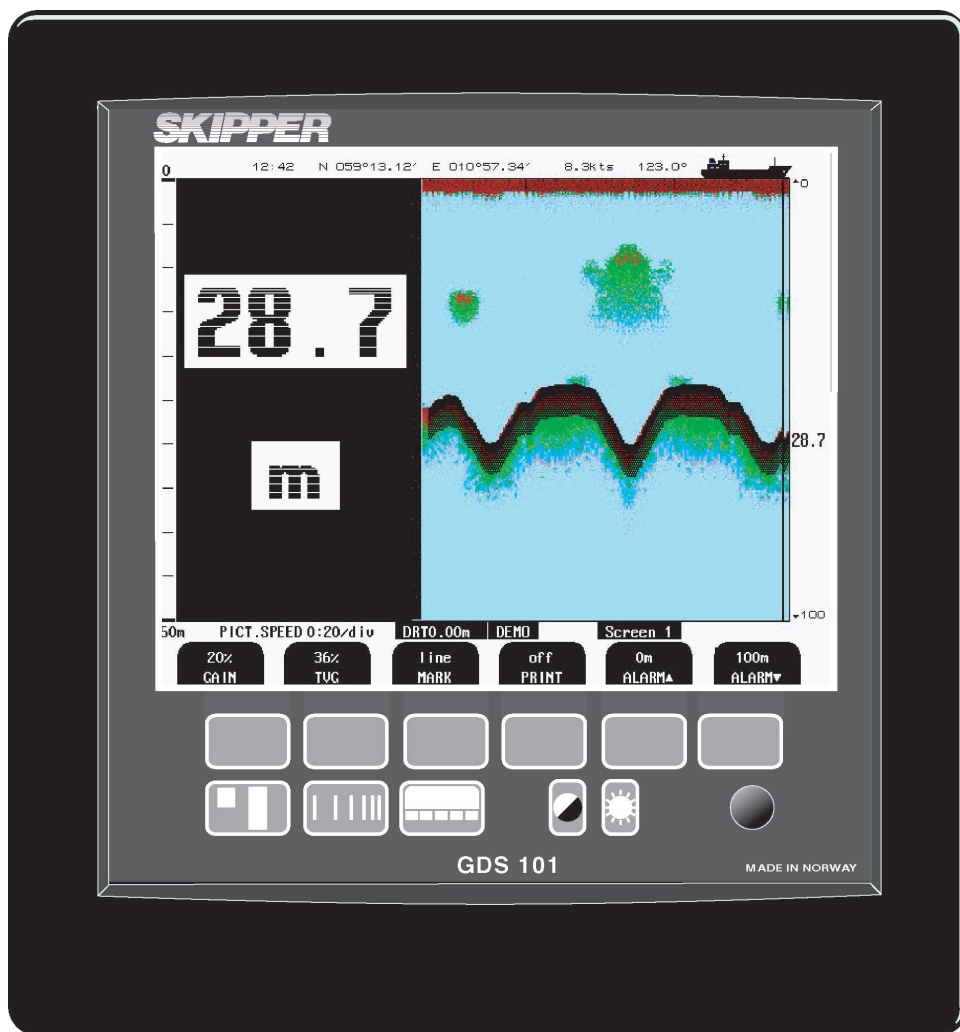


# SKIPPER GDS101

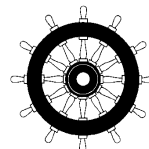
Graphic Depth Sounder

Illustrated parts list

Edition : 20121214



**SKIPPER**



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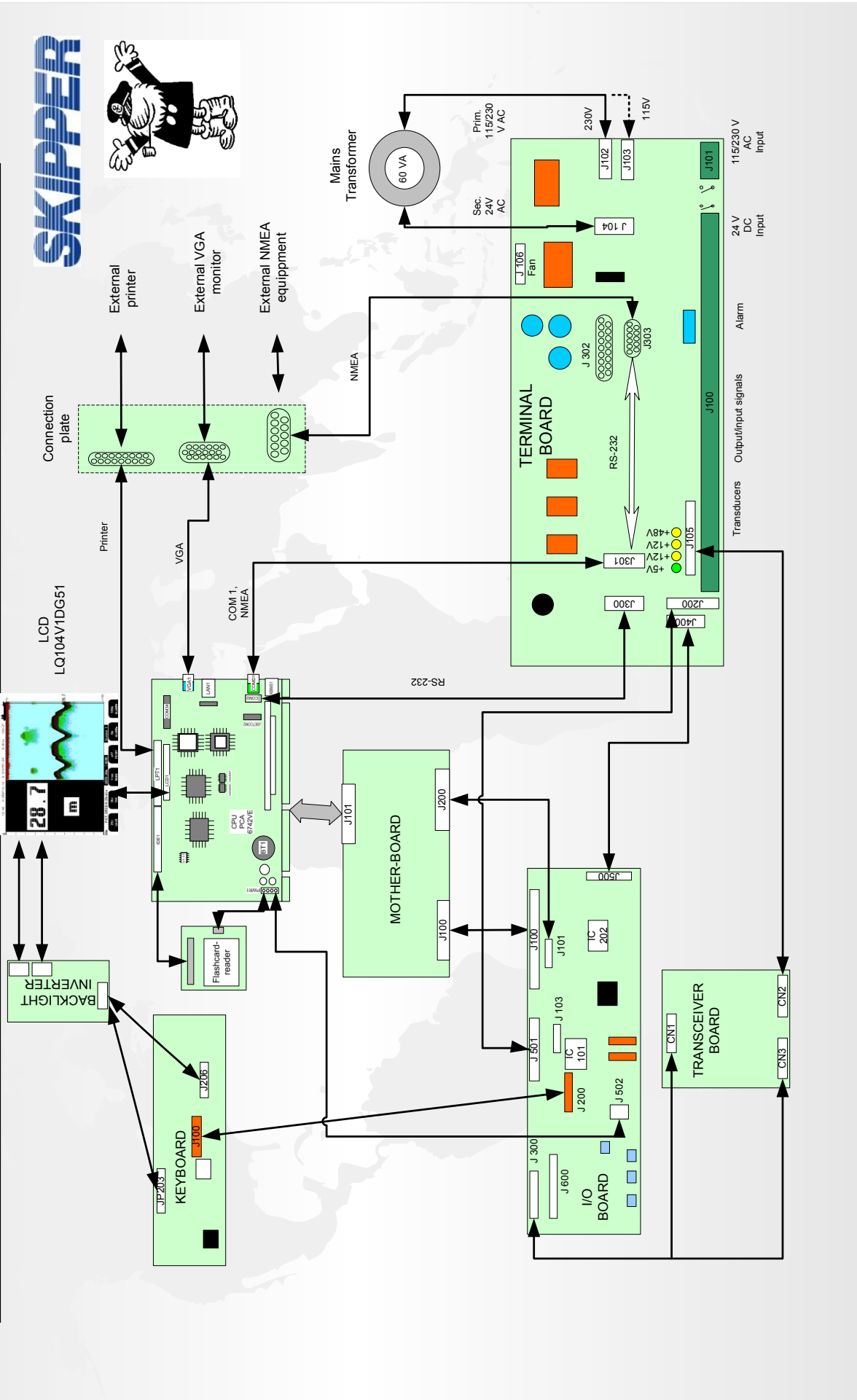
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# 1. INSTRUMENT BLOCK DIAGRAM

