PAMS Technical Documentation RAE–2 Series PDA Phone

# **Chapter 09**

# Mechanical Parts and Disassembly

Mechanical Parts

## AMENDMENT RECORD SHEET

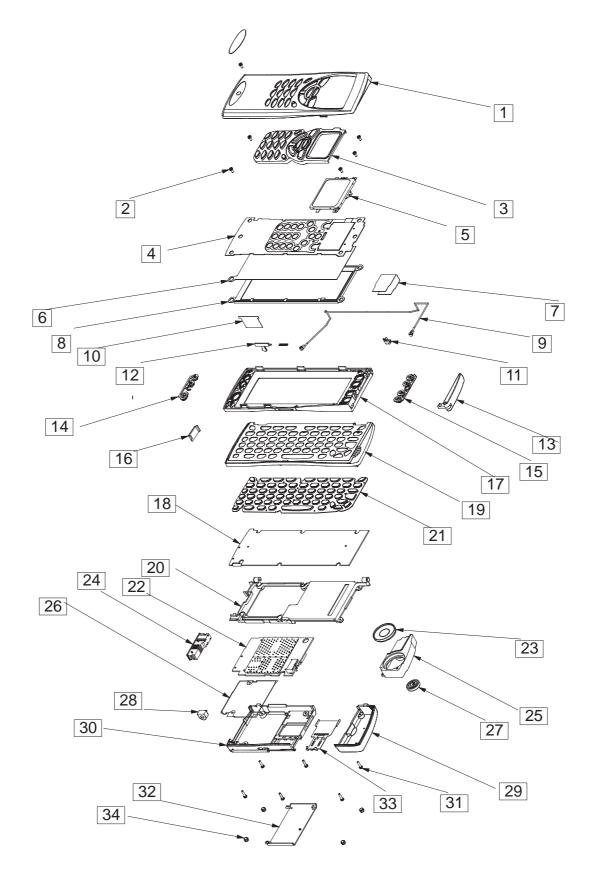
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#### RAE-2 Exploded diagram below



## **List of Mechanic Parts**

Item	Code	Description	Specifications / Ratings
1	9456203	Front cover with lens	
2	6190033	Screw M1,6x5 6 pcs	6x M1,6X5
3	9790326	Phone keypad	
4	0201097	Phone UI PCB	
5	4850063	Phone LCD	
6	4850801	PDA Display ELbacklight	
7	9855044	Hingle flex	
8	4850049	PDA LCD	
9	9780234	Coaxial cable	
10	9460251	Flex cover	
11	9460248	Hinge end	
12A	9460249	Latch	
12B	6402165	Spring	
13	0660183	Antenna	
14	9790330	Function keypad left	
15	9790320	Function keypad right	
16	9451258	IR window	
17	9456209	Screen frame	
18	0201096	PDA PCB	
19	9367026	Keypad frame	
20	9547007	Chassis	
21	9790313	QWERTY keypad	Note: English language keypad
22	**	CMT PCB	Not available as spare part
23	5140119	HF speaker	
24	5469091	System connector	
25	9467029	Audio holder	
26	9510421	Metal gasket	
27	5140067	Earpiece	
28	5140133	Microphone	
29	9451261	Audio cover	
30	9456156	Back cover	
31	6190013	Screws	6 x M1,6x7
32	9451257	Card cover	
33	9510425	Card shield	
34	9470052	Plug	4 pcs

**Mechanical Parts** 

### LCD / UI Module Disassembly

- 1. Remove battery.
- 2. Remove cover label (A) and screw (B).
- 3. Gently lift off front cover starting from both sides in the bottom end of the phone or by pulling the top end of front cover.
- 4. Remove phone keymat.
- 5. Remove 5 screws (C) and 2 washers (D).
- 6. Disconnect flex connectors by releasing connector clips. Connectors will be opened by lifting the clip up.
- 7. Unplug the coaxial cable.
- 8. Unclip UI PCB from PDA LCD by lifting up 3 metal clips (E).
- 9. Remove phone LCD. Do not try to remove phone LCD without opening the metal clip. Elastomer might be damaged.
- Remove UI PCB, display EL backlight, PDA LCD and function keypads.
  Note 1: Latch and spring, spring flies away quite easily.
  Note 2: PDA LCD is connected to screen frame with tapes. Always use new tapes when re-assembling.
- 11. Remove antenna. Use a knife or a small screwdriver to lift plastic clip which blocks the antenna.
- 12. Re–assemble in reverse order and observe the following points:

-Check that coaxial cable goes behind guide pin and does not get trapped under front cover. See further details in figure1

-Note that torque of the screws must be 10 Ncm.

-Assembly flex cover so that mat side is inside the phone.

The correct way to assembly coaxial cable is described in the next page.



Figure 1. Correct way to assemble the coaxial cable in the lid part.

# System Module Disassembly

- 1. Remove battery.
- 2. Remove four plugs (34) and six screws (31).
- 3. Remove audio cover, audio holder and back cover, be careful not to touch sensitive parts of earpiece.
- 4. Unplug the coaxial cable.
- 5. Remove CMT PCB, system connector and IR window. CMT PCB might be very tightly connected, use necessary force to remove it.
- 6. Open chassis. Disconnect flex connector by releasing connector clip. Connector will be opened by lifting the clip up.
- 7. Remove PDA PCB.
- 8. Remove chassis; at first from the lower hinge, easiest position is to put the hinge almost 180° angle, and remove the chassis then. Be careful not to damage coaxial cable.
- 9. Remove QWERTY keypad and keypad frame. Do not touch carbon connections surfaces on QWERTY keypad.
- 10. Re–assemble in reverse order and observe following points: –Re–assemble chassis first to the upper hinge and check coaxial cable.

-Re-assemble PDA PCB and connect flex connector when chassis is open.

-Coaxial cable must go under the hinge flex and between two bulbs on keypad frame. See picture. (figure 4)

-Check that coaxial cable does not get trapped.

-Check that coaxial cable goes to CMT PCB between two bulbs. See pictures.(figure 2 and figure 3)

-Notice that torque of screws must be 15 Ncm.

11. Figures 2 to 4 : The correct way to assemble coaxial cable.



Figure 2. Correct way to assemble coaxial cable between the guiding pins.

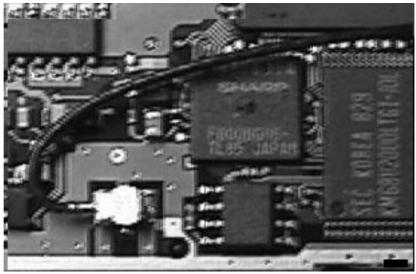


Figure 3.

Figure 3. Correct way to assemble coaxial cable on CMT PCB.

Mechanical Parts

#### Technical Documentation

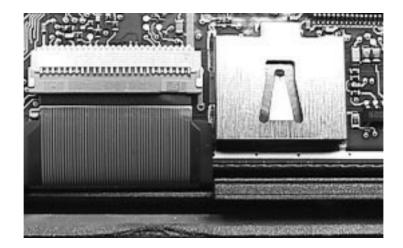


Figure 4. Correct way to assemble coaxial cable under hinge flex cover.