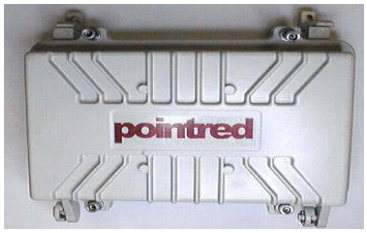
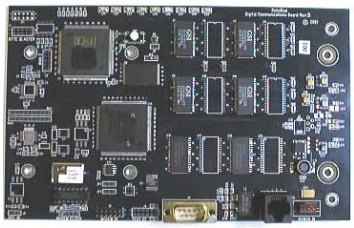
BASE STATION ASSEMBLY PROCEDURE

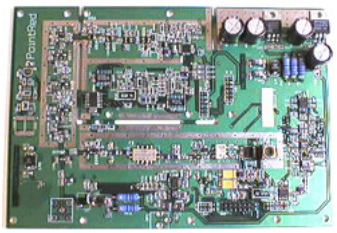
I. COMPONENTS



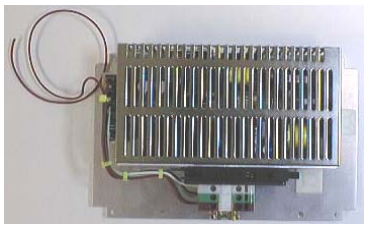
BTS Housing (2)
P/N 02-0002



BTS Digital Board (1)
P/N 09-0040-00

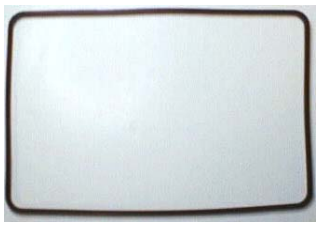


BTS Modem Board (1)
09-0001-00



Power Supply (1)
P/N 09-0100

CAT-5 Ethernet Cable (1)
P/N 02-0012



Rubber Seal (2)
P/N 00-0018

Wire Mesh Seal (2)
P/N 00-0019

2x7 Ribbon Cable (1)
P/N 02-0007

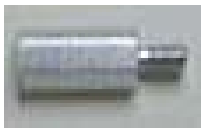
Cat-5 Ferrite (2), 1Opt. Wire Ferrite (1)
P/N 01-0030 P/N 01-0029

