

TouchTunes Music Corporation

Maestro Parts and Service Manual

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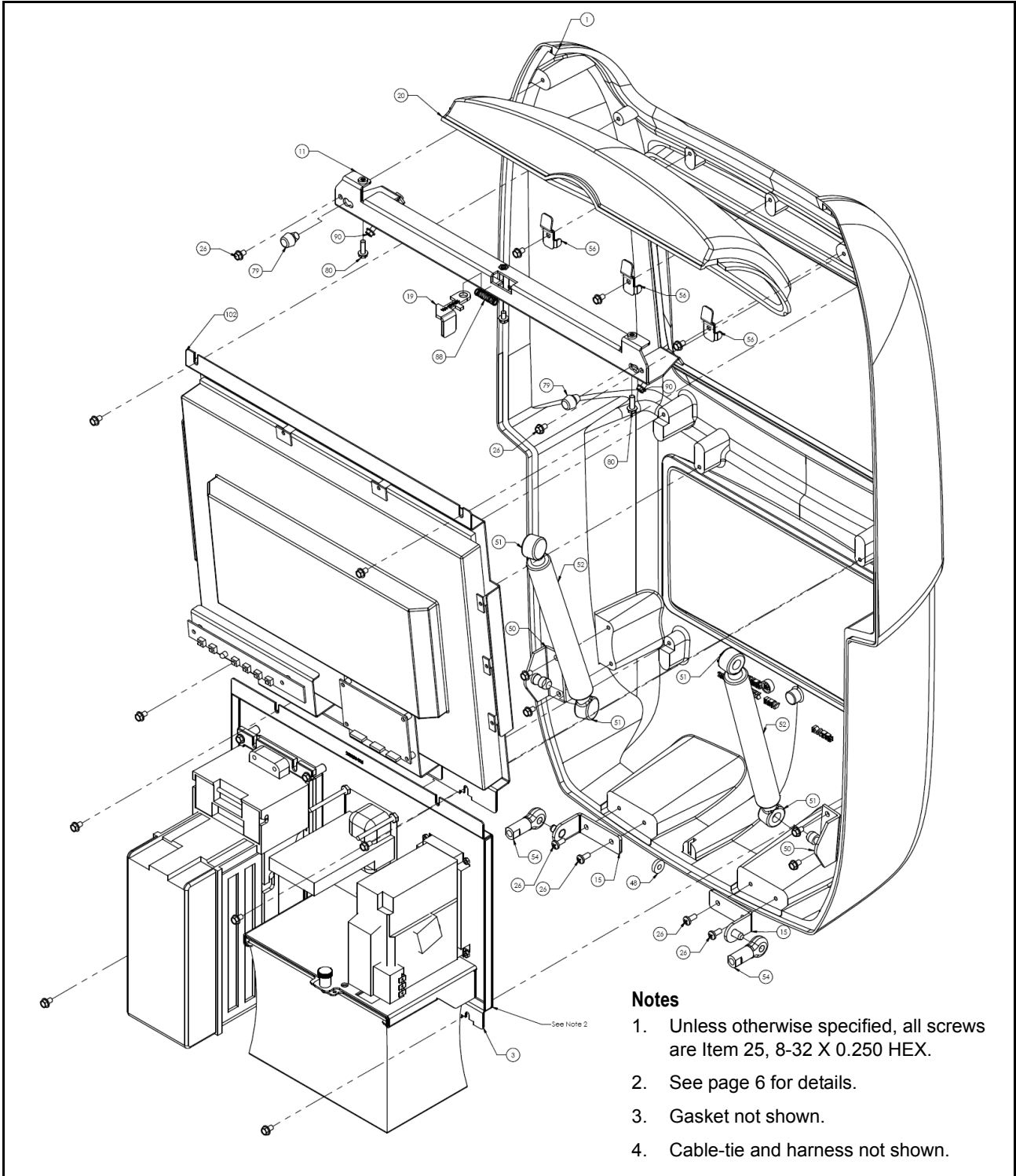
Chapter 2