## MODULES AND INTERCONNECTION BLOCK-DIAGRAM GDS 101 PCA 6742VE SKIPPER Electronics January 2009

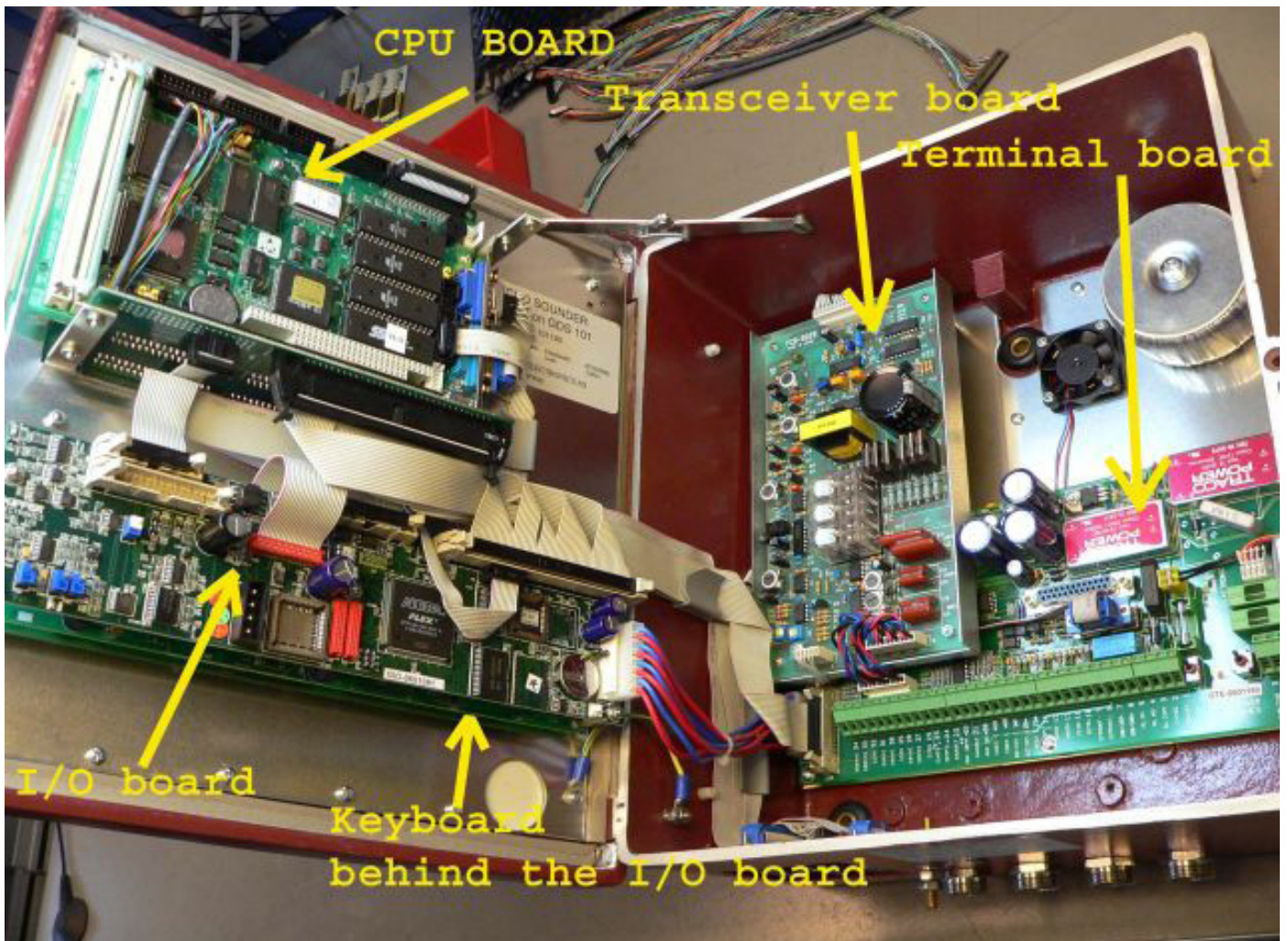


## 2. GDS101 REPLACEMENT PART NUMBER DIAGRAM

Year	Description	Serial no from	Serial no to	CPU PCB Part no	Terminal PCB Part no	Keyboard PCB Part no	I/O PCB Part no	Screen Part no	Front Plate Part no	Transceiver PCB Part no
1993	Monoscreen, Internal printer 286 CPU	SN 930026	SN 950304		PT-G001	PK-G001			SA-G001	PS-G002
1996	Monoscreen, Internal printer 386 CPU	SN 960305	SN 990949		PT-G001	PK-G001			SA-G001	PS-G002
1999	Monoscreen 9,4" SHARP LM64P83L Internal printer 6135 386 CPU	SN 990950	SN 991249	PCA6135 No RAM	PT-G001	PK-G001	PI-G021	KY-G001	SA-G001	PS-G002
2000	Monoscreen 9,4" SHARP LM64P83L, Ext. printer	SN 001250	SN 031934	Upgrade kit SA-G144	PT-G001	PK-G001	PI-G021	KY-G001	SA-G021	PS-G002
2003	Monoscreen 9,4" HITACHI LMG5278XUFC. Ext. Printer	SN 031935	SN 05299	Upgrade kit SA-G144	PT-G001	PK-G001	PI-G021	KY-G002	SA-G021	PS-G002
2005	Colour screen 10,4" SHARP LQ104V1DG51	SN 052300	SN083156	Upgrade kit SA-G142	PT-G041	PK-G021	PI-G021	KY-C003	SA-G041	PS-G002
2008	Colour screen, SW on Compact Flash CPU6742	SN083157		PC-C053	PT-G041	PK-G021	PI-G032	KY-C003	SA-G041	PS-G002

### 3. ILLUSTRATED PARTS LIST

#### OVERVIEW



FRONT PLATE WITH OVERLAY, SCREEN AND GLASS



Note!

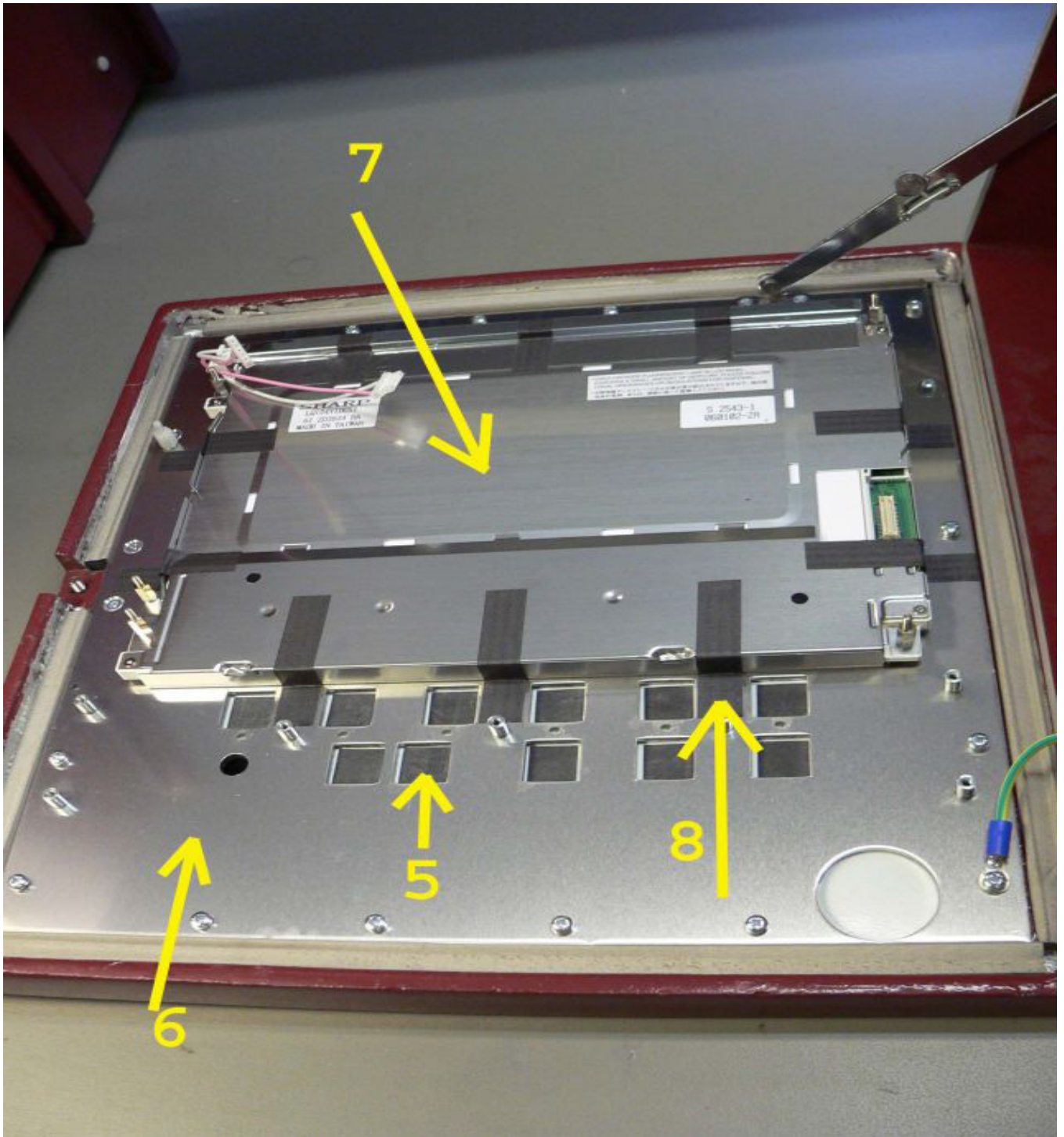
If front glass is damaged this is very inconvenient to repair in field.