Power Cable (1)
P/N 02-0006

Small Nut & O Ring Seal (4)
P/N 00-0020

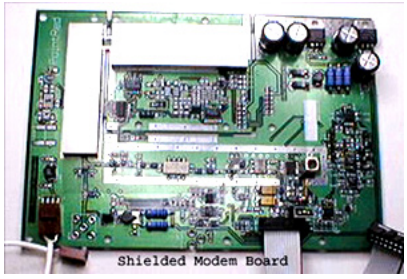
Tie Wrap Holder (2), 1 Opt
P/N 00-0022

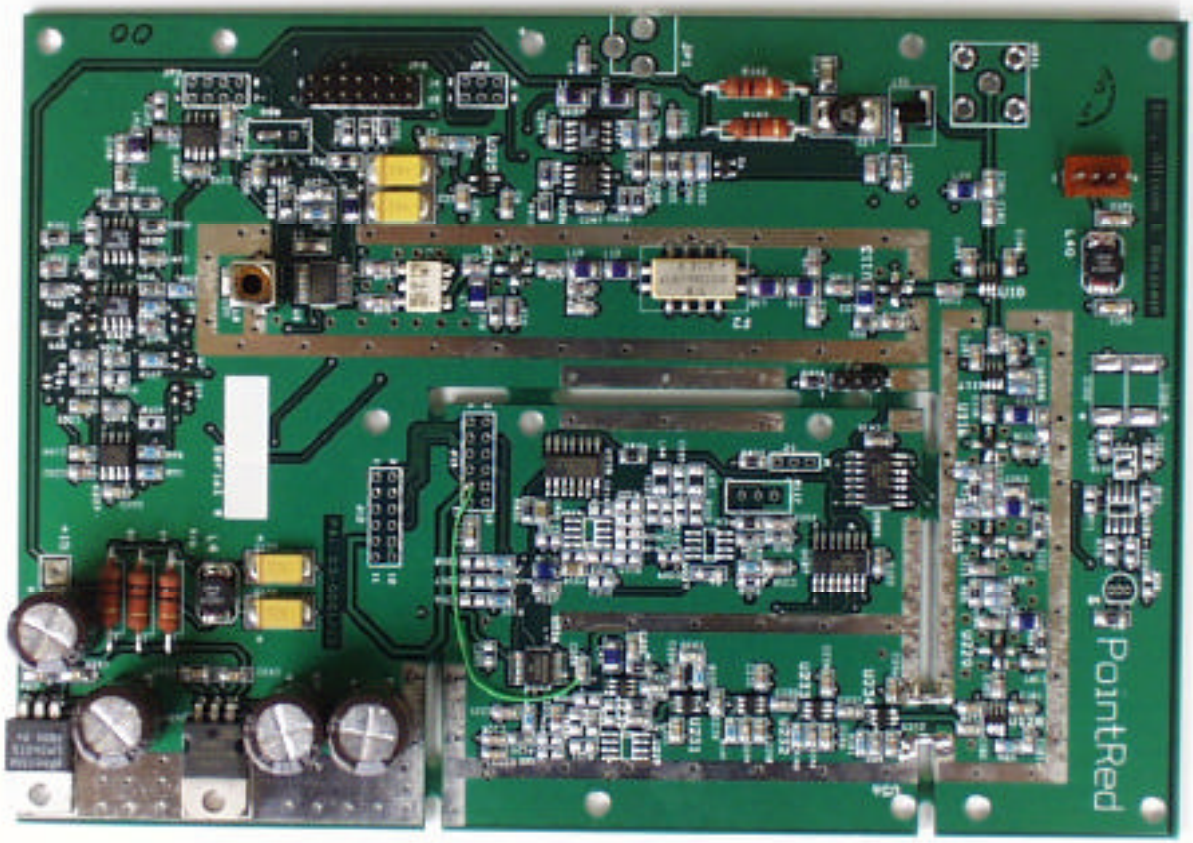
Tie Wrap (2), 1 Opt.
P/N 00-0023

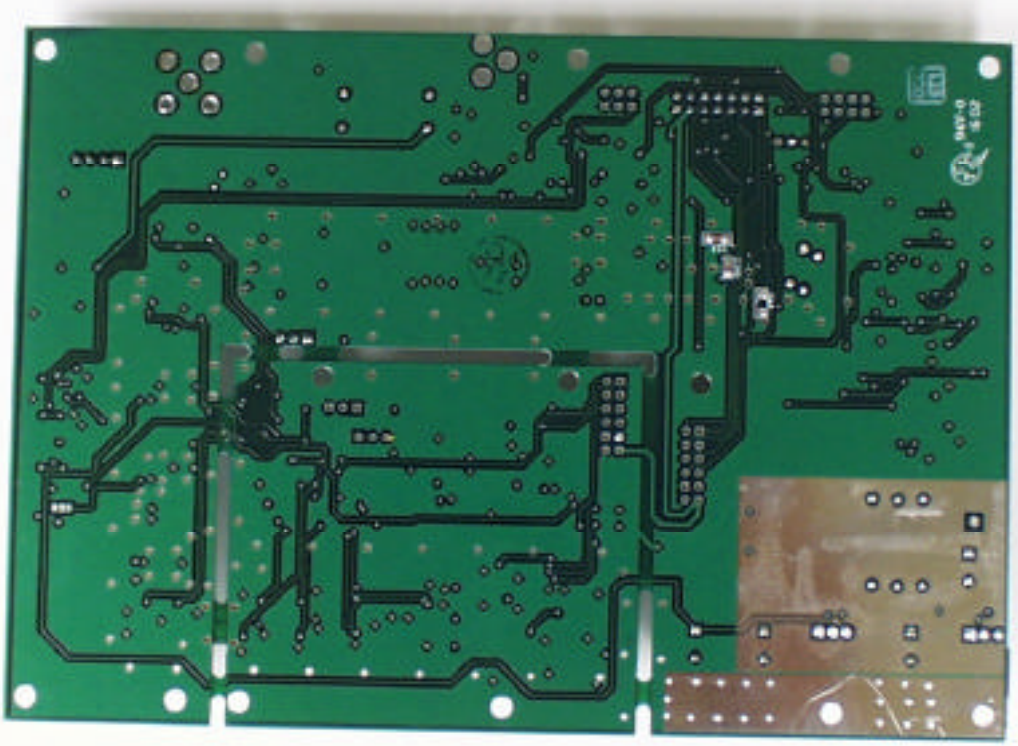


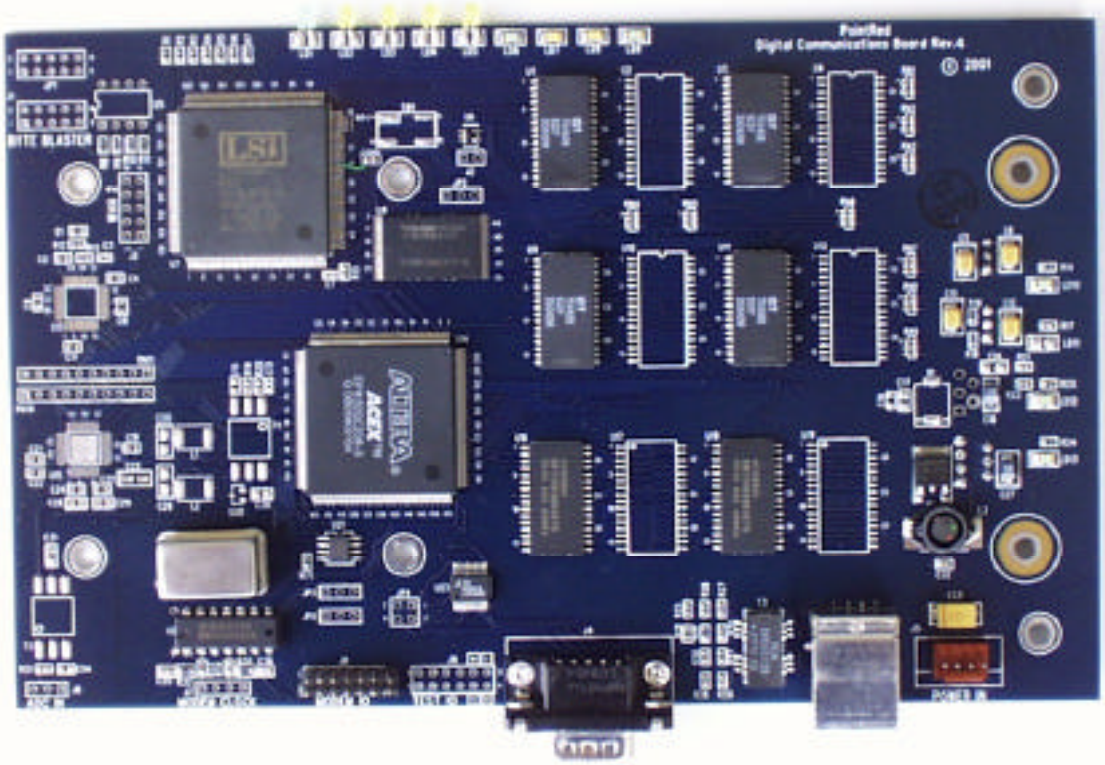
Stand-Off (18)
