

**SONY.**

## Computer Monitors Service Bulletin

**CSI-111**

Sony Service Company - Technical Services  
A Division of Sony Electronics Inc.  
Sony Drive, Park Ridge, New Jersey 07656

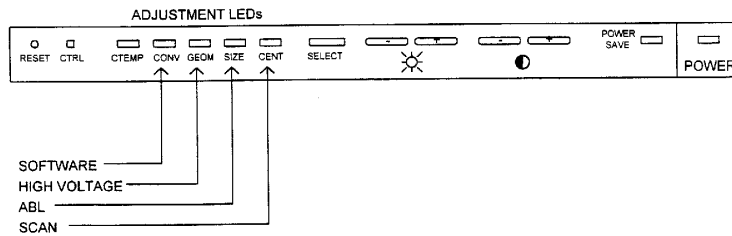
**Model:** GDM17SE1, GDM20SE1

**No.** 54R1

**Subject:** Significance of LED Flashing during a Shutdown **Date:** May 27, 1994

**Symptom:**  
(111) Unit is in shutdown

**Solution:** When this unit goes into shutdown check the front panel LEDs for valuable information about the type of shutdown. The information is illustrated below:



**Note:** A shutdown is indicated by the flashing of the "Power" and "Power Save" LEDs in combination with 1 or more of the adjustment LEDs. The Type of shutdown is indicated by the Adjustment LEDs as indicated above.

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## Computer Monitors Service Bulletin

**CSI-111**

Sony Service Company - Technical Services  
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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM17SE1

**No.** 60

**Subject:** Aging Mode

**Date:** June 24, 1994

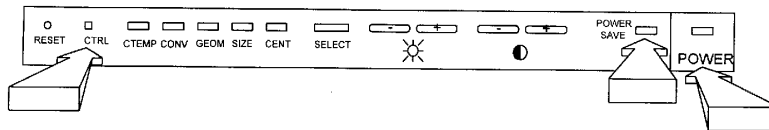
**Symptom:**

(\*\*\*) How do you put this unit into Aging Mode ?

**Solution:**

Before Performing White Balance, you must place the unit into aging for 30 minutes. To Place this unit into Aging you must do the following:

1. Remove the R, G, B, H, and V signal connections from the unit.
2. Power ON the unit and wait for it to go into POWER SAVE (Power Save LED Comes ON).
3. Press and Hold the CTRL and POWER Buttons for 2 seconds then release. The Green Power LED will flash.



4. To exit the Aging Mode, Power OFF the unit.



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**CSI-111**

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**Model:** GDM20SE1

**No. 63**

**Subject:** Alignment Grid (Ball Chart) Part Number

**Date:** September 9, 1994

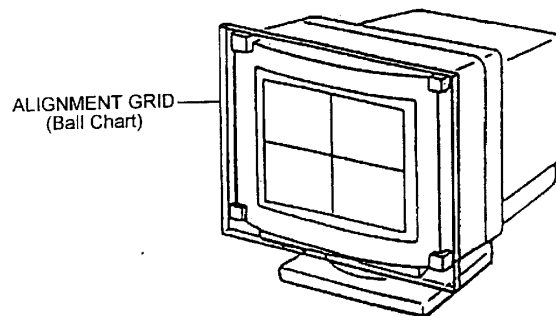
**Symptom:**  
(\*\*)

What is the Part Number for the Alignment Grid used with this Model ?

**Solution:**

The Alignment Grid (also known as "Ball Chart") for this model is available under Part Number 3-702-687-01. This alignment grid is used to adjust picture geometric distortion without parallax problems. Please add this part number to the Service Manual.

DESCRIPTION	PART NUMBER
ALIGNMENT GRID	3-702-687-01



# Computer Monitors Service Bulletin

**CSI-111**

Sony Service Company - Technical Services  
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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM20SE1

**No. 78**

**Subject:** Alignment Grid Part Number

**Date:** January 9, 1995

**Symptom:**

(\*\*\*)

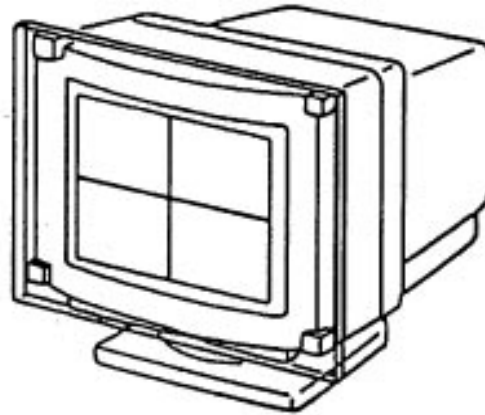
What is the Part Number for the Alignment Grid used with this Model ?

**Solution:**

The Alignment Grids (also known as "Ball Charts") for this model have been newly prepared and registered as a service Jig. This Alignment Grid is needed to adjust picture geometric distortions without parallax problems.

Description	Part Number
Alignment Grid (4 : 3) Central Gauge Size: 360mm X 270mm.	3-702-687-01

**Ball Chart**





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## Computer Monitors Service Bulletin

**CSI-111**

Sony Service Company - Technical Services  
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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM-17SE1

**No. 36**

**Subject:** Alignment Grid Part Number

**Date:** January 21, 1994

**Symptom:**

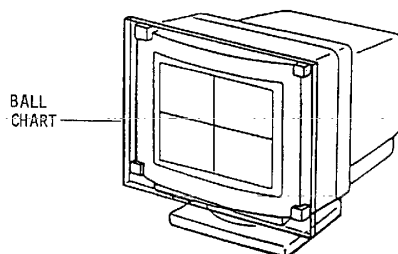
(\*\*\*)

What is the Part Number for the Alignment Grid used with this Model ?

**Solution:**

The Alignment Grids (also known as "Ball Charts") for this model have been newly prepared and registered as a service Jig. These Alignment Grids are used to adjust picture geometric distortion without parallax problems.

Description	Part Number
16 X 12 Alignment Grid, Central Gauge Size: 300mm X 225mm.	3-702-637-01



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**Model:** CPD15SF1, CPD15SF2, CPD15SX1, CPD100ES, CPD100GS, CPD100SX, CPD100VS, CPD101VS, CPD110GS, CPD120VS, CPD200ES, CPD200GS, CPD210GS, CPD220GS, CPD200SX, CPD17SF1, CPD17SF2, CPD100SF, CPD200SF, CPD201VS, CPD220VS, CPDE100, CPDE210, CPDE200, CPDG200, CPDG220R, CPDG220S, CPD20SF2T, CPD300SFT, CPD420GS, CPDE400, CPDG400, CPDG420, CPDG420S, CPD520GS, CPD-E500, CPDG500, CPDG520, GDM17SE1, GDM17SE2T, GDM200PS, GDM400PS, GDM500PS, GDM20SE1, GDM20SE2T, GDMF400, GDMF420, GDMF500, GDMF520, GDMF500R, GDMFW900, GDMW900, HMDA100, HMDA200, HMDV200

**No. 91R11**

**Subject:** CATS\_I<sup>™</sup> and WinCATS SW and Control Cables for Minolta Color Analyzers **Date:** May 7, 2001

**Symptom:****(1432)**

The Color Adjustment Tool for Service: CATS\_I<sup>™</sup> and WinCATS systems are used for computer monitor white balance set up. These systems have three major sections. The software program runs on the control PC. An RS-232 communication cable connects to the Minolta color analyzer. The monitor communication uses the same cables and adapters that are used with the Digital Alignment DAS<sup>™</sup> system.

Note: Refer to the Service Bulletin C/P No. 34 for PC hardware requirements and specific monitor communication cables and adapters used in the DAS<sup>™</sup> system.

**Solution:**

Please run CATS\_I<sup>™</sup> and WinDAS SW on the PC's used for the DAS<sup>™</sup> computer monitor test station. The hardware requirements for these test stations are the same as the DAS<sup>™</sup> system for each model. The Color Analyzer communication cable is added for connecting the COM-1 (or 2) Port of the PC to the Minolta CA-100 or Minolta TV-2130. This is used for commanding Minolta operating modes and reading the white balance measurements. The following descriptive items are included here:

- Procedure for First Time CATS\_I<sup>™</sup> Users is on Page 2.
- Table: CATS\_I<sup>™</sup> SOFTWARE AND HARDWARE P/N is on Page 2.
- Illustration: CATS\_I<sup>™</sup> Hardware Set-Up Diagram is on Page 3.
- Table: CATS\_I<sup>™</sup> SW VER. 5.3.7 SUPPORTED MODELS is on Page 3 - 5.
- CATS\_I<sup>™</sup> Communication Cable Wiring Illustrations is on Page 6.
- WHITE BALANCE ADJUSTMENT PROCEDURE SUMMARY is given on Page 7.

Cont.

**Procedure for First Time Users**

1. Refer to Service Bulletin C/P No. 34 for details of the DAS™ System hardware connections to the monitor. This set up is used to test and adjust the Computer Monitor in a similar way to the DAS™ System using the CATS\_I™ program. The COM 1 (or 2) Port communicates with the monitor's microcomputer to set up the white balance parameters. Refer to CATS\_I HARDWARE SET UP DIAGRAM on Page 3.
2. The PC's hosting the CATS\_I™ and WinCATS SW will be required to operate one of these Video Signal Generators.

TEAM VG-515	ASTRO VG-819	QUANTUM DATA 801GF
TEAM VG-516	ASTRO VG-823(DAS)	QUANTUM DATA 801GF-ISA
TEAM VG-530		Sencore CM-2250

The VG-515 is not supported by WinCATS. The VG-515 does not run on Pentiums.