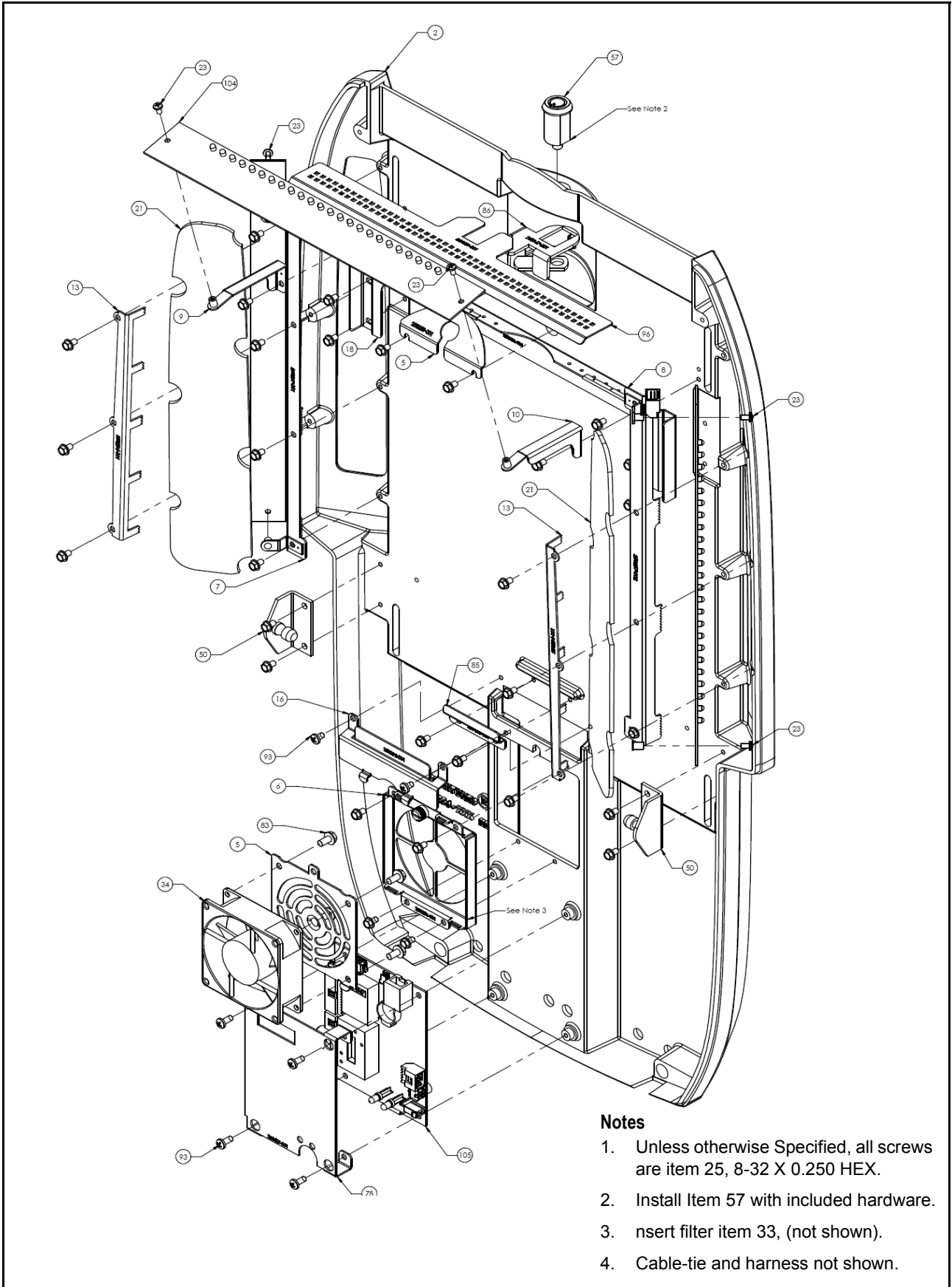
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Chapter 1