P/N 00-0024

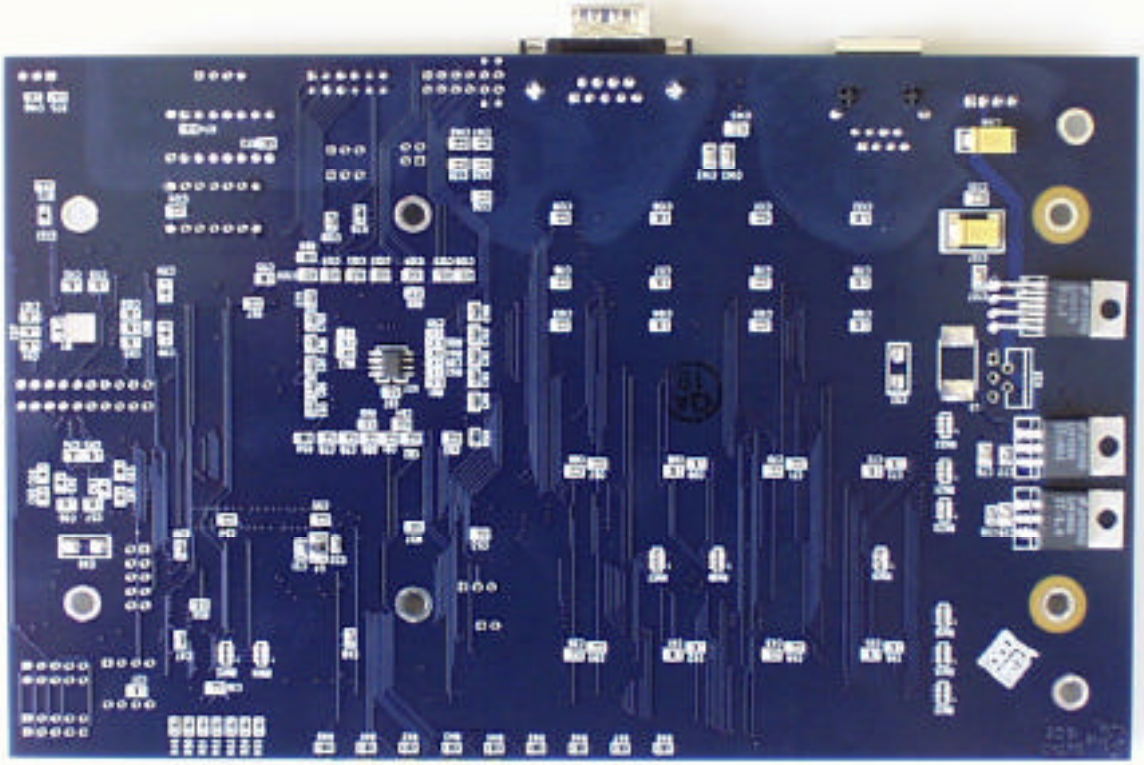
RJ45 Cable Connector (2), 1Opt.
P/N 01-0028




PointRed




PointRed
Digital Communications Board Rev.4
© 2001
BYTE BLASTER
LSI
ALTERA
ACEX



BTS F-Connector (1)
P/N 01-0009

.5 in Aluminum Pipe (1)
P/N 00-0027

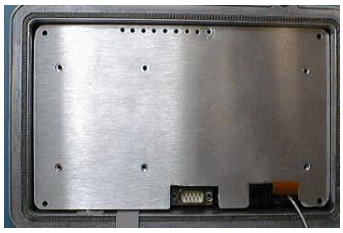
Weather Resistant Plastic Connector (2)
P/N 00-0026

Aluminum Bracket (2)
P/N 00-0028

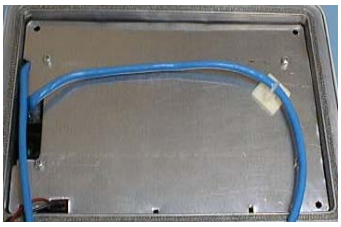
Screw, Nut & Washer B (2)

Screw A (42)

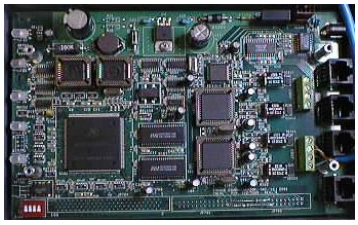
Modem Card Shield (1)
P/N 02-0014



Digital Card Shield (1)
P/N 02-00013



T1 Card Shield (1)



T1 Card Interface **(Optional)** (1)