We recommend to change the complete front plate with overlay and front glass

Front plate Mono int printer	SA-G001	With front overlay and front glass
Front plate Mono ext printer	SA-G021	With front overlay and front glass
Front plate Colour	SA-G041	With front overlay and front glass



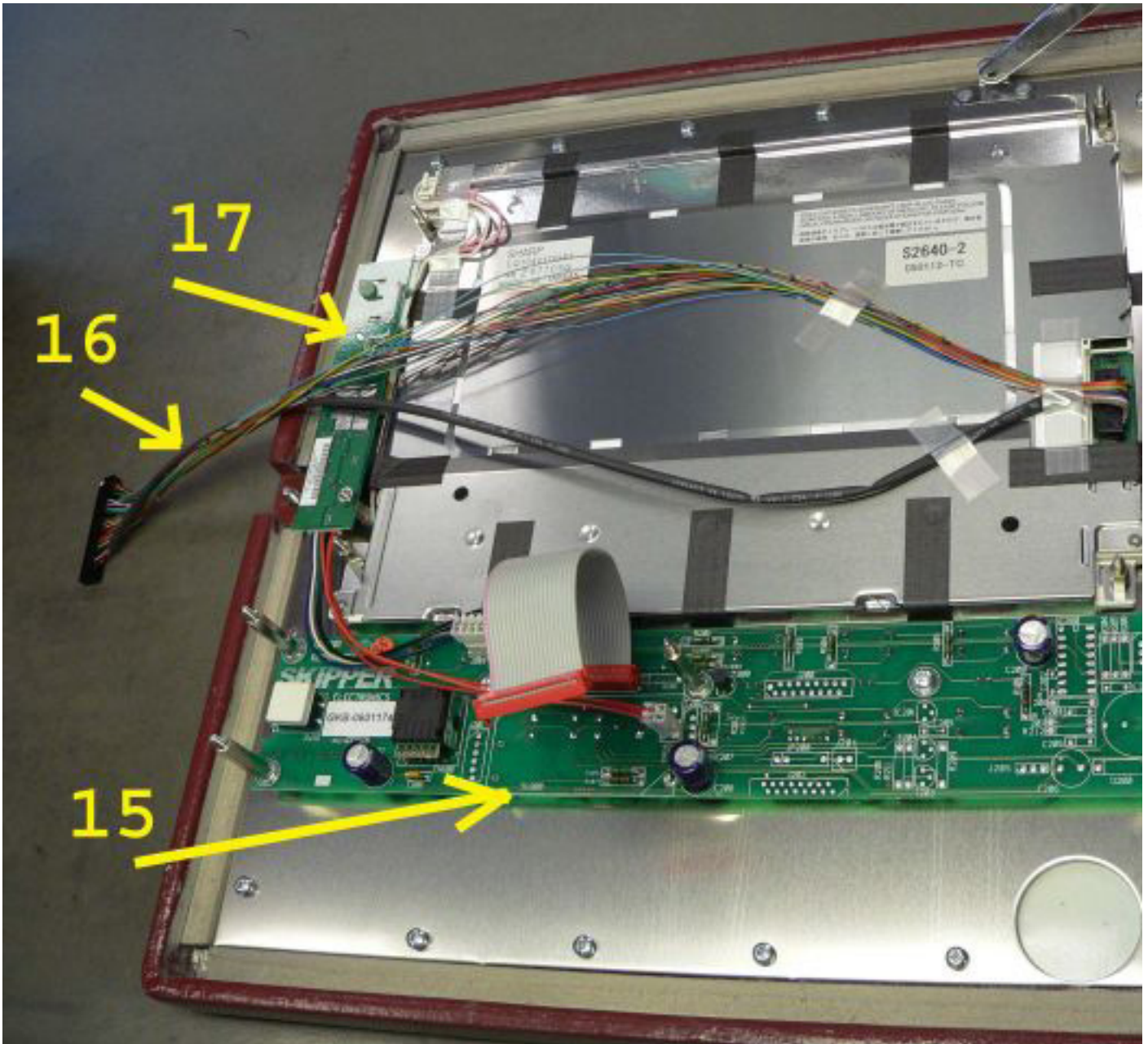
FRONT PLATE, SCREEN, TAPE AND KEYPAD SPACERS



Item no	Description	Part no	
5	Keypads rubber space	N/A	
6	Front plate Mono int printer	SA-G001	Whith front overlay and front glass
6	Front plate Mono ext printer	SA-G021	Whith front overlay and front glass
6	Front plate Colour	SA-G041	Whith front overlay and front glass
7	LCD panel 9,4" Mono GDS101U 27kohm. Sharp LM64P83L	KY-G001	SHARP LM64P83L (See page 18)
7	LCD panel 9,4" Mono GDS101U 24kohm. Hitachi LM5278XUFC.	KY-G002	Hitachi LM5278XUFC.
7	10,4" Colour Screen	KY-C003	SHARP LQ104V1DG61
8	Conductive tape	N/A	www.nortelco.no

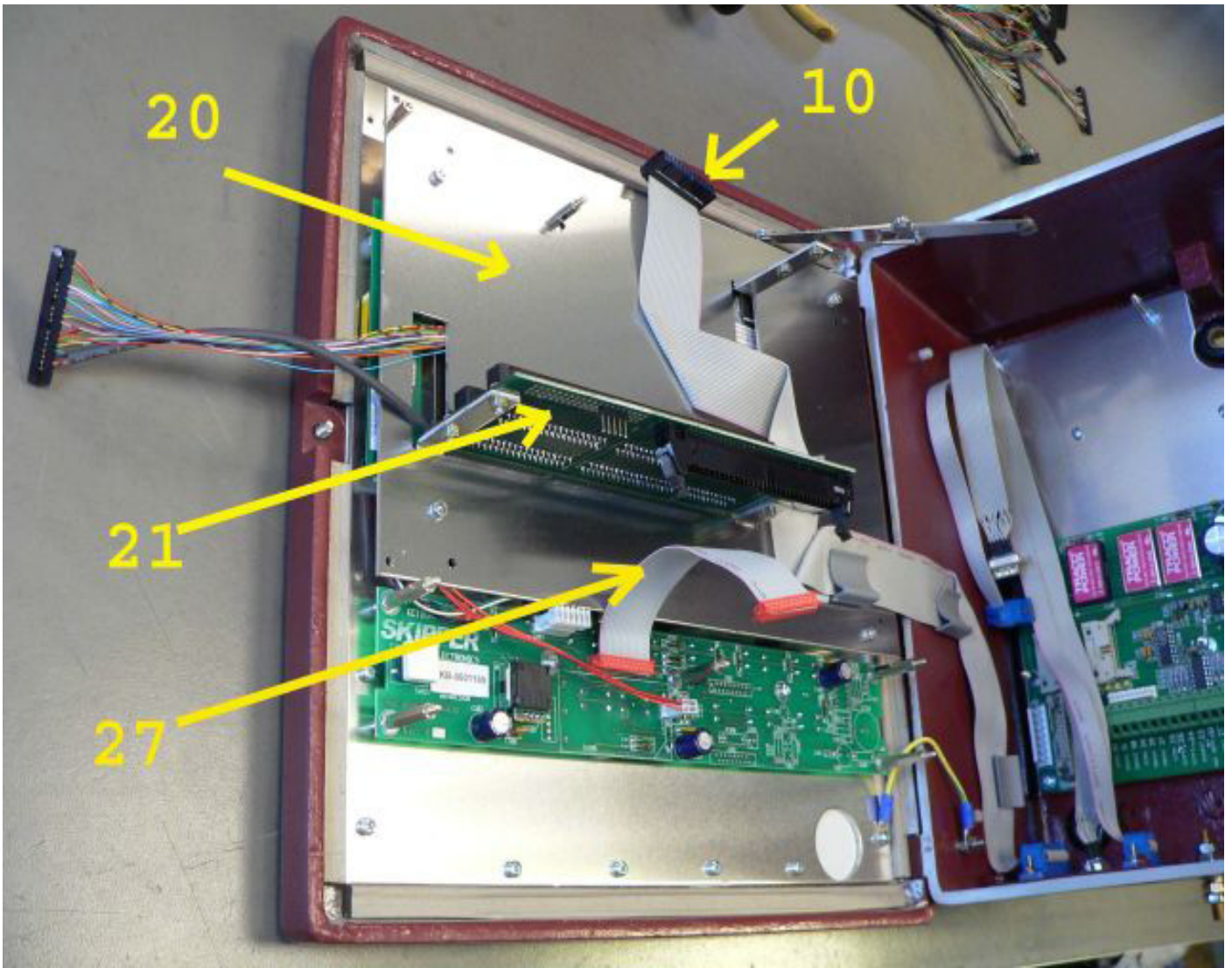


KEYBOARD, INVERTER AND GRAPHIC CABLE



Item no	Description	Part no	
15	Keyboard Mono ver B	PK-G001	Mono screen (See page 18)
15	Keyboard Colour ver D	PK-G021	Colour Screen
16	Graphics cable Mono (SHARP)		from CPU to Screen
16	Graphics cable Colour	ZZK-01034	from CPU to Screen
17	High voltage inverter	ZAA-01137	