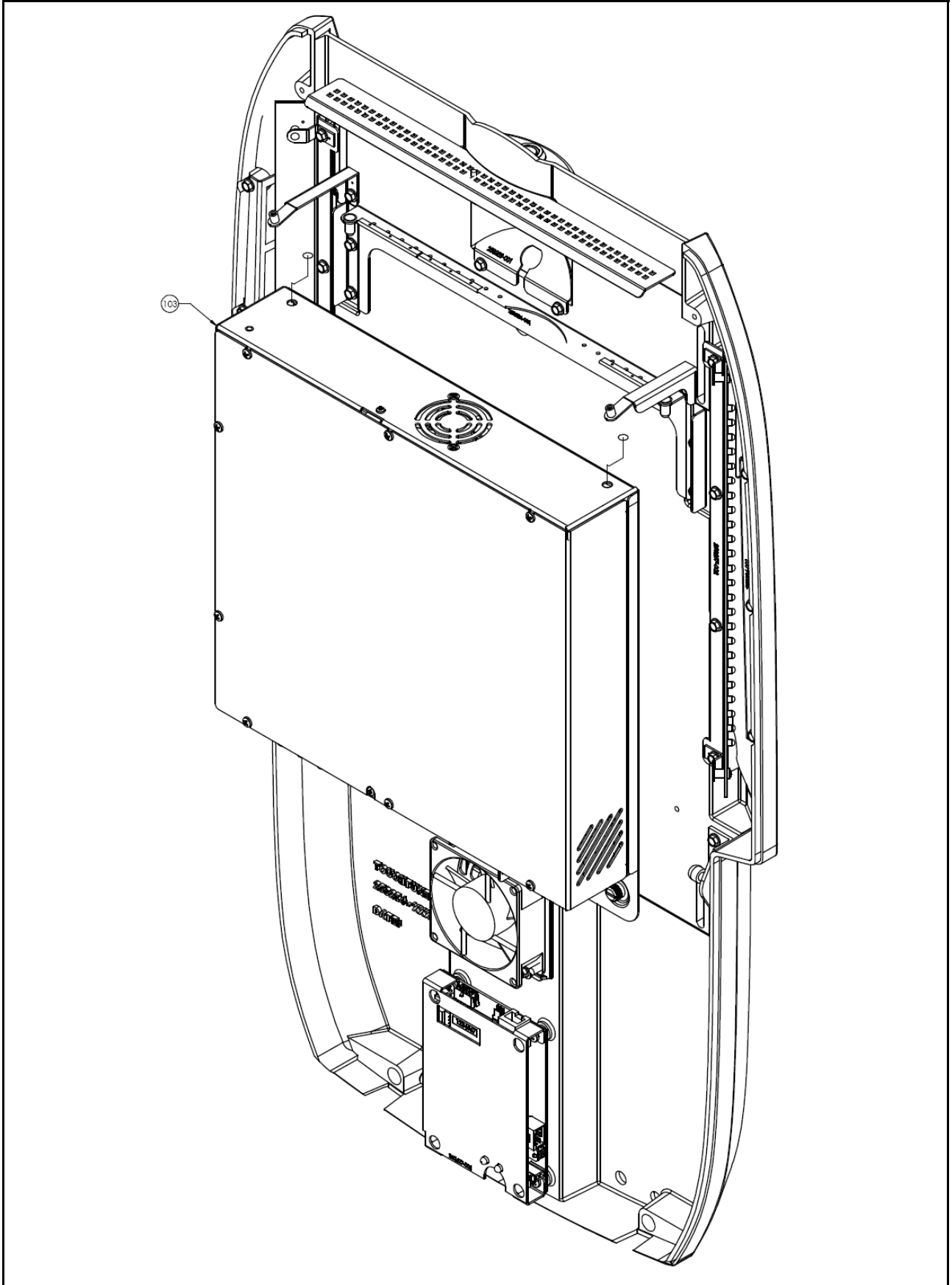
Parts List

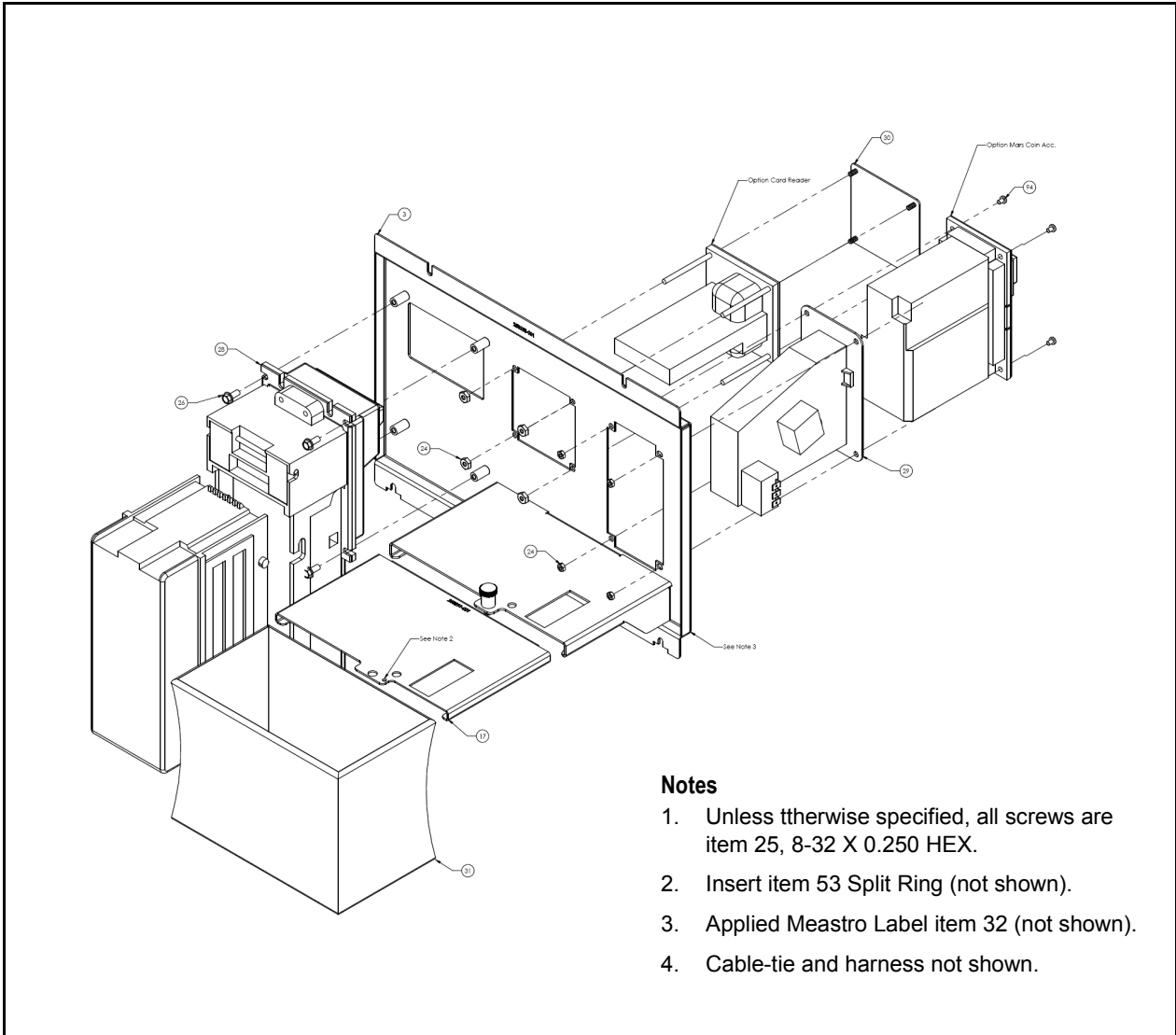




Notes

1. Unless otherwise Specified, all screws are item 25, 8-32 X 0.250 HEX.
2. Install Item 57 with included hardware.
3. Insert filter item 33, (not shown).
4. Cable-tie and harness not shown.





Notes

1. Unless ttherwise specified, all screws are item 25, 8-32 X 0.250 HEX.
2. Insert item 53 Split Ring (not shown).
3. Applied Meastro Label item 32 (not shown).
4. Cable-tie and harness not shown.