Threaded Pipe (2)
P/N 01-0031

Large Nut & O Ring Seal (1)
P/N 00-0021

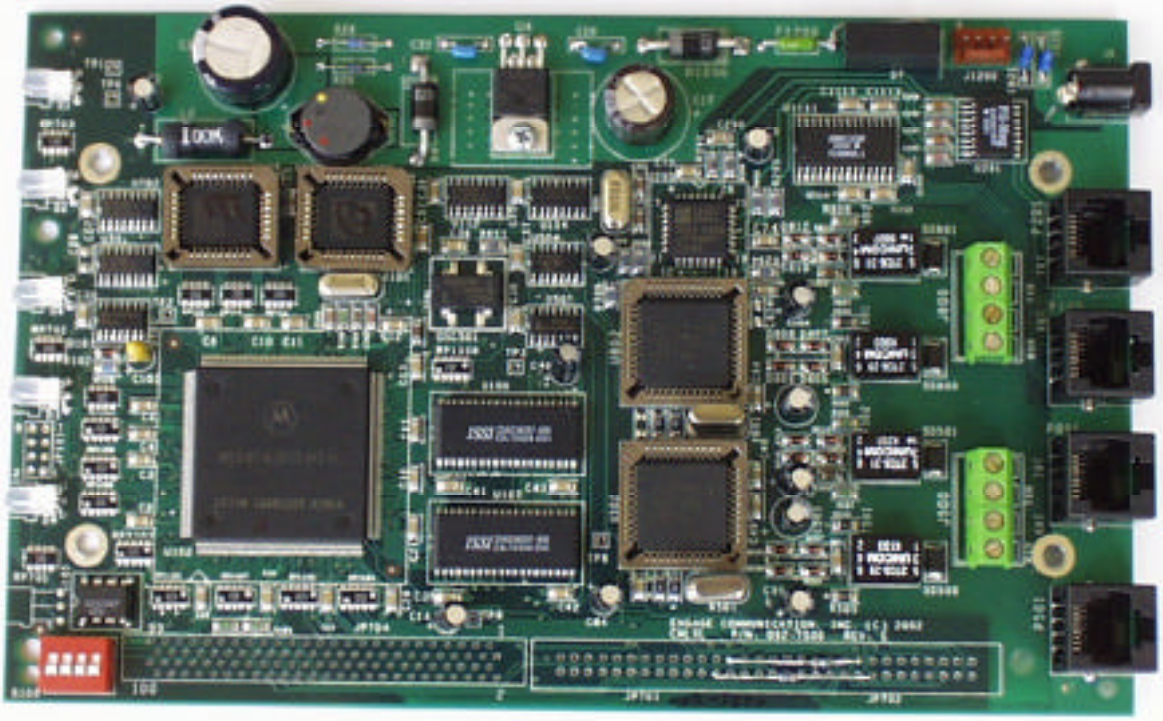
Power Connector

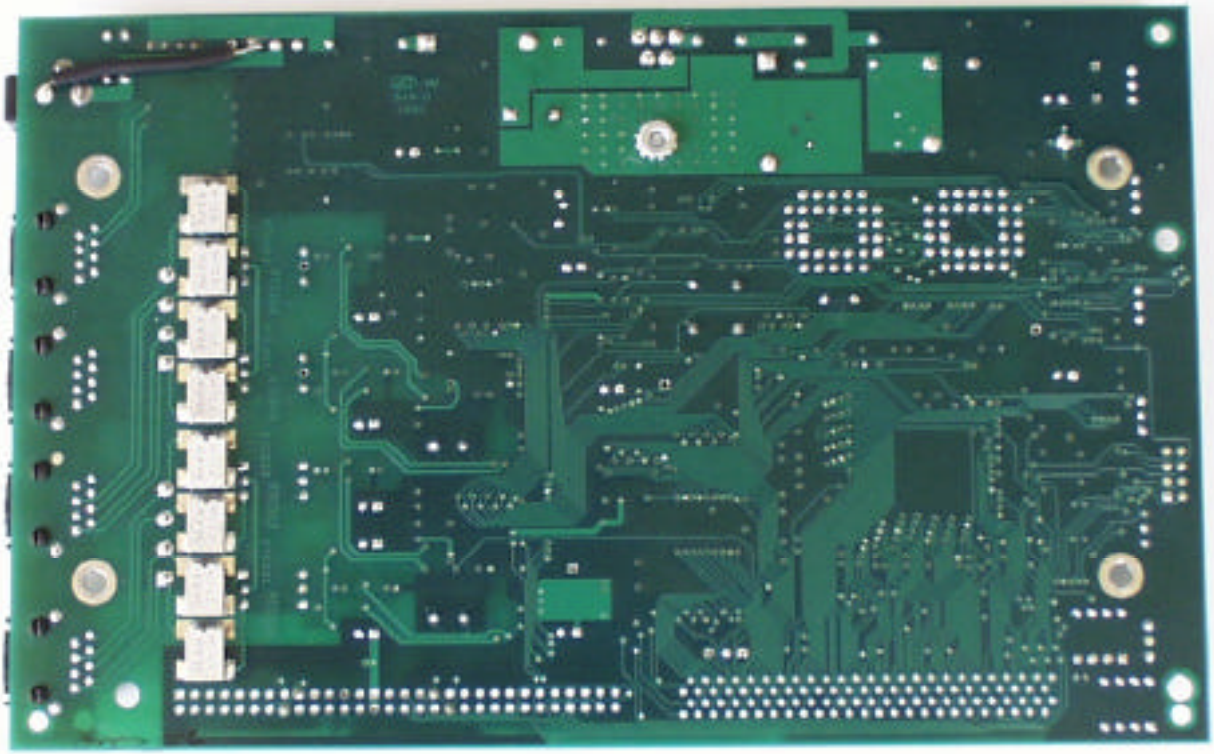
ASSEMBLY STEPS

General: The Base Station consists of two housing boxes that are connected with two threaded pipes. Each Housing box has a lid and a base. With the lids open outward, the left box is the **Power Supply Housing Box (PSH Box)** and the right box is the **Digital/Modem Card Housing Box (DMH Box)**

1. Connect the two housing boxes together with two pipes.

   a. Roll the two nuts on the pipe almost to the center of the pipe
   b. Apply Pipe Thread Seal on the left end of the pipes
   c. Turn the pipes into the opening of the **PSH Box** until about ¼ inch over flushed.