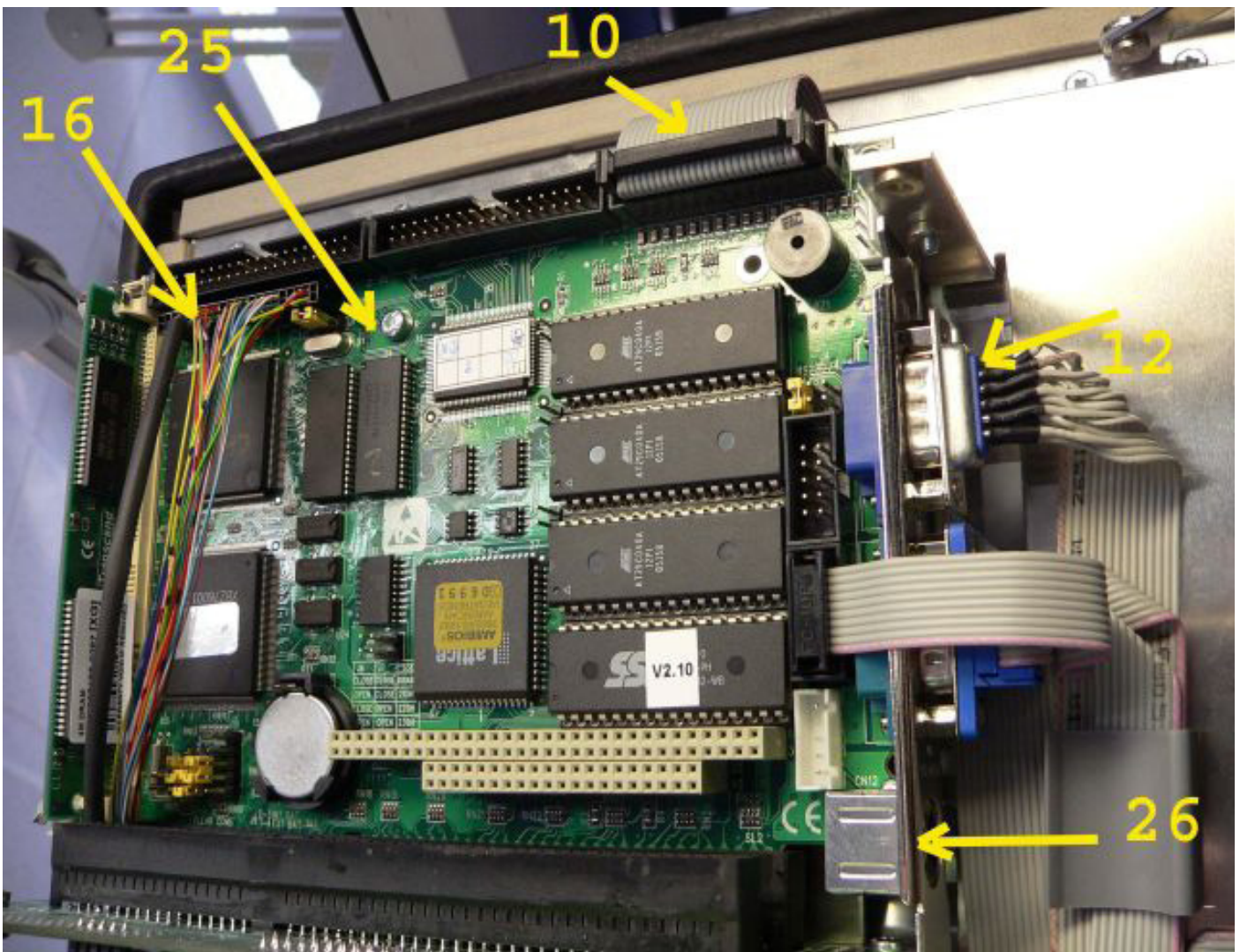
CPU PLATE AND MOTHER BOARD



Item no	Description	Part no	
10	Printer cable from CPU to Ext conn. panel	ZZK-01020	
20	CPU plate	ZAA-01121	
21	Mother board	ZZZ-010006	
27	Cable from Keyboard to I/O board	ZZK-01019	