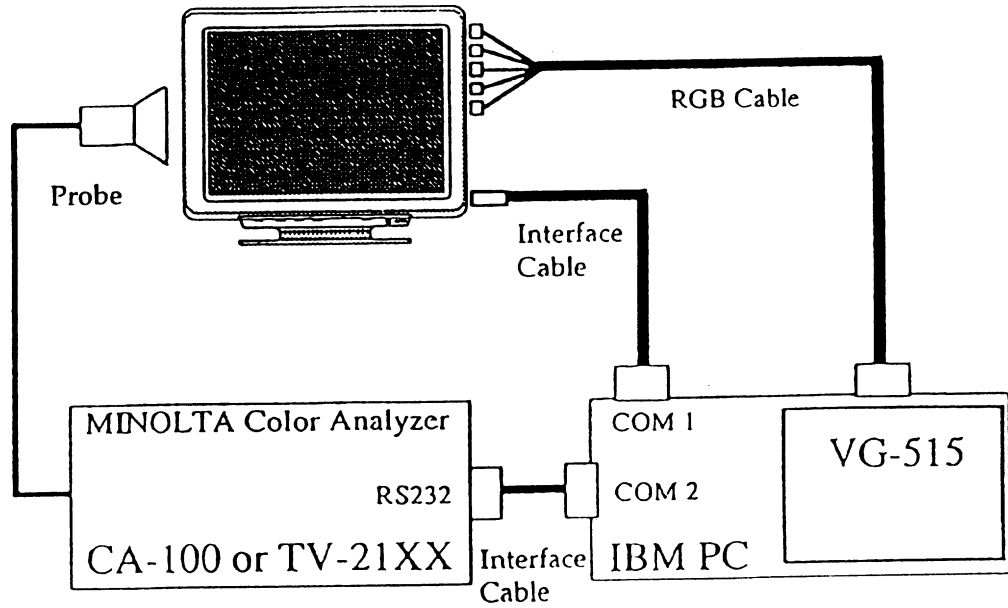
3. The CATS\_I™ and WinCATS software supports either Minolta CA-100 or TV-2130 units but the cables are different. Order the required SW and one of the communications cables using the Sony P/N's in the following table. Sony SSC users may download the required SW program from the Sony SSC Web Site. Alternatively, either communication cable can be constructed using the illustrations on Page 6.
4. The TV-2130 uses calibration offsets provided when the unit is calibrated. Follow procedures listed in the User's Manual to enter the calibration offsets in the CATS\_I™ and WinCATS program. The CA-100 does not use the calibration offsets.
5. Set up the CATS\_I™ System using the following illustrations. Refer to CATS\_I HARDWARE SET UP DIAGRAM on Page 3.
6. Refer to the CATS\_I™ and WinCATS User's Manual for additional instructions.

**CATS\_I™ SOFTWARE AND HARDWARE P/N'S**

	ITEM DESCRIPTION	ORDER SONY P/N OR DOWNLOAD
1A	CATS_I™ SW Start Up Kit Includes SW Ver. 5.4.4, and User's Manual Ver. 2.1.	PN T-998-581-21 Or Download from Sony SSC Web Site
1B	WinCATS SW Start Up Kit Includes Install SW, instructions, and User Manual.	PN T-998-607-83
2	WinCATS Version 1.3.3 alignment SW and User Manuals.	Download from the SSC or ASC Websites
3	Hasp Security Key is Required for WinDAS and WinCATS operation.	PN T-998-607-68
4	CATS_I™ PC - CA-100 Cable (Cable Only)	3-702-699-01
5	CATS_I™ PC - TV-21XX Cable (Cable Only)	3-702-700-01



**CATS\_I HARDWARE SET UP DIAGRAM**



**CATS\_I™ SW VER. 5.4.4 SUPPORTED MODELS**

Model	Chassis
CPD-15SX1 CPD-100SX	SX1
CPD-200SX	200SX
CPD-15SF1 CPD-17SF1	X1
CPD-15SF2 CPD-100VS CPD-17SF2	X2
GDM-17SE1 GDM-20SE1	N1
CPD-110GS CPD-210GS	X-110
CPD-100ES CPD-100SF CPD-200SF	X2R

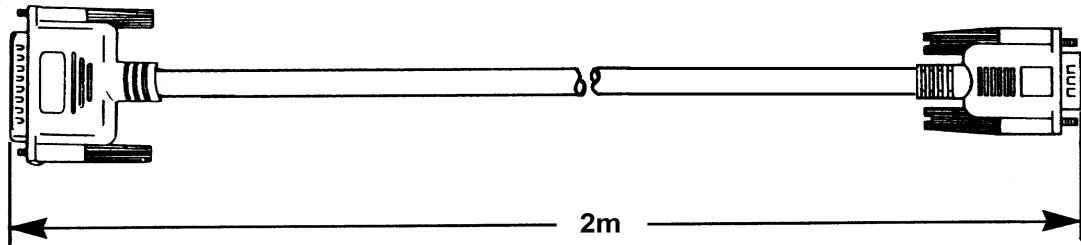
**CATS\_I™ SW VER. 5.4.4 SUPPORTED MODELS CONT.**

<b>Model</b>	<b>Chassis</b>
CPD-200ES	X2F
CPD-100GS CPD-200GS	D1 D1H
CPD-220GS	D1P
CPD-120VS CPD-220VS	V2
CPD-101VS CPD-201VS	V3
CPD-E100 HMD-A100 HMD-A200	X11R
CPD-E200 CPD-E210	D99C
CPD-G200	D99
HMD-V200	HIT
GDM-17SE2T CPD-20SF2(T) CPD-300SFT	N2
GDM-20SE2T	N2H
GDM-200PS GDM-400PS GDM-500PS CPD-520GS	N3
HMD-A400	H1
CPD-420GS	D98
CPD-E400 CPD-G400	F99
GDM-F400 GDM-F500	N3P
CPD-E500 CPD-G500 GDM-F500R	G1
GDM-FW900	G1W
GDM-W900	W1

**CURRENT WIN CATS SOFTWARE VERSIONS**

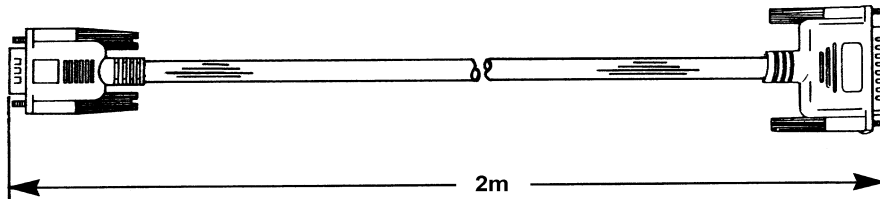
<b>WIN CATS Versions</b>	<b>Models Supported</b>	<b>Chassis Types</b>
WIN CATS Ver. 1.3.3	CPD-G200	D99
	CPD-G220R CPD-G220S	17VC
	CPD-E400 CPD-G400	F99
	CPD-E500 CPD-G500 GDM-F500R	G1
	CPD-G420 CPD-G420S CPD-G520 GDM-F420 GDM-F520	CR1
	GDM-FW900	G1W

**CATS\_I™ Cable, PC to CA-100, P/N 3-702-699-01**



DB 25 (Male)			DB 9 (Female)	
PIN #	SIGNAL		SIGNAL	PIN #
1	FG	—————	FG	-
2	TXD	—————	TXD	3
3	RXD	—————	RXD	2
4	RTS	—————	RTS	7
5	CTS	—————	CTS	8
7	GND	—————	DSR	6
20	DTR	—————	GND	5

**CATS\_I™ Cable, PC to TV-2130, P/N 3-702-700-01**



DB9 (Female)		14 Pin (Male) Amphenol™ No. 57-30104
PIN #		PIN #
-	—————	1
2	—————	2
3	—————	3
4	—————	6
5	—————	7
6	—————	8
7	—————	5
8	—————	4

**CATS\_I WHITE BALANCE ADJUSTMENT PROCEDURE SUMMARY**  
**(Refer to Win CATS User manual for Win CATS operations.)**  
**(By Thomas Vo, Dallas SSC)**

<b>STEP BY STEP</b>	<b>NOTE</b>	<b>TYPE OR PRESS HOT KEY</b>
1. Select the CATS_I Program.		C:\>CD\CATS_I
2. Start CATS_I program.		C:\CATS_I\MENU
3. Select group of Model.	Based on Chassis type.	<F2>
4. Select the Model Number.		<SHIFT>-<F3>
5. Follow on Screen instructions.	Start White Balance operations.	
6. Complete the White Balance Operations	Monitor operational Notes.	
7. At "OK" Screen, check the WB Specifications.		
8. Press Enter for Gray Scale.	Check G2 level visible at the first Bar on the left.	<Enter>
9. If G2 level is incorrect in Step 8, then repeat WB Steps 5-8.		
10. Return to Main Menu.		<SHIFT>-<F10>

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CSI-111

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A Division of Sony Electronics Inc.  
Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM17SE1, GDM20SE1

**No.** 85

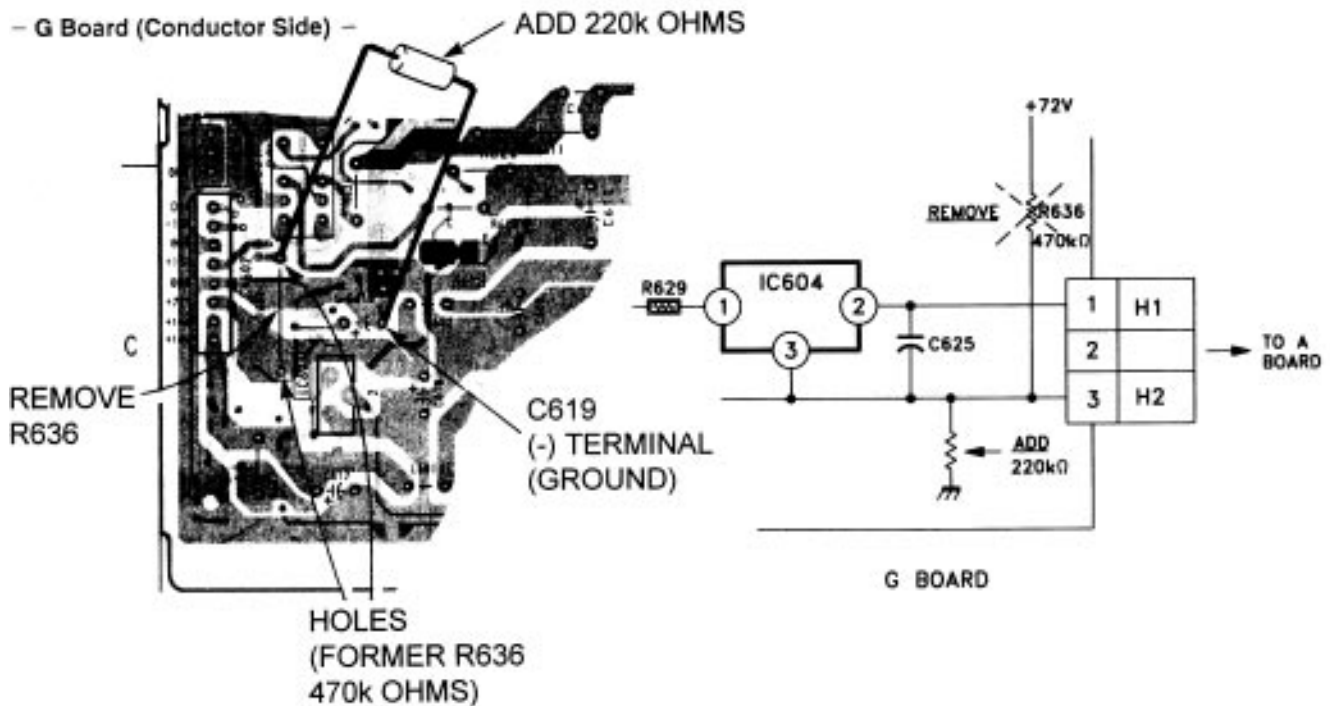
**Subject:** Circuit Improvement

**Date:** February 21, 1995

**Symptom:**  
(231) Countermeasure against possible arcing

**Solution:** Please perform the following changes:

1. Remove R636 from the G-Board.
2. Add new Resistor (220K $\Omega$ , ½ Watt, P/N: 1-202-842-11) between R636 and C619 lands as illustrated below.
3. Fix resistor in place by applying RTV.