   d. Lock the nuts together by turning them in opposite directions. Apply Pipe Thread Seal on the other end and turn them back into the right box until both ends are flushed with both boxes.





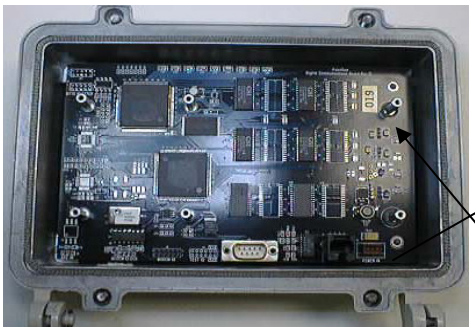
2. Wrap the connectors with Teflon seal and screw them in the holes.

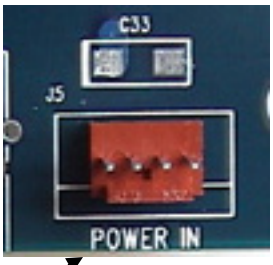
3. Install the Rubber Shields to the base and Wire Mesh Shields to the lid of the boxes.

4. Screw 6 stand-off screws into the lid of the Digital/Modem Card housing box.

Wire Mesh Shield

5a. Solder the Power Connecto r to the Digital Board.

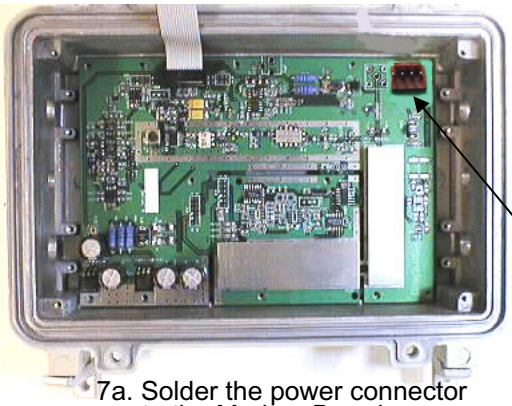




5b.Put the Digital Board on top of the stand-offs and tighten with screw.