Item	TouchTunes Part #	Part #	Rev.	Description	Qty
1	400062-001	267521-111	0	HOUSING,CONSOLE,FRONT,SILVER	1
2	400072-001	267522-111	0	HOUSING,CONSOLE,REAR,CASTING	1
3	400101-001	258258-001	0	BRACKET,PAYMENT,CONSOL,MAESTRO	1
4	400165-001	258259-001	0	COVER,AC,CONSOLE,MAESTRO	1
5	400166-001	258255-001	0	BRACKET,FAN,CONSOLE,MAESTRO	1
6	400167-001	258256-001	0	BRACKET,FILTER,CONSOLE,MAESTRO	1
7	400168-001	258257-001	0	BRACKET,LED,L,CONSOLE,MAESTRO	1
8	400169-001	258257-002	0	BRACKET,LED,R,CONSOLE,MAESTRO	1
9	400170-001	258260-001	0	BRACKET,CTRL,LED,L,CSL,MAESTRO	1
10	400171-001	258260-002	0	BRACKET,CTRL,LED,R,CSL,MAESTRO	1
11	400089-001	258285-001	0	LOCK,ANCHOR,CONSOLE,MAESTRO	1
12	400059-001	258265-001	0	BRACKET,WALL,CONSOLE,MAESTRO	1
13	400172-001	258284-001	0	BRACKET,LENS,CONSOLE,MAESTRO	2
15	400105-001	258263-001	0	HINGE,MOBILE,CONSOLE,MAESTRO	2
16	400060-001	258292-001	0	BRACKET,PASSTRU,CONSOLE,MAESTRO	1
17	400030-001	258291-001	0	COVER,COIN,BAG,CONSOLE,MAESTRO	1
18	400173-001	258286-001	0	BRACKET,SBC,CONSOLE,MAESTRO	1
19	400092-001	258267-001	0	CAM,KEYLOCK,CONSOLE,MAESTRO	1
20	400029-001	258251-001	0	DOME,BACKLITE,CONSOLE,MAESTRO	1
21	400174-001	258269-001	0	LENS,SIDE,LEFT,CONSOLE,MAESTRO	2
23	N/A	107343-04	1	SCREW,MACH,6-32x.25,PAN,XREC	6
24	N/A	100413-3	5	NUT,HEX,6-32,KEPS	8
25	N/A	121441-04	5	SCREW,MACH,8-32x.25,HEXW,HEX	14
26	N/A	121441-06	5	SCREW,MACH,8-32x.375,HEXW,HEX	39
27	400175-001	262225-06	0	SCREW,WING,STEEL,1/4-20 X 3/8L	2
28	400117-001	195262-002	0	BILL ACCEPTOR,24VAC,STACK750	1
29	400033-001	258277	0	COIN COLLECTOR,QUARTER & 1\$US	1
30	400028-001	216148-002	0	PLATE,CARD READER,BLANK,SILVER	1
31	400031-001	195265-002	0	BAG,COINS,CLOTH,CONSOL,MAESTRO	1
32	N/A	263163-001	0	LABEL,PAYMENT,MAESTRO,SILVER	1
33	400049-001	258282	0	FILTER,POLY,GRAY,FAN,84MM	2
34	400176-001	262227-001	0	FAN,12VDC,80X80X25MM	1

Item	TouchTunes Part #	Part #	Rev.	Description	Qty
35	300038-001	262211-001	0	HARNESS,LS_CTRL/SD LED,MEASTRO	1
36	300150-088	148589	1	ANTENNA,FM,DIPOLE,75 OHM,FCONN	1
37	300045-001	262212-001	0	HARNESS,LS_CTRL/SD,LED,MAESTRO	2
38	300046-001	262214-001	0	HARNESS,CTRL,PCB/BILL,MAESTRO	1
39	300047-001	262216-001	0	HARNESS,CTRL	1
40	300039-001	262213-001	0	HARNESS,SBC/CTRL PCB,MAESTRO	1
41	N/A	262217-001	0	HARNESS,CTRL PCB/CARD,MAESTRO	1
42	300048-001	262424-001	0	LINE CORD,IEC320,18AWG,R ANGL	1
43		199002-001	0	CABLE TIE	4
44	N/A	263162-001	0	CLAMP,WIRE,STEEL/PVC	12
45	N/A	262226-001	0	STRAIN REL,BUSH,.625X.550X.062	1
48	400073-001	262230	0	MAGNET,DISC SHAPE	1
49	100224-001	196833-001	0	SEMI-COND,DALLAS,BUTTON,DS1993	1
50	400076-001	262219	0	BRACKET,DAMPER,GUDEN,BR204R-02	4
51	400074-001	262220	0	END_FITTING,DAMPER,GUDEN,EF110	4
52	400075-001	262221	0	DAMPER,GUDEN,GDE60-E	2
53	N/A	262223-001	0	RING,SPLIT,METAL	1
54	400149-001	262224-001	0	ROD END BALL JOINT, JOINT,FEM,1/4-28	2
55	N/A	262218-06	0	SCREW,MACH,10-24X.375,BIND,PH	2
56	400177-001	262229-001	0	CLIP,RETAINING,DOME,MAESTRO	3
57	400057-001	195290-002	0	LOCK,KIT,FLAT KEY	1
58	N/A	262222-001	0	GASKET,EMI SHIELD,CLIP-ON	0.5
59	400099-001	262228-999	0	GASKET,FOAM,BLACK,.125X.250,UL	9
	N/A				
60	400093-001	255388-050	0	TAPE,FOAM,.12"THK,BLK,UL	2
61	900130-001	185150	1	LABEL,BLANK 2.5x1.0	4
62	N/A	263166-001	0	LABEL,WARNING,WING BOLT,WMNT	1
64	N/A	258272	0	LABEL,PRODUCT,CONSOLE,MAESTRO	1
65	N/A	258273	0	LABEL,BAR/SKU,CONSOLE,MAESTRO	1
66	N/A	262419	0	LABEL,INTEL PROP,CONSL,MAESTRO	1
68	N/A	172930-04	5	CONNECTOR,PLUG-IN,4P	1
70	N/A	147538	0	BATTERY,CARBON,AA SIZE	3

