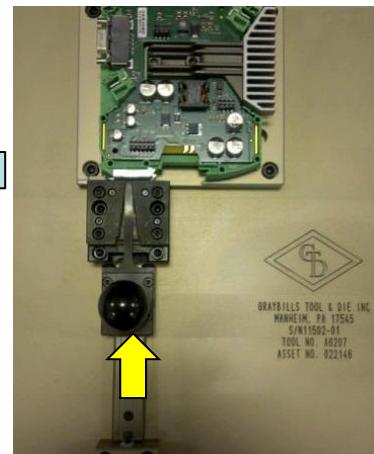


Place
spring
into
fixture
as
shown

Place Housing Assy in
Fixture A6207.

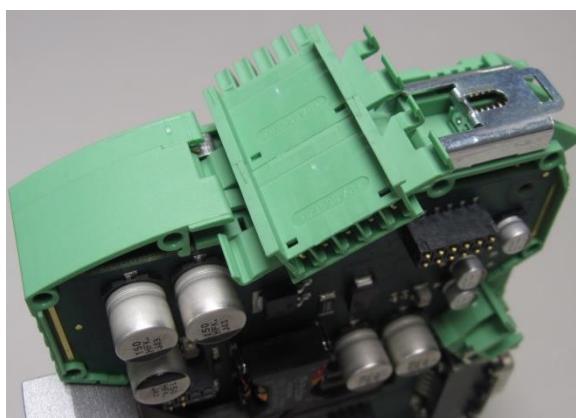


Verify that
spring was
inserted into
the assembly
then exercise
Din clip to
verify proper
function

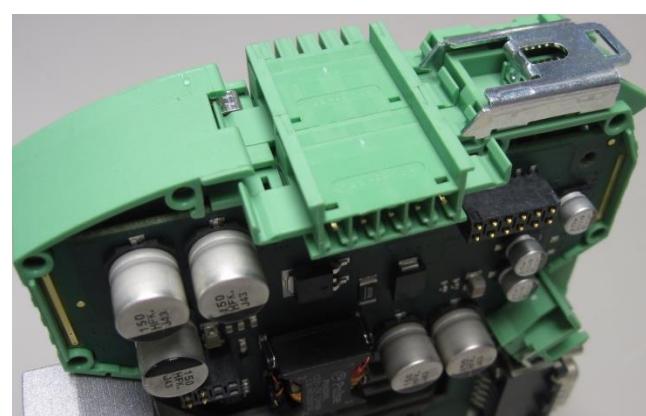


Push handle
towards the
Housing assy to
insert spring. Once
spring is inserted
then return handle
to home position

8.2



Install TBUS
connector by
pivoting into place
as shown

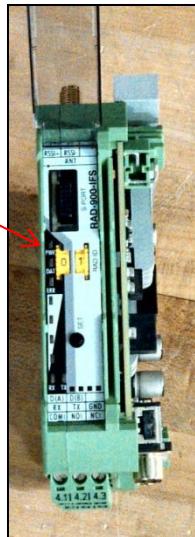


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STEP 9

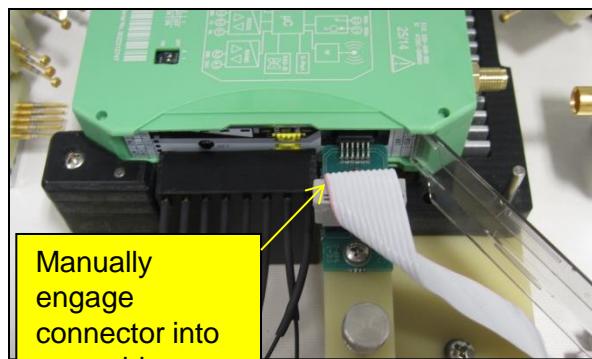
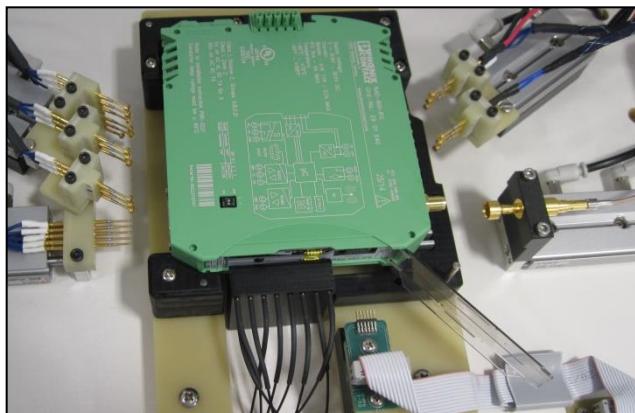
9.1