Stand-Off

6. Screw another 6 stand-off screws on top of the Digital Board.



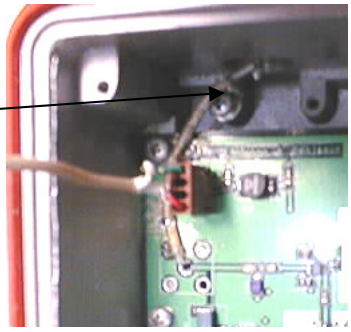
7a. Solder the power connector to the Modem Board

7b. Install the Modem Board into the Digital/Modem Board Housing Box and tighten with screws. Connect the Power and Ribbon cable to the Modem and Digital Board.

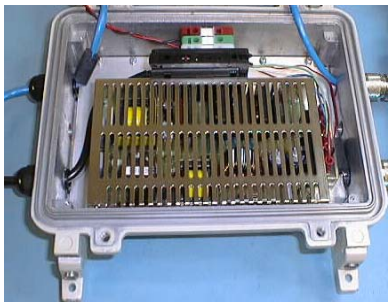
8. Connect the F-Connector to the Base of the Digital/Modem Housing Box.

F-Connector

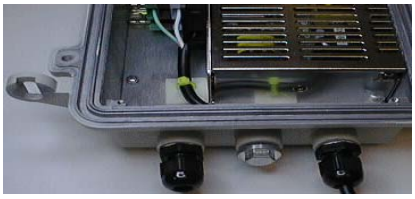
Ground



9. Solder a wire from the back of the F-connector to the Modem Board.

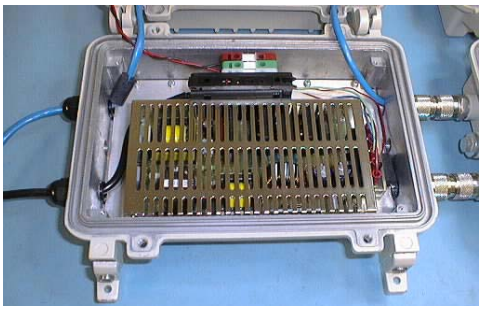


10. Install the Power Supply into the base of the Power Supply Housing Base. Connect

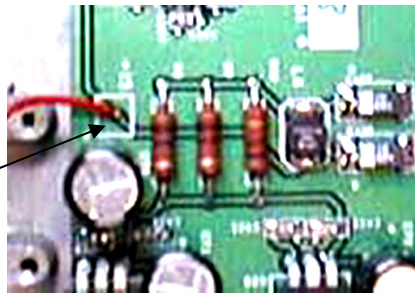


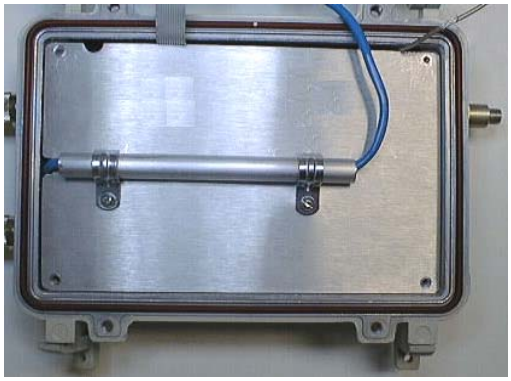
each wire to the appropriate color. Insert tie wrap holders and tie wrap the power supply cable to it

11. Run a 3 ½ Foot long Category 5 cable through the Plastic Weather Resistant Connector, then through the pipe to the other housing box. **DO NOT** Make a connector for each ends of the Cat 5 cable yet. Attach a ferrite to the most left of the Cat 5 cable in each housing box.