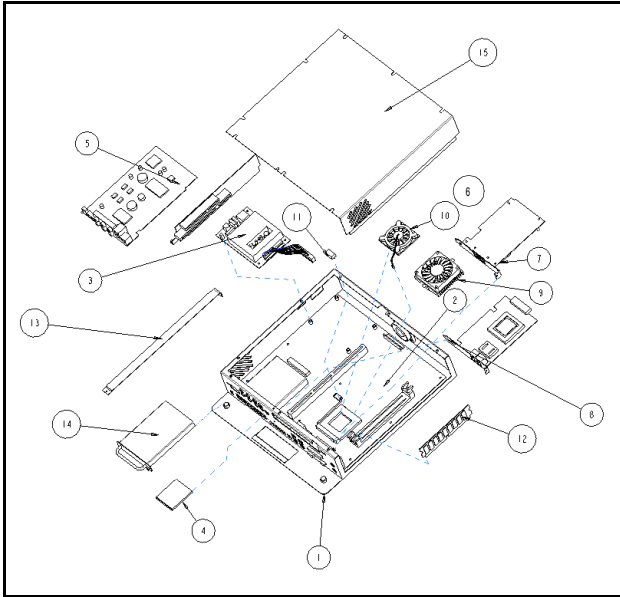
Item	TouchTunes Part #	Part #	Rev.	Description	Qty
71	700031-001	285931	1	REMOTE CONTROL,RC-JB-3	1
72	N/A	196924	0	ENVELOPE,PADDED,8.5X12	1
74	900155-001	263135	0	PACKING,CUSH ASSY,CONSOLE BTM	1
75	900156-001	263134	0	CARTON,RSC,TUNE-UP CONSOLE	1
76	N/A	124045	0	STAPLE,CARTON,1.25x.75	10
77	N/A	186897	0	TAPE,SEALING,BROWN,UNPRINTED	3.67
78	400061-001	262427-001	0	COVER,CTRL PCB,CONSOLE,MAESTRO	1
79	400178-001	262428-001	0	BUMPER,RUBBER	2
80		121441-08	5	SCREW,MACH,8-32x.5,HEXW,HEX	6
81	N/A	263161	0	WIRE TERM,0.177ID TO FASTON	1
82	N/A	262429-012	0	CABLE,CAT5,RJ45-RJ45,12"L	1
83	N/A	257447-012	1	SCREW,TF,10-9,HEXW,HEX,BLK	4
84	N/A	263164-001	0	BUSHING,CAP,3/8 OD	4
85	400113-001	263165-001	0	BRACKET,LOCK,SBC,CONSOL,MAESTRO	1
86	400152-001	263167-001	0	LATCH,FIXE,CONSOLE,MAESTRO	1
88	400056-001	263170	0	SPRING	1
89	400183-001	263136	0	PACKING,CUSH ASSY,CONSOLE TOP	1
90		119095-14	0	SCREW,MACH,8-32X.875,HEX,HEX	2
91	N/A	250649	1	CABLE,MODULAR TELEPHONE,RJ-11	1
92	N/A	216146-999	0	GASKET,TOUCHSCREEN INTERFACE	0
93	N/A	263177-06	0	SCREW,#8-32X3/8,PAN,PH	6
94	N/A	216137-06	0	SCREW,#6-32X3/8,CARR BOLT	4
95	400180-001	216138-060	0	MICROFOAM,46",SCORE-60"	1
96	400068-001	264659-001	0	BRACKET,SHLD,ANTI THEFT,MAESTRO	1
97	N/A	196914-999	0	TAPE,FOAM,.25 THK,PSA,UL	0.2708
98	N/A	196722-03	0	ADHESIVE,LOCTITE #262,10 MIL	0.007
99	N/A	171958	7	ADHESIVE,AIRFLEX,426,WHITE	0.04
101	400050-001	258592-001	0	HOLDER,REMOTE	1
102	300152-001	283294-001	0	LCD 15", GENERAL TOUCH	1
103	300004-002	262420-001	0	COMPUTER ASSY,CONSOLE,MAESTRO	1
104	300006-001	258270-001	0	LED KIT,CONSOLE,MAESTRO	1
105	300005-002	258281	0	CONTROL PCB,CONSOLE,MAESTRO	1

Chapter 2

Servicing the Maestro SBC

Overview

This chapter explains how to remove and replace the Maestro SBC (single board computer), as well as service its internal components.

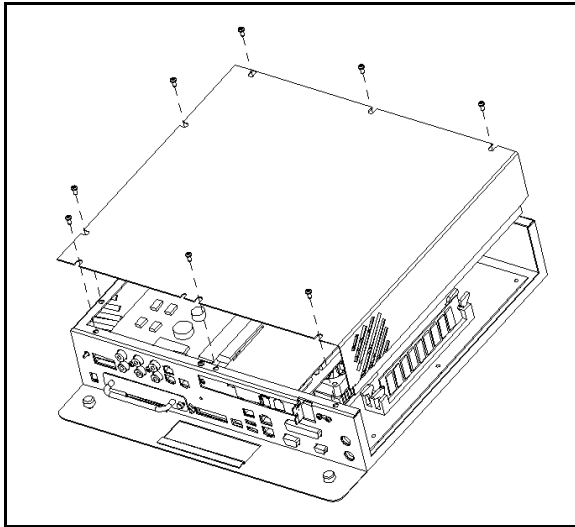


Parts list

Item	Part #	Description
1	400004-001	SBC Chassis Base
2	300017-001	TME Motherboard N2115
3	100141-001	EOS Power Supply
4	NA	Not Used
5	300013-001	Maestro Sound Card
6	100143-002	CPU AMD K62+
7	300115-001	Modem, Zoom for Genesis II & Maestro
8	300078-001	Modem, Zoom for Genesis II & Maestro
9	300003-17	Cofan, BGM System
10	300003-003	Cofan 50mm Fan for Maestro PC
11	NA	Battery, SBC Maestro
12	100142-001	Memory Module 256mb PC100 DIMM
13	400006-001	SBC Riser Support
14	100146-030	Hard Drive 2.5" IDE 30 gig
15	400005-001	SBC Top Cover

