

Service Manual

LDK 5302/60
2 INCH HDTV VIEWFINDER

Identification and Status

To indicate the status of a drawing, a box with the numbers 0 to 9 is shown in the bottom-right of the drawing. The number that is crossed-out is the status number of the drawing. For example, in the illustration below, the status is 1.

0	1	2	3	4
5	6	7	8	9

A sticker is used on the units themselves to identify them and to indicate their status. For example, in the illustration below, the top line is the 12-digit number that identifies the unit type.

3922	406	88991
00121107	00	01

The first four digits of the number on the second line represent a date code (year, week); the next four digits represent the serial number for that week.

The number in the grey area indicates the status of the unit. The last two digits represent the number that will be given to the next status. However, if these two digits are contained in a box, then this is the current status. For example, in the illustration above, the current status of the unit is 01.

Line 1	3922407 00000
Line 2	123456AA0101
Line 3	VR/0123456789

Line 1

This is the code number of the printed circuit board assy. (PCB)

Line 2

This is the serial number of the PCB. The first 6 digits and the 2 letters are for internal use. The last four digits represent the date of the manufacturing: wwyy.

Example:

123456AA1402 means the PCB is manufactured in week 14 of the year 2002.

Line 3

This is the status of the PCB.

The digit after the first slash is the status. If there is no number before the slash, it means that the status is less than 10, a 1 before the slash means the status is between 10 and 19, a 2 before the slash means between 20 and 29 etc.

Example:

- VR4567891012 means status 4

- VR3/78901234 means status 37.

Example of LDK number:

LDK 4501/01 means 8926450 10101

LDK 4500/00 means 8926450 00001

Numbers of printed circuit board assy

- 3922 406 xxxxx or 3922 407 xxxxx

Number (screened in PCB layout) of printed circuit board assy: 3922 411xxxxx. (not a sparepart)

Safety Summary

This information is intended as a guide for trained and qualified personnel who are aware of the dangers involved in handling potentially hazardous electrical/electronic equipment. It is not intended to contain a complete list of all safety precautions which should be observed by personnel in using this or other electronic equipment.

The installation, maintenance and service of this equipment involves risks both to personnel and equipment and must be performed only by qualified personnel exercising due care.

Personnel engaged in the installation, operation, maintenance or servicing of this equipment are urged to become familiar with First Aid theory and practices.

During installation and operation of this equipment, local building safety and fire protection standards must be observed.

Before connecting the equipment to the power supply of the installation, the proper functioning of the protective earth lead of the installation needs to be verified.

Whenever it is likely that safe operation is impaired, the apparatus must be made inoperative and secured against any unintended operation. The appropriate servicing authority must then be informed. For example, safety is likely to be impaired if the apparatus fails to perform the intended function or shows visible damage.

This product has been designed and tested according to EN60065.

Cautions and Warnings

When performing service, be sure to read and comply with the warning and caution notices appearing in the manuals. Warnings indicate danger that requires correct procedures or practices to prevent death or injury to personnel. Cautions indicate procedures or practices that should be followed to prevent damage or destruction to equipment or property.

WARNING

THE CURRENT AND VOLTAGES PRESENT IN THIS EQUIPMENT ARE DANGEROUS. ALL PERSONNEL MUST AT ALL TIMES FOLLOW THE SAFETY REGULATIONS.

ALWAYS DISCONNECT POWER BEFORE REMOVING COVERS OR PANELS.

ALWAYS DISCHARGE HIGH VOLTAGE POINTS BEFORE SERVICING.

NEVER MAKE INTERNAL ADJUSTMENTS, PERFORM MAINTENANCE OR SERVICE WHEN ALONE OR WHEN FATIGUED.

IN CASE OF AN EMERGENCY ENSURE THAT THE POWER IS DISCONNECTED.

ANY INTERRUPTION OF THE PROTECTION CONDUCTOR INSIDE OR OUTSIDE THE APPARATUS, OR DISCONNECTION OF THE PROTECTIVE EARTH TERMINAL, IS LIKELY TO MAKE THE APPARATUS DANGEROUS. INTENTIONAL INTERRUPTION IS PROHIBITED.

FOR SAFETY REASONS THE CPU MUST BE MOUNTED IN A 19-inch RACK WHICH HAS SAFETY COVERS ACCORDING TO IEC65.

WHEN TWO CPUs ARE MOUNTED ABOVE EACH OTHER THE MINIMUM DISTANCE BETWEEN THEM MUST BE 50MM OR THE RACK MUST BE FORCE-AIR COOLED.

USE ONLY FUSES OF THE TYPE AND RATING SPECIFIED.

CAUTION

To prevent risk of overheating, ventilate the product correctly.

Connect the product only to a power source with the specified voltage rating.

Only connect a Triax cable from the LDK 6 camera family to an LDK 6 CPU. Never connect it to any other base station.

Never connect the Triax cable from a camera to a CPU of a different family; never connect the LDK family to the TTV family.

Do not allow system ground currents to exceed 1.5A in the outer shield of the triax cable or 0.2A in other cable shields.

It is strictly prohibited to short circuit the inner and outer shields of a triax cable used to connect a camera to a base station.

Symbol	Colour	Explanation
	Red	High voltage terminal at which a voltage, with respect to an other terminal, exists or may be adjusted to 1000V or more.
	Yellow/Black	Live part.
	Yellow/Black	This marking indicates that the operator must refer to an explanation in the Instruction Manual, or that a specific component must be replaced by the component specified in the documentation for safety reasons.
	White/Black	Protective earth (ground) terminal.

Cathode ray tubes

Components marked  on the circuit diagram are critical for safety and include those specified to comply with X-ray emission standards for units using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

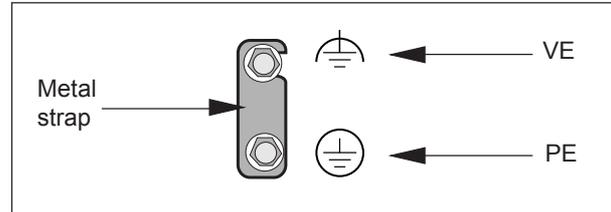
When servicing units that use cathode ray tubes (CRTs), the cathode ray tubes themselves, the high voltage circuits and related circuits are specifically chosen so that they comply with recognized codes pertaining to X-ray emission.

Consequently, when servicing, replace the cathode ray tubes and other parts with specified parts only. Do not attempt to modify these circuits as any unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

Handle the cathode ray tube only when wearing shatterproof goggles and after discharging the high voltage completely.

Earthing

The rear of a CPU has two separate screw terminals for protective earth  (PE) and video earth  (VE).



These are normally connected by a metal strap. The protective earth terminal is internally connected to the protective earth conductor of the power cable. If required, the central earth connection wire of the studio can be connected to terminal PE.

In normal circumstances the connection between the protective earth and the video earth should not be broken.

The metal strap may be removed only if the studio (or OB van) is equipped with separate protective and video earth systems. Under these circumstances the video earth terminal must be connected to the central functional earth potential (video earth) of the studio. This earth potential should have functional protective and noiseless earth (FPE) qualities as stated in the VDE regulation 0800/part2. A low impedance interconnection of both earth conductors must be provided at the central studio earthing point.

WARNING

THE UNIT MUST ALWAYS BE CONNECTED TO PROTECTIVE EARTH.

Mains Lead Wiring for UK Users

The wires in the mains lead are coloured in accordance with the following code:

GREEN AND YELLOW	-	EARTH
BLUE	-	NEUTRAL
BROWN	-	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

- The wire coloured GREEN AND YELLOW must be connected to the terminal on the plug marked with the letter E or by the safety earth symbol  or coloured GREEN or GREEN AND YELLOW.
- The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured RED.
- The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLACK.

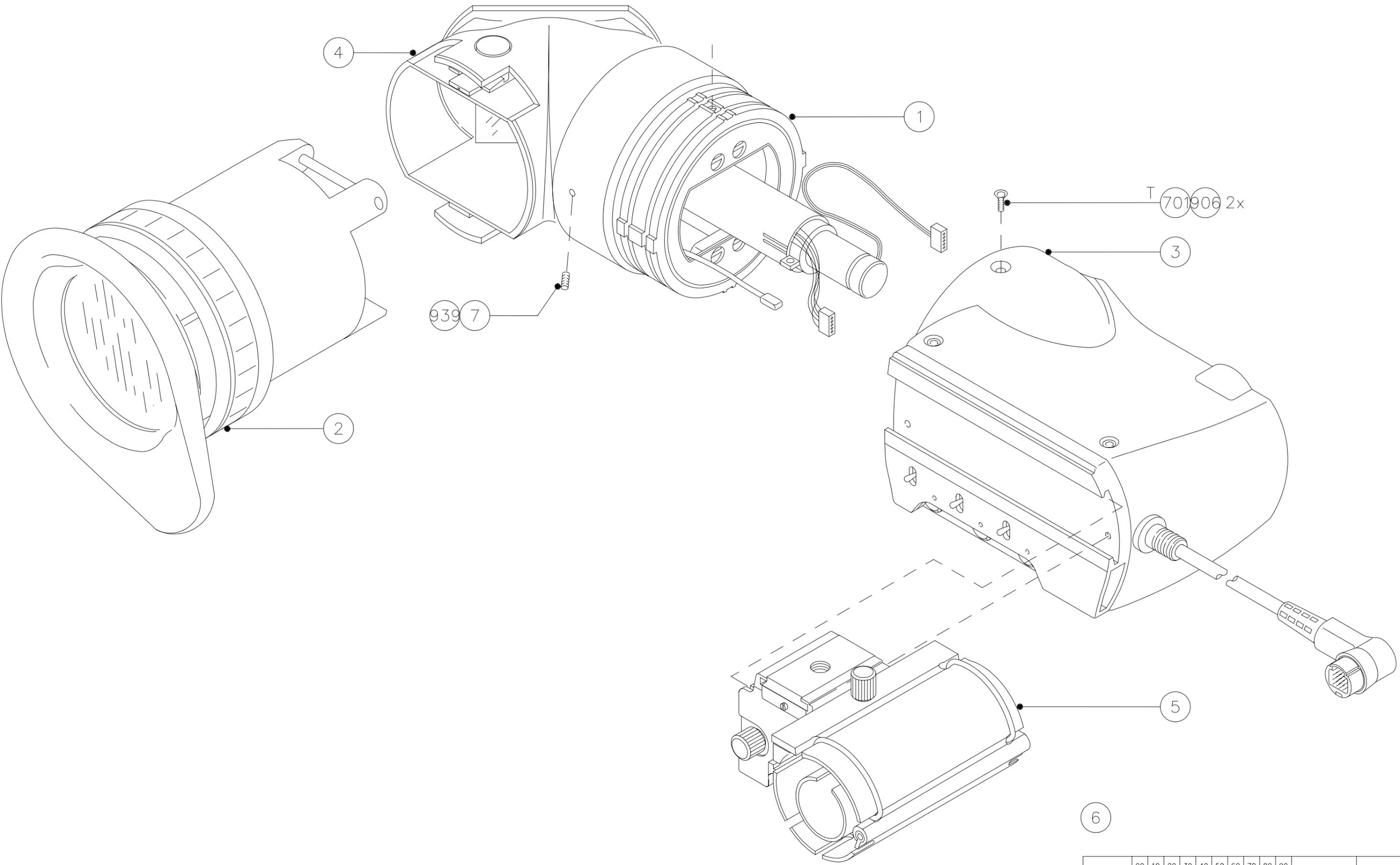
Ensure that your equipment is connected correctly - if you are in any doubt consult a qualified electrician.

3922 496 49001 - Service Manual LDK 5302/60 2 INCH VIEWFINDER HDTV

Tab	Part number	Drawing number	Description
1	8926 530 26001	8926 530 26001	2 INCH VIEWFINDER HDTV
2	3922 407 33691	3922 407 33691	2 INCH VIEWFINDER HOUSING ASSY
3	3922 407 33681	3922 407 33681	2 INCH VIEWFINDER MAGNIFIER ASSY
4	3922 407 33701	3922 407 33701	2 INCH VIEWFINDER TUBE ASSY
5	3922 407 33711	3922 407 33711	2 INCH VIEWFINDER MIRRORHOUSING ASSY
6	3922 407 33921	-	MICROPHONE CLAMP ASSY
	3922 407 30761	392240730761	CLAPMOUNT ASSY-B
	3922 407 30771	392240730771	CLAPMOUNT ASSY-A
7	3922 406 88671	3922 406 88671	2 INCH HDTV VIEWFINDER BOARD
8	3922 406 88681	3922 406 88681	LEDBOARD
9	3922 407 34491	-	ADDITIONAL SUPPLIES 2 INCH VIEWFINDER

8926 530 26001;7 2 INCH HDTV VIEWFINDER

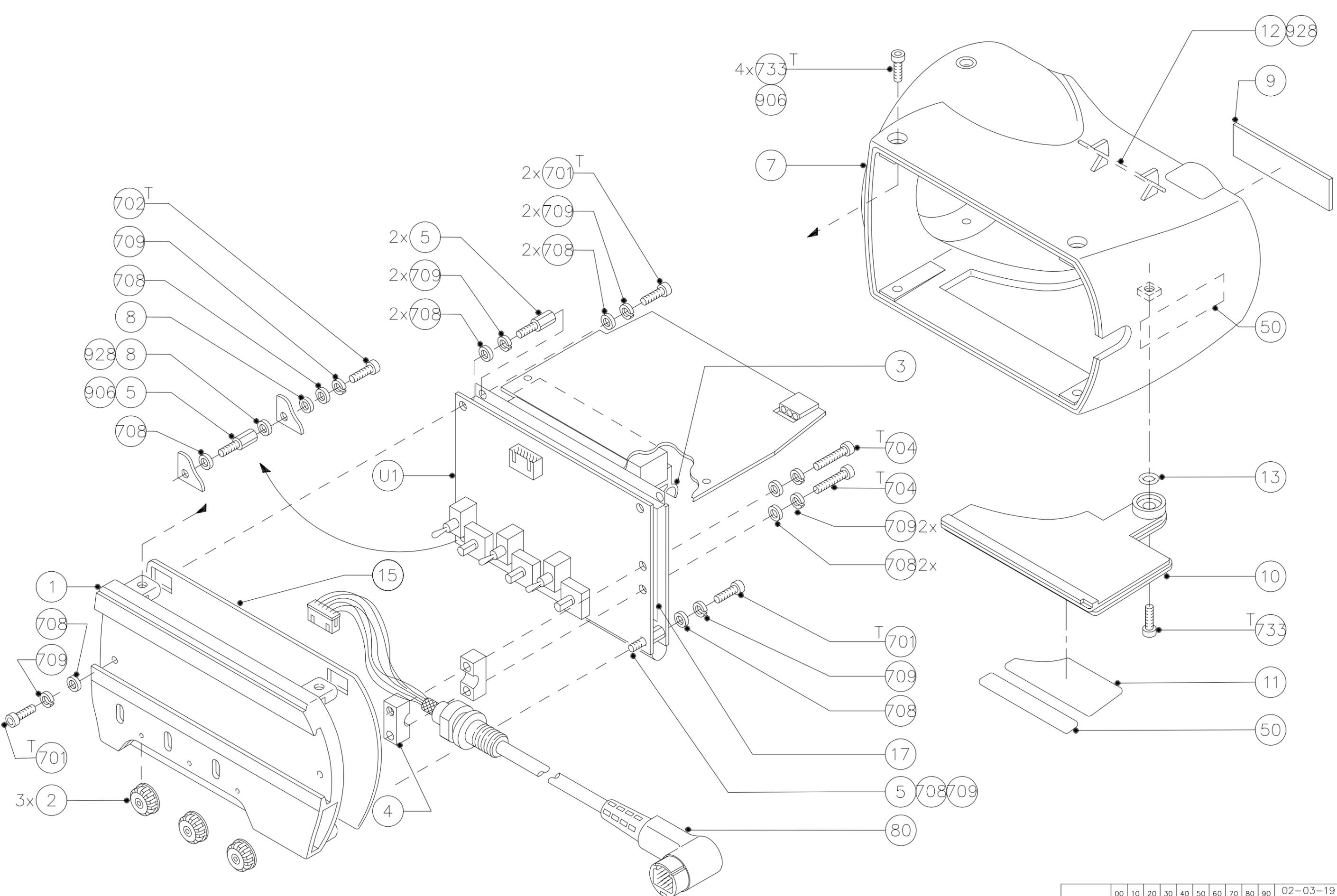
Ref	Description	Part 12nc	Service part
1	2 INCH VF TUBE ASSY	3922 407 33701	No
2	2 INCH VF MAGNIFIER ASSY	3922 407 33681	Yes
3	2 INCH VF HOUSING ASSY	3922 407 33691	No
4	2INCH VF MIRRORHOUSING ASSY	3922 407 33711	Yes
5	MICROPHONE CLAMP ASSY	3922 407 33921	Yes
6	ADD.SUPPLIES 2 INCH VF	3922 407 34701	No



STATUS	00	10	20	30	40	50	60	70	80	90		
	0	1	2	3	4	5	6	7	8	9		
	2" VIEWFINDER ASSY										8926 530 26001	
MICROFILM												
NAME: P. DE GREEUW SUPERS:								1 SH SH 110- 1	DATE: 01-03-14	A3		
EH PROPERTY OF PHILIPS BROADCAST TELEVISION SYSTEMS - BREDA - THE NETHERLANDS												