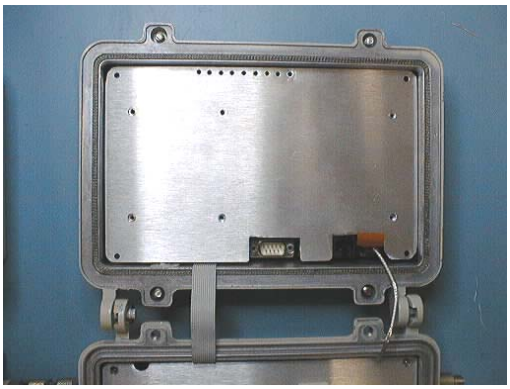
12. Run a red cable from the power supply box through a wire ferrite then through the pipe to the other housing box and solder it to the "+15 V" area of the modem board. Connect the other end to the Red section of the power supply.





13. Attach the ½ inch aluminum pipe to the Modem Board Shield with two brackets. Run the Cat. 5 cable through the pipe then make a Cat. 5 connector for each end of the cable (see page 6 for instruction). Secure the Shield to the box. Connect one end of the Cat.5 connector to the Digital Board.

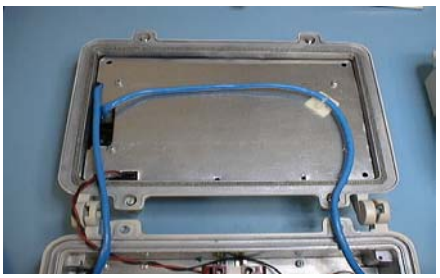
14. Install the shield for the Digital Board. Secure with screws A.



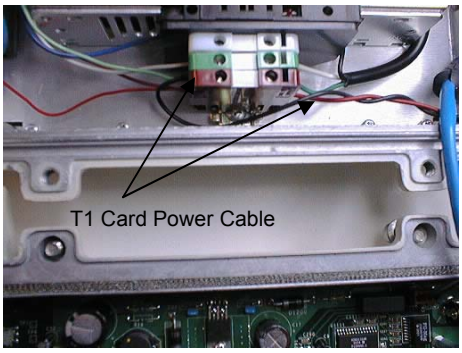
Optional

For Base Station equipped with a T1 Card.

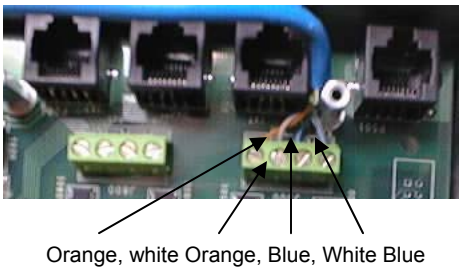
From Step 13: When you make the Cat 5 connector, one end goes to the Digital Board. Make sure the other end is inside the Power Supply Housing Box as it will go to the p 100 slot of the T1 Card.



14. Connect the power cable from the T1 Card to the Power Supply



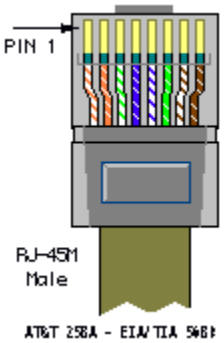
15. Run a 2 feet long Cat 5 cable thru the Plastic Weather Resistant connector, strip the cable and insert the color-coded wires into the J800 section.



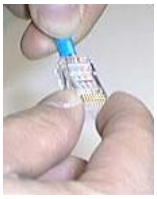
16. Install 6 stand-off into the lid of the PSH Box just like those for the Digital Card.
17. Secure the Shield to the Housing Lid with screws.

Category 5 wiring standards:

Pin #	Color
1	White/Orange
2	Orange
3	White/Green
4	Blue
5	White/Blue
6	Green
7	White/Brown
8	Brown



1. Strip off about 1½ inch of the outer insulation



2. Insert the wires into the connector

3. Crimp down the connector to the wires

4. Test the cable. Make sure number 1-4 goes green on both ends.

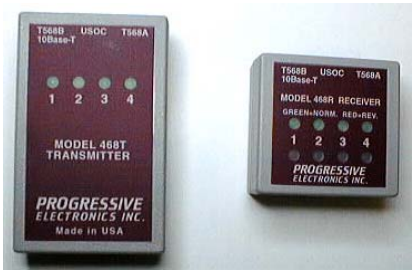
Note: Make sure ALL wires are pushed completely into the connector before seating the connector cable lock.

II. TOOLS

Crimper

Cable Stripper

Power Screw Driver



Cable Tester