Removing and opening the SBC

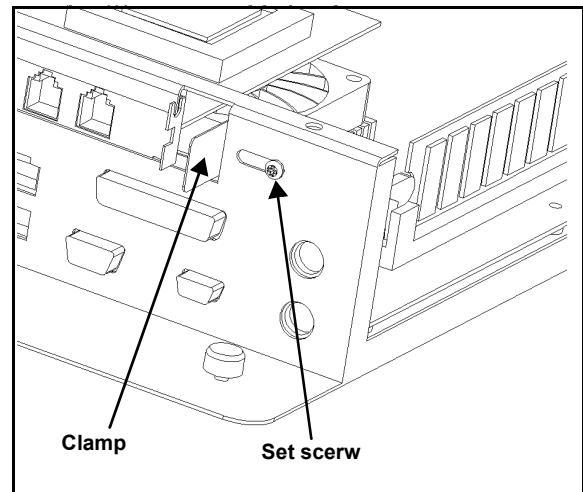
1. Disconnect the power cord
2. Disconnect all cabling from rear face of the SBC (including all RCA jacks, Phone and Modem jacks, etc.)
3. Unscrew the two (2) captive screws attaching the SBC to the frame.
4. Place the SBC on grounded work surface and wear static charge protective clothing or a static strap.
5. Remove the eight (8) sheet metal screws on top of the SBC and remove the cover.



ISA/PCI card

Removal

1. Loosen the set screw on the tab clamp adjacent to the card and slide clamp away from the card.
2. Grasp the card by the sheet metal flange and slide it away from slot- connector on the riser card, then slide card completely out of the connector.



Installation

Note: The ISA card and PCI card each dock into unique connectors on the riser card. The ISA card docks upright into the black connector and the PCI card docks upside down into the white connector.

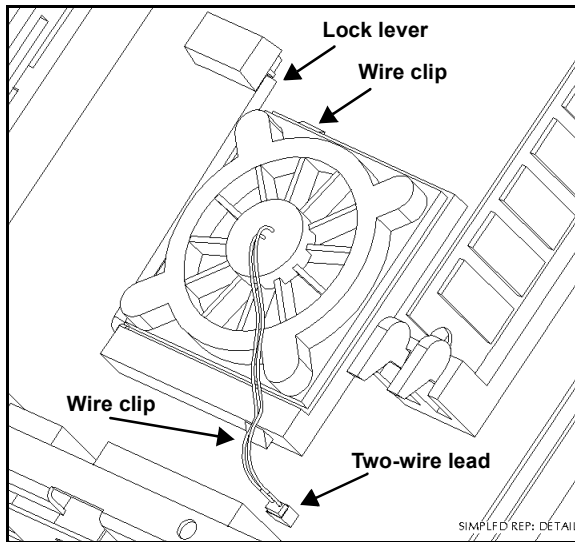
1. Orientate the card into position and be sure to position the sheet metal flange into the slot on the case.
2. Align the notches on the card with the slot connector and push the rear corner into the dock. Insert other corner of the card by pressing on the sheet metal flange, making sure that the card is completely docked to the connector.
3. Slide the tab clamp tight to the sheet metal flange and tighten the set screw.

CPU and fan

Note: *It is recommended that you wear an anti-static wrist strap connected to the metal case to prevent any static charges from damaging the CPU.*

Removal

1. Remove the two cards installed in the riser card as explained in "ISA/PCI card" on page 12.
2. Locate and remove the 2-wire fan power lead from the motherboard.
3. Depress the wire clips on each side of the fan and release the catch tabs. A flat blade screwdriver may be needed to carefully slip the wire clips past the catches



4. Pull the locking lever upright to release the CPU and fan.
5. Pull the CPU and fan straight up and out of the socket.

Installation

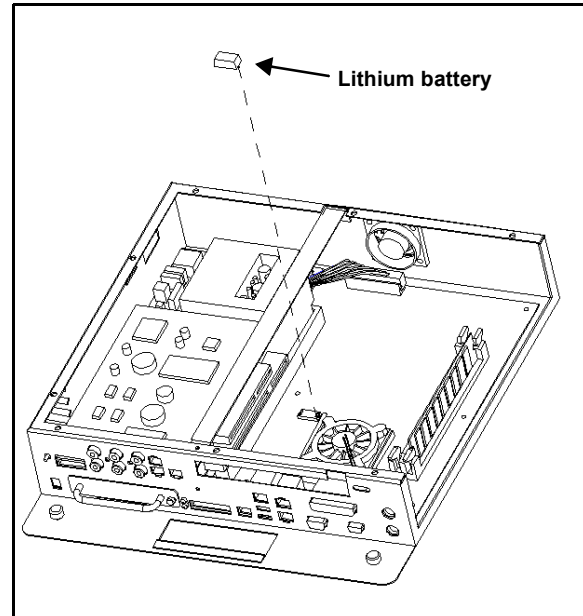
Note: *When handling the CPU, never touch the pins, always hold the CPU on the sides.*

1. Align the pins on the CPU with the holes in the motherboard socket and push in.
2. Press the wire catches on each side of the fan onto the catch tabs one at a time. You may need to use a flat blade screwdriver to get the wire clips past the catches, being careful not to damage the processor.
3. Lower the lock lever into the locked position.
4. Connect the 2-wire power lead into the receiver on the motherboard.
5. Reinstall the cards you removed earlier, as explained in "ISA/PCI card" on page 12.

Lithium clock battery

Removal

1. Remove the two cards installed in the riser card as explained in "ISA/PCI card" on page 12.
2. Locate the yellow rectangular clock battery and pull straight up to remove it from the motherboard.