**Model:** GDM-17SE1, GDM-20SE1**No.** 207**Subject:** Color Noise or No Color; BNC Connector Failure**Date:** June 19, 1998**Symptom:**  
**(1440)**

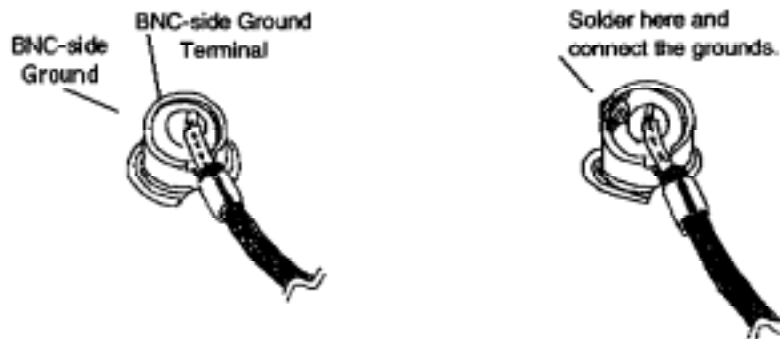
The unit has noise in the picture or a color is missing. The picture may be unstable or have intermittent no picture symptoms. The BNC Input connectors may have deteriorated contact points.

**Solution:**

If the customer complains of this symptom, then please check the condition of the BNC connectors on the Input Terminal Board. Refer to the following illustrations.

**INPUT TERMINAL BOARD**

If needed, solder each of the BNC input connectors as shown below.

**SOLDER THE INPUT TERMINALS**

Repeat with each connector (R, G, B, HD, VD).

The correction procedure is completed.



**Model:** GDM-17SE1, GDM-20SE1**No.** 207**Subject:** Color Noise or No Color; BNC Connector Failure**Date:** June 19, 1998**Symptom:**  
**(1440)**

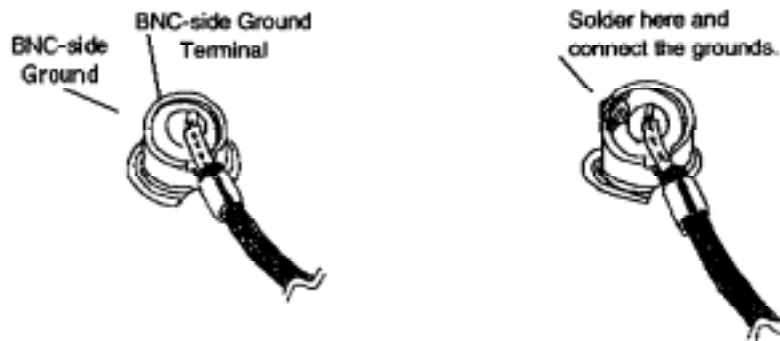
The unit has noise in the picture or a color is missing. The picture may be unstable or have intermittent no picture symptoms. The BNC Input connectors may have deteriorated contact points.

**Solution:**

If the customer complains of this symptom, then please check the condition of the BNC connectors on the Input Terminal Board. Refer to the following illustrations.

**INPUT TERMINAL BOARD**

If needed, solder each of the BNC input connectors as shown below.

**SOLDER THE INPUT TERMINALS**

Repeat with each connector (R, G, B, HD, VD).

The correction procedure is completed.

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**CSI-111**

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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM17SE1

**No. 70**

**Subject:** Countermeasure for dimming picture

**Date:** November 18, 1994

**Symptom:**  
(332)

After a while, the picture dims and eventually disappears completely

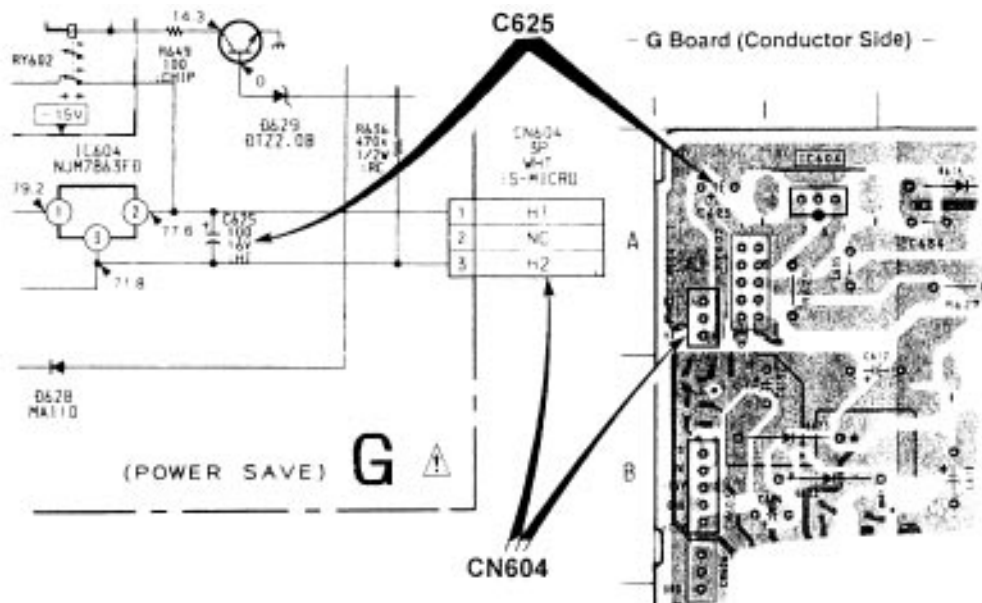
**Solution:**

Do not replace the Picture tube nor the Power Supply board (G-Board). Instead please check C-625 first.

C-625 is located on the G-board and it is the main filter for the CRT heater voltage. In some rare cases visual inspection will reveal an inward indentation on the top of the capacitor. This indentation causes the heater voltage across the CRT to drop due to cap failure. Replace the Capacitor.

If this is not the case, check the heater circuit for normal operation. CRT confirmation may be done by disconnecting CN604 (heater voltage) and applying an external regulated 6 volts DC directly to H1 and H2 on the A-Board.

ITEM	DESCRIPTION	PART NUMBER
C625	100 $\mu$ F, 20%, 16V	1-123-973-91





Filename: C\_P0070.SB  
Directory: J:\SBDOC\NOV94  
Template: C:\WINWORD\S\_BULL.DOT  
Title: CSI-111, GDM17se1 Picture Dims  
Subject:  
Author: Hoyt Wing Lee  
Keywords:  
Comments:  
Creation Date: 11/18/94 2:34 PM  
Revision Number: 2  
Last Saved On: 11/18/94 2:34 PM  
Last Saved By: Hoyt Wing Lee  
Total Editing Time: 0 Minutes  
Last Printed On: 04/01/96 10:06 AM  
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Number of Pages: 2  
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Number of Characters: 1,091 (approx.)

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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM17SE1, GDM20SE1

**No. 75**

**Subject:** Countermeasure for high pitch squeal

**Date:** January 9, 1995

**Symptom:**

**(154)** High Pitch Squeal noise

**Solution:**

In some cases a high pitch squeal may be emitted by L501 and/or L507 on the D-Board. Please change to the new part respectively.

DESCRIPTION	OLD PART NUMBER	NEW PART NUMBER
L501 FOR THE 17"	1-409-597-11	1-409-599-11
L501 FOR THE 20"		1-409-690-11
L507 FOR THE 17"	1-409-598-11	1-460-080-12
L507 FOR THE 20"		1-409-691-11





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**CSI-111**

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**Model:** GDM17SE1, GDM20SE1

**No.** 75

**Subject:** Countermeasure for high pitch squeal

**Date:** January 9, 1995

**Symptom:**

(154) High Pitch Squeal noise

**Solution:**

In some cases a high pitch squeal may be emitted by L501 and/or L507 on the D-Board. Please change to the new part respectively.

DESCRIPTION	OLD PART NUMBER	NEW PART NUMBER
L501 FOR THE 17"	1-409-597-11	1-409-599-11
L501 FOR THE 20"		1-409-690-11
L507 FOR THE 17"	1-409-598-11	1-460-080-12
L507 FOR THE 20"		1-409-691-11







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**Model:** GDM17SE1, GDM20SE1

**No.** 75

**Subject:** Countermeasure for high pitch squeal

**Date:** January 9, 1995

**Symptom:**

(154) High Pitch Squeal noise

**Solution:**

In some cases a high pitch squeal may be emitted by L501 and/or L507 on the D-Board. Please change to the new part respectively.

DESCRIPTION	OLD PART NUMBER	NEW PART NUMBER
L501 FOR THE 17"	1-409-597-11	1-409-599-11
L501 FOR THE 20"		1-409-690-11
L507 FOR THE 17"	1-409-598-11	1-460-080-12
L507 FOR THE 20"		1-409-691-11





# Computer Monitors Service Bulletin

CSI-111

Sony Service Company - Technical Services  
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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM17SE1

**No.** 76

**Subject:** Countermeasure for High Pitch Squeal

**Date:** January 9, 1995

**Symptom:**

(154)

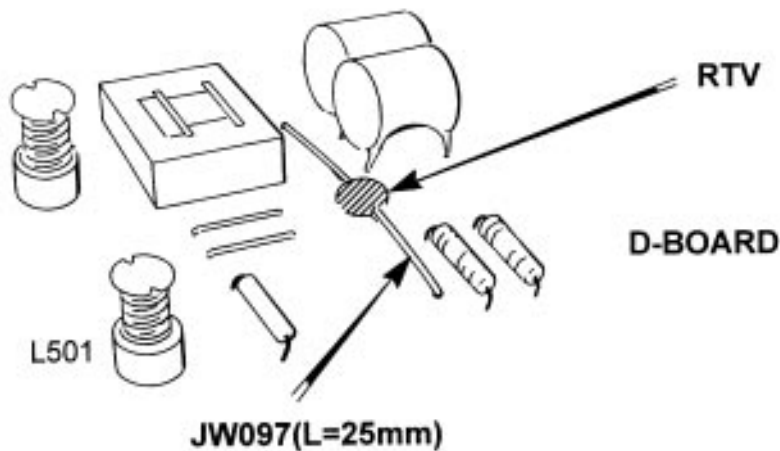
A high frequency squeal is audible when using the MAC 16" Mode

**Solution:**

The noise comes from JW097 (jumper wire). JW097 vibrates due to L501 (Horizontal Linearity Coil). To confirm the noise source, touch the center of JW097 using a plastic adjustment tool.

If the Noise is confirmed, apply RTV in the middle of the jumper wire as illustrated below:

JW097 is located in the middle of the D-Board near L501 and T502.