CPU WITH VGA AND PRINTER CABLE

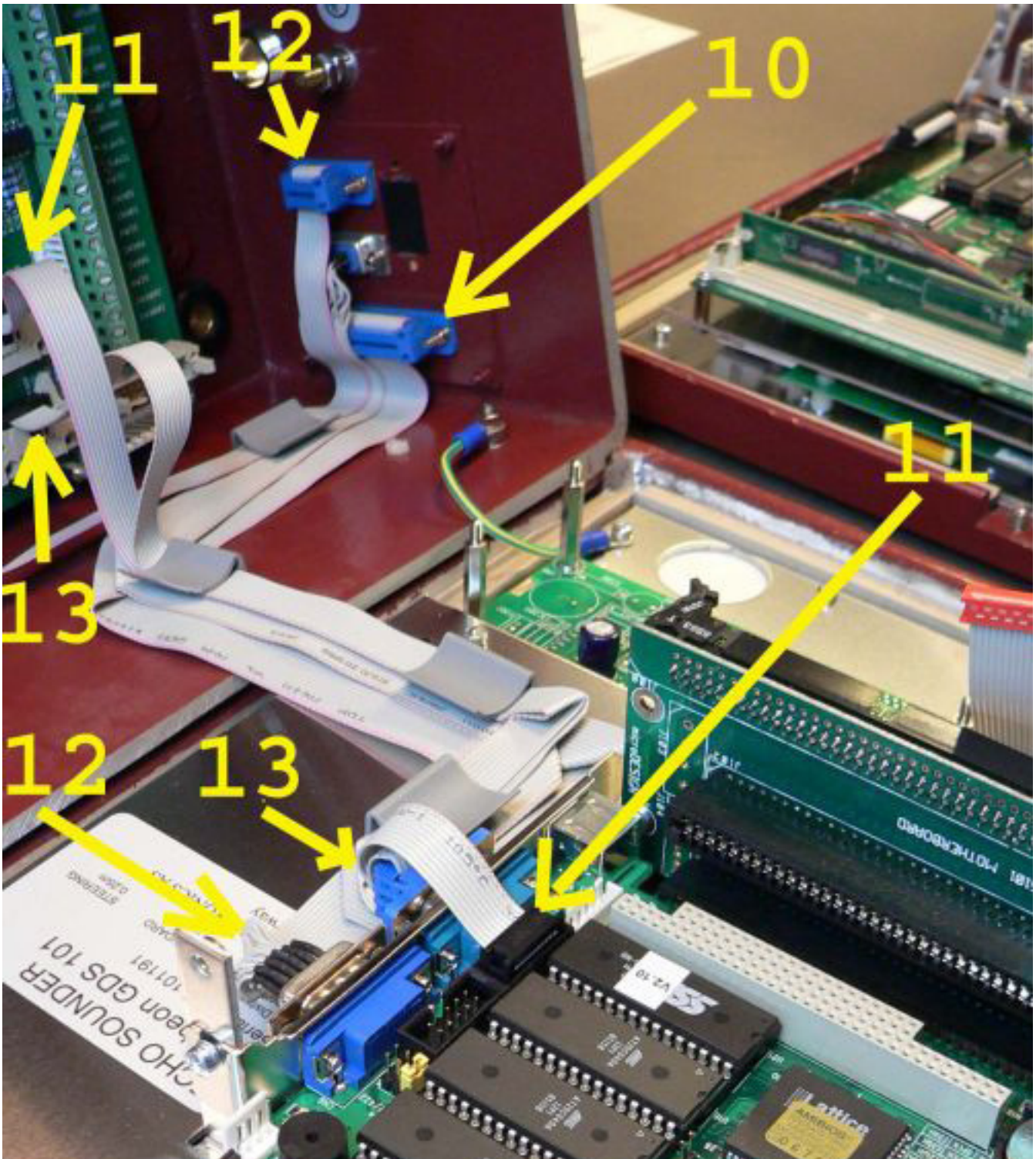


Item no	Description	Part no	
10	Printer cable from CPU to Ext. conn panel	ZZK-01020	
12	Cable VGA from CPU to Ext. conn panel	ZZK-01021	For external monitor
16	Graphics cable Mono (SHARP)		from CPU to Screen
16	Graphics cable Colour	ZZK-01034	from CPU to Screen
25	CPU PCB GDS101 Mono Internal printer	OBSOLETE Upgrade kit SA-G144	With RAM+FLASH setup ready
25	CPU PCB GDS101 Colour PCA 6135 (Serial from 052300 to 083156)	OBSOLETE Upgrade kit SA-G142	With RAM+FLASH setup ready
25	CPU PCB GDS101 Colour PCA6742 (Serial no from 083157-)	PC-C053	Setup ready
26	Socket for external keyboard		

Units from before 1999 (serial no <99950)  
 These units will have CPU with separate VGA board. These CPUs are obsolete. SKIPPER Electronics recommend to upgrade unit.



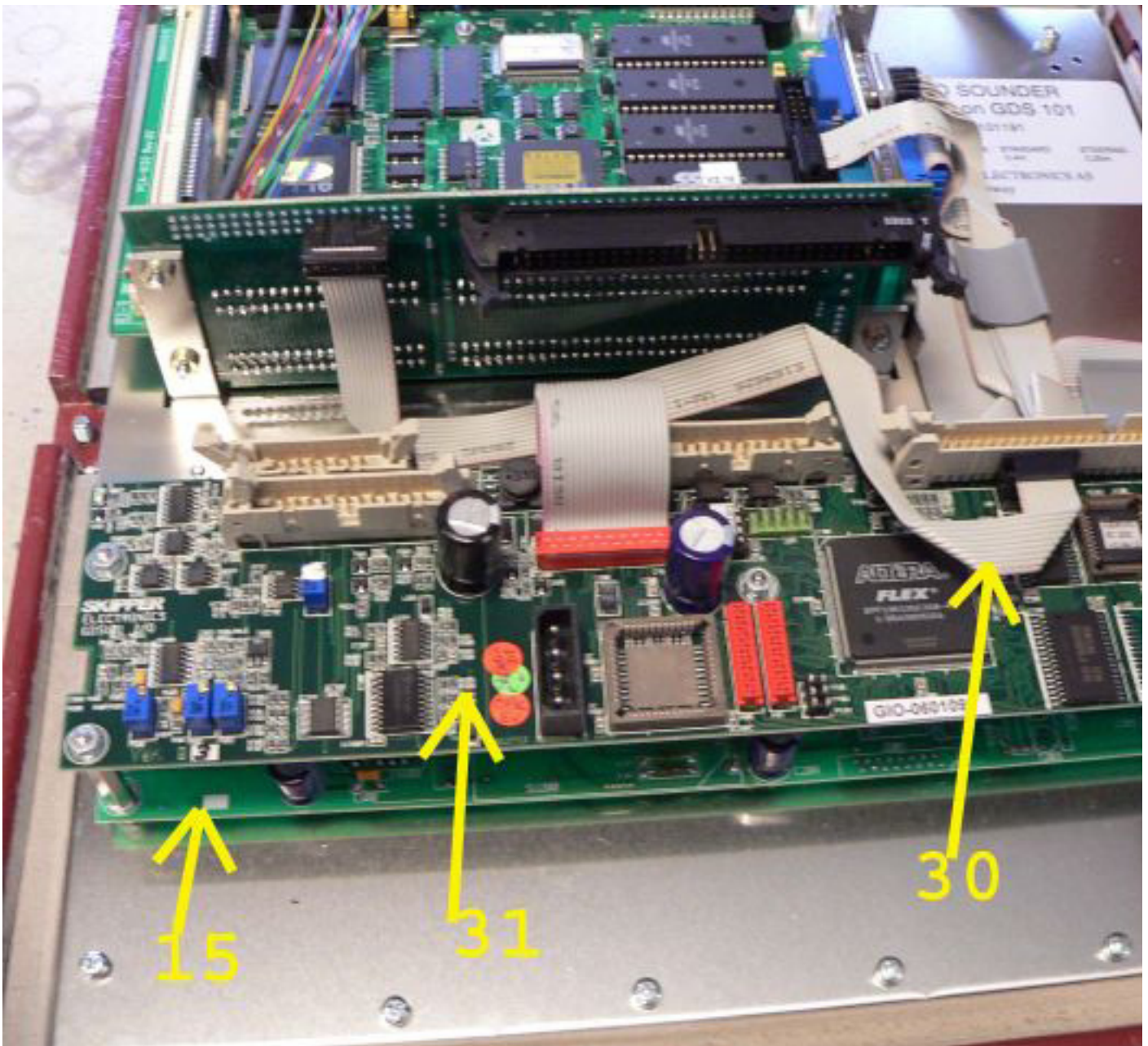
CPU WITH ALL CABLES



Item no	Description	Part no	
10	Printer cable from CPU to Ext. conn panel	ZZK-01020	
11	RS232 cable from CPU to Terminal board	ZZK-01015	
12	VGA cable from CPU to Ext. conn panel	ZZK-01021	
13	NMEA cable from CPU to terminal board	ZZK-01014	