3922 407 33691;20 2 INCH VF HOUSING ASSY

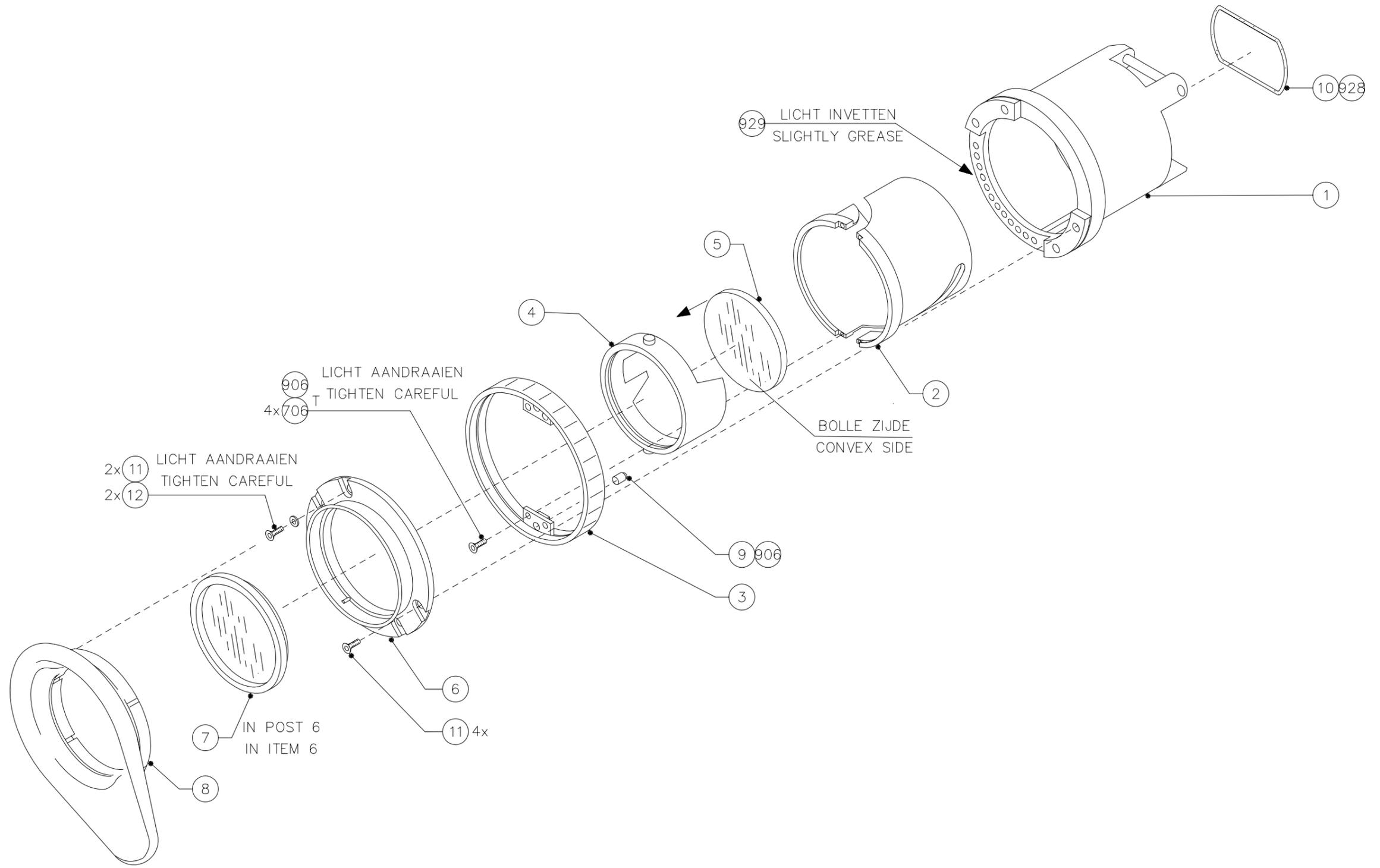
Ref	Description	Part 12nc	Service part
1	GUIDE	3922 404 22213	Yes
2	VF-KNOB	3922 400 08264	Yes
3	HT-CABLE CLAMP	3922 400 10031	Yes
4	CLAMPING BLOCK	3922 404 22431	Yes
5	SPACER	3922 407 34523	No
7	HOUSING	3922 400 08232	Yes
8	WASH PF-CP SH 2,2X5X0,3	3922 203 00051	No
9	WORDMARK 35MM	3922 402 04721	No
10	COVER MACHINED	3922 407 35641	No
11	CERTIFICATION-LABEL	3922 401 48861	No
12	SI RUB O-PROFILE 1.65X0.8	3922 083 03111	No
13	O-RING 1.78x1.02 VITON	2622 080 91444	No
15	GUIDESEAL	3922 405 01561	No
17	INSULATING PLATE	3922 405 02831	No
50	TYPEPLATE THOMSON CE	3922 405 01781	No
80	VF-CABLE ASSY	3922 045 01631	Yes
701T	PAN SCR STL ST M2x4	2522 201 08002	No
704T	PAN SCR STL ST M2X10	2522 201 08006	No
708	WASH STL ST 2,2X5	2522 600 27151	No
709	SPR WASH STL ST 2,1X4.4	2522 613 12001	No
733T	PAN SCR STL ST M3X6	2522 201 08031	No
906	RUBBER GLUE SYNTHETIC NBR 042	1322 503 36701	No
928	CYANO ACRYLATE RESIN GLUE CAC	1322 520 33101	No
U1	2 INCH HDTV VF BOARD	3922 406 88671	Yes



STATUS	00	10	20	30	40	50	60	70	80	90	02-03-19	
	0	1	2	3	4	5	6	7	8	9	03-06-17	
2" V.F. HOUSING ASSY											3922 407 33690	
MICROFILM □												
NAME: P. DE GREEUW SUPERS: 1 SH SH 110-1											DATE: 01-03-14	A3
EH PROPERTY OF: THOMSON Multimedia Broadcast Solutions - BREDA - THE NETHERLANDS												

3922 407 33681;6 2 INCH VF MAGNIFIER ASSY

Ref	Description	Part 12nc	Service part
1	MAGNIFIER HOUSING	3922 407 33672	No
2	ROTATING-BUSH	3922 404 28973	No
3	DIOPTER RING	3922 400 08323	No
4	LENSBUSH	3922 400 10061	No
5	2INCH VF LENS F=126MM	3922 405 01731	No
6	FILTERRING	3922 400 08842	No
7	VF PROTECTION GLASS LDK100	3922 401 48672	No
8	RUBBER CAP	3922 083 03141	Yes
9	SPRING LOADED BALL BUSH 4	2622 890 12087	No
10	MAGNIFIER-SEALING	3922 400 09351	No
11	PANTAPSCR ST ELVZ BLACK T8 2X7	2522 200 98331	No
12	LOCKINGPLATE	3922 400 09601	No
706T	CSK SCR STL ST M2x4	2522 203 04002	No
906	RUBBER GLUE SYNTHETIC NBR 042	1322 503 36701	No
928	CYANO ACRYLATE RESIN GLUE CAC	1322 520 33101	No
929	GREASE FS 1292	1304 500 13202	No

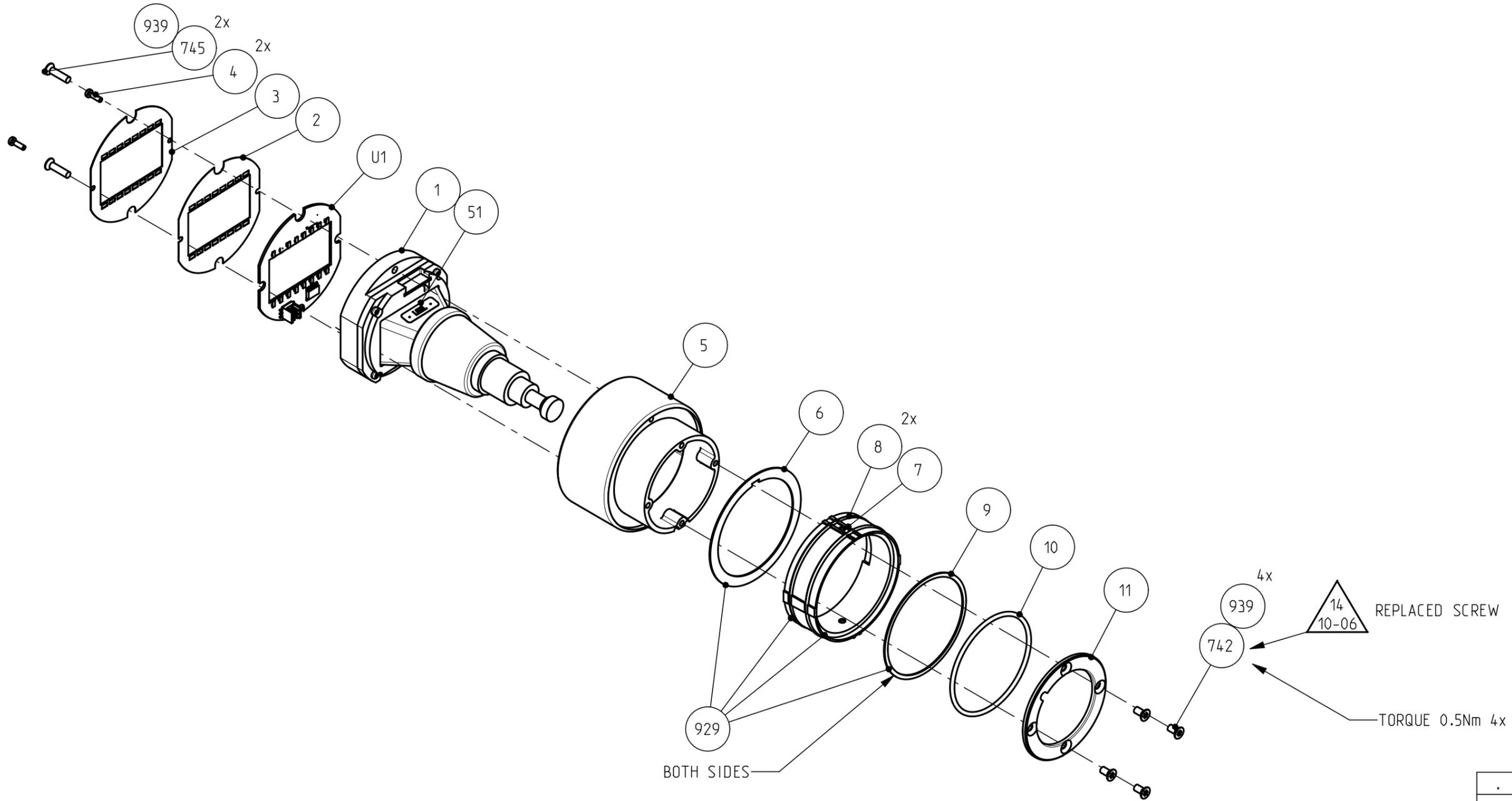


STATUS	00	10	20	30	40	50	60	70	80	90		
	0	1	2	3	4	5	6	7	8	9		
2" V.F. MAGNIFIER ASSY											3922 407 33680	
NAME: P. de Greeuw											1 SH SH 110-1	
EH PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS BREDA - THE NETHERLANDS											DATE: 01-03-13	
											A3	

3922 407 33701;9 2 INCH VF TUBE ASSY

Ref	Description	Part 12nc	Service part
1	2 INCH HD CRT ASSY WIRED	3922 407 38511	Yes
2	OPALESCEMENT FILM	3922 405 01201	No
3	MASK	3922 404 29001	No
4	PANTAPSCR ST ELVZ BLACK T8 2X7	2522 200 98331	No
5	VF HOUSINGRING	3922 404 28942	No
6	FRICTIONRING-A	3922 400 09252	No
7	BEARINGRING	3922 400 08381	No
8	O RING	3922 400 08011	No
9	FRICTIONRING-B	3922 400 09262	No
10	O-RING 48x2 COMPOUND VIT	2622 080 92862	No
11	PRESSURE RING	3922 405 02181	No
74GA	CSK SCR STL ST M3A	2522 203 0402H	No
745T	CSK SCR STL ST M3X12	2522 203 04026	No
929	GREASE FS 1292	1304 500 13202	No
939	SCREW LOCK 222	1311 502 06002	No
U1	LEDBOARD	3922 406 88681	No

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TORQUE TABLE	
Tolerances unless otherwise stated: $\pm 10\%$	
Torque unless otherwise stated:	
Thread size	Torque (Nm)
M2	0.5
M2.5	0.75
M3	1
M4	2

- MATERIAL AND FINISHES MUST BE RoHS COMPLIANT
 - MATERIAL OR PACKAGING MUST BE MARKED WITH RoHS COMPLIANCE MARKING OR LABEL

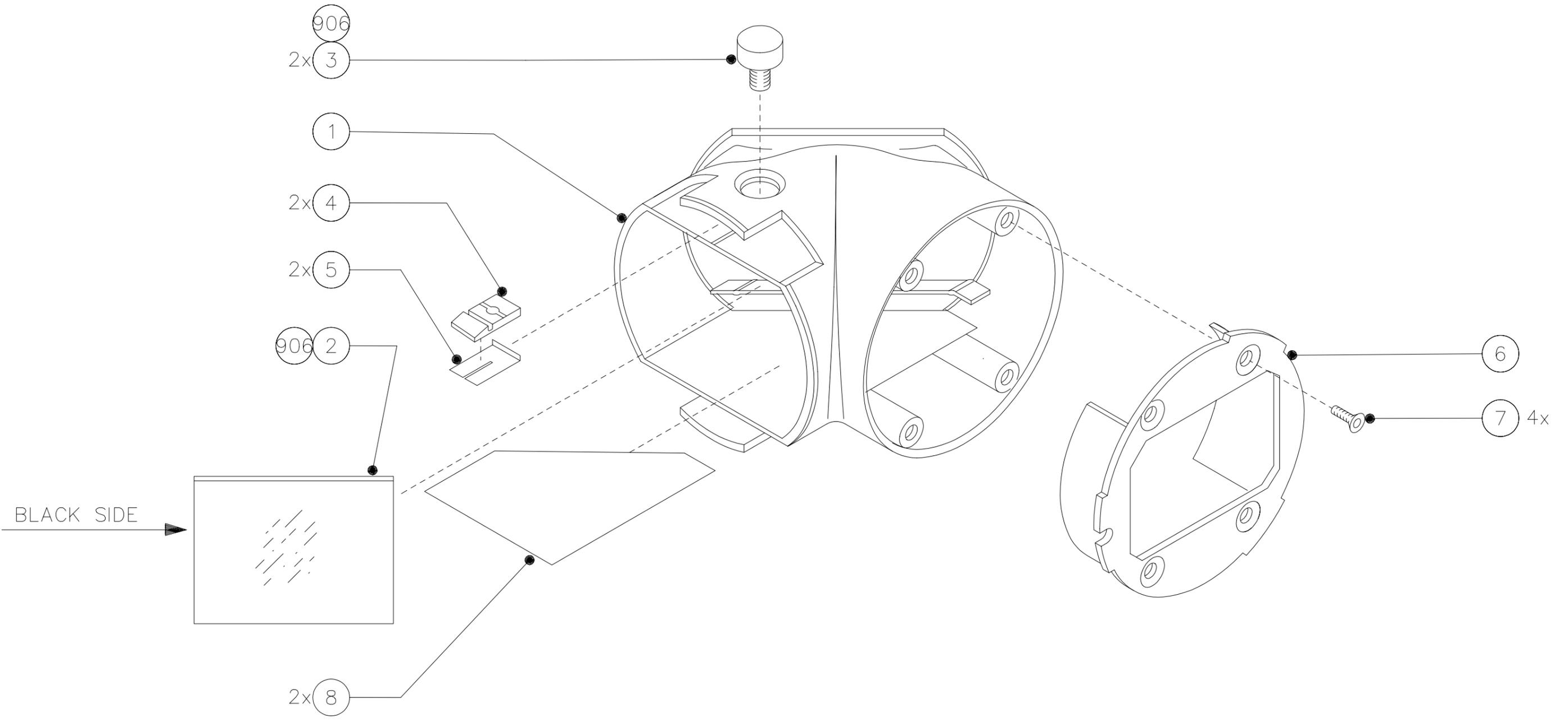
Rev	Name	Date
1	ES	2014-11-07
1	VM	2012-09-12

MATERIAL:	-				SCALE
TREATMENT:	-				1:2
FINISH:	-				UNIT
DRAWN BY:	DATE:	GENERAL ROUGHNESS:	TOLERANCES UNLESS OTHERWISE STATED:		mm
P. DEGREEUW	2001-03-16	Ra 3.2 n um	DIMENSION: $\pm 0,2$ ANGLE: $\pm 1^\circ$		