Address click
wheel to "01"



9.2

Place Assembly into test
fixture and perform
functional test



Manually
engage
connector into
assembly as
shown



Close tester lid and
handle will lock into
position

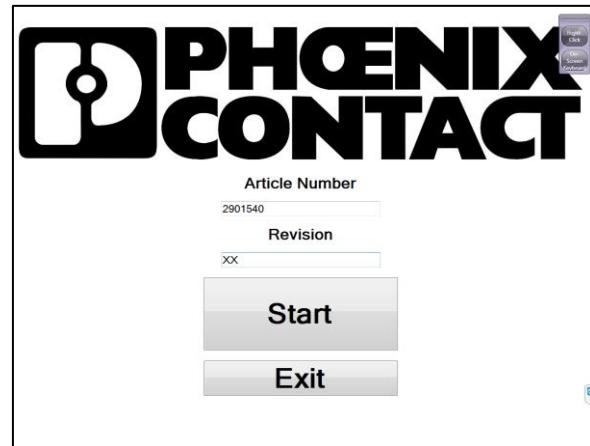


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STEP 9. cont.

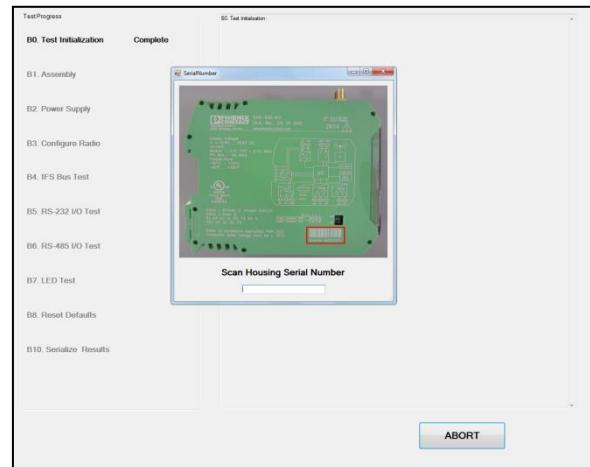
9.2.1

- Open main program on desktop
- Enter the article number and OSM revision into supplied fields
- Press start



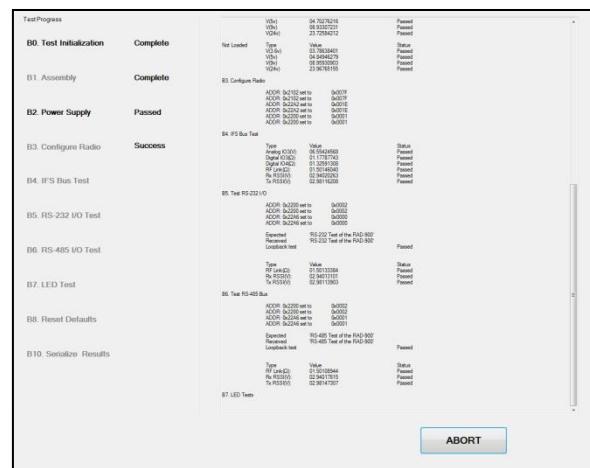
9.2.2

- Press start
- Scan the serial number of the housing through the fixture lid



9.2.3

- The test will start automatically
- Program will store test data and provide test result for product – “PASS” or “FAIL”



Proceed to STEP 10 if test result is “PASS”