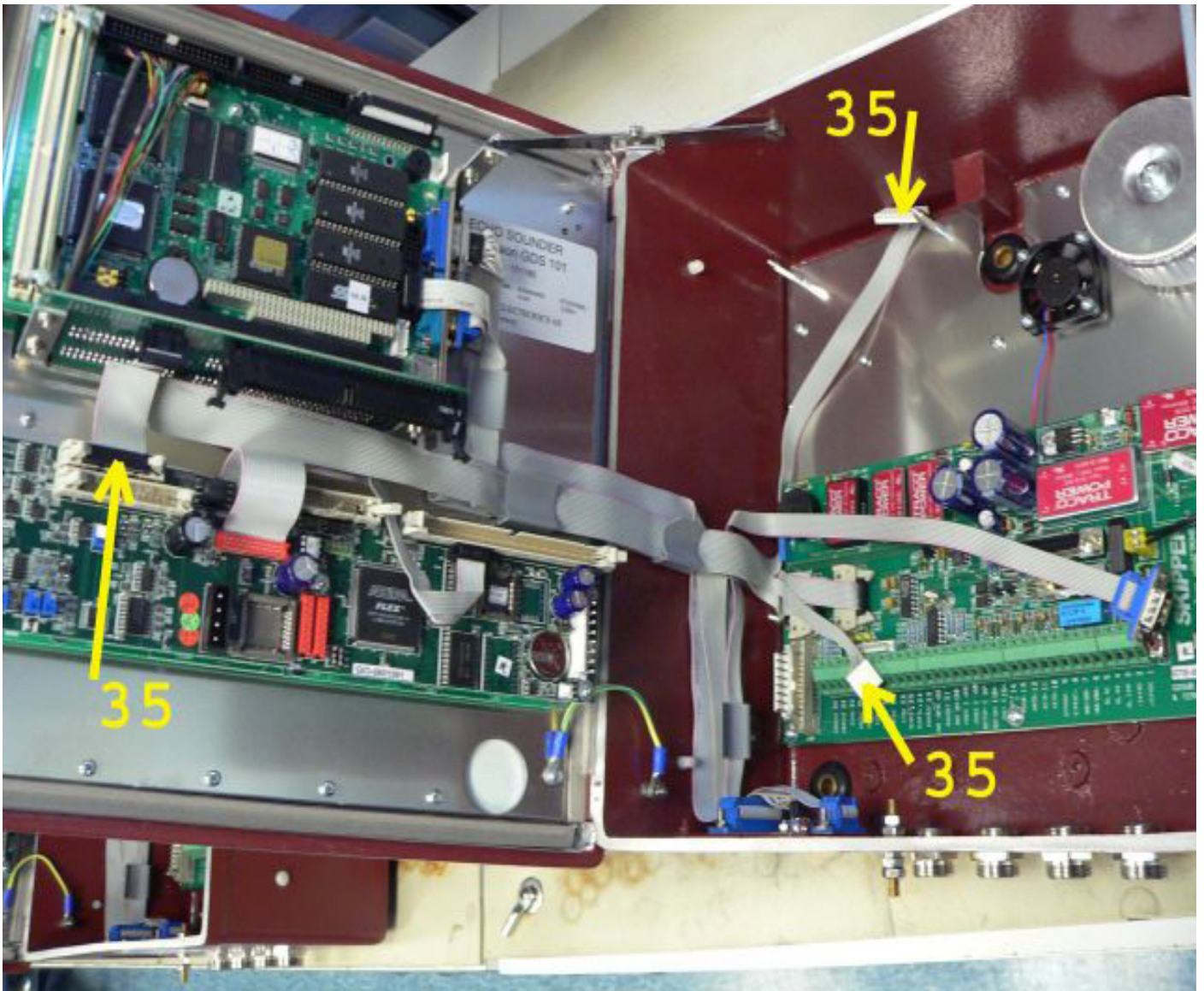
ENCODER CABLE



Item no	Description	Part no	
15	Keyboard Mono ver B	PK-G001	Mono screen (See page 17)
15	Keyboard Colour ver D	PK-G021	Colour Screen
30	Encoder cable from I/O board to mother board	ZZK-01013	
31	I/O PCB with Software. Mono/Colour For CPU PCA6135 in units from 1999-2008	PI-G021	
31	I/O PCB For CPU PCA6742 in units from 2008-	PI-G032	

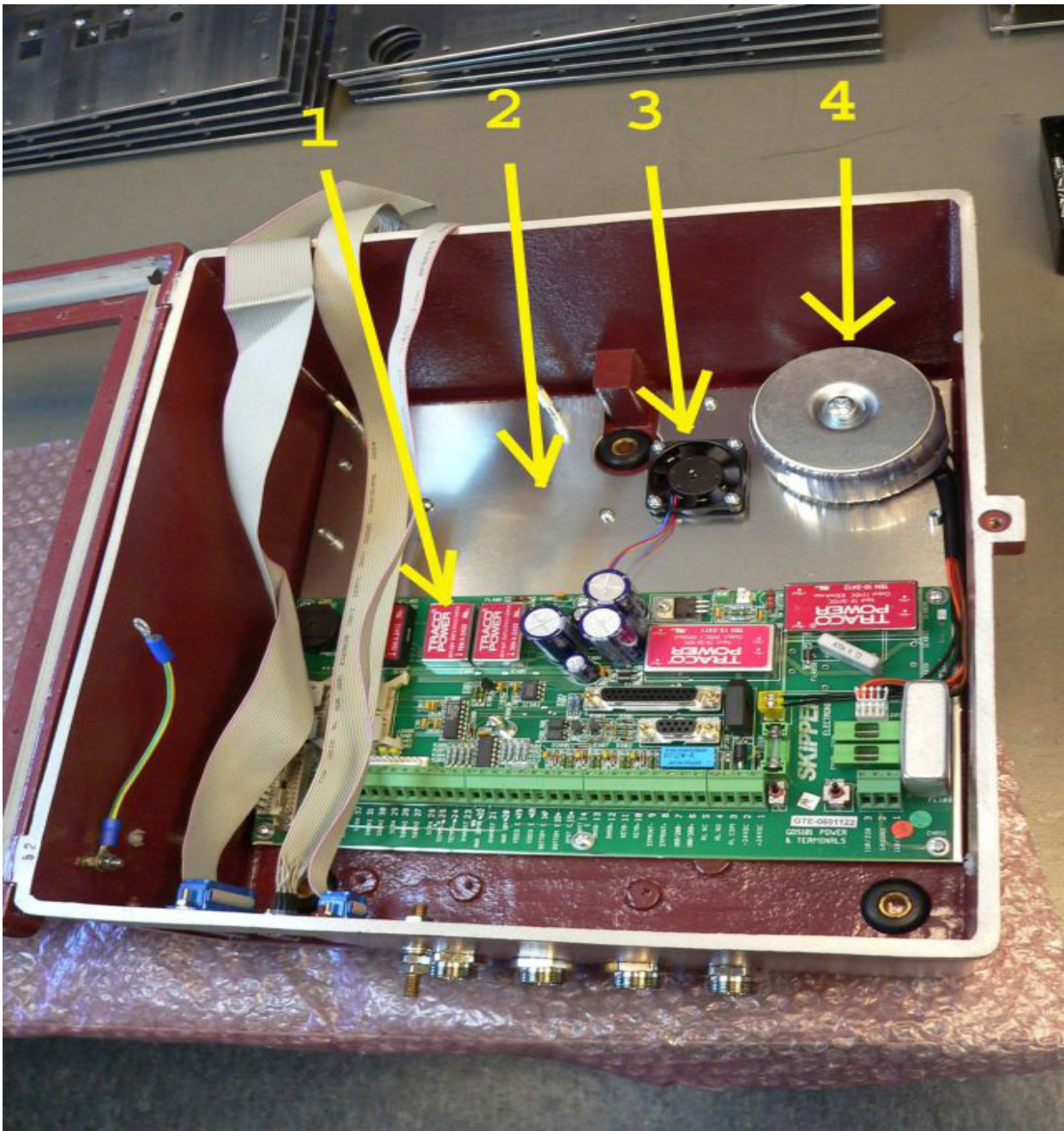


TRANCEIVER CABLE FROM I/O BOARD



Item no	Description	Part no	
35	Cable from I/O board to Tranceiver board	ZZK-01009	

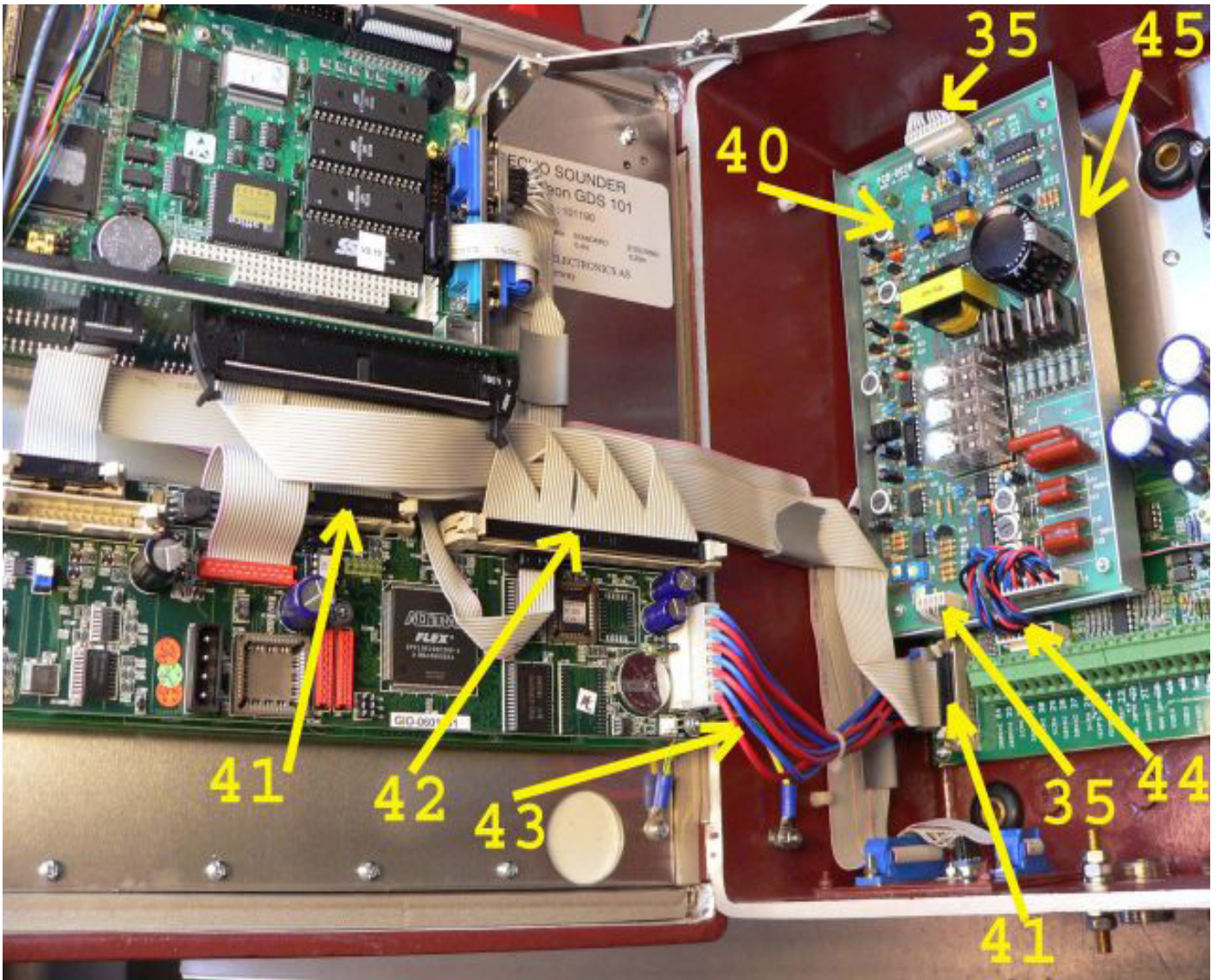
CABINET, BACK PLATE, TERMINAL BOARD, FAN AND TRANSFORMER