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**Model:** CPD1430, CPD15SF1, CPD15SF2,  
CPD15SX1, CPD1730, CPD17SF1,  
CPD17SF2, GDM17SE1, GDM17SE2T,  
GDM1936, CPD20SF2, GDM2036S,  
GDM2038, GDM20SE1, GDM20SE2

**No. 82R1**

**Subject:** Countermeasure for Intermittent DAS Software Lock-ups

**Date:** April 30, 1996

**Symptom:**  
(273) Software locks up intermittently

**Solution:** In various cases DAS will lock-up intermittently when the Mouse is in use and/or due to insufficient memory. To resolve these problems, please perform the following.

1. Disconnect the Mouse when using DAS. Remove mouse drivers from autoexec.bat and config.sys files. Instead, use the Hot keys, TAB, ENTER and Arrow keys to access/execute Menu options.
2. Ensure DAS operating SW has 100k available memory. It is recommended to load DOS in Hi memory. Load EMM386 to optimize memory usage.

You may find it faster and more effective to operate DAS in this fashion.



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**Model:** GDM17SE1, GDM20SE1

**No. 86**

**Subject:** D824 Improvement

**Date:** March 20, 1995

**Symptom:**

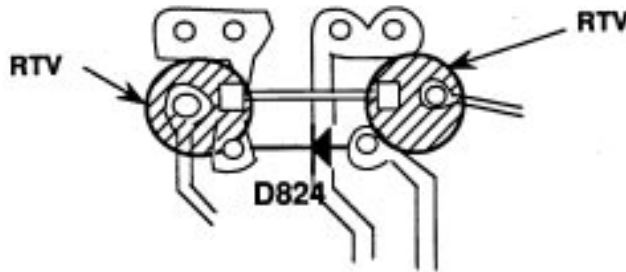
**(131)** No Picture due to HV shutdown

**Solution:** Please check D-824 on the D-Board. If shorted, replace as follows:

1. Replace D824 with a 1SS83 type

DESCRIPTION	PART NUMBER
1SS83 DIODE	8-719-901-83

2. Apply RTV to locations illustrated below:





Filename: C\_P0086.SB  
Directory: J:\SBDOC\MAR95  
Template: C:\WINWORD\S\_BULL.DOT  
Title: CSI-111, D824 change GDM17se1  
Subject:  
Author: Hoyt Wing Lee  
Keywords:  
Comments:  
Creation Date: 03/20/95 8:50 AM  
Revision Number: 2  
Last Saved On: 03/20/95 8:50 AM  
Last Saved By: Hoyt Wing Lee  
Total Editing Time: 0 Minutes  
Last Printed On: 04/01/96 9:31 AM  
As of Last Complete Printing  
Number of Pages: 2  
Number of Words: 112 (approx.)  
Number of Characters: 644 (approx.)



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**CSI-111**

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**Model:** GDM17SE1, GDM20SE1

**No. 86**

**Subject:** D824 Improvement

**Date:** March 20, 1995

**Symptom:**

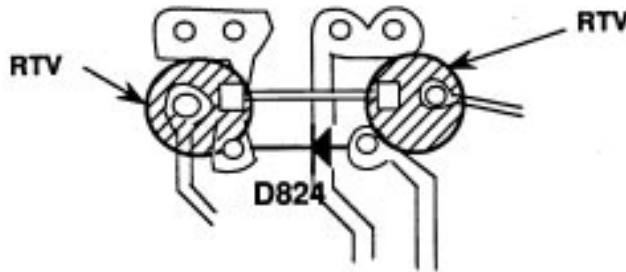
**(131)** No Picture due to HV shutdown

**Solution:** Please check D-824 on the D-Board. If shorted, replace as follows:

1. Replace D824 with a 1SS83 type

DESCRIPTION	PART NUMBER
1SS83 DIODE	8-719-901-83

2. Apply RTV to locations illustrated below:





Filename: C\_P0086.SB  
Directory: J:\SBDOC\MAR95  
Template: C:\WINWORD\S\_BULL.DOT  
Title: CSI-111, D824 change GDM17se1  
Subject:  
Author: Hoyt Wing Lee  
Keywords:  
Comments:  
Creation Date: 03/20/95 8:50 AM  
Revision Number: 2  
Last Saved On: 03/20/95 8:50 AM  
Last Saved By: Hoyt Wing Lee  
Total Editing Time: 0 Minutes  
Last Printed On: 04/01/96 9:31 AM  
As of Last Complete Printing  
Number of Pages: 2  
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Number of Characters: 644 (approx.)

# Computer Monitors Service Bulletin

CSI-111

Sony Service Company - Technical Services  
A Division of Sony Electronics Inc.  
Sony Drive, Park Ridge, New Jersey 07656

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**Model:** CPD1430, CPD1730, CPD15SF1,  
CPD17SF1, GDM17SE1, GDM20SE1,  
GDM1936, GDM2036S, GDM2038

**No. 67**

**Subject:** DAS is not Windows Compatible

**Date:** November 16, 1994

**Symptom:**  
(\*\*\*)

Will DAS run in Windows ?

**Solution:**

Yes, DAS will run in Windows but, NO it is not compatible with Windows. Please do not operate DAS from windows. DAS is purely a DOS program and will corrupt Monitor data if used in Windows.

Running DOS from Windows and running DAS after is no exception. Windows is still running in the background and will corrupt your data.





Filename: C\_P0067.SB  
Directory: J:\SBDOC\NOV94  
Template: C:\WINWORD\S\_BULL.DOT  
Title: CSI-111, DAS in Windows Warning  
Subject:  
Author: Hoyt Wing Lee  
Keywords:  
Comments:  
Creation Date: 11/16/94 1:50 PM  
Revision Number: 2  
Last Saved On: 11/16/94 1:50 PM  
Last Saved By: Hoyt Wing Lee  
Total Editing Time: 0 Minutes  
Last Printed On: 04/01/96 10:06 AM  
As of Last Complete Printing  
Number of Pages: 2  
Number of Words: 143 (approx.)  
Number of Characters: 818 (approx.)

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**Model:** CPD1425, CPD1430, CPD15SF1, CPD15SF2, CPD15SX1, CPD100ES, CPD100GS, CPD100SX, CPD100VS, CPD101VS, CPD110GS, CPD120VS, CPD200ES, CPD200GS, CPD210GS, CPD220GS, CPD200SX, CPD1730, CPD17SF1, CPD17SF2, CPD100SF, CPDE100, CPD200SF, CPD201VS, CPD220VS, CPDE200, CPDE200/L, CPDE210, CPDG200, CPDG220S, CPDG220R, CPDE400, CPDG400, CPDG420, CPDG420S, CPD20SF2, CPD300SFT, CPD420GS, CPD520GS, CPDE500, CPDG500, CPDG520, CPDL133, CPDL150, CPDL181, CPDL181A, CPDM151, GDM17SE1, GDM17SE2T, GDM200PS, GDM400PS, GDM500PS, GDM1936, GDM2036S, GDM2038A, GDM20SE1, GDM20SE2T, GDMF400, GDMF420, GDMF500, GDMF520, GDMF500R, GDMFW900, GDMW900, HMDA100, HMDA200, HMDV200, KLW7000, KLW7000A, KLW9000, KLW9000A, SDMN50, SDMN50PS

**No. 34R13**

**Subject:** DAS and WinDAS (Digital Alignment System) Software And Hardware Requirements

**Date:** May 7, 2001

**Symptom:**

**(1335)**

Digital alignment is required for computer monitors with communication port. Digital Alignment System: DAS is needed. DAS is used to control Video Signal Generator (only) for some models as noted. Part numbers are required to order DAS hardware (HW) items. Internet is used to obtain the required software (SW) programs.

**Solution:**

Please use the following instructions and related information to obtain necessary materials, assemble, and set up the DAS System and update it as required. The following items are included here:

- Procedure for First Time DAS Users is listed on Page 2.
- Current DAS Software Versions are listed by model and chassis on Pages 3-5.
- The Digital Alignment System DAS Set Up illustration is on Page 6.
- Required SW download versions and HW part numbers are listed on Page 7.
- Notes relating DAS System SW and HW Updates are on Page 8.
- Video Signal Generators supported by DAS are listed in the table on Page 8.
- Digital Alignment Procedure Notes are listed on Page 9.

Cont.

**PROCEDURE FOR FIRST TIME DAS USERS**

1. Obtain the following basic materials available outside of Sony:

<b>DAS J VERSION (DOS) PROGRAMS</b>	<b>WIN DAS PROGRAMS</b>
A. One PC type personal computer system with minimum requirements: Speed: 486/66Mhz CPU COM Ports 1 & 2 available 3 ISA slots available OS: DOS V. 3.3 or higher, DOS/V V. 6.2 or higher, or Windows 95 Floppy Disk; 1.44MB FDD	A. One PC type personal computer system with minimum requirements: Pentium or Higher CPU COM Ports 1 & 2 available 3 ISA slots available 64 MB or more Memory OS: Windows 95 or 98 only Hard Disk; HD (100MB Min.), 1.44MB FDD; CD-ROM
B. One Video Signal Generator from list: VIDEO SIGNAL GENERATORS SUPPORTED BY DAS on Pg. 7.	B. One Video Signal Generator from list: VIDEO SIGNAL GENERATORS SUPPORTED BY WinDAS on Pg. 7.
C. Access to the Internet to download the required DAS & WinDAS SW programs.	

2. Determine which Sony Computer monitor model(s) are planned for service. Check the DAS versions and monitor chassis types needed from table: CURRENT DAS SOFTWARE VERSIONS, Page 3 - 5.
3. Check the Pg. 6 illustration: DIGITAL ALIGNMENT SYSTEM DAS SET UP to determine which cable adapters are needed for the chassis types planned for service. The numbered balloons refer to item numbers listed in the Pg. 6 table: DAS SW DOWNLOAD VERSIONS AND HW PART NUMBERS.
4. Write a list of materials needed by part number using the Pg. 7 table: DAS SW DOWNLOAD VERSIONS AND HW PART NUMBERS. Include all necessary item numbers as determined in Step 3.
5. Contact the Sony World Repair Parts Center as follows to order the necessary HW materials:

SONY WORLD REPAIR PARTS CENTER  
 8281 NW 107<sup>th</sup> Terrace  
 Kansas City, MO 64153-1275  
 TEL: 816-891-7550 FAX: 816-891-2580

6. The DAS SW is obtained by downloading from one of the following (2) Internet Web Sites.

Sony Service Center (SSC Web Site):  
 Contact your Sony Service Center manager to obtain the URL address, username, and password needed to access the SSC Web Site.

Sony Authorized Service Center (ASC Web Site):  
 Contact your Sony Technical Representative to obtain the URL address, username, and password needed to access the ASC Web Site.