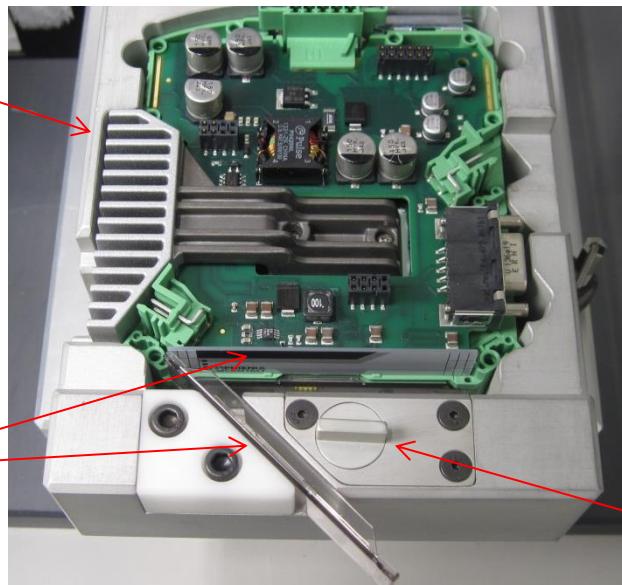
Set aside test rejects “FAIL” for Evaluation

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STEP 10.

10.1

Install assembly into press tool no. A6119



10.2

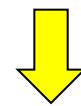
Install cover and face plate

Note: Verify correct orientation of components:

- PxC logo toward bottom of face plate
- >PC< material mark toward top of clear cover

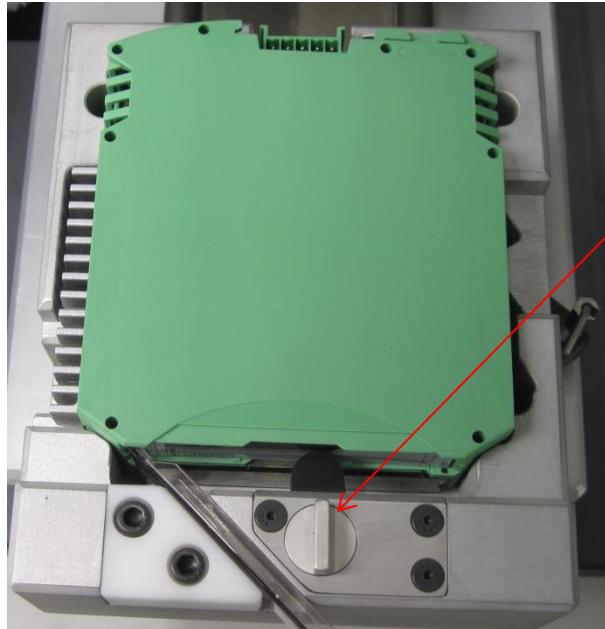
10.1.1

Turn knob to reveal rubber stop before installing components



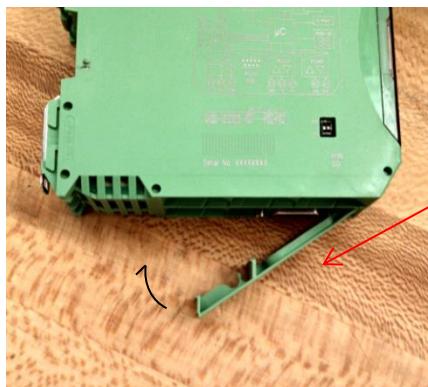
10.2

Load housing component and actuate press

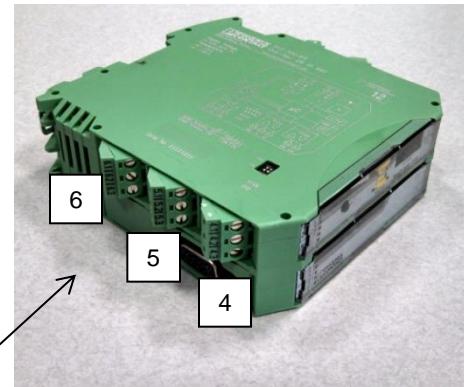


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STEP 11.

**11.1.1**

Snap in d-sub cover by pivoting into place as shown

**11.1.2**

Install numbered plugs (5 plcs)