Item no	Description	Part no	
1	Terminal board ver E3P	PT-G001	Mono screen
1	Terminal board E5	PT-G041	Colour Screen
2	Back plate	ZZA-01024	
3	Cooling fan	ZZJ-02019	
4	Transformer	ZZS-01116	



I/O BOARD AND TRANCEIVER BOARD WITH ALL CABLES



Item no	Description	Part no	
35	Cable from I/O board to Tranceiver board	ZZK-01009	
40	Tranceiver board 002B	PS-G002	38, 50 and 200kHz
41	Cable from Terminal board to I/O board	ZZK-01012	
42	Bus cable from Mother board to I/O board	ZZK-01081	
43	Power cable from terminal board to I/O board	ZZK-01017	
44	TX cable from Tranceiver board to terminal board	ZZK-01018	
45	Tranceiver shield box	ZAA-01125	

## KEY BOARD CONFIGURATION WITH MONOCHROME SCREEN

When replacing keyboard PCB or the monochrome screen in GDS101 you have to configure the keyboard PCB to the type of Screen.

A Screen type SHARP LM64P83L requires R207= 27kOhm

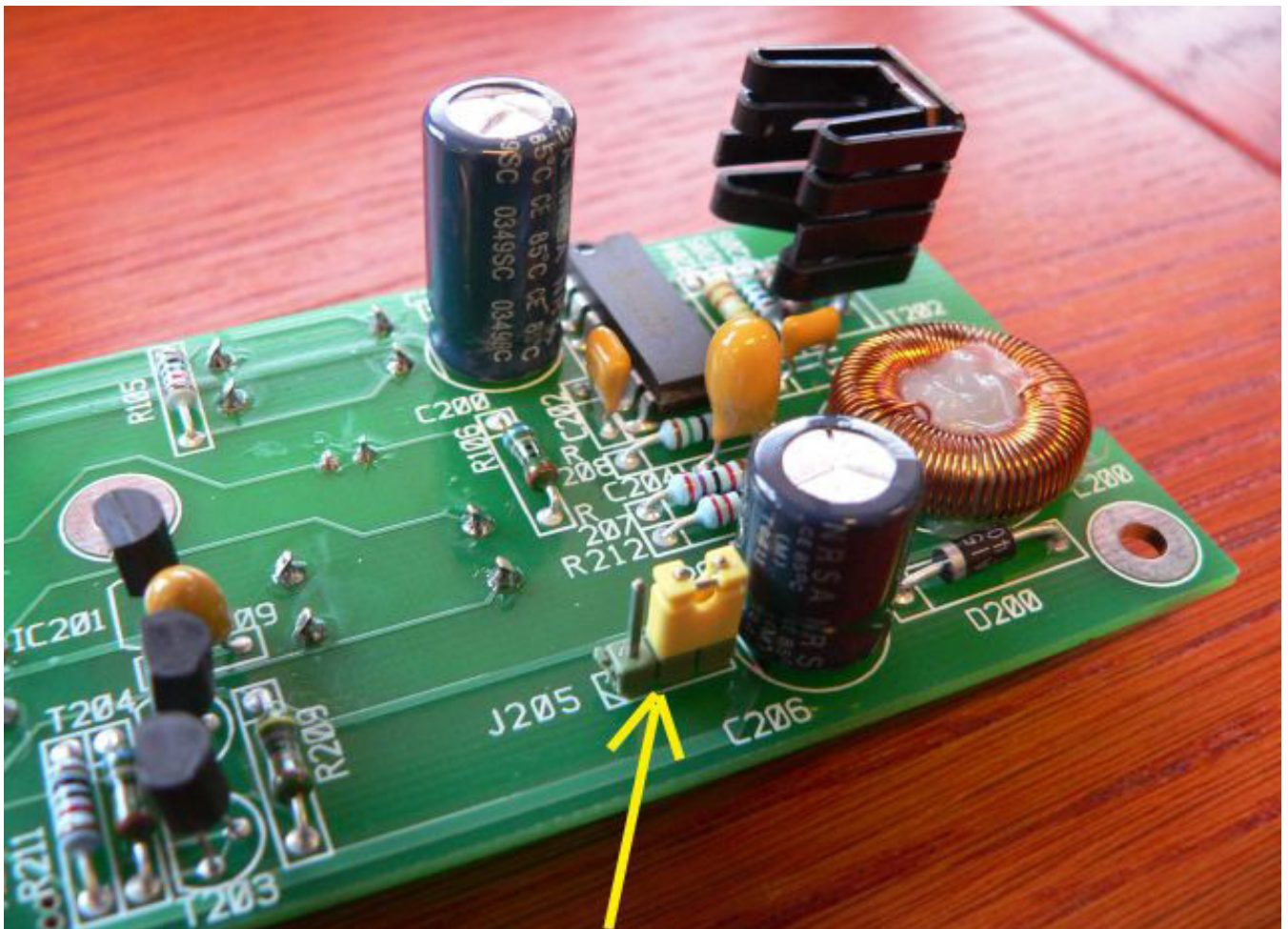
A Screen type Hitachi LMG5278 requires R207= 24kOhm

Wrong resistance will create contrast error on the screen.

On keyboard Part number PK-G001 ver B you may set Jumper J205 to correct resistance.