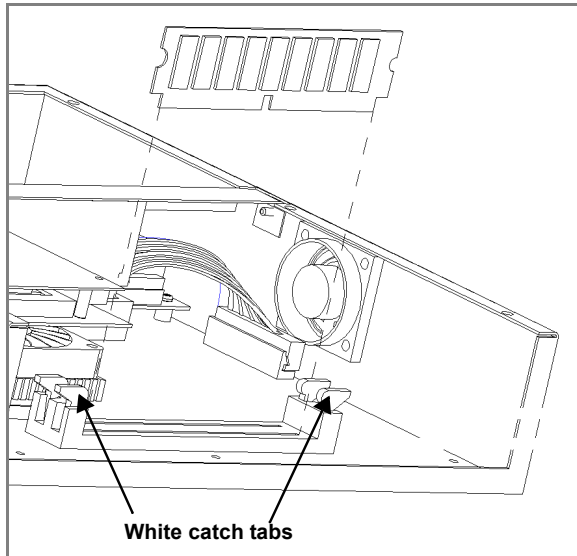
Installation

1. Align the tabs of the new clock battery into battery base on the motherboard and push firmly into place.
2. Reinstall the cards you removed earlier, as explained in "ISA/PCI card" on page 12.

RAM card

Removal

1. Depress the two (2) white catch tabs on either side of the RAM card until it releases from the DIMM slot connector.
2. Remove the RAM card.



Installation

Note: There is only one orientation in which the RAM card can be inserted into the DIMM slot connector. Be sure to properly align the notches on the edge of the card correctly before installation or the card or slot connector may be damaged.

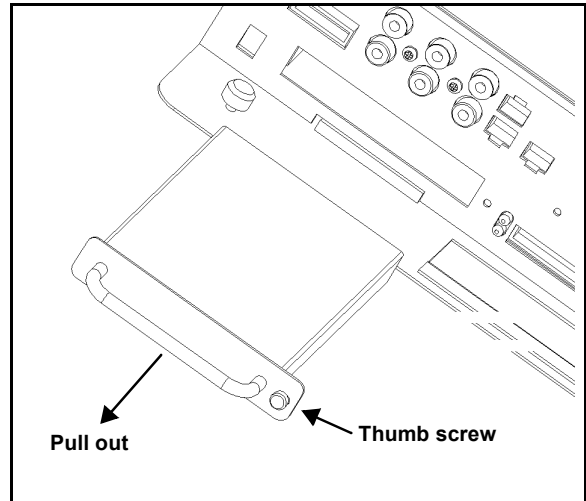
1. Orientate the RAM card into position and firmly push both sides of the card into the DIMM connector until the white catch tabs lock into sides of memory card.

Note: Make sure both catches are locked into the side notches on RAM card.

Hard drive

Removal

1. Remove the thumb screw adjacent to the hard drive.
2. Grasp the hard drive by the handle and pull it out of slot.



Installation

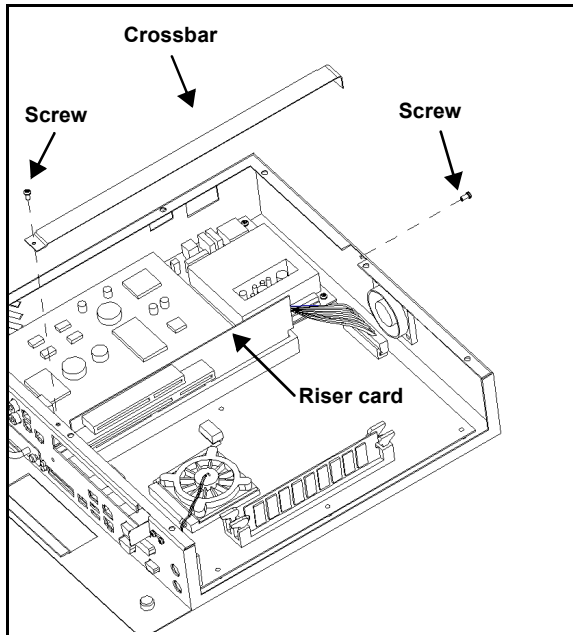
Note: Take extra care to make sure that the hard drive pins are correctly aligned or the pins may be bent and damaged during installation.

1. Insert the hard drive into the slot keeping a small amount of pressure on the front of the unit by pulling up while sliding the drive in. Gently push the hard drive into the slot until the face is flush with the case. DO NOT FORCE THE HARD DRIVE IN. If the hard drive will not easily enter the slot, then the pins are not correctly aligned. The pins must be aligned before the hard drive will properly dock into the connector.
2. Replace the thumb screw.