TITLE: 2 INCH VF TUBE ASSY				
	DOCUMENT NUMBER		FORMAT	SHEET
	3922 407 3370		A3	1/1
	RELEASE LEVEL: ...		110-01	SH120

3922 407 33711;3 2INCH VF MIRRORHOUSING ASSY

Ref	Description	Part 12nc	Service part
1	MIRRORHOUSING	3922 400 08292	Yes
2	MIRROR VF LDK100	3922 401 48801	Yes
3	KNOB	3922 404 27131	Yes
4	LOCKINGKNOB	3922 407 30981	Yes
5	LOCKING SPRING	3922 404 27121	Yes
6	MIRRORHOUSING RING	3922 404 28951	No
7	CSK TAP SCR F ST T8 2.9X9.5	2522 200 98338	No
8	STICKER	3922 401 49761	Yes
906	RUBBER GLUE SYNTHETIC NBR 042	1322 503 36701	No



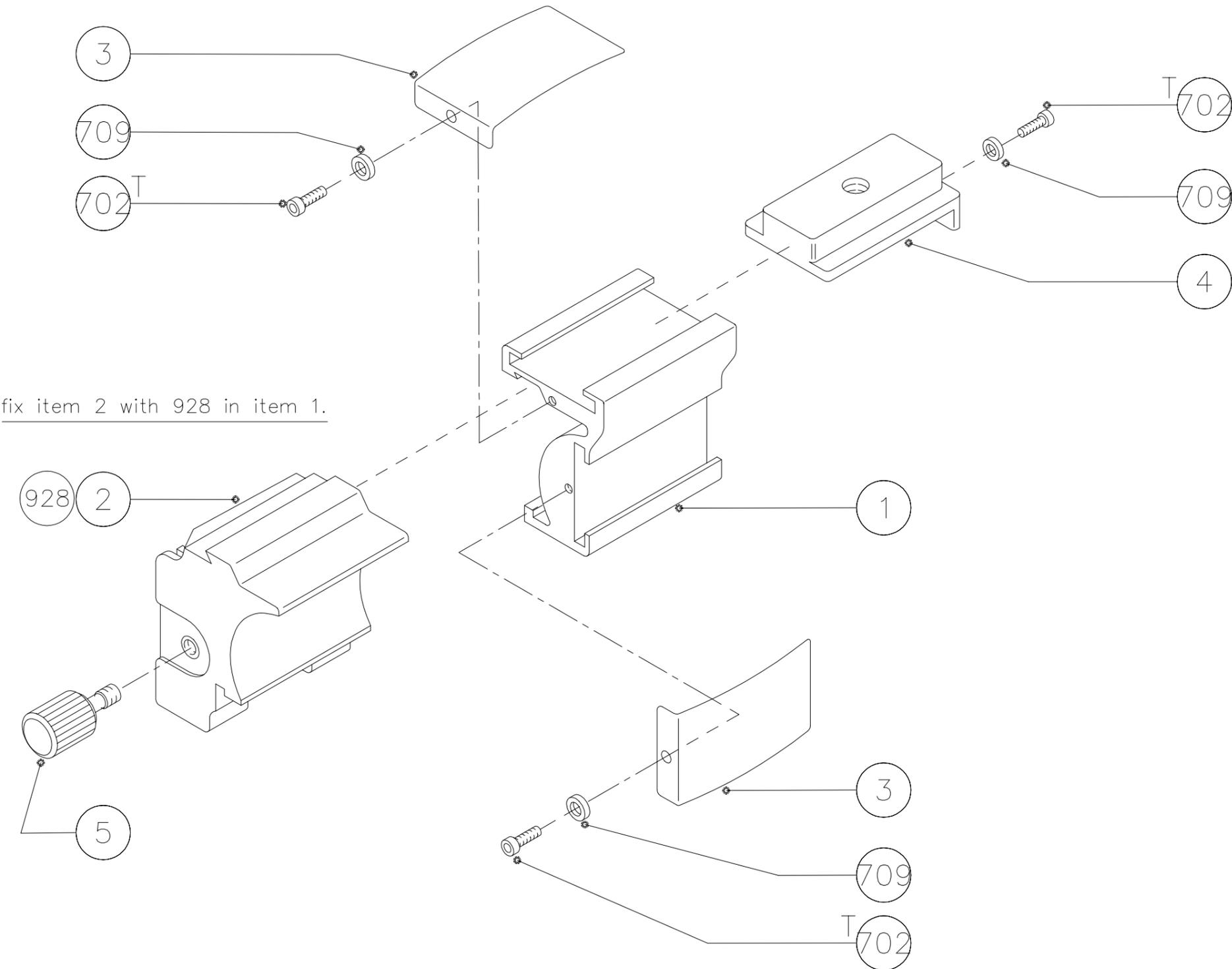
STATUS	00	10	20	30	40	50	60	70	80	90		
	0	1	2	3	4	5	6	7	8	9		
2" V.F. MIRRORHOUSING ASSY 3922 407 33711												
MICROFILM □												
NAME: P de Greeuw SUPERS: 1 SH SH 110- 1										DATE: 01-03-14		
EH PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS - BREDA - THE NETHERLANDS										A3		

3922 407 33921;1 MICROPHONE CLAMP ASSY

Ref	Description	Part 12nc	Service part
1	CLAMPMOUNT-B ASSY	3922 407 30761	Yes
2	CLAMPMOUNT-A ASSY	3922 407 30771	Yes

3922 407 30761;4 CLAMPMOUNT-B ASSY

Ref	Description	Part 12nc	Service part
1	CLAMPMOUNT-B	3922 407 30141	Yes
2	CLAMPPLATE-ADAPTED	3922 407 30151	Yes
3	SHOESPRING	3922 404 23271	Yes
4	ACCESSORY SHOE	3922 404 23281	Yes
5	SCREW	3922 404 23922	No
702T	PAN SCR STL ST M2X6	2522 201 08004	No
709	SPR WASH STL ST 2,1X4.4	2522 613 12001	No
928	CYANO ACRYLATE RESIN GLUE CAC	1322 520 33101	No

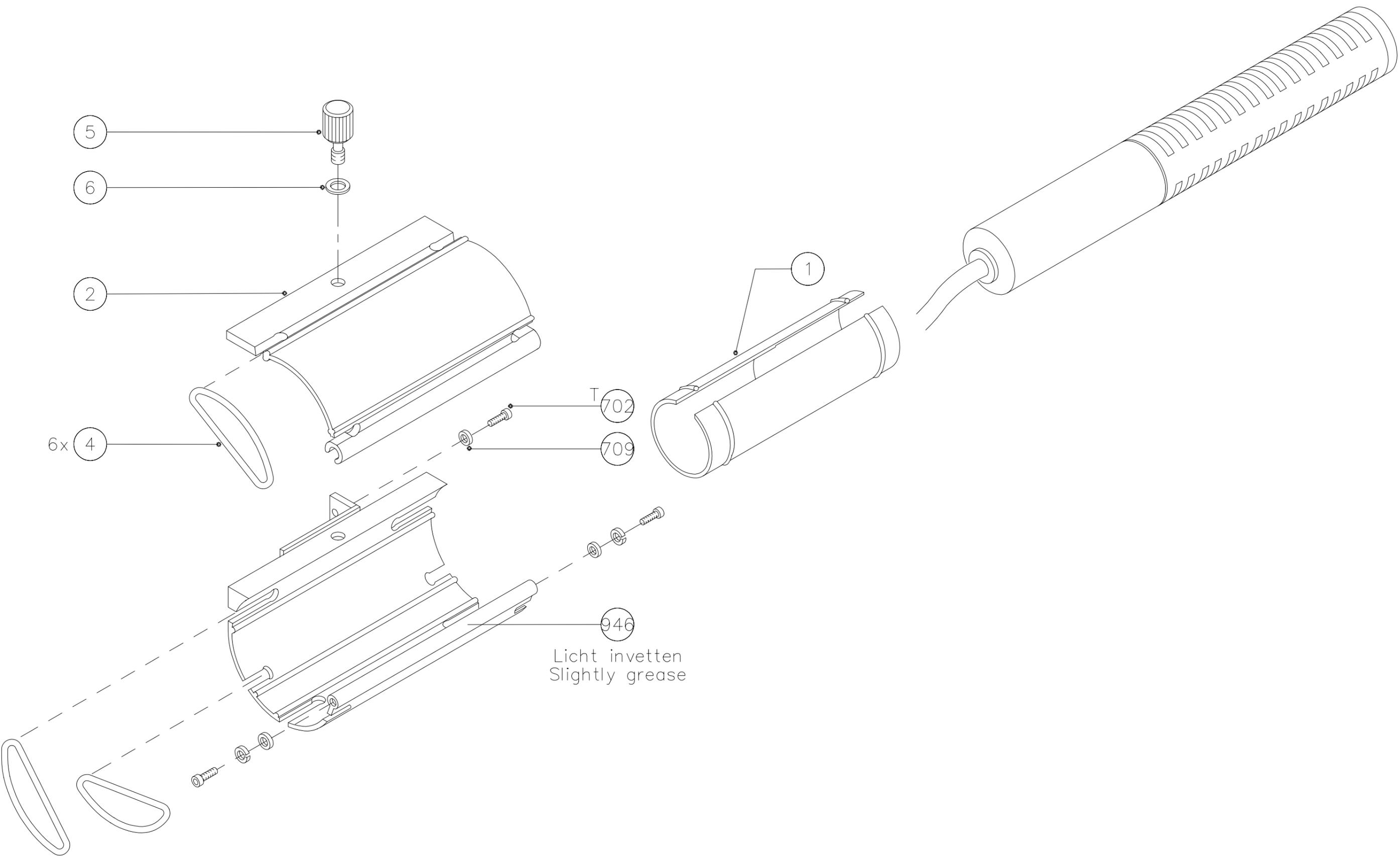


fix item 2 with 928 in item 1.

STATUS	00	10	20	30	40	50	60	70	80	90	00-01-28	
	0	1	2	3	4	5	6	7	8	9		
	CLAMPMOUNT ASSY-B										3922 407 30760	
MICROFILM												
NAME: DE GREEUW	SUPERS:							1 SH SH 110-1		DATE: 99-04-01		A3
EH PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS - BREDA - THE NETHERLANDS												

3922 407 30771;5 CLAMPMOUNT-A ASSY

Ref	Description	Part 12nc	Service part
1	CLAMPING BUSH	3922 404 26573	Yes
2	CLAMP COVER	3922 407 32041	Yes
4	O-RING 18.72x2.62 COMPOUND VI	2622 080 89021	Yes
5	SCREW	3922 404 23922	Yes
6	RING	3922 401 47381	Yes
702T	PAN SCR STL ST M2X6	2522 201 08004	No
709	SPR WASH STL ST 2,1X4.4	2522 613 12001	No
946	INSTRUMENT GREASE 006	1322 515 43801	No



946
Licht invetten
Slightly grease

STATUS	00	10	20	30	40	50	60	70	80	90	00-01-31	
	0	1	2	3	4	5	6	7	8	9		
MICROPHONE CLAMP ASSY											3922 407 30770	
NAME: P. DE GREEUW SUPERS: 1 SH SH 110-1											DATE: 99-04-01	A3
EH PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS - BREDA - THE NETHERLANDS												

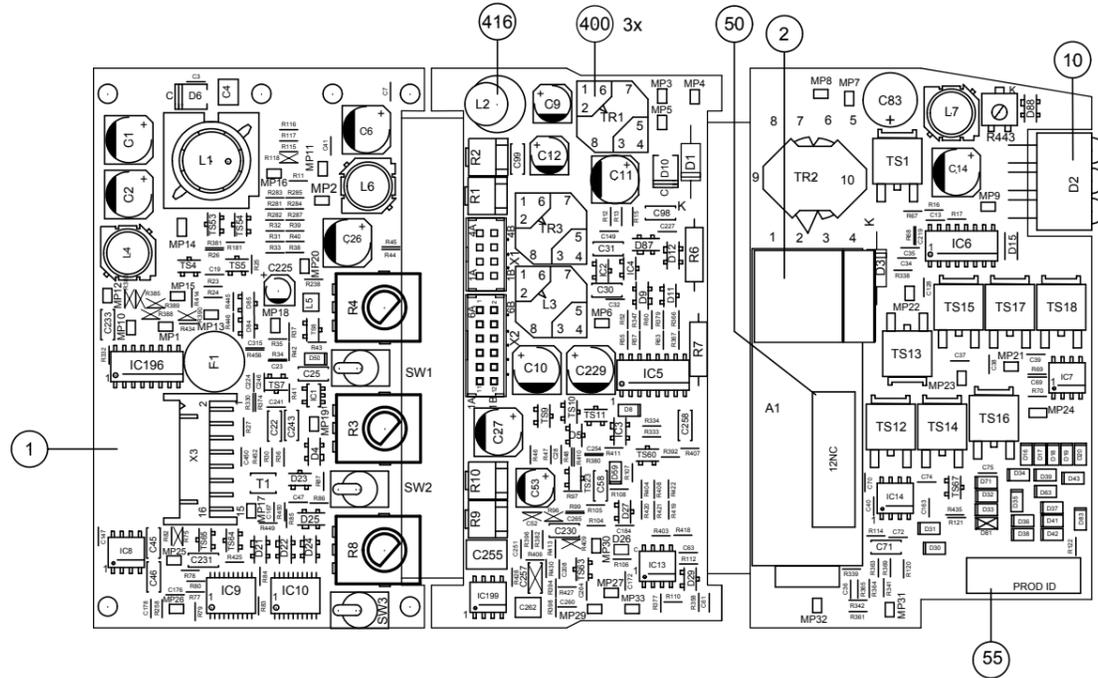
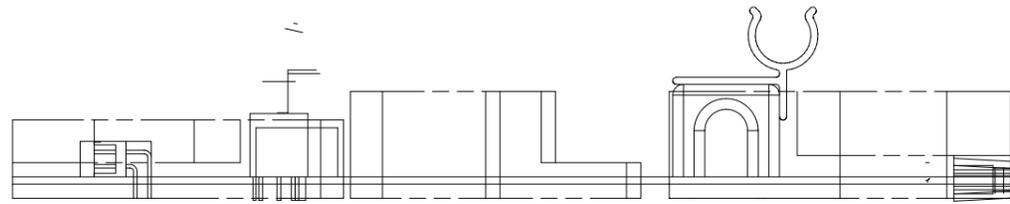
3922 406 88671;44 2 INCH HDTV VF BOARD

Ref	Description	Part 12nc	Spare part
	No service components available, only complete board		

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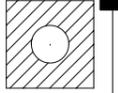
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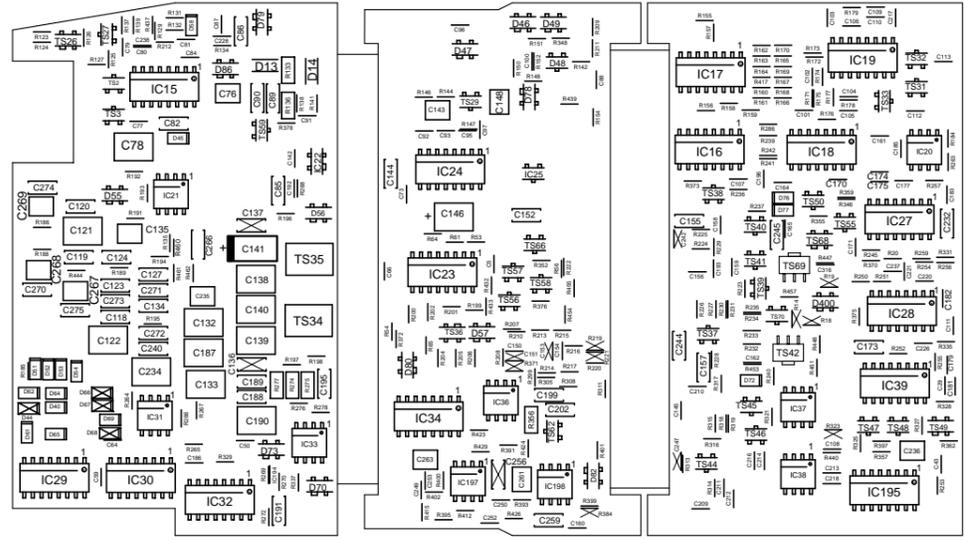
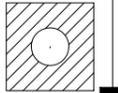
ASSEMBLY LAYER 1

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
STATUS: 18	
ASS. 12NC: 3922 406 88670	
ASS. NAME: 2 INCH HDTV VF BOARD	
PCB. 12NC: 3922 411 88674	
ASSEMBLY TOP	CURR. DATE: 07-11-12
SCALE 1 : 1	PREV. DATE: 07-09-18
B.V.D.HERIK	ORG. DATE: 01-07-16
H VERMEULEN	SHEET : 110-1
GRASS VALLEY NEDERLAND B.V. - BREDA	