Position 2-3 (shown on picture) Resistance is 27kOhm

Position 1-2 Resistance is 24kOhm

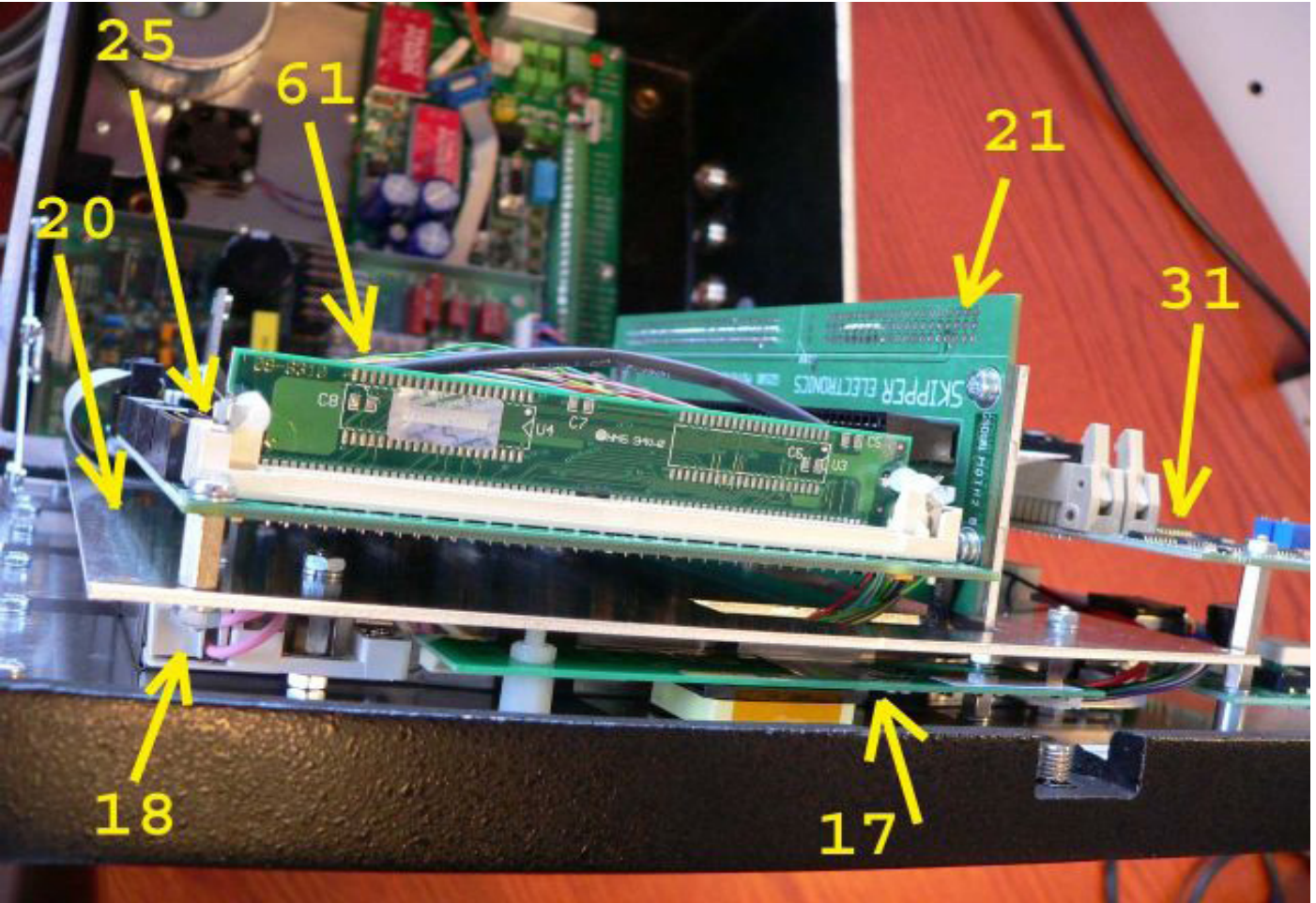


JUMPER J205 in position 2-3



To access screen, backlight and backlight inverter:

Remove all cables on I/O board. Remove I/O board.  
 Remove all cables on CPU board. Remove CPU board (with RAM board)  
 Remove CPU plate with motherboard.



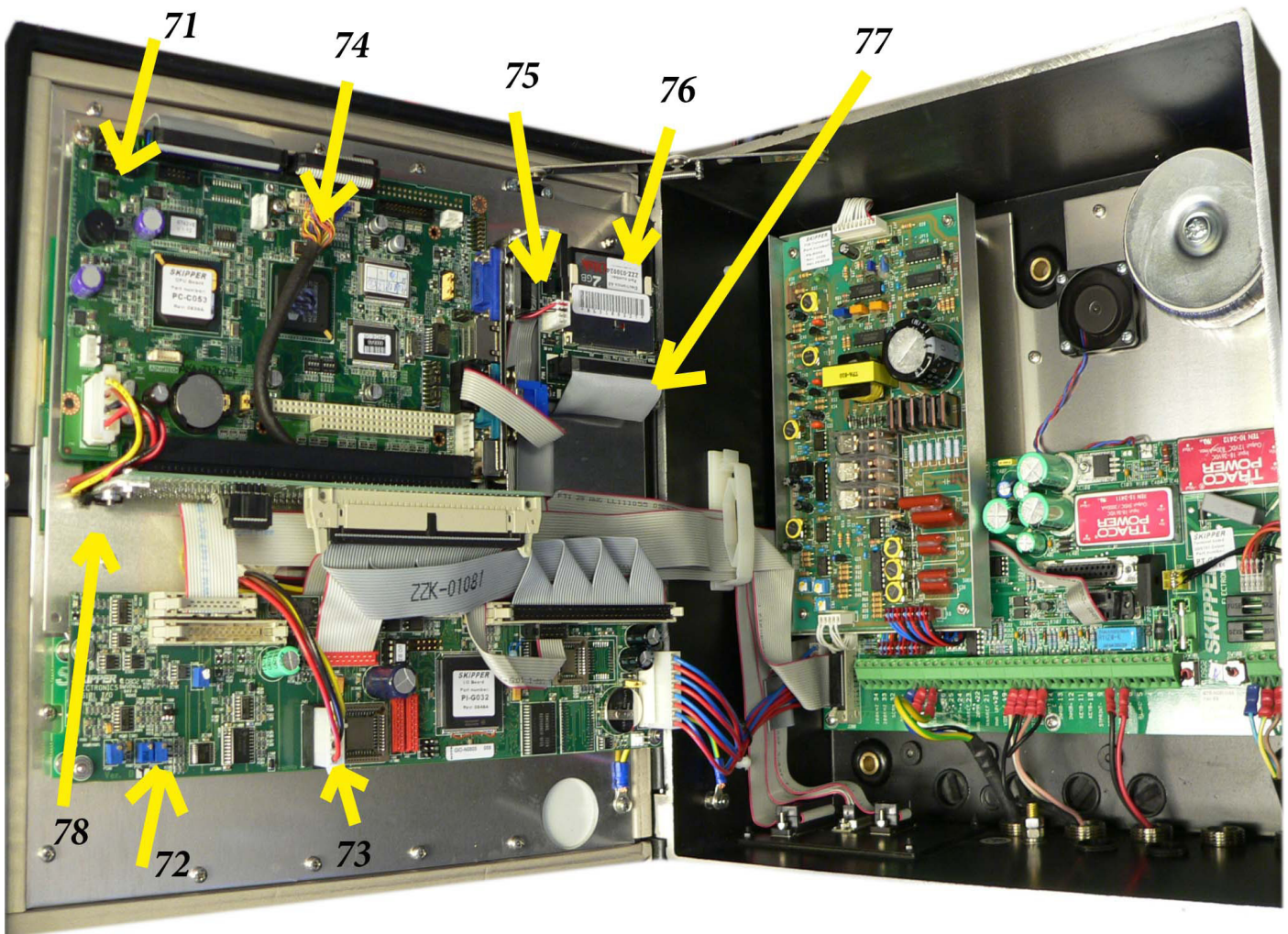
Item no	Description	Part no	
17	PCB Backlight inverter	ZAA-01137	
18	Fluorecent back light modul for LQ104V1DG51 Sharp 10,4"	ZAA-01001BL	Obsolete. Used in GDS101 serial 052300 to 103711.
18	Fluorecent back light module for LQ104V1DG61 Sharp 10,4"	ZAA-01009	Used in GDS101 from serial 103712.
20	CPU plate	ZAA-01121	
21	Mother board	ZZZ-010006	
25	PCB CPU		
31	PCB I/O board		
61	PCB RAM board on CPU board 6135		Included with PCB CPU

Note!

Backlight ZAA-01009 is the only backlight available.  
 For other screens you will need to replace complete screen.  
 The colour screen LQ104V1DG61 is compatible with LQ104V1DG51. (only minor thicknes difference)  
 same part number KY-C003.



NEW PARTS IN UNITS FROM SERIAL NO 083157.



Item no	Description	Part no	
71	PCB CPU 6742VEF Setup ready. No Flash card.	PC-C053	
72	PCB I/O board FOR GDS101 for CPU 6742	PI-G032	
73	Power cable 5/12V	ZZK-01074	
74	CABLE Screen PCA 6742	ZZK-01076	
75	FLASH CARD READER MESA	ZZZ-030023	
76	FLASH CARD Sandisk 2GB	ZZZ-030024	
77	FLAT CABLE FOR FLASH CARD READER (IDE)	ZZZ-030025	
78	COMPUTER PLATE GDS PL-8013. Holes for MESA card.	ZAA-01139	

In units from 083157 the new CPU PCS6742 is used.  
 The software is moved from I/O PCB to Compact Flash Cards. There are two CF cards. One on backside of CPU PCB and one on Flash card reader MESA.

The CFcard on Flash Card reads MESA is used for upgrades and recordings.  
 The CF card on backside of CPU is used for software and settings.

The newest Software version and upgrade procedure is available as download from [www.skipper.no](http://www.skipper.no)