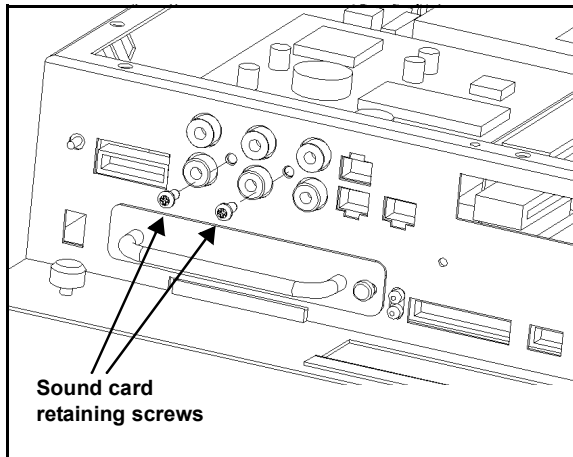
Riser/sound card

Removal

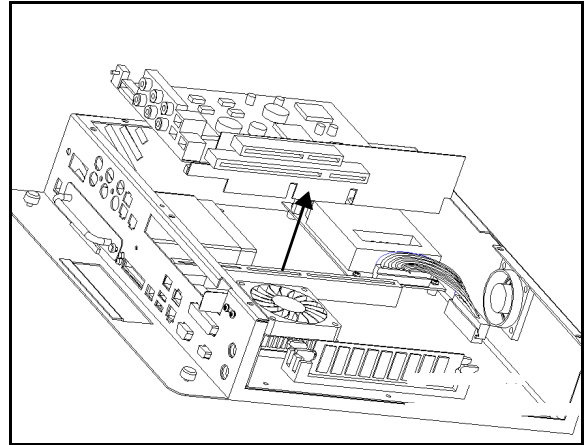
1. Remove the two cards installed in the riser card as explained in "ISA/PCI card" on page 12.
2. Remove the two (2) screws that hold the cross-bar in place over the riser card.
3. Remove the crossbar.



4. Remove the two (2) sound card retaining screws on the wall of the case next between the RCA jacks.



5. Pull up on the rear corner of the riser card, disconnecting it from the slot connector on the motherboard. Slide the riser card and sound card assembly away from the wall of the case. Be sure that all jacks are clear of the case before removing the assembly from SBC.



6. Pull sound card out of slot connector on riser card to separate.

Installation

1. Align the notches on the sound card with the slot connector on the riser card and insert, firmly pushing the two cards together.
2. Simultaneously align the RCA jacks, the Mic In connector and the Manager button on the sound card through the wall of the case, as well as the slot connector on the riser card with the slot on the motherboard.

At this point the sound card will be angled so as to allow the left side of the riser card to enter the slot connector first. With gentle pressure, insert the riser card into the slot connector starting on the left side and working towards the right side.

Note: After installation, make sure the connection between the sound card and riser card is tight

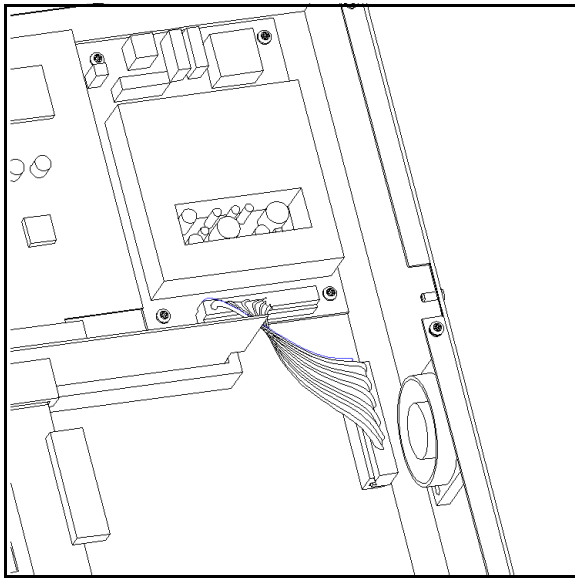
3. Install the crossbar by placing the end tab **under** the flange on the case and securing the two screws. Be sure that the guides on the crossbar capture the top edge of the riser card before both screws are tightened.
4. Reinstall the cards you removed earlier, as explained in "ISA/PCI card" on page 12.

Power supply

Removal

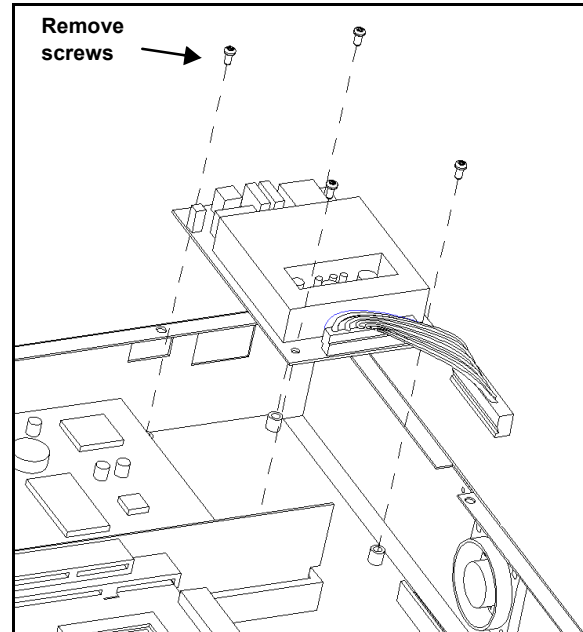
Warning: *Be extremely cautious when handling the power supply, the capacitors may discharge if the contacts form a circuit.*

1. Remove the two (2) sheet metal screws on either end of the metal crossbar.
2. Remove the crossbar.
3. Using a wide metal blade, gently pry the lock tab away from the ribbon connector attaching the power supply to the motherboard. Pull the ribbon cable up and out of the way.



4. Follow the four (4) wires (2 white and 2 black), from the rear of the main power switch and disconnect them from the tabs on the 120V supply jack and the white snap connector on the power-supply card .
5. Depress the two tabs on the sides of the switch and pull the switch with the wires attached through the hole in the case.

6. Remove the four (4) screws attaching the power supply card to the motherboard. A screw is located in each corner of the power supply card.



7. Pull the power supply card up and away a few inches from the motherboard and remove the ground wire connector from the power supply card.

Installation

1. Attach the green ground wire to the tab on the power supply card.
2. Align the screw holes on the power supply card over the four offset studs and tighten all four screws.
3. Pass the four wires from the rear of the switch through the hole in the case and install the connectors in the corresponding slots.
4. Snap the tabs of the switch housing through the case so it locks into place.
5. Connect the ribbon cable to the corresponding slot on the motherboard
6. Install the crossbar by placing the end tab **under** the flange on the case and securing the two screws.