7. Access the Sony Web Site and download the necessary DAS SW programs to your local HD or FDD.
8. Follow the Web Site instructions to Unzip and or copy the DAS SW programs to 1 or 2 floppy disks for installation on the computer monitor test stations described in Step 1.
9. Follow the set up and operating instructions in the Installation Manuals and User's Manuals provided with the Start Up Kit and listed in the Web Site Downloads.
10. Refer to the DIGITAL ALIGNMENT PROCEDURE FOR J Version SONY COMPUTER MONITORS on Page 9 for a summary of operating procedures to use with the J Version DAS System.



**CURRENT DAS SOFTWARE VERSIONS**

<b>DAS Versions</b>	<b>Models Supported</b>	<b>Chassis Types</b>
DAS Ver. 3.5	CPD-1430 CPD-1730	CPD
	GDM-1936 GDM-2036S	P3
	GDM-2038(A)	P3.5
DAS Ver. 5.7D	CPD-1425	Video Generator Only
	CPD-15SX1 CPD-100SX	SX1
	CPD-200SX	200SX
	CPD-15SF1 CPD-17SF1	X1
	CPD-15SF2 CPD-100VS CPD-17SF2	X2
	GDM-17SE1 GDM-20SE1	N1
	CPD-L133 CPD-L150 SDM-M151	LCD (Control Video Generator)
DAS Ver. JC 1.4.5	CPD-110GS CPD-210GS	X-110
	CPD-E100 HMD-A100 HMD-A200	X11R
DAS Ver. JC H1	HMD-A400	H1
DAS Ver. JN 1.0.7	HMD-V200	HIT

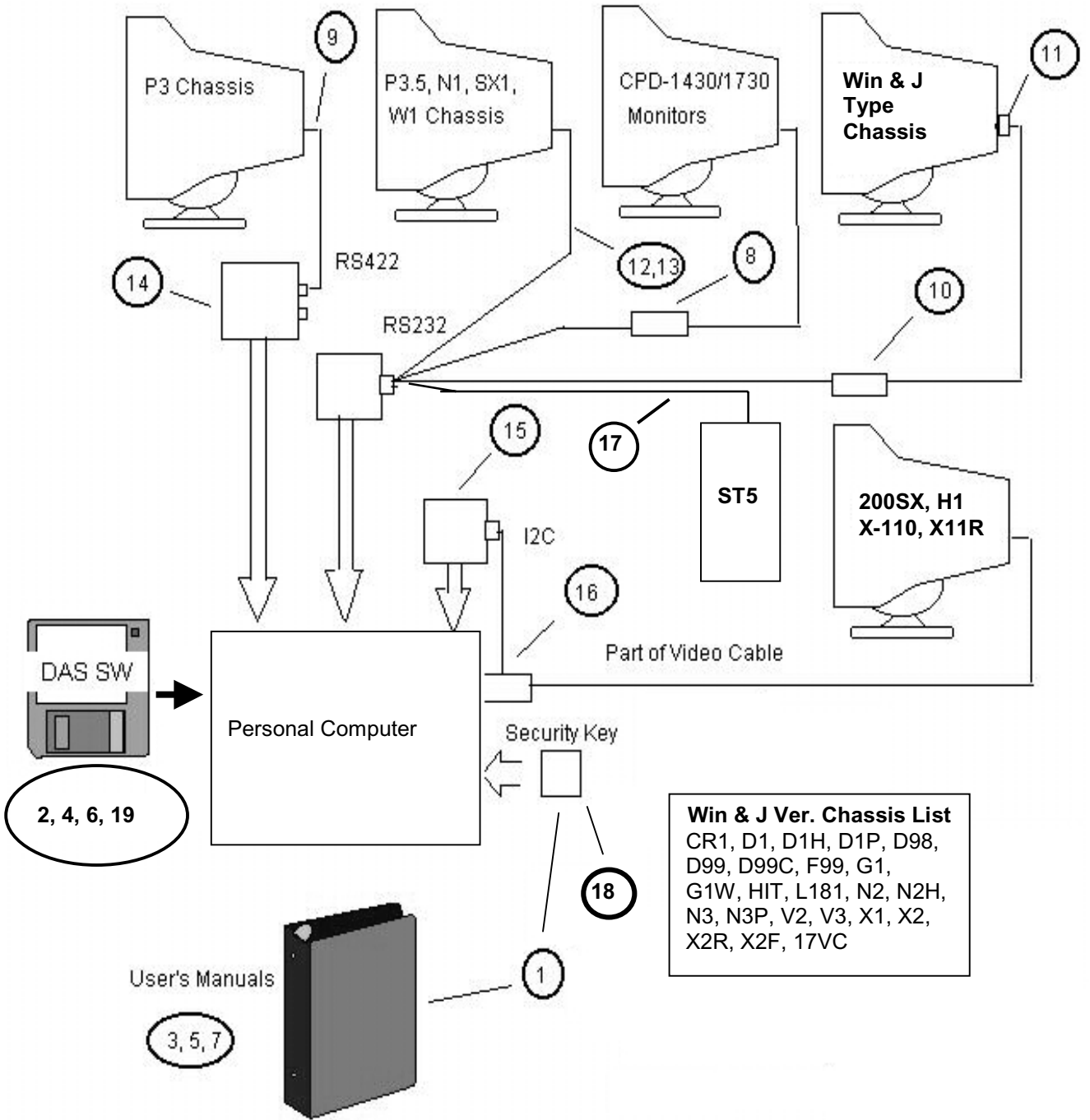
**CURRENT DAS SOFTWARE J VERSIONS CONTINUED**

<b>DAS Versions</b>	<b>Models Supported</b>	<b>Chassis Types</b>
DAS Ver. JA1.0.1	CPD-100ES CPD-100SF CPD-200SF	X2R
	CPD-200ES	X2F
	CPD-120VS CPD-220VS	V2
	GDM-17SE2T CPD-20SF2(T) CPD-300SFT	N2
	GDM-20SE2T	N2H
	GDM-W900	24W1
DAS Ver. JB1.0.2 * Includes ETI Reading mode for these models.	* CPD-100GS * CPD-200GS	D1 D1H
	* CPD-220GS	D1P
	CPD-101VS CPD-201VS	V3
	CPD-E200 * CPD-E210	D99C
	* CPD-G200	D99
	GDM-200PS GDM-400PS GDM-500PS CPD-520GS	N3
	CPD-420GS	D98
	* CPD-E400 * CPD-G400	F99
	* GDM-F400 * GDM-F500	N3P
	* CPD-E500 * CPD-G500 * GDM-F500R	G1
	GDM-FW900	G1W
	CPD-L181(A)	L181
	SDM-N50(PS)	ST5

**CURRENT WIN DAS SOFTWARE VERSIONS**

<b>WIN DAS Versions</b>	<b>Models Supported</b>	<b>Chassis Types</b>
WIN DAS Ver. 1.3.4	CPD-G200	D99
	CPD-G220R CPD-G220S	17VC
	CPD-E400 CPD-G400	F99
	CPD-E500 CPD-G500 GDM-F500R	G1
	CPD-G420 CPD-G420S CPD-G520 GDM-F420 GDM-F520	CR1
	GDM-FW900	G1W

**DIGITAL ALIGNMENT SYSTEM DAS SET UP**



**NOTE: System will not operate without Security Key (P/O Start Up Kit).**

**REQUIRED DAS SW DOWNLOAD VERSIONS  
AND HW PART NUMBERS**

<b>Ref</b>	<b>Description</b>	<b>Part No. or Download</b>
1A	DAS Start Up Kit: (Includes J Version Security Key, and User's Manuals: Items 3, 5, & 7 listed below.) Order Cables and adapters (Items 8-17 )separately.	T-998-552-51
1B	WinDAS Start Up Kit (Includes Installation Software on CD ROM, Installation Instructions, and Users Manuals). Order Cables and adapters (Items 8-18) separately. HASP Key, Item 18 is required for WinDAS operation.	T-998-607-83
2	DAS Ver. 3.5 SW Program	Download
3	DAS Ver. 3.4 User's Manual; Last Release: 05/94	T-998-553-01
4	DAS Ver. 5.7a SW Program	Download
5	DAS Ver. 5.5 User's Manual; Last Release: 01/28/97	T-998-557-21
6A	DAS Ver. JA1.0.1 SW Program	Download
6B	DAS Ver. JB1.0.2 SW Program	Download
6C	DAS Ver. JC1.4.5 SW Program	Download
6C	DAS Ver. JCH1 SW Program	Download
6D	DAS Ver. JN1.0.7 SW Program	Download
7	DAS Ver. J2.0. User's Manual; Last Release: 09/20/96	T-998-584-21
8	Comm. Control Unit for CPD1430/1730 Monitors.	3-702-589-01
9	Communication Cable for the P3 Chassis.	3-702-610-01
10	Communication Control Unit for X1, X2, N2-chassis.	A-1500-819-A
11	Adapter required with item 10 for the X1 Chassis.	3-702-691-01
12	Communication VISCA Cable (8pin DIN to 8pin DIN) for the P3.5, N1, and SX chassis.	T-998-552-81
13	VISCA (8 Pin DIN) to RS232 (9 Pin DSUB) Adapter plus VISCA (8 Pin DIN) to RS232 (25 Pin DSUB) Adapter. Needed to use with the P3.5 Chassis Communication VISCA Cable (item 12).	T-998-552-71
14	RS232/RS422 PC Interface Board by Sealevel Systems.	3-083-S-101
15	I <sup>2</sup> C PC Interface Card for H1, SX, X-110, X11R Chassis	9-980-808-01
16	I <sup>2</sup> C Interface Cable and HD15 Connector Adapter.	9-980-809-01
17	Communication Cable for SDM-N50	1-900-255-59
18	Win DAS Hasp Security Key	T-998-607-68
19	WIN DAS SW Ver. 1.3.4 and User Manual	Download

**IMPORTANT NOTES ON SW AND HW UPDATES**

- Newly released DAS SW Versions will be announced via updates of this Service Bulletin.  
The DAS SW is obtained by downloading from one of the following (2) Internet Web Sites.

Sony Service Center (SSC Web Site):

Contact your Sony Service Center manager to obtain the URL address, username, and password needed to access the SSC Web Site.

Sony Authorized Service Center (ASC Web Site):

Contact your Sony Technical Representative to obtain the URL address, username, and password needed to access the ASC Web Site.

- The Start Up Kit Does Not include HW Items 8-17. Items 8-17 are required for communication between the PC and the Monitor. These cables and adapters are Monitor chassis dependent. See the following Set Up illustrations.
- DAS Jx.x.x versions require use of a HOST PC with 486/66Mhz or higher speed rating. WinDAS versions require a Pentium or higher PC Platform. Pentiums do not support the VG-515 Video Signal Generator.
- DAS Windows HASP Key works with DAS Windows and J versions.  
DAS J Version Security Key works with DAS J Versions only.

**VIDEO SIGNAL GENERATORS  
SUPPORTED BY THE DAS SYSTEM**

DAS 3.5	DAS 5.7D	DAS JA1.0.1 DAS JB1.0.2 DAS JC1.4.5 DAS JC H1 DAS JN 1.0.7	WinDAS Ver. 1.3.3	VIDEO SIGNAL GENERATOR TYPES
X	X	X	X	Astro VG-819
X	X	X	X	Astro VG-819S
		X	X	Astro VG-823
		X	X	Astro VG-823DAS
X	X	X	X	Quantum Data QD801GF
X	X	X	X	Quantum Data QD801GF-ISA
X	X	X		TEAM VG-515
X	X	X	X	TEAM VG-516pc
X	X	X	X	TEAM VG-530pc
X	X	X		Sencore CM-2250

**DIGITAL ALIGNMENT PROCEDURE FOR J VERSION (DOS BASED) DAS  
(By Thomas Vo, Dallas SSC)**

<b>STEP BY STEP</b>	<b>NOTE</b>	<b>TYPE OR PRESS HOT KEY</b>
1. Select DAS Program.	Ver. 5.x or J4.x.x.	C:\>cd\j.x.x or C:\j.x.x>DAS
2. Select Model Number.	Sub Model versions based on Serial Number.	F2
3. Select Control Generator. Function.	Check all modes. Note the mode customer is using for Step 7.	F6
4. Reset the Monitor.	Press and Hold Reset for two blinks on the picture. Check some modes to get some idea of geometric distortion.	
5. Read Failure Information.	Note Failure Code. Refresh failure Code.	ALT-F6
6. Touch up the geometry.	Adjust in order: Tilt, Key, and Pin Cushion.	ALT-F5.
7. Factory Preset.	Perform required adjustments on all the modes. Refer to specifications. Verify mode the customer is using.	F5
8. Check Convergence.	Adjust Six Pole Rings.	
9. Check Focus.	Optimize Focus at center and four corners.	
10. Complete functional check.		

**SONY.**

# Computer Monitors Service Bulletin

**CSI-111**

Sony Service Company - Technical Services  
A Division of Sony Electronics Inc.  
Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM17SE1, GDM20SE1

**No.** 71

**Subject:** Deflection Circuit Improvement

**Date:** November 24, 1994

**Symptom:**  
(111)

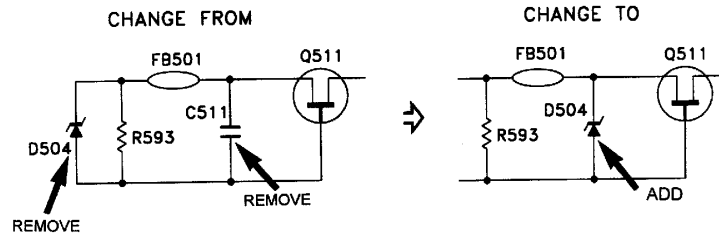
No operation, Front Panel LEDs are flashing

**Solution:** Perform the following on the D-Board:

- 1 Check Q-511, Q-512, PS-500 (Fuse link) and C-548.
- 2 Replace the above items if necessary.

ITEM	DESCRIPTION	PART NUMBER
Q-511	IRFI9630S-LF Transistor (GDM17SE1)	8-729-023-09
Q511	IRFI9630GS-LF Transistor (GDM20SE1)	8-729-015-28
Q-512	2SC3997-CC Transistor	8-729-023-08
PS-500	1.6 Amp Fuse Link	1-532-841-21
C-548	220 $\mu$ F, 20%, 63V Electrolytic Capacitor	1-104-796-11

- 3 Remove C-511.
- 4 Remove D-504 and mount it to the C-511 lands.





# Computer Monitors Service Bulletin

CSI-111

Sony Service Company - Technical Services  
A Division of Sony Electronics Inc.  
Sony Drive, Park Ridge, New Jersey 07656

Model: GDM20SE1, GDM17SE1

No. 89R1

Subject: Failure of Q511 on D Board due to CRT Arcing      Date: August 8, 1995

Symptom: (131) No picture. Scan failure. Q511 failure on D Board .

Solution: In addition to Q511 replacement, Remove SG800 and add SG801 in new location on D Board as described below. This will protect Q511 from CRT arcing.

REF	FORMER		NEW	
	DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER
SG800	1500 V. SPARK GAP	1-519-422-11		
SG801			300 V. SPARK GAP	1-519-421-11

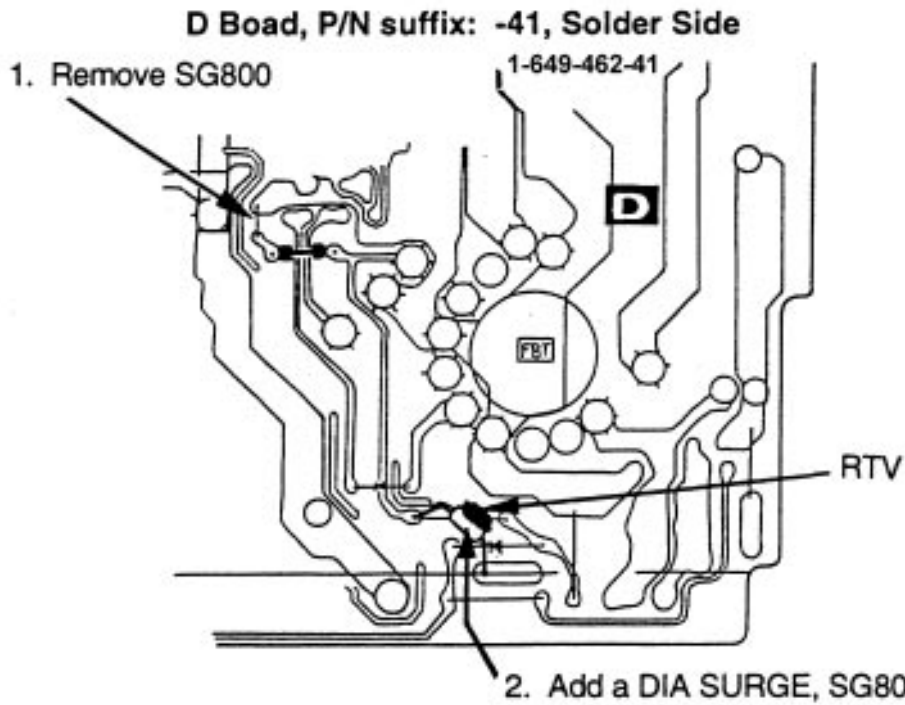
Procedure to remove SG800 and add SG801. See Figure below.

1. Remove SG800 Spark Gap.
2. SG801 will be soldered on the Soldering side of the D Board. Cut the leads of the SG801 as necessary. Solder one lead of SG801 to the land of R825. Solder the other lead of SG801 to the land of the Heatsink as shown.
3. Fix the body of SG801 to the D Board on the board near the FBT ground with RTV or similar adhesive.

cont.



Board, Part No. Suffix -11 to -42

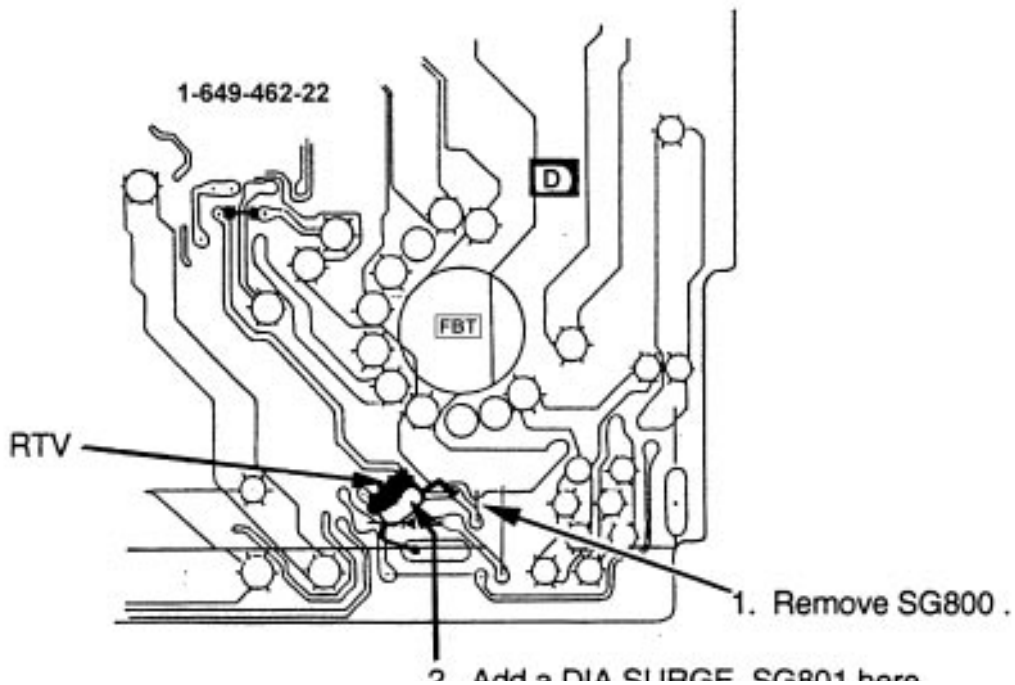


Perform modifications as shown according to the applicable foil pattern.

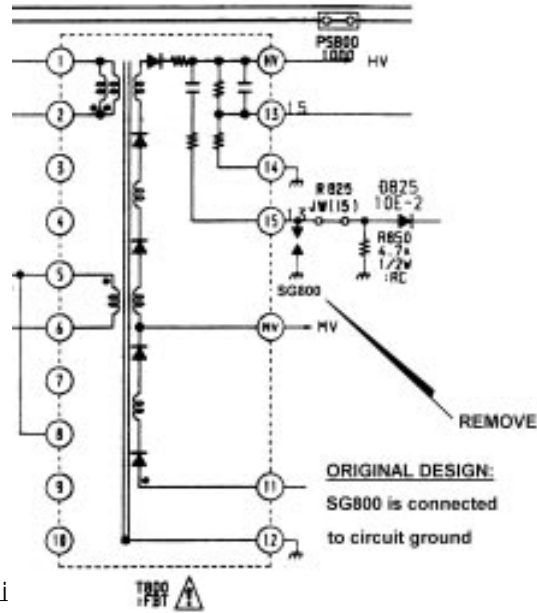
For other foil patterns, perform modifications according to the schematic changes described as follows. cont.

Board, Part No. Suffix -11 to -042

Schematic diagram changes.

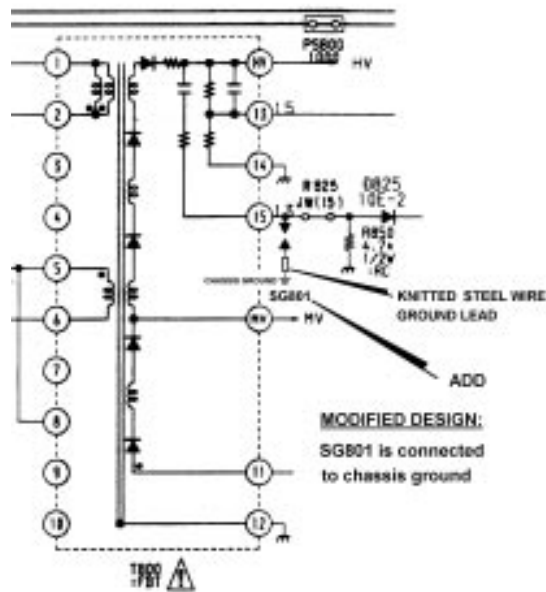


Original Design: SG800 is connected to circuit ground.



Modified Design: SG801 is connected to chassis ground.

Original Design: SG800 is connected to circuit ground.



**Board, Part No. Suffix -43 and Higher**

Do not modify. These units are updated in production.

# Computer Monitors Service Bulletin

**CSI-111**

Sony Service Company - Technical Services  
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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM17SE1, GDM20SE1

**No. 74**

**Subject:** Improved Part

**Date:** December 22, 1994

**Symptom:**

(\*\*)

If D503, D505 and D506 require replacement, use the new replacement.

**Solution:** D503, D505 and D506 were changed to the following new part below:

REF	FORMER		NEW	
	DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER
D503	ERC91-02 DIODE	8-719-920-67	ERC90M-03 DIODE	8-719-048-73
D506	ERC91-02 DIODE	8-719-920-67	ERC90M-03 DIODE	8-719-048-73
D505	EGP30G DIODE	8-719-979-57	ERC90M-03 DIODE	8-719-048-73





# CONFIDENTIAL

CSI-111

Sony Service Company  
National Technical Services  
A Division of Sony Electronics Inc.  
Park Ridge, New Jersey 07656

## Service Bulletin Computer Monitors

**Model:** GDM-17SE1, GDM-20SE1

**No.** 125

**Subject:** No Picture due to loss of CRT Heater Voltage

**Date:** July 3, 1996

### Symptom:

(\*\*)

If the screen is dark, this may be due to loss of CRT heater voltage caused by IC604 failure on the G Board. Effected units have IC604 marking shown in the illustration below. Units with IC604 corrected have green labels affixed to the G Board shield case and to the information label on the rear panel.

### Solution:

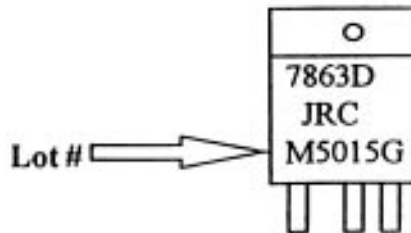
Then, please perform the following procedure on the G Board.

Note: The part listed below is needed to complete this procedure.

REF	DESCRIPTION	PART NUMBER
IC604	IC NJM7863FD	8-759-164-53

1. Check the Lot No. on IC 604. See illustration below.

#### IC604 MARKINGS



2. If the Lot No. of IC604 is "**M5015G**", then replace IC604 with the new component.
3. If IC604 was replaced, then mark the unit by affixing a small (6-10 mm) green label to the G Board shield case. Also, affix a small (6-10 mm) green label to the information label on the rear panel of the unit.

The correction procedure is completed.



**Model:** GDM-17SE1, GDM-20SE1**No.** 267**Subject:** Operating Instructions for DAS**Date:** October 13, 1999**Symptom:**  
**(1335)**

What are the operating instructions for using the Digital Alignment System, DAS<sup>™</sup> to align these models. The following procedures are helpful to use when starting out to adjust these models with the DAS system.

**Solution:**

Please use the following procedures as a guideline to adjust these models with the DAS system.

**DIGITAL ALIGNMENT PROCEDURE FOR THE DAS SYSTEM  
(By Thomas Vo, Dallas SSC)**

STEP BY STEP	NOTE	TYPE OR PRESS HOT KEY
1. Select the DAS Program.	Ver. 5.xxx	C:\>CD\5.xxx C:\5.xxx>DAS
2. Select the Model Number.	Different sub-model is selected according to the unit Serial Number.	F2
3. Select the Control Video Generator Function.	Check all Timing Modes. Note the mode the customer is using to verify in Step 7.	F6
4. Reset the Monitor.	Press the Front Panel Reset Button. Hold for two blinks of the picture. Check some modes to get some idea of the geometric distortion.	
5. Read the Failure Information.	Note the Failure Code. Refresh the Failure Code.	ALT-F6
6. Touch up the Geometry.	F9 for Rotation. Complete other functions and Prime Mode adjustments. Adjust all values to the appropriate model specifications.	ALT-F5

CONT.

**DIGITAL ALIGNMENT PROCEDURE FOR THE DAS SYSTEM CONT.**

<b>STEP BY STEP</b>	<b>NOTE</b>	<b>TYPE OR PRESS HOT KEY</b>
7. Adjust Factory Presets.	Perform adjustment on all the modes. Verify the customer used mode noted in Step 3.	F5
8. Check the color convergence.	Adjust 6 Pole Ring and Digital Alignment	
9. Check Focus	Use highest resolution Timing Mode. Verify focus at center and four corners.	
10. Complete the Functional Check.		

The operating procedure for the DAS system is completed.



# Computer Monitors Service Bulletin

**CSI-111**

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Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM-17SE1, GDM-20SE1

**No. 99**

**Subject:** Picture not Focused at Sides or in Spots.

**Date:** November 10, 1995

**Symptom:**

(133)

Picture out of focus along the side or in random areas. Failure of dynamic focus circuits is caused by damaged IC404 on the D board.

**Solution:**

IC404 is damaged by energy of CRT arcing at G4. Replacing IC404 will restore dynamic focus function. Adding two new capacitors and one new diode to the IC404 circuit will reduce the arc energy reaching IC404.

### PARTS REQUIRED

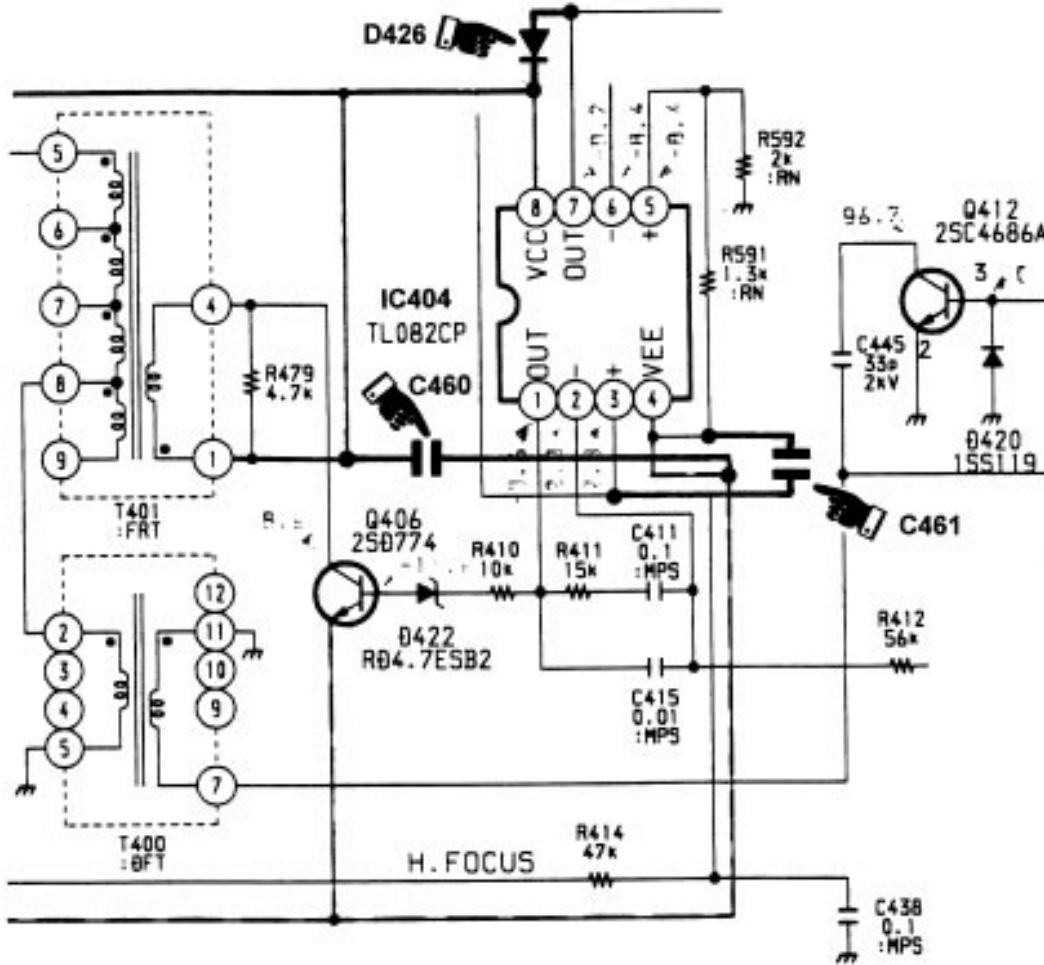
REF. NO.	COMPONENT DESCRIPTION	SONY P/N	CONNECTIONS TO IC404
IC404	IC: TL082CP	8-759-503-91	Replace IC
C460	Film Cap.: 0.1 MF 5% 50V	1-137-399-11	Pin 8 and Pin 4
C461	Film Cap.: 0.1 MF 5% 50V	1-137-399-11	Pin 3 and Pin 4
D426	Diode: 1SS19	8-719-911-19	Cathode to Pin 8; Anode to Pin 7

The circuit changes are indicated in the schematic figure on the following page. The PCB changes are indicated in the layout figure on the last page.

CONT.



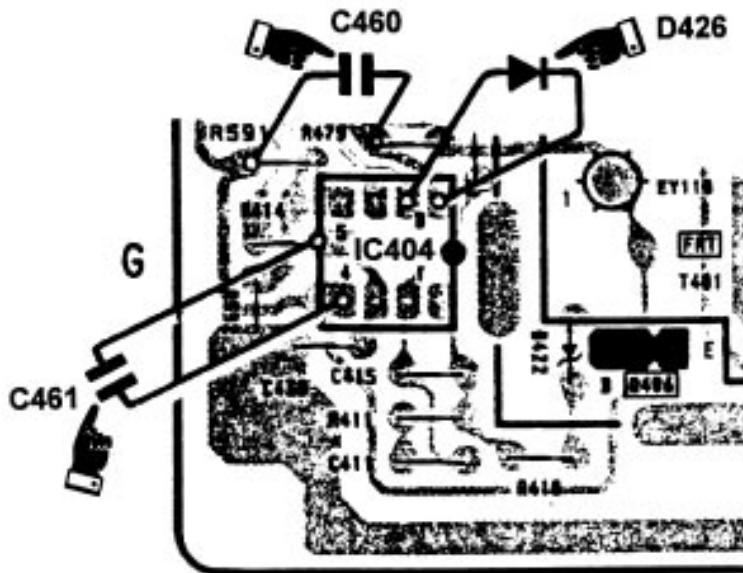
D Board Schematic: C460, C461, D426 added to IC404.



Procedure for implementing circuit changes.

1. Replace IC 404 on the D Board.
2. Install C460 as a new part. Cut leads to about 0.5" length. Solder tack one lead to IC404 Pin 4 at the R591 solder pad. Solder tack the other lead to IC404 Pin 8 at the R479 solder pad.
3. Install C461 as a new part. Cut leads to about 0.4" length. Solder tack one lead to IC404 Pin 3 at the R414 solder pad. Solder tack the other lead to IC404 Pin 4 solder pad.
4. Install D426 as a new part. Cut leads to about 0.4" length. Solder tack the anode lead to the IC404 Pin 7 solder pad. Solder tack the cathode lead to IC404 Pin 8 solder pad.
5. Secure C460, C461, D426 component bodies to PCB surface with RTV as needed.

**D Board Layout: C460, C461, D426 Connections to IC404.**



Filename: C\_P0099.SB  
Directory: J:\SBDOC\NOV95  
Template: C:\WINWORD\TEMPLATE\S\_BULL.DOT  
Title:  
Subject:  
Author: Hoyt Wing Lee  
Keywords:  
Comments:  
Creation Date: 11/10/95 9:52 AM  
Revision Number: 2  
Last Saved On: 11/10/95 9:52 AM  
Last Saved By: Hoyt Wing Lee  
Total Editing Time: 0 Minutes  
Last Printed On: 04/01/96 10:17 AM  
As of Last Complete Printing  
Number of Pages: 3  
Number of Words: 319 (approx.)  
Number of Characters: 1,823 (approx.)

# Computer Monitors Service Bulletin

**CSI-111**

Sony Service Company - Technical Services  
A Division of Sony Electronics Inc.  
Sony Drive, Park Ridge, New Jersey 07656

**Model:** GDM-17SE1, GDM-20SE1

**No. 99**

**Subject:** Picture not Focused at Sides or in Spots.

**Date:** November 10, 1995

**Symptom:**

(133)

Picture out of focus along the side or in random areas. Failure of dynamic focus circuits is caused by damaged IC404 on the D board.

**Solution:**

IC404 is damaged by energy of CRT arcing at G4. Replacing IC404 will restore dynamic focus function. Adding two new capacitors and one new diode to the IC404 circuit will reduce the arc energy reaching IC404.

### PARTS REQUIRED

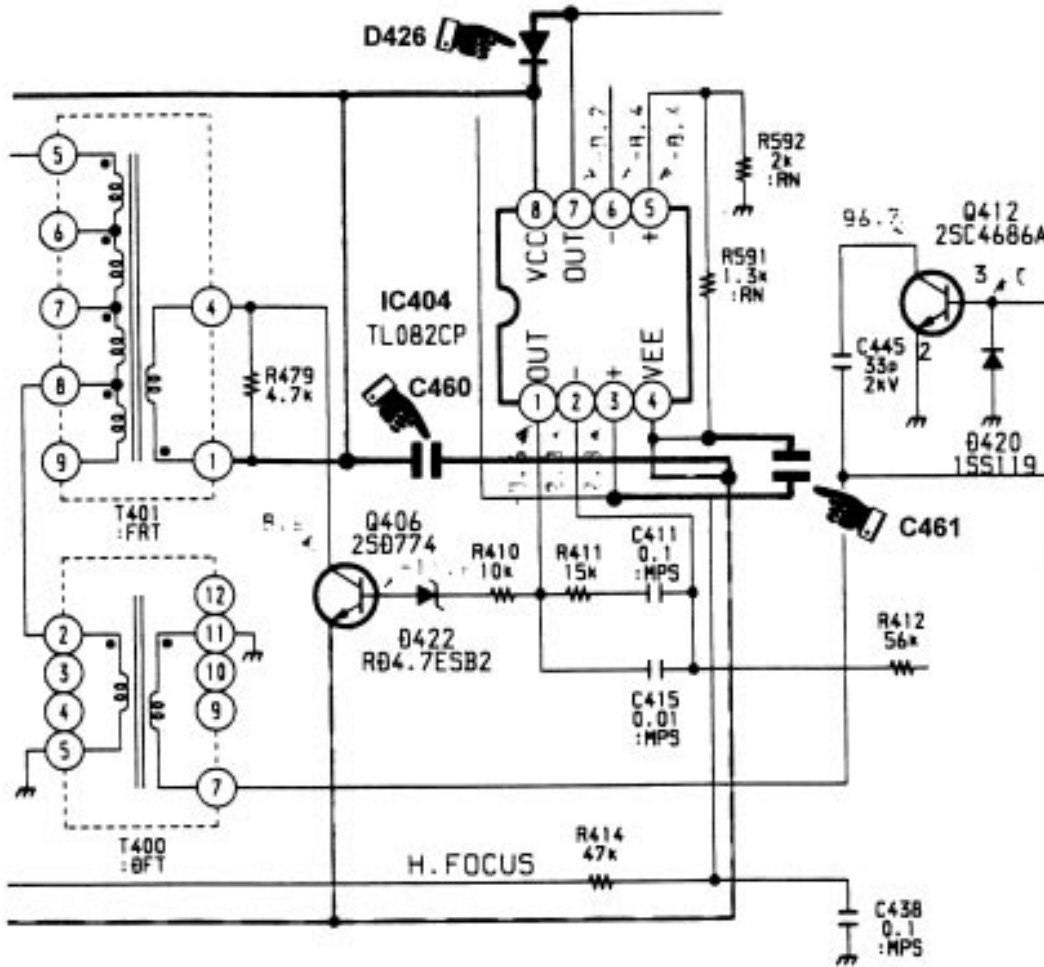
REF. NO.	COMPONENT DESCRIPTION	SONY P/N	CONNECTIONS TO IC404
IC404	IC: TL082CP	8-759-503-91	Replace IC
C460	Film Cap.: 0.1 MF 5% 50V	1-137-399-11	Pin 8 and Pin 4
C461	Film Cap.: 0.1 MF 5% 50V	1-137-399-11	Pin 3 and Pin 4
D426	Diode: 1SS19	8-719-911-19	Cathode to Pin 8; Anode to Pin 7

The circuit changes are indicated in the schematic figure on the following page. The PCB changes are indicated in the layout figure on the last page.

CONT.



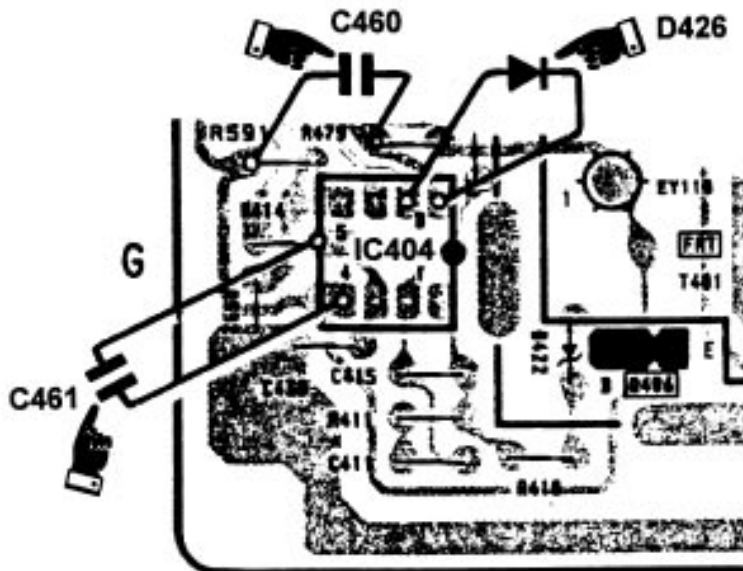
D Board Schematic: C460, C461, D426 added to IC404.



Procedure for implementing circuit changes.

1. Replace IC 404 on the D Board.
2. Install C460 as a new part. Cut leads to about 0.5" length. Solder tack one lead to IC404 Pin 4 at the R591 solder pad. Solder tack the other lead to IC404 Pin 8 at the R479 solder pad.
3. Install C461 as a new part. Cut leads to about 0.4" length. Solder tack one lead to IC404 Pin 3 at the R414 solder pad. Solder tack the other lead to IC404 Pin 4 solder pad.
4. Install D426 as a new part. Cut leads to about 0.4" length. Solder tack the anode lead to the IC404 Pin 7 solder pad. Solder tack the cathode lead to IC404 Pin 8 solder pad.
5. Secure C460, C461, D426 component bodies to PCB surface with RTV as needed.

**D Board Layout: C460, C461, D426 Connections to IC404.**



Filename: C\_P0099.SB  
Directory: J:\SBDOC\NOV95  
Template: C:\WINWORD\TEMPLATE\S\_BULL.DOT  
Title:  
Subject:  
Author: Hoyt Wing Lee  
Keywords:  
Comments:  
Creation Date: 11/10/95 9:52 AM  
Revision Number: 2  
Last Saved On: 11/10/95 9:52 AM  
Last Saved By: Hoyt Wing Lee  
Total Editing Time: 0 Minutes  
Last Printed On: 04/01/96 10:17 AM  
As of Last Complete Printing  
Number of Pages: 3  
Number of Words: 319 (approx.)  
Number of Characters: 1,823 (approx.)



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**Model:** CPD-15SX1, CPD-100SX, CPD-200SX, CPD-15SF1, CPD-17SF1, GDM-17SE1, GDM-20SE1**No. 215****Subject:** Procedure for Built-In Raster Aging**Date:** August 24, 1998**Symptom:****(1181)**

The unit has come in for service. Raster Aging is necessary for testing symptoms and for warming the unit prior to adjusting set up. The Built-In Raster Aging mode should be used for this purpose. Special procedures are required to enable the Built-In Raster Aging functions.

**Solution:**

Please refer to the following procedures to put the unit into the Built-In Raster Aging modes. Use the procedure listed for the particular model. The times listed are approximate.

**BUILT-IN RASTER AGING****CPD-15SX1, CPD-100SX:**

1. Connect AC cable and turn On Power Button.
2. Remove Video Cable. Wait for Power Save.
3. Remove AC Cable.
4. Reconnect AC Cable.

**CPD-200SX:**

1. Connect AC cable.
2. Remove Video Cable.
3. Press the Power Button in with " ← "&" → " buttons and hold for 3 seconds.

**CPD-15SF1, CPD-17SF1:**

1. Connect AC cable.
2. Remove Video Cable.
3. