

All operations to be carried out in a static controlled environment.
Static precautions to be observed at all times when handling static-sensitive components.

Specific Tooling List

Tool Description	Tool No:
Drill and 7mm Drill Bit	N/A
Wire Stripper	3757-2
Pozi Screwdrivers	N/A
8mm Spanner	N/A
Mobile Phone	N/A
Soldering Iron	N/A
FLUKE 87III	INS-013
Dremel Router	N/A
5.5mm Nut Runner	N/A

Consumable Item List

Item No:	Part Description	Part Code	Qty
1	Double-sided Tape (TESA 51968)	20-0051	A/R
2	Kapton Tape	20-0052	A/R
3	Multicore Cable 7/0.1mm 12 Way	22-0130	A/R
4	Tinned Copper Wire (FEC 301-826 or equivalent)	None	A/R
5	Cable Tie 102x2.5mm Black	20-0054	1

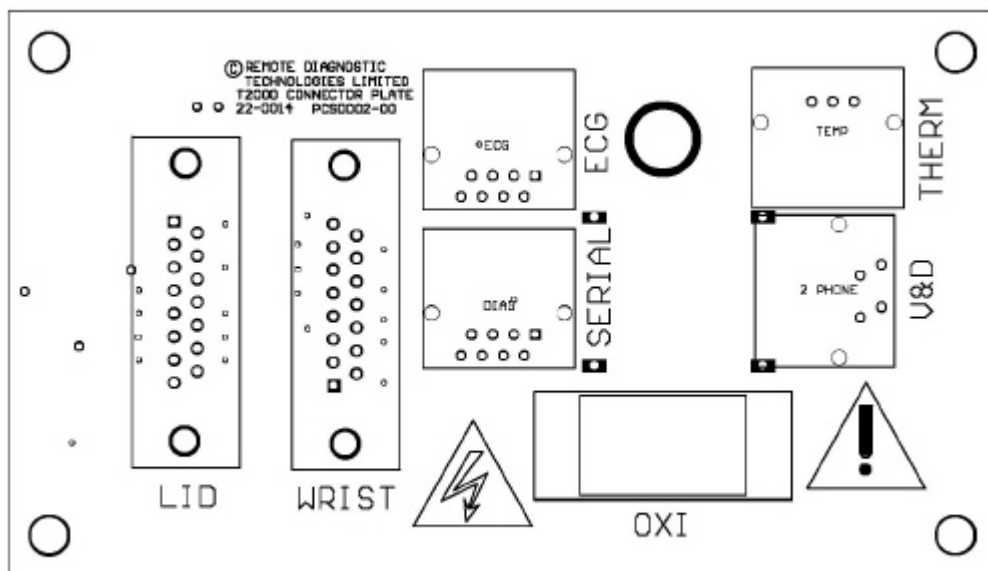
Parts Item List

Item No:	Part Description	Part Code	Qty
6	Mobile Phone SIM Card	22-0129	1
7	Sony Ericsson GC75 GPRS PC Card	22-0128	1
8	Baseplate Assembly CardHost Pro	23-0085	1
9	Connector Plate HF PCB Assembly	23-0018	1
10	Base Mechanical Assembly	23-0068	1
11	GSM Card-Antenna Interface Cable	23-0083	1
12	Revie Tri-Band GSM Antenna (modified connector) (Centurion AAF95003)	22-0124	1

1) GSM SIMM Card Activation/Fitting

- 1.1 At least 24 hours before testing activate SIM card (Item 6) with service provider.
- 1.2 Check SIM card is functional using a mobile phone to dial a familiar number.
- 1.3 Fit SIM card into GSM PC Card (Item 7).
- 1.4 Record information on traveller:
 - SIM card telephone number.
 - SIM card identity number.

- Service provider.
- 2) GSM PC Card Fitting to Baseplate Assembly
 - 2.1 Record GSM card serial numbers on traveller.
 - 2.2 Take CardHost Baseplate Assembly (Item 8) and fit GSM PC Card into CardHost socket.
 - 2.3 Test GSM card operation.
- 3) Connector Plate Modification (Drilling and antenna extension)
 - 3.1 Take a connector plate HF PCB assembly (Item 9) and drill a 7.0-mm hole, 40mm from left edge, and 15.5mm down.



- 3.2 Scrape away sufficient solder resist around hole to allow good contact between connector and connector plate.
 - 3.3 Fit connector of antenna interface cable (Item 11) to connector plate with serrated washer beneath nut shaped flange, and tighten nut with 8mm spanner.
 - 3.4 Check conductivity of connector to ground plane with meter (less that 0.2 ohms).
- 4) Foam Block Preparation for Antenna and Headset.
 - 6.1 Take main section foam block as picked for the base mechanical assembly (Item 10).
 - 6.2 Remove area of foam block for antenna with Dremel.
 - 6.3 Cut away part of foam block for headset microphone.

5) Fitting Antenna to Base Assembly

- 5.1 Cut approximately 250mm of cable (Item 3).
- 5.2 Remove the outer sleeving and the inner wires so that only the screen is left
- 5.3 Unsolder the cable from the flat panel of the antenna
- 5.4 Feed the sleeving over the antenna cable
- 5.5 Remove approximately 2mm of the heat shrink of the antenna at the end closest to the screw.
- 5.6 Cut approximately 30mm of tinned copper wire (Item 4), and wrap it around the braided screening to form a tight bond between the braid, and the newly exposed piece of metal.
- 5.7 Wrap a small piece of Kapton Tape (Item 2) over the tinned copper wire to tidy the edges.
- 5.8 Re-solder the antenna back to the flat panel.
- 5.9 Ensuring that the braided screening is resting just below the flat panel. Apply a small piece of Kapton tape to it to stop the braid moving upwards.
- 5.10 Finish by applying a cable tie just below the flat panel.
- 5.11 Use double-sided tape (Item 1) approximately 7cm long to stick antenna (Item 12) to base mechanical assembly (Item10).
- 5.12 Use appropriate lengths of Kapton tape (Item 2) to secure lead to base.

6) Change History

ECR 03-0017	Issue 1	Original.
ECR 03-0041	Issue 2	Detailed changes to title, item lists and process steps for reflect new builds, including basic tests on connectivity in three modes.
ECR 03-0074	Issue 3	Addition of braided screening to antenna cable.