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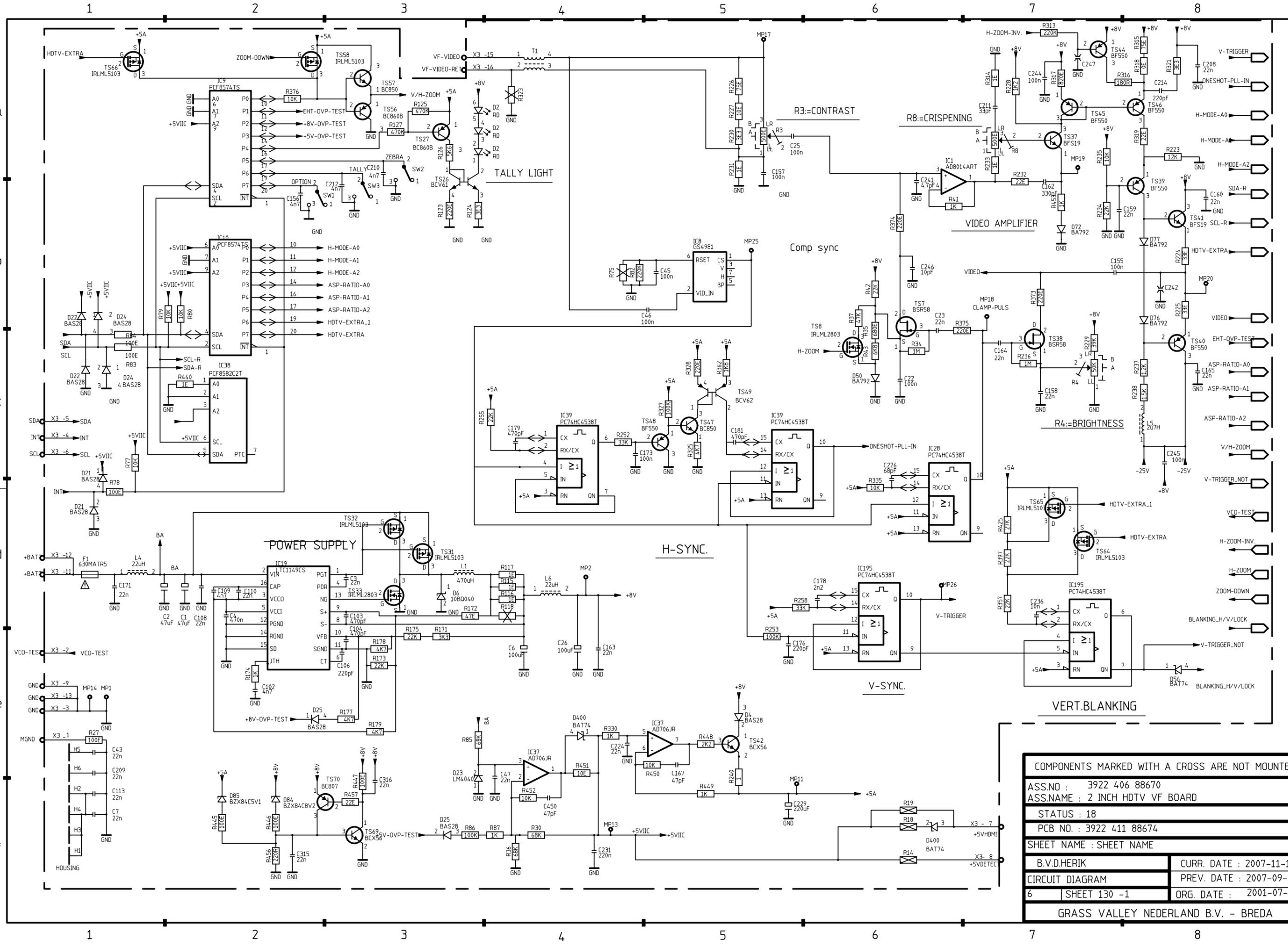
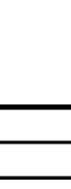
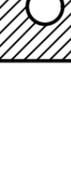
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reproduceren van het geheel of
deel daarvan is strafbaar.
Van de afzender afgekeurd.



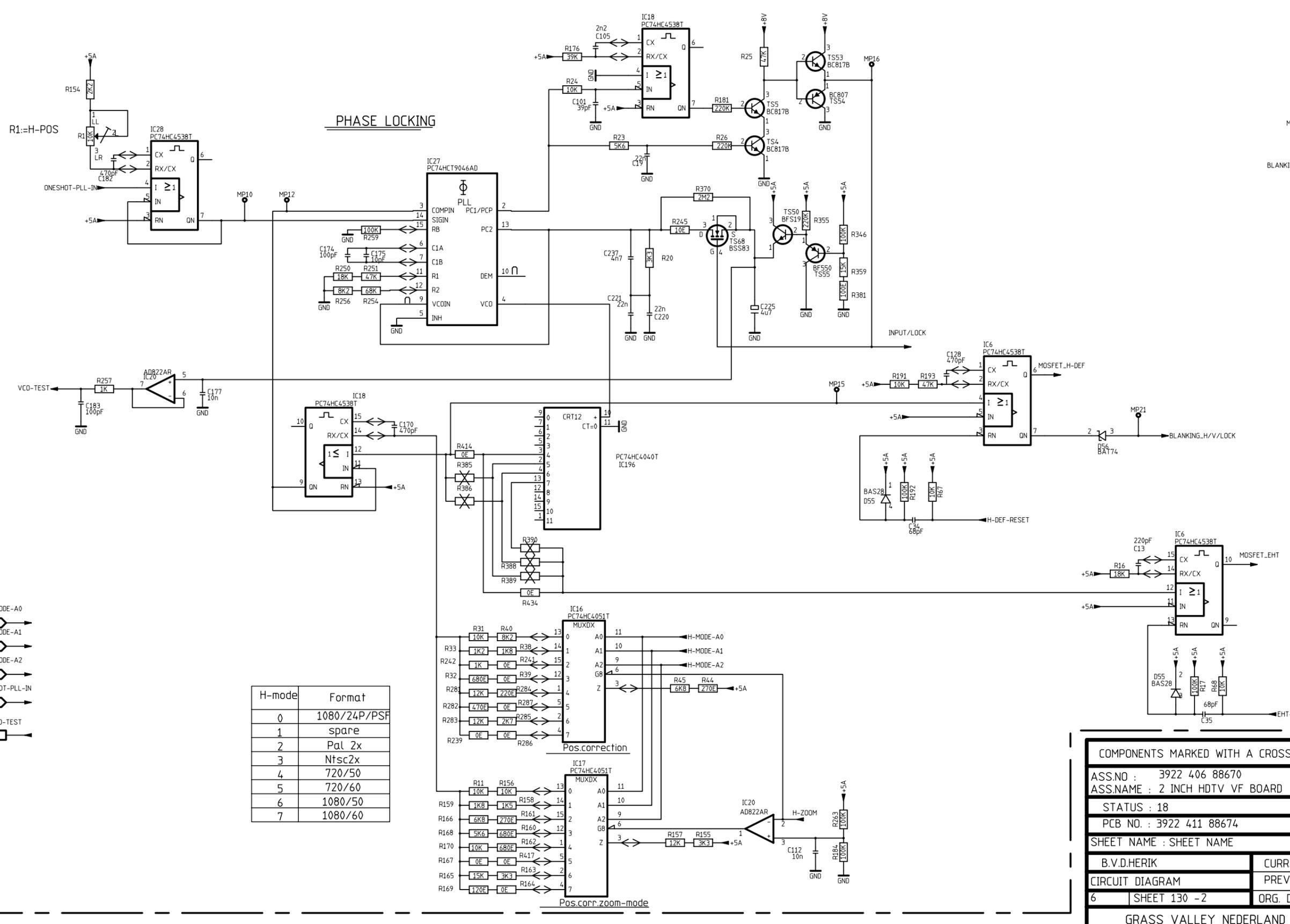
ASSEMBLY LAYER 6

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
STATUS: 18	
ASS. 12NC: 3922 406 88670	
ASS. NAME: 2 INCH HDTV VF BOARD	
PCB. 12NC: 3922 411 88674	
ASSEMBLY BOTTOM	CURR. DATE: 07-11-12
SCALE 1 : 1	PREV. DATE: 07-09-18
B.V.D.HERIK	ORG. DATE: 01-07-16
H VERMEULEN	SHEET : 110-2
GRASS VALLEY NEDERLAND B.V. - BREDA	

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COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO : 3922 406 88670	
ASS.NAME : 2 INCH HDTV VF BOARD	
STATUS : 18	
PCB NO. : 3922 411 88674	
SHEET NAME : SHEET NAME	
B.V.D.HERIK	CURR. DATE : 2007-11-12
CIRCUIT DIAGRAM	PREV. DATE : 2007-09-18
6 SHEET 130 -1	ORG. DATE : 2001-07-16
GRASS VALLEY NEDERLAND B.V. - BREDA	



PHASE LOCKING

H-mode	Format
0	1080/24P/PSF
1	spare
2	Pal 2x
3	Ntsc2x
4	720/50
5	720/60
6	1080/50
7	1080/60

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED

ASS.NO : 3922 406 88670
 ASS.NAME : 2 INCH HDTV VF BOARD
 STATUS : 18
 PCB NO. : 3922 411 88674
 SHEET NAME : SHEET NAME

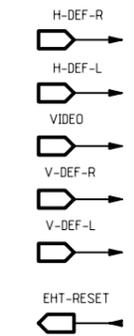
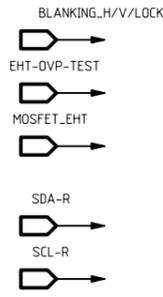
B.V.D.HERIK	CURR. DATE : 2007-11-12
CIRCUIT DIAGRAM	PREV. DATE : 2007-09-18
6 SHEET 130 -2	ORG. DATE : 2001-07-16

GRASS VALLEY NEDERLAND B.V. - BREDA

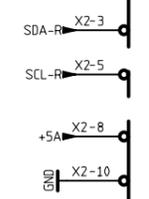
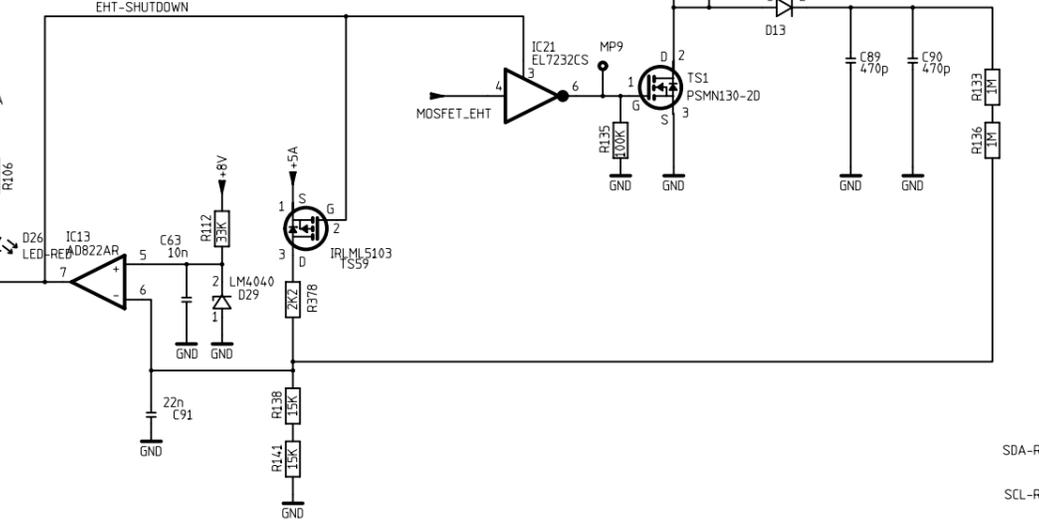
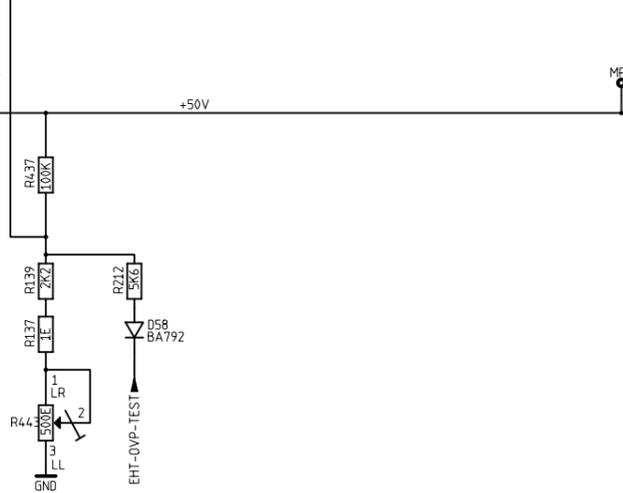
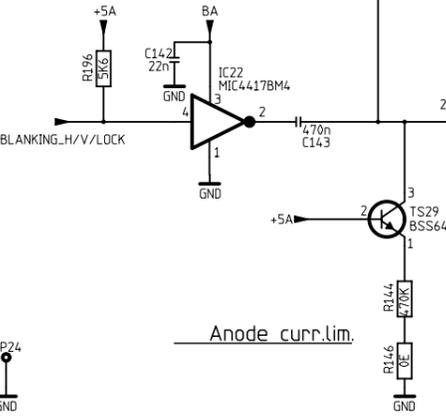
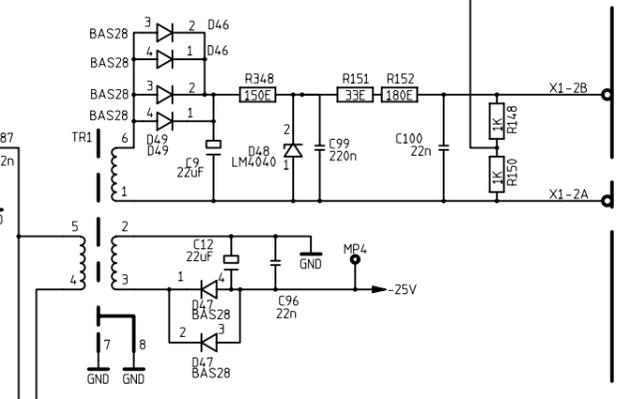
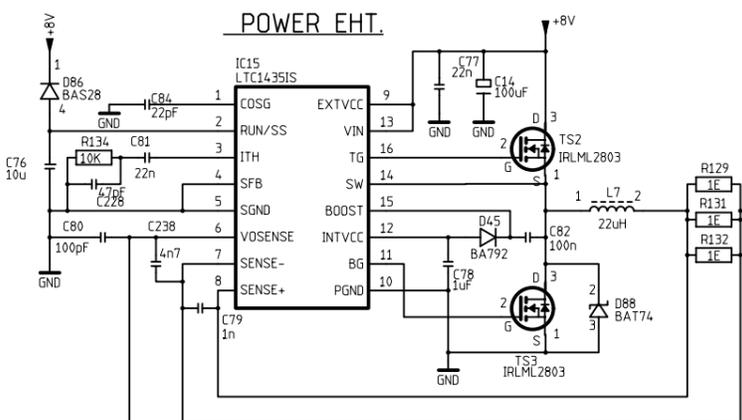
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- H-MODE-A0
- H-MODE-A1
- H-MODE-A2
- ONESHOT-PLL-IN
- VCO-TEST

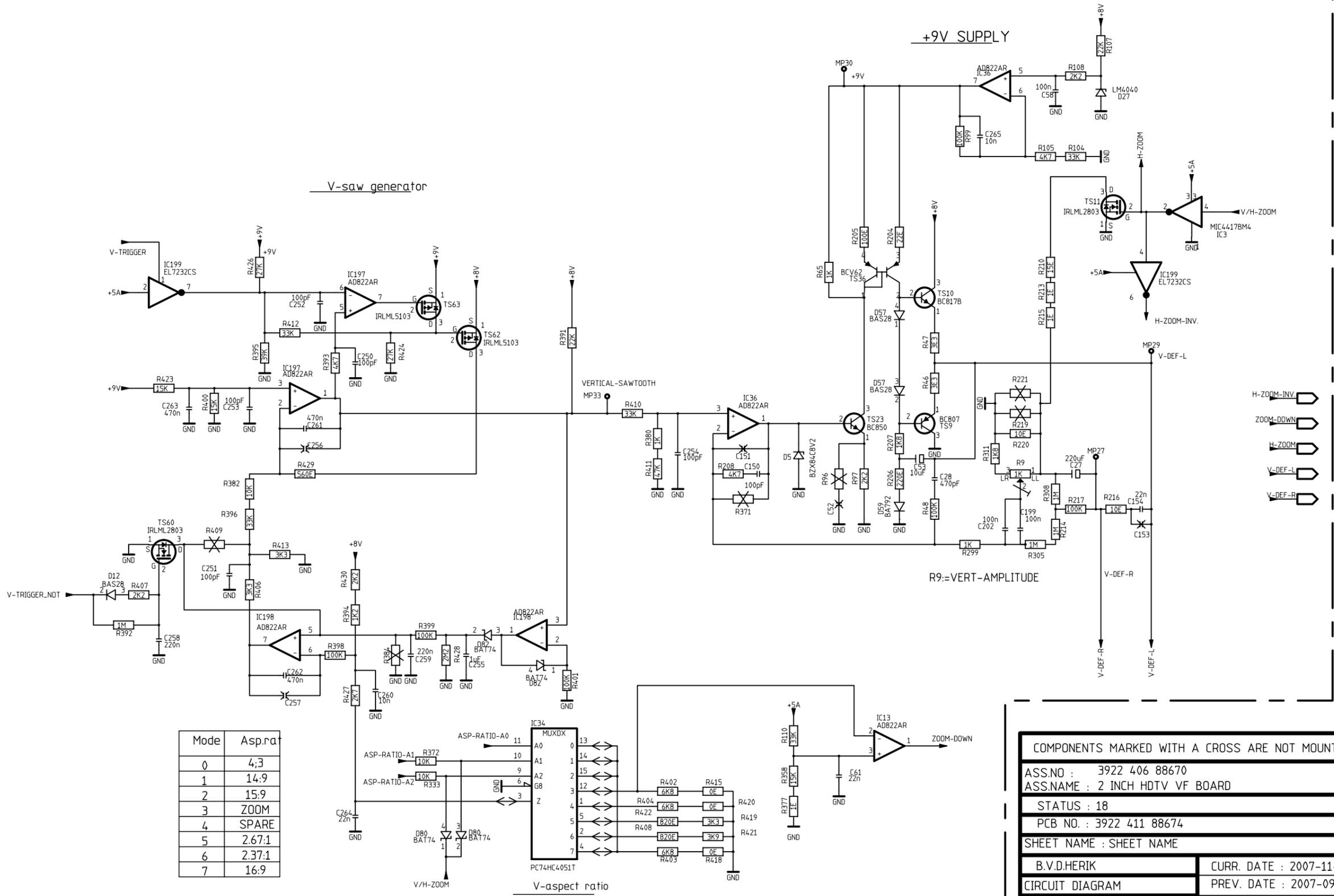
- INPUT/LOCK
- MOSFET_H-DEF
- MOSFET_EHT
- BLANKING_H/V/LOCK
- EHT-RESET
- H-ZOOM
- H-DEF-RESET



- CONNECTOR X1:
- 1A = ORANJE (BUISSVOET)
 - 1B = N.C.
 - 2A = BRUIN (BUISSVOET)
 - 2B = BLAUW (BUISSVOET)
 - 3A = N.C.
 - 3B = N.C.
 - 4A = N.C.
 - 4B = ROOD (BUISSVOET)
- CONNECTOR X2:
- 1A = ORANJE (VERT. - DEFLECTIE)
 - 1B = ZWART (GND - EHT)
 - 2A = BLAUW (VERT. - DEFLECTIE)
 - 2B = ZWART (GND - LED BOARD)
 - 3A = N.C.
 - 3B = GEEL (+5V - LED BOARD)
 - 4A = ROOD (SCL - LED BOARD)
 - 4B = BRUIN (HOR. - DEFLECTIE)
 - 5A = BRUIN (SDA - LED BOARD)
 - 5B = N.C.
 - 6A = N.C.
 - 6B = ROOD (HORZ. - DEFLECTIE)



COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO : 3922 406 88670	
ASS.NAME : 2 INCH HDTV VF BOARD	
STATUS : 18	
PCB NO. : 3922 411 88674	
SHEET NAME : SHEET NAME	
B.V.D.HERIK	CURR. DATE : 2007-11-12
CIRCUIT DIAGRAM	PREV. DATE : 2007-09-18
6	SHEET 130 -3
	ORG. DATE : 2001-07-16
GRASS VALLEY NEDERLAND B.V. - BREDA	



Mode	Asp.ra
0	4:3
1	14:9
2	15:9
3	ZOOM
4	SPARE
5	2.67:1
6	2.37:1
7	16:9

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED

ASS.NO : 3922 406 88670
 ASS.NAME : 2 INCH HDTV VF BOARD

STATUS : 18

PCB NO. : 3922 411 88674

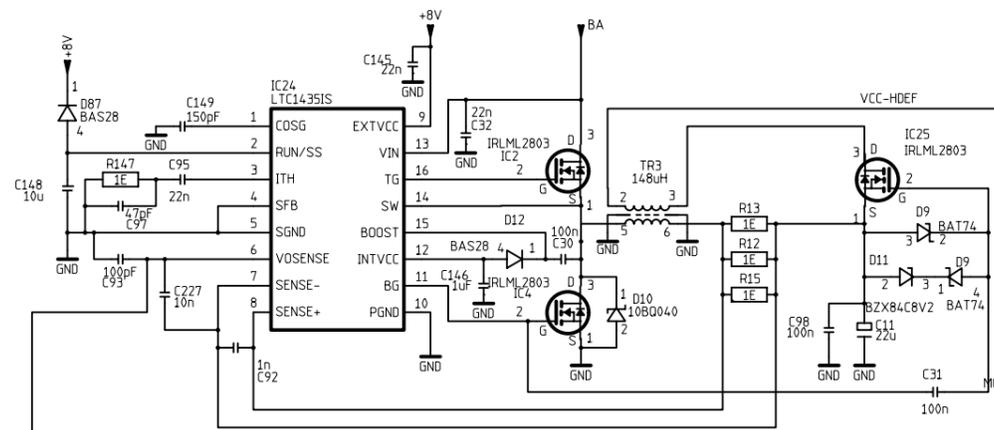
SHEET NAME : SHEET NAME

B.V.D.HERIK	CURR. DATE : 2007-11-12
CIRCUIT DIAGRAM	PREV. DATE : 2007-09-18
6	ORG. DATE : 2001-07-16

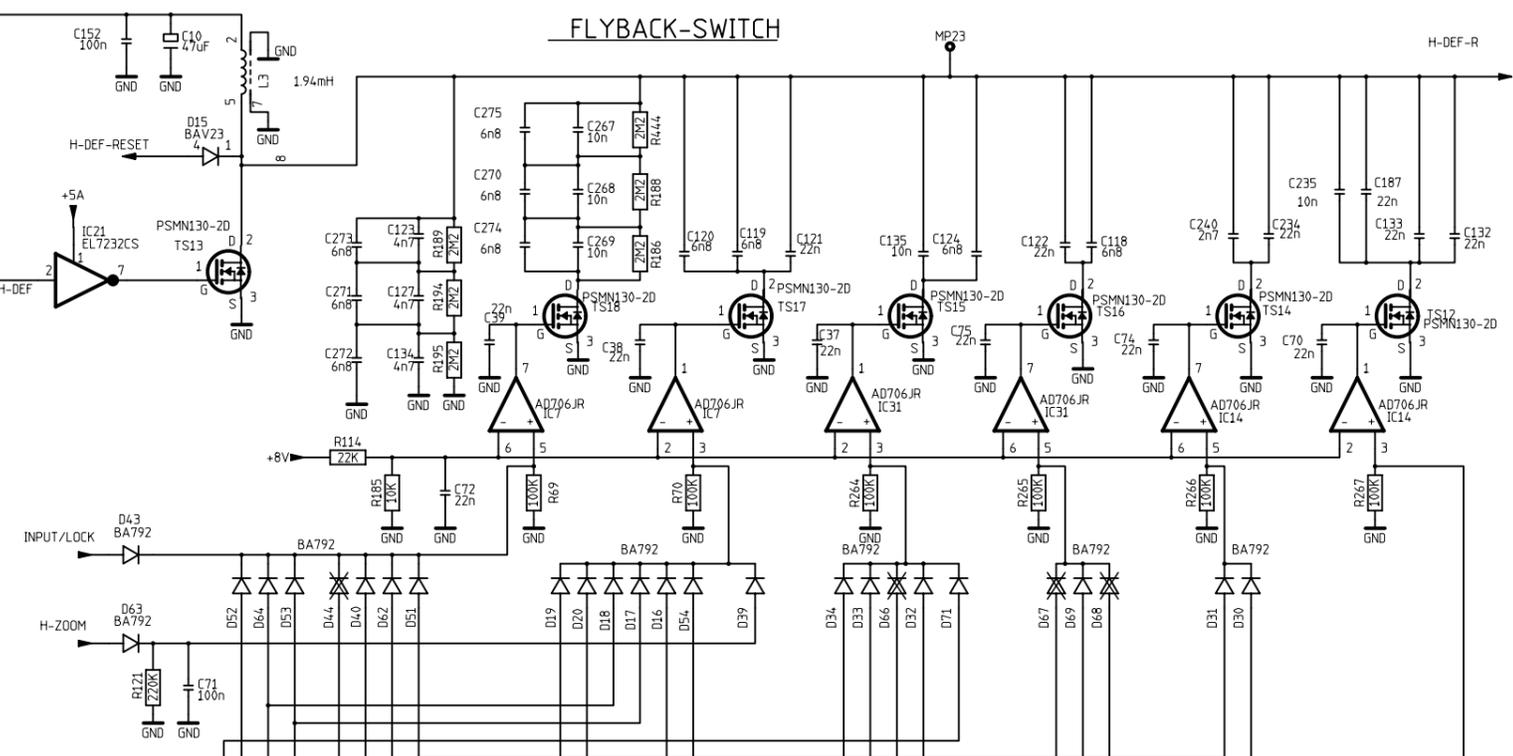
6 SHEET 130 -4

GRASS VALLEY NEDERLAND B.V. - BREDA

POWER HOR. DEFLECTION



FLYBACK-SWITCH



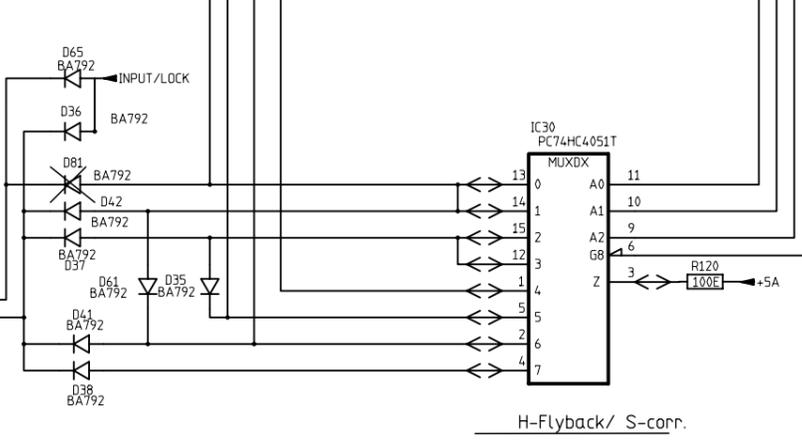
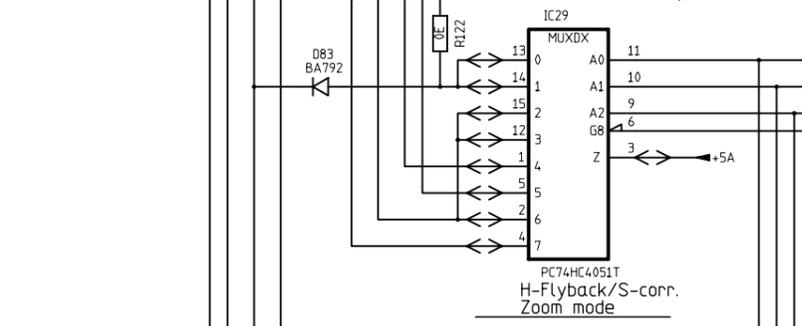
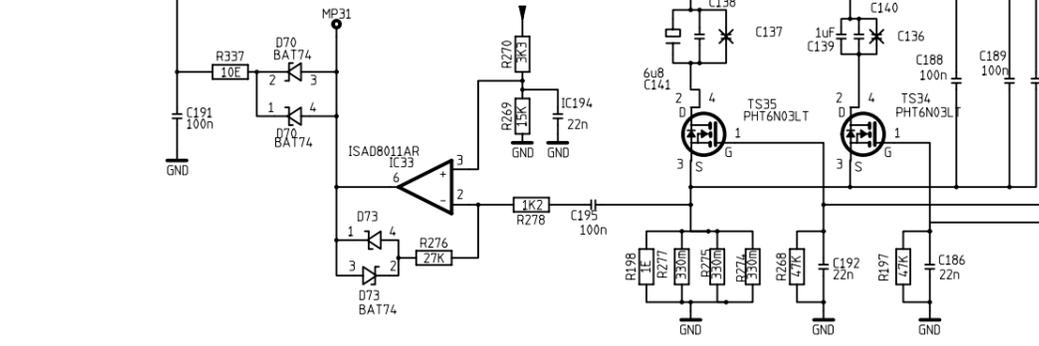
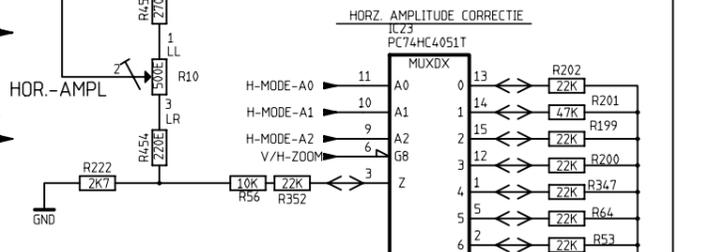
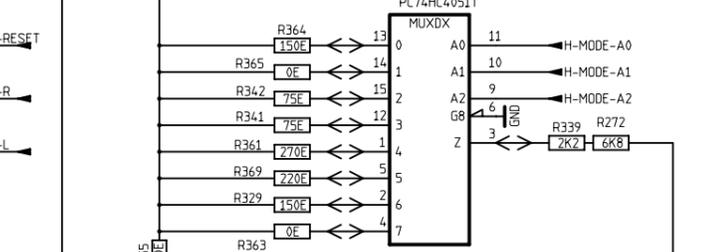
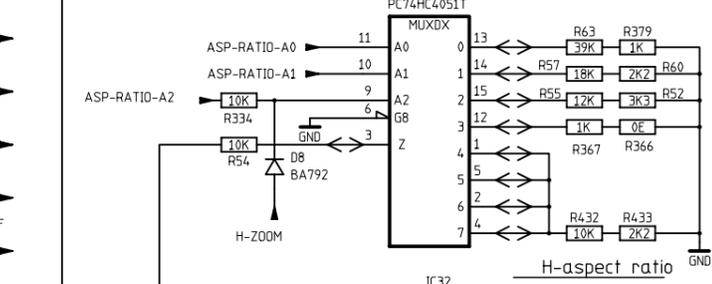
Mode	Asp.rat
0	4:3
1	14:9
2	15:9
3	ZOOM
4	SPARE
5	2.67:1
6	2.37:1
7	16:9

H-mode	Format
0	1080/24P/PSF
1	spare
2	Pal 2x
3	Ntsc2x
4	720/50
5	720/60
6	1080/50
7	1080/60

- V/H-ZOOM
- ASP-RATIO-A0
- ASP-RATIO-A1
- ASP-RATIO-A2
- H-MODE-A0
- H-MODE-A1
- H-MODE-A2
- H-ZOOM
- H-ZOOM
- MOSFET_H-DEF

- H-DEF-RESET
- H-DEF-R
- H-DEF-L

- INPUT/LOCK
- HDTV-EXTRA



COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED

ASS.NO : 3922 406 88670
 ASS.NAME : 2 INCH HDTV VF BOARD

STATUS : 18

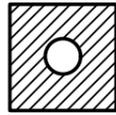
PCB NO. : 3922 411 88674

SHEET NAME : SHEET NAME

B.V.D.HERIK	CURR. DATE : 2007-11-12
CIRCUIT DIAGRAM	PREV. DATE : 2007-09-18
6 SHEET 130 -5	ORG. DATE : 2001-07-16

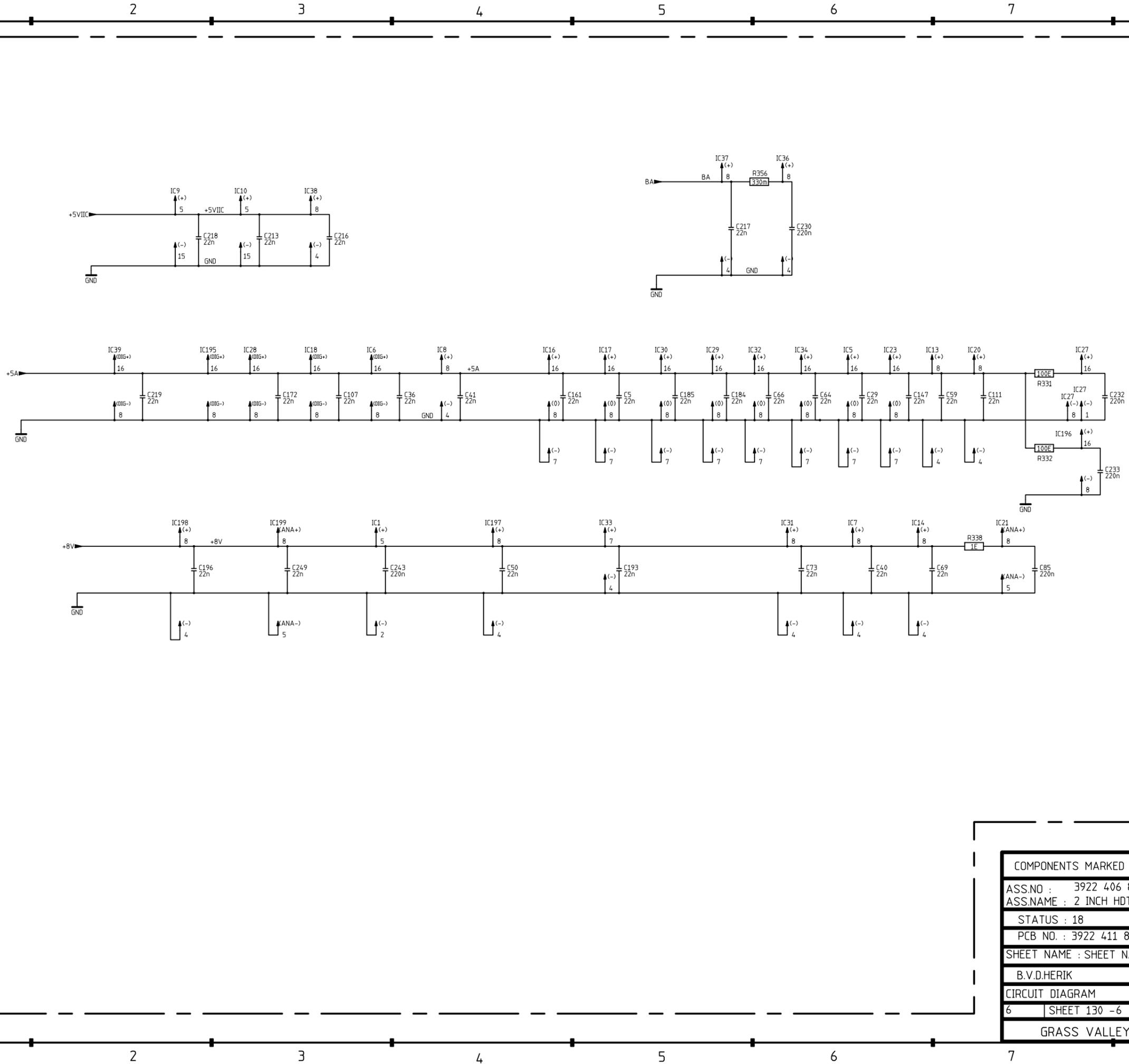
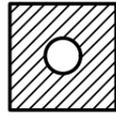
GRASS VALLEY NEDERLAND B.V. - BREDA

GRASS VALLEY



Alle in dit tekening getoonde componenten zijn vervaardigd door Grass Valley Nederland B.V. of zijn afkomstig van een van haar dochterondernemingen. Het is niet toegestaan deze componenten te kopiëren of te verspreiden zonder schriftelijke toestemming van Grass Valley Nederland B.V.

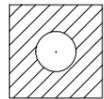
Alle in dit tekening getoonde componenten zijn vervaardigd door Grass Valley Nederland B.V. of zijn afkomstig van een van haar dochterondernemingen. Het is niet toegestaan deze componenten te kopiëren of te verspreiden zonder schriftelijke toestemming van Grass Valley Nederland B.V.



COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO : 3922 406 88670	
ASS.NAME : 2 INCH HDTV VF BOARD	
STATUS : 18	
PCB NO. : 3922 411 88674	
SHEET NAME : SHEET NAME	
B.V.D.HERIK	CURR. DATE : 2007-11-12
CIRCUIT DIAGRAM	PREV. DATE : 2007-09-18
6	SHEET 130 -6
ORG. DATE : 2001-07-16	
GRASS VALLEY NEDERLAND B.V. - BREDA	

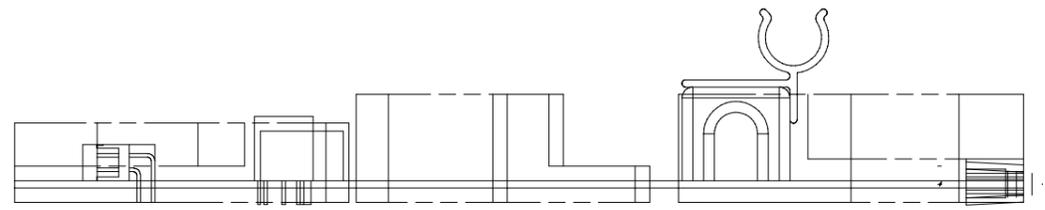
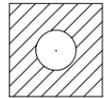
3922 406 88671;49 2 INCH HDTV VF BOARD

Ref	Description	Part 12nc	Spare part
No service components available, only complete board			

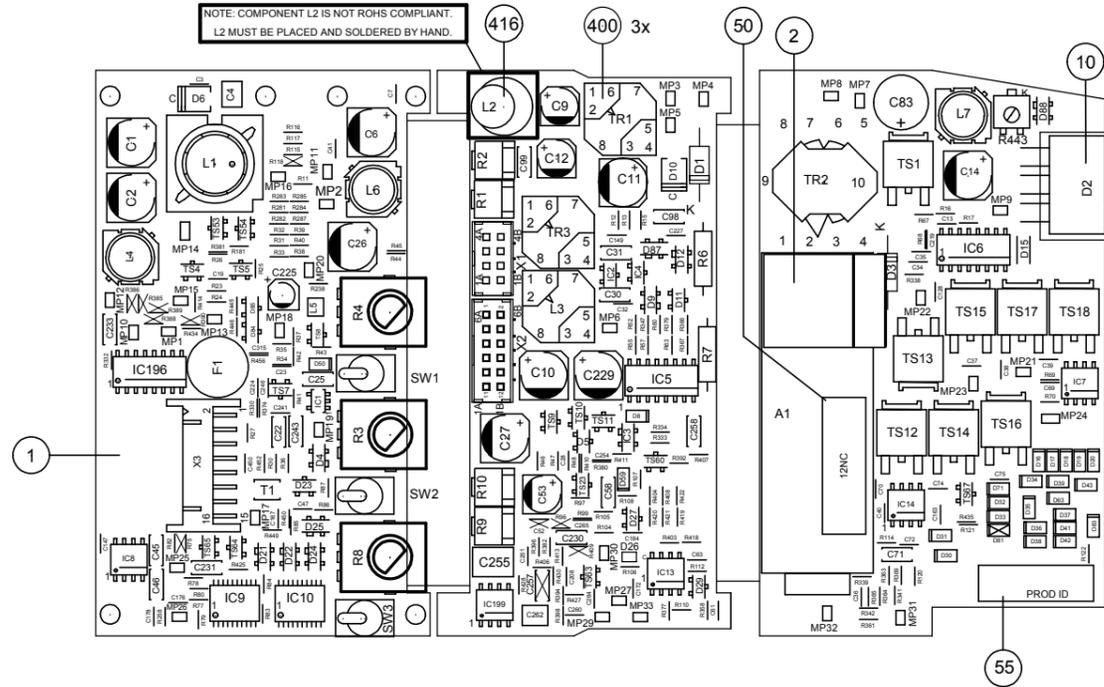


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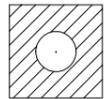


NOTE: COMPONENT L2 IS NOT ROHS COMPLIANT.
L2 MUST BE PLACED AND SOLDERED BY HAND.



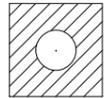
ASSEMBLY LAYER 1

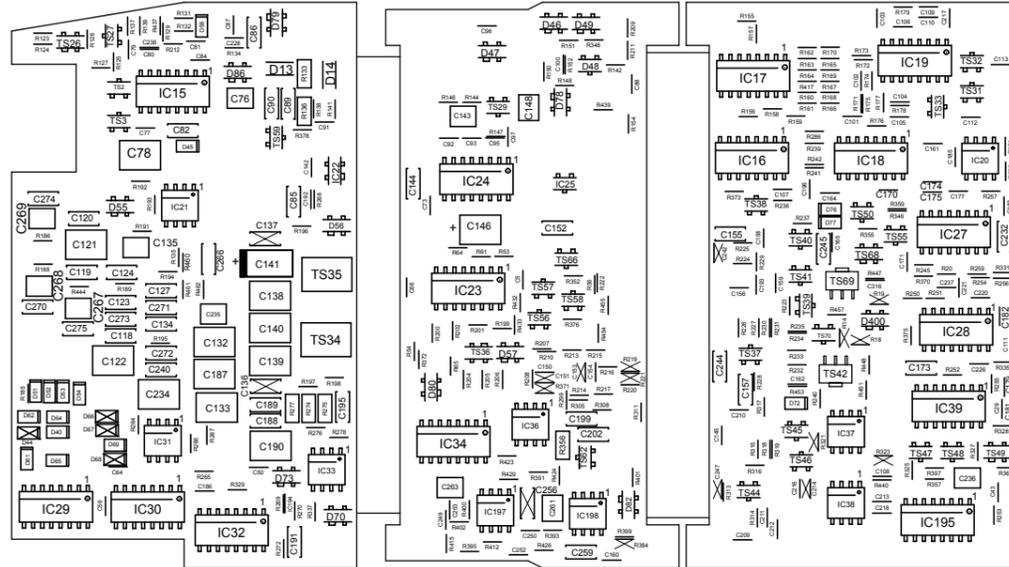
COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
STATUS: 20	
ASS. 12NC: 3922 406 88670	
ASS. NAME: 2 INCH HDTV VF BOARD	
PCB. 12NC: 3922 411 88674	
ASSEMBLY TOP	CURR. DATE: 08-09-22
SCALE 1 : 1	PREV. DATE:08-07-02
B.V.D.HERIK	ORG. DATE: 01-07-16
H VERMEULEN	SHEET : 110-1
GRASS VALLEY NEDERLAND B.V. - BREDA	



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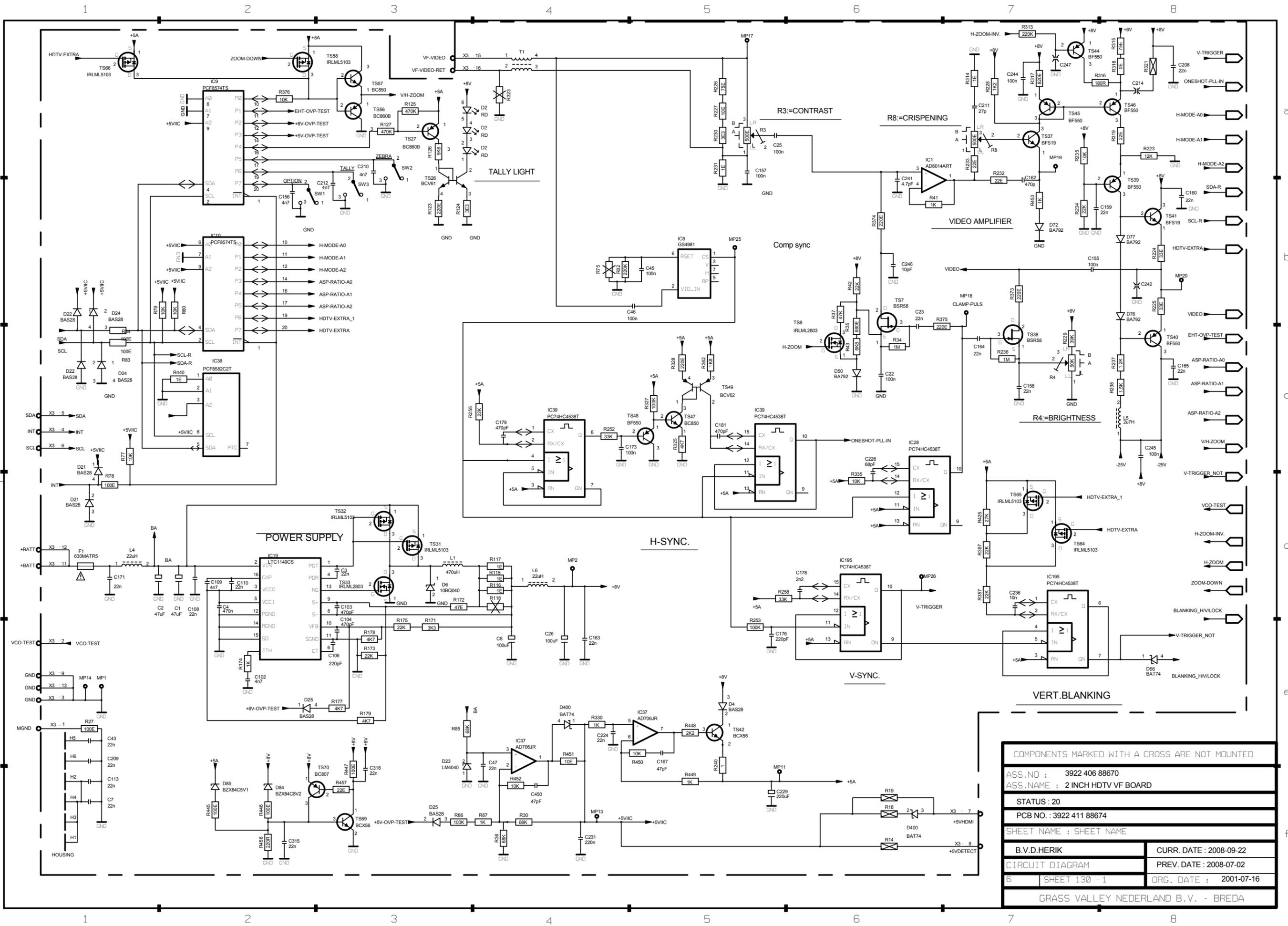




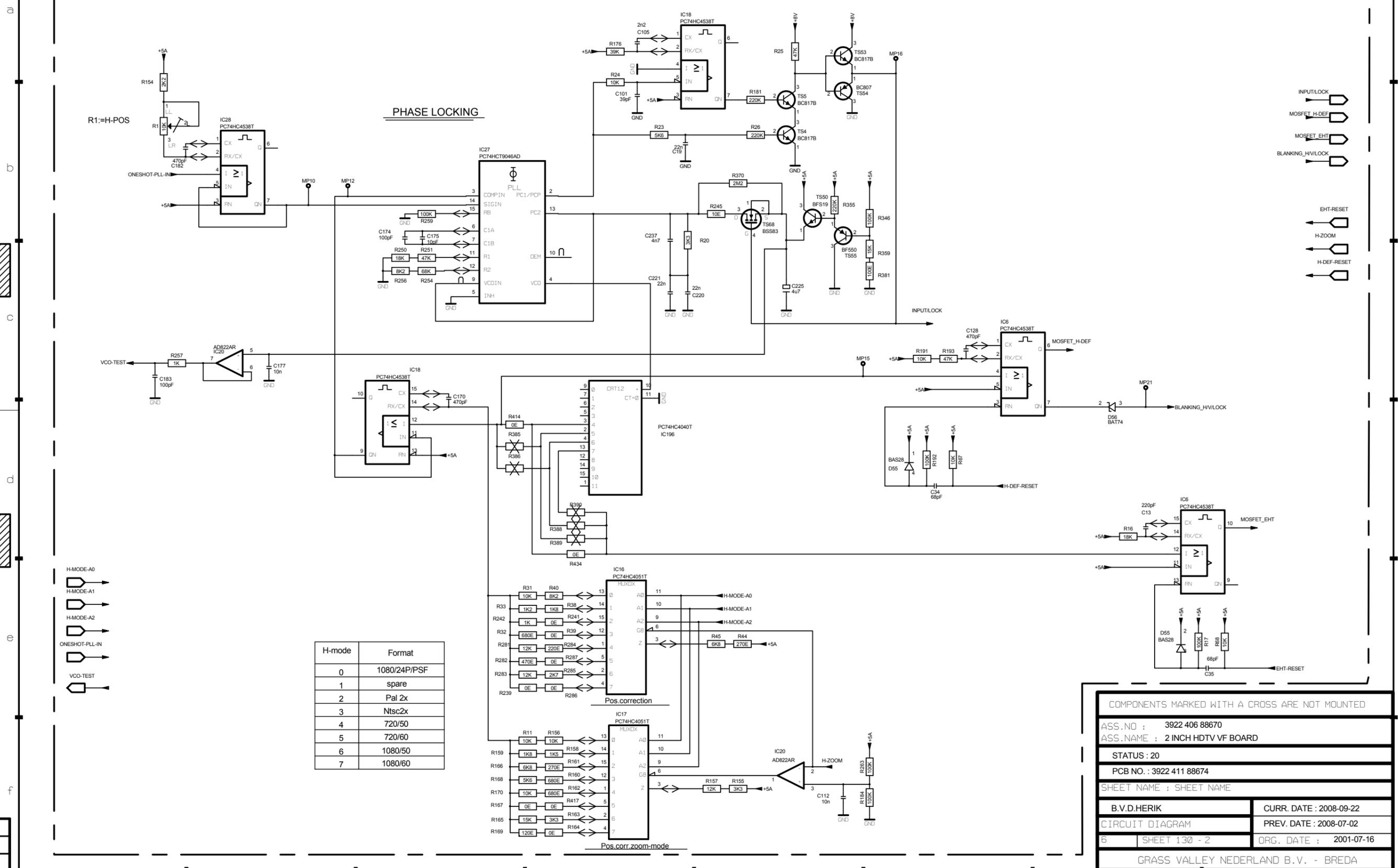
ASSEMBLY LAYER 6

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
STATUS: 20	
ASS. 12NC: 3922 406 88670	
ASS. NAME: 2 INCH HDTV VF BOARD	
PCB. 12NC: 3922 411 88674	
ASSEMBLY BOTTOM	CURR. DATE: 08-09-22
SCALE 1 : 1	PREV. DATE: 08-07-02
B.V.D.HERIK	ORG. DATE: 01-07-16
H VERMEULEN	SHEET : 110-2
GRASS VALLEY NEDERLAND B.V. - BREDA	

GRASS VALLEY



COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO : 3922 406 88670	
ASS.NAME : 2 INCH HDTV VF BOARD	
STATUS : 20	
PCB NO. : 3922 411 88674	
SHEET NAME : SHEET NAME	
B.V.D.HERIK	CURR. DATE : 2008-09-22
CIRCUIT DIAGRAM	PREV. DATE : 2008-07-02
6 SHEET 130 - 1	ORG. DATE : 2001-07-16
GRASS VALLEY NEDERLAND B.V. - BREDA	



- INPUTLOCK
- MOSFET_H-DEF
- MOSFET_EHT
- BLANKING_HVLOCK
- EHT-RESET
- H-ZOOM
- H-DEF-RESET

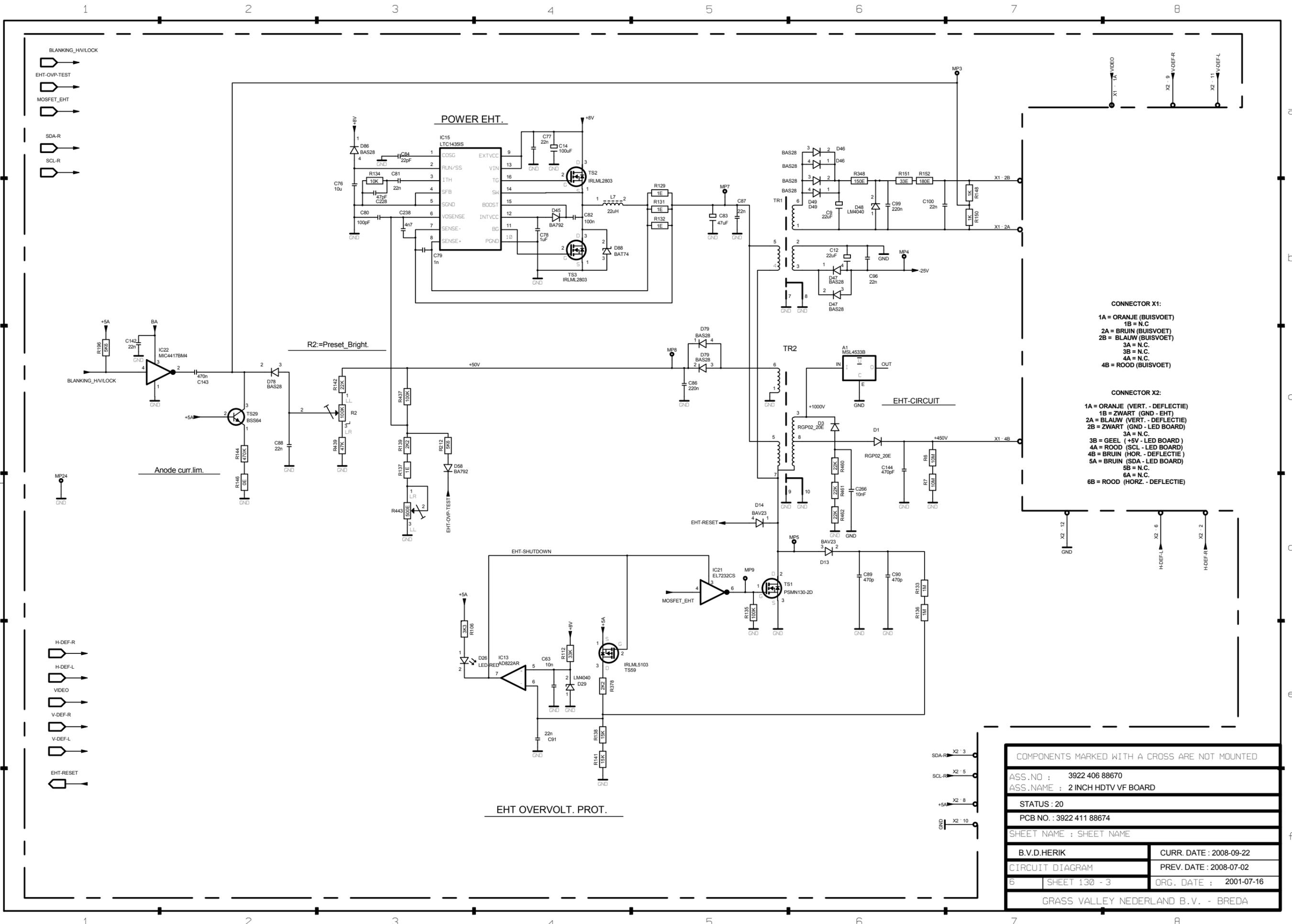
- H-MODE-A0
- H-MODE-A1
- H-MODE-A2
- ONESHOT-PLL-IN
- VCO-TEST

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED

ASS.NQ : 3922 406 88670
 ASS.NAME : 2 INCH HDTV VF BOARD
 STATUS : 20
 PCB NO. : 3922 411 88674
 SHEET NAME : SHEET NAME
 B.V.D.HERIK CURR. DATE : 2008-09-22
 CIRCUIT DIAGRAM PREV. DATE : 2008-07-02
 6 SHEET 130 - 2 ORG. DATE : 2001-07-16
 GRASS VALLEY NEDERLAND B.V. - BREDA

GRASS VALLEY

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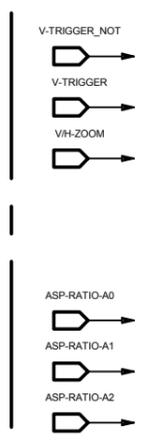
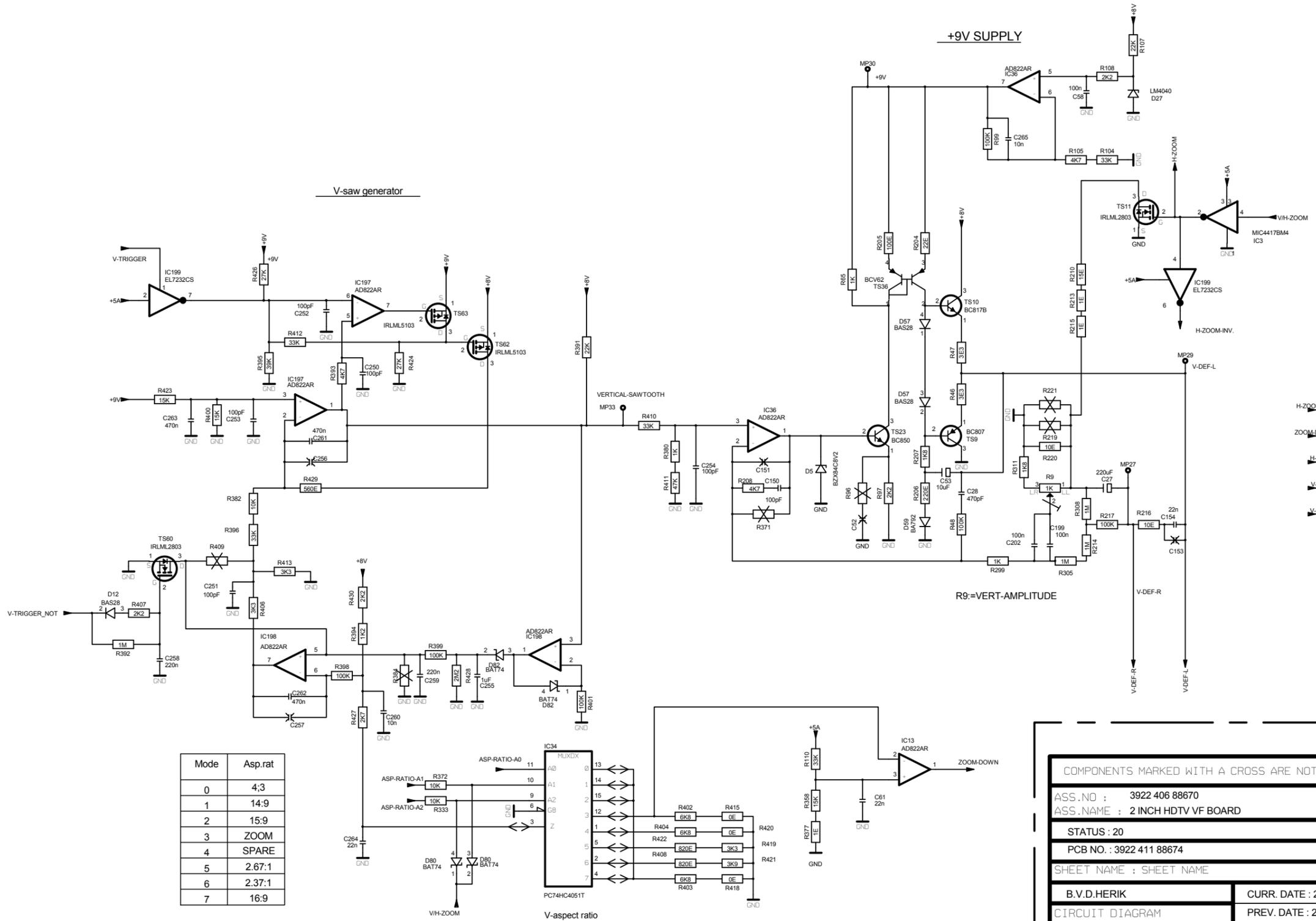


- CONNECTOR X1:**
- 1A = ORANJE (BUISSVOET)
 - 1B = N.C
 - 2A = BRUIN (BUISSVOET)
 - 2B = BLAUW (BUISSVOET)
 - 3A = N.C.
 - 3B = N.C.
 - 4A = N.C.
 - 4B = ROOD (BUISSVOET)

- CONNECTOR X2:**
- 1A = ORANJE (VERT. - DEFLECTIE)
 - 1B = ZWART (GND - EHT)
 - 2A = BLAUW (VERT. - DEFLECTIE)
 - 2B = ZWART (GND - LED BOARD)
 - 3A = N.C.
 - 3B = GEEL (+5V - LED BOARD)
 - 4A = ROOD (SCL - LED BOARD)
 - 4B = BRUIN (HOR. - DEFLECTIE)
 - 5A = BRUIN (SDA - LED BOARD)
 - 5B = N.C.
 - 6A = N.C.
 - 6B = ROOD (HORZ. - DEFLECTIE)

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO :	3922 406 88670
ASS.NAME :	2 INCH HDTV VF BOARD
STATUS :	20
PCB NO. :	3922 411 88674
SHEET NAME : SHEET NAME	
B.V.D.HERIK	CURR. DATE : 2008-09-22
CIRCUIT DIAGRAM	PREV. DATE : 2008-07-02
6	SHEET 130 - 3
ORG. DATE : 2001-07-16	
GRASS VALLEY NEDERLAND B.V. - BREDA	

- SDA-R X2 - 3
- SCL-R X2 - 5
- +5A X2 - 8
- GND X2 - 10



Mode	Asp.rat
0	4:3
1	14:9
2	15:9
3	ZOOM
4	SPARE
5	2.67:1
6	2.37:1
7	16:9

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED

ASS.NO : 3922 406 88670
 ASS.NAME : 2 INCH HDTV VF BOARD

STATUS : 20

PCB NO. : 3922 411 88674

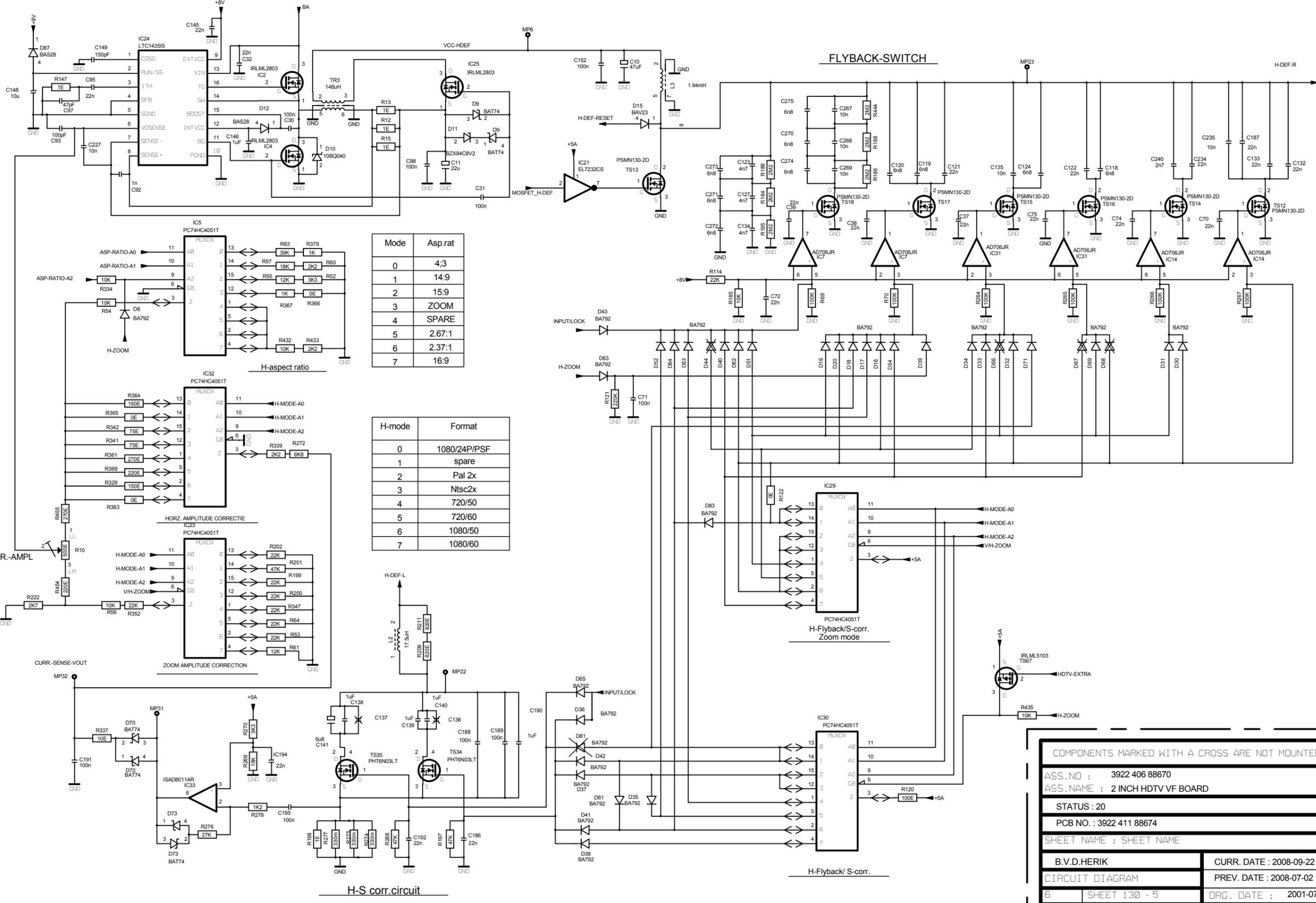
SHEET NAME : SHEET NAME

B.V.D.HERIK	CURR. DATE : 2008-09-22
CIRCUIT DIAGRAM	PREV. DATE : 2008-07-02
6 SHEET 130 - 4	ORG. DATE : 2001-07-16

GRASS VALLEY NEDERLAND B.V. - BREDA

POWER HOR. DEFLECTION

FLYBACK-SWITCH



Mode	Asp.rat
0	4:3
1	14:9
2	15:9
3	ZOOM
4	SPARE
5	2.67:1
6	2.37:1
7	16:9

H-mode	Format
0	1080/24P/PSF
1	spare
2	Pal 2x
3	Ntsc2x
4	720/50
5	720/60
6	1080/50
7	1080/60

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED

ASS.NO : 3922 406 88670

ASS.NAME : 2 INCH HDTV VF BOARD

STATUS : 20

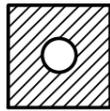
PCB NO. : 3922 411 88674

SHEET NAME : SHEET NAME

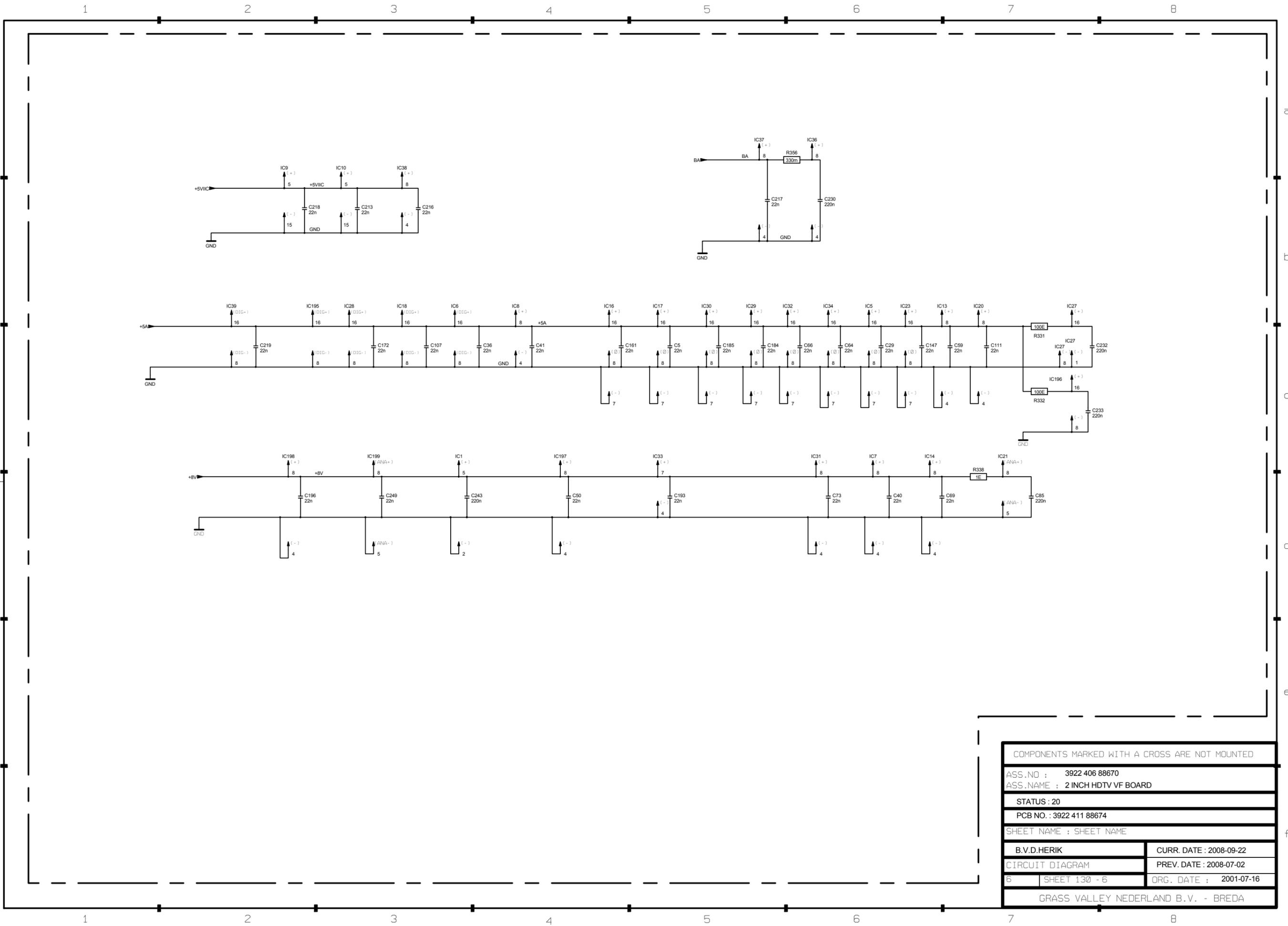
B.V.D.HERIK	CURR. DATE : 2008-09-22
CIRCUIT DIAGRAM	PREV. DATE : 2008-07-02
6	SHEET 130 - 5
	ORG. DATE : 2001-07-16

GRASS VALLEY NEDERLAND B.V. - BREDA

GRASS VALLEY



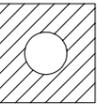
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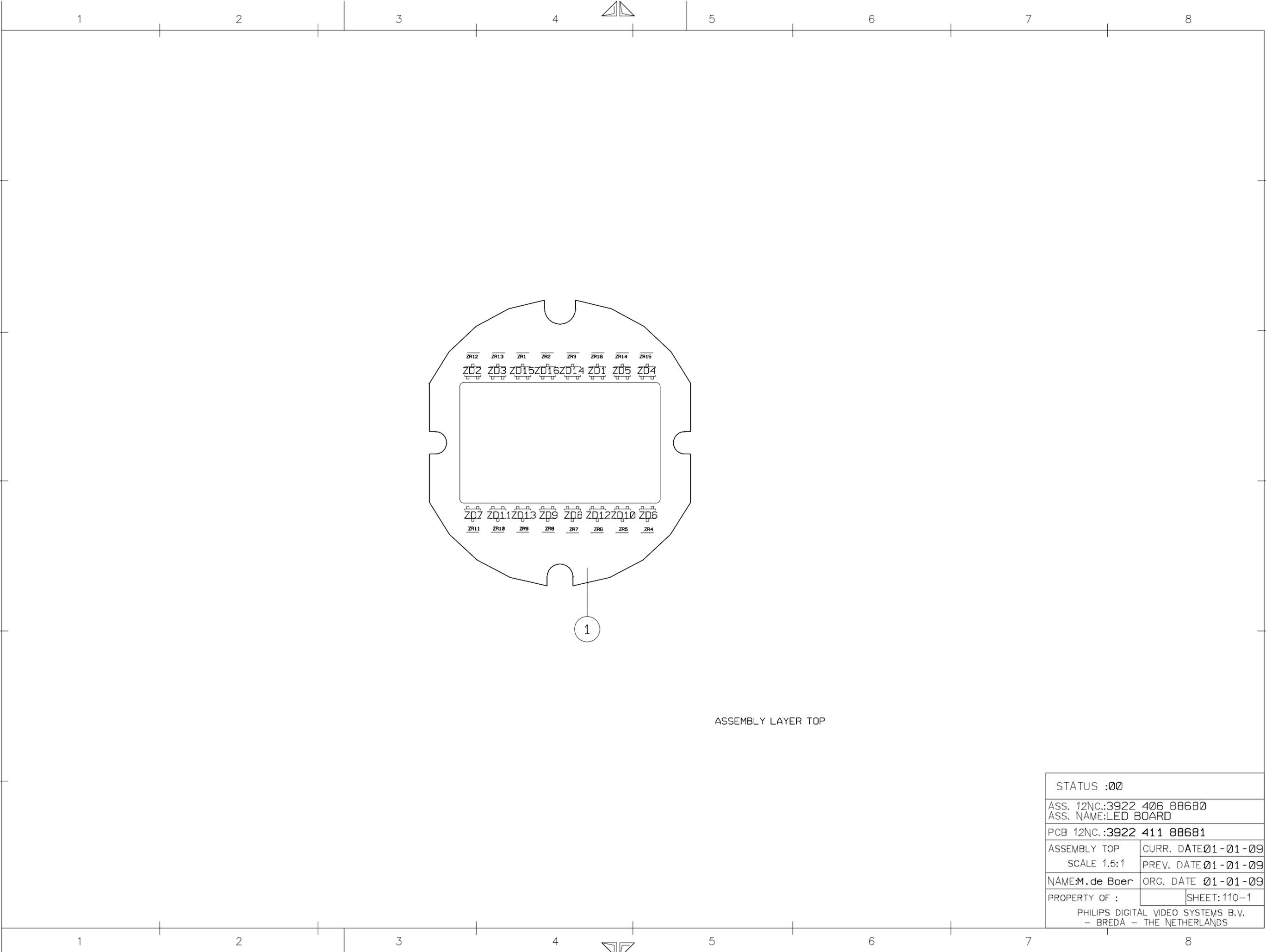
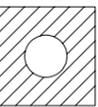
COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO : 3922 406 88670	
ASS.NAME : 2 INCH HDTV VF BOARD	
STATUS : 20	
PCB NO. : 3922 411 88674	
SHEET NAME : SHEET NAME	
B.V.D.HERIK	CURR. DATE : 2008-09-22
CIRCUIT DIAGRAM	PREV. DATE : 2008-07-02
6	SHEET 130 - 6
ORG. DATE : 2001-07-16	
GRASS VALLEY NEDERLAND B.V. - BREDA	

3922 406 88681;8 LEDBOARD

Ref	Description	Part 12nc	Service part
No service parts available.			



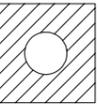
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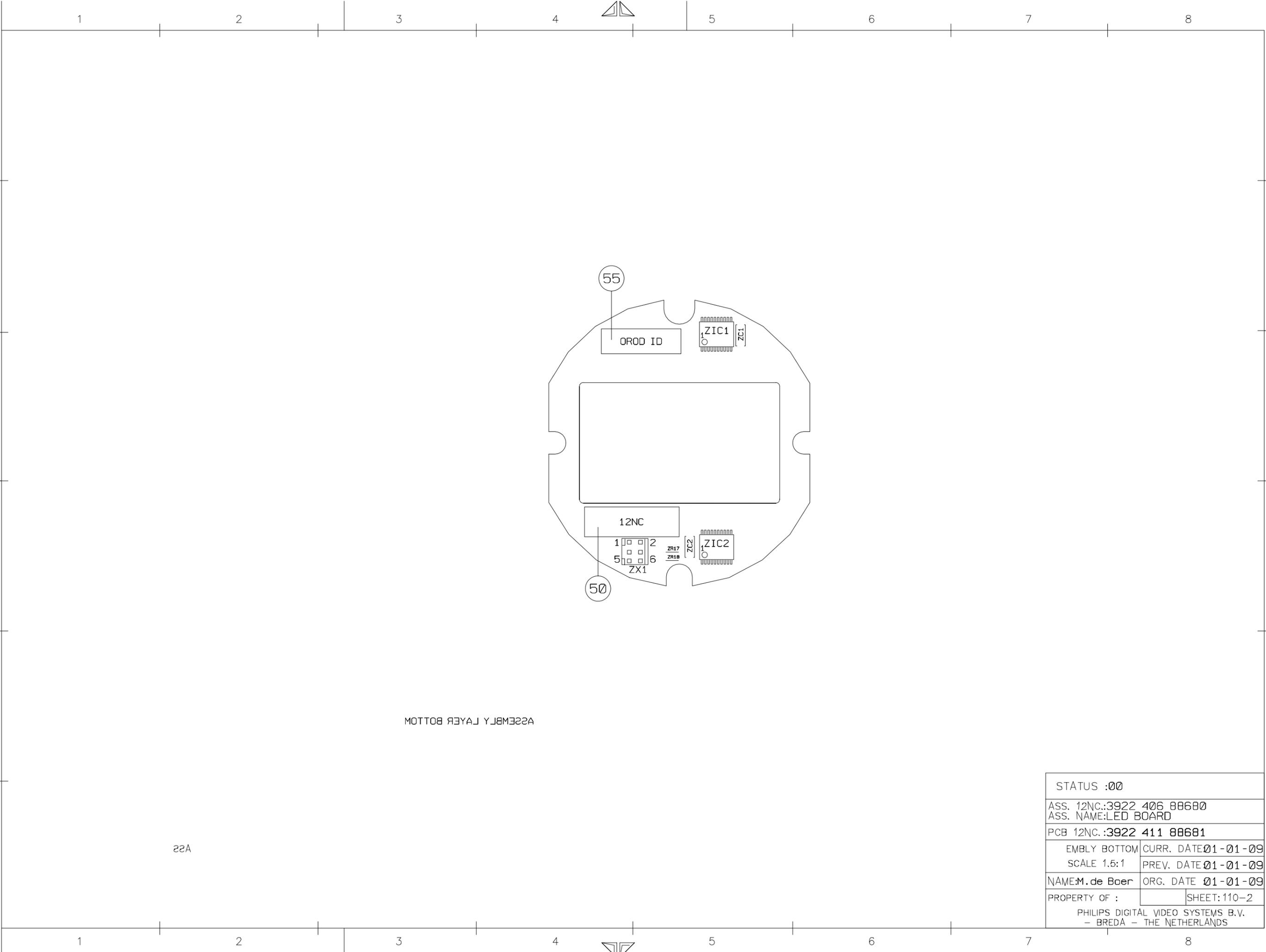
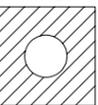
1

ASSEMBLY LAYER TOP

STATUS :00	
ASS. 12NC.:3922 406 88680 ASS. NAME:LED BOARD	
PCB 12NC. :3922 411 88681	
ASSEMBLY TOP	CURR. DATE 01-01-09
SCALE 1.5:1	PREV. DATE 01-01-09
NAME:M.de Boer	ORG. DATE 01-01-09
PROPERTY OF :	SHEET:110-1
PHILIPS DIGITAL VIDEO SYSTEMS B.V. - BREDA - THE NETHERLANDS	



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ASSEMBLY LAYER BOTTOM

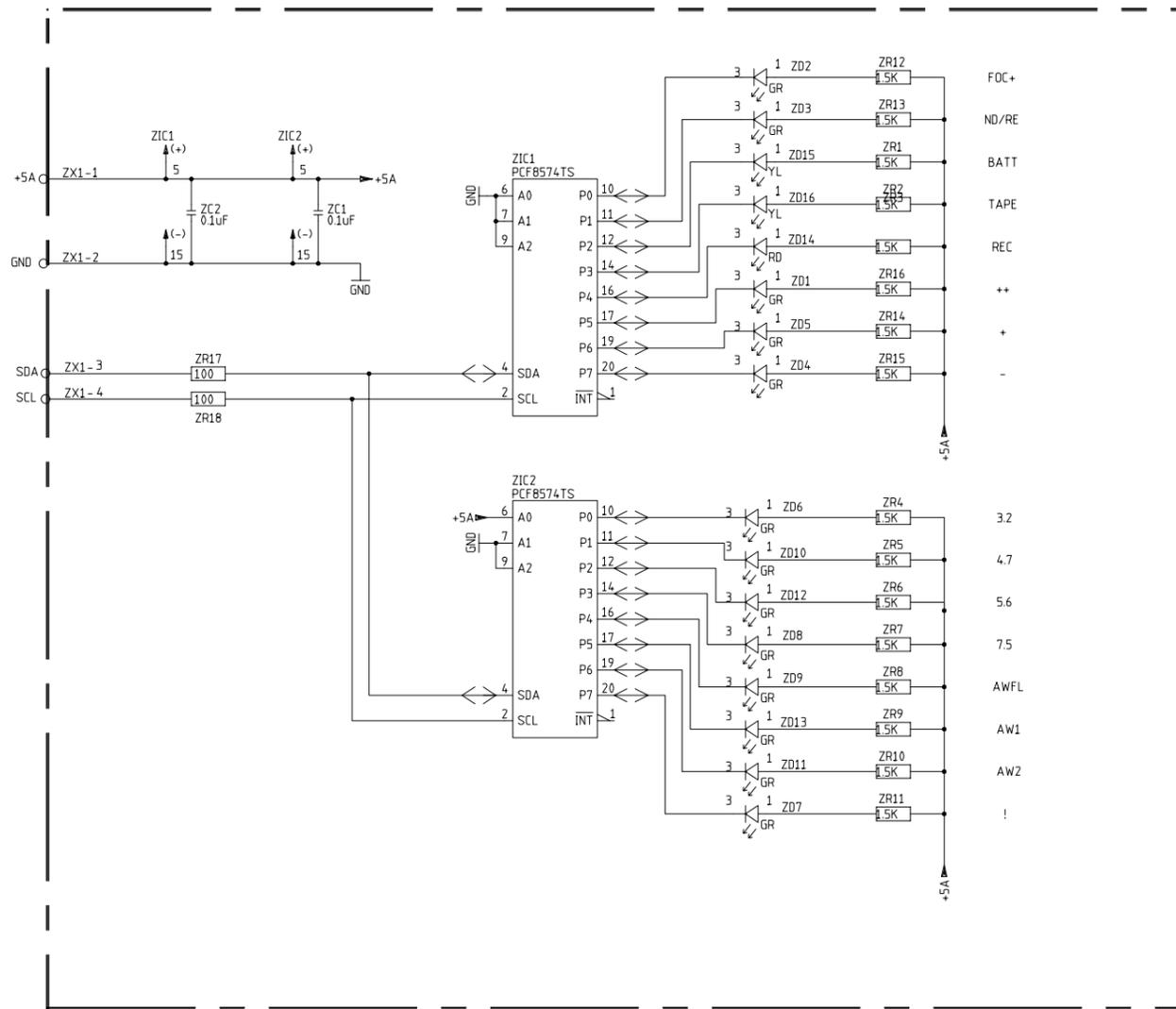
22A

STATUS :00	
ASS. 12NC.:3922 406 88680 ASS. NAME:LED BOARD	
PCB 12NC. :3922 411 88681	
EMBLY BOTTOM	CURR. DATE 01-01-09
SCALE 1.5:1	PREV. DATE 01-01-09
NAME:M.de Boer	ORG. DATE 01-01-09
PROPERTY OF :	SHEET:110-2
PHILIPS DIGITAL VIDEO SYSTEMS B.V. - BREDA - THE NETHERLANDS	



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COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 88680
ASS.NAME:	LED BOARD LDK6000
STATUS:	00
PCB.NO:	3922 411 88680
CIRCUIT DIAGRAM	CURR. DATE: 2000-04-08 PREV. DATE: 2000-04-08
NAME M.de Boer	ORG. DATE: 2000-04-08
PROPERTY OF:	SH 01 SHEET: 130 - 01
PHILIPS DIGITAL VIDEO SYSTEMS bv BREDA - THE NETHERLANDS	

MISCELLANEOUS

3922 407 34701;2 ADD.SUPPLIES 2 INCH VF

Ref	Description	Part 12nc	Service parts
1	BAG PE 100X130X0,05 O	2822 800 06003	Yes
2	EYEPIECE-COVER	3922 405 00461	Yes
3	USER'S GUIDE LDK5302/60	3922 496 49001	Yes

Declaration of Conformity

We, Thomson Broadcast Solutions Nederland B.V., Kapittelweg 10, 4827 HG Breda, The Netherlands declare under our sole responsibility that this product is in compliance with the following standards:

- EN60065 : Safety
- EN55103-1 : EMC (Emission)
- EN55103-2 : EMC (Immunity)

following the provisions of:

- a. the Safety Directives 73/23/EEC and 93/68/EEC
- b. the EMC Directives 89/336/EEC and 93/68/EEC

FCC Class A Statement

This product generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause interference to radio communications.

It has been tested and found to comply with the limits for a class A computing device pursuant to Subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

Operation of this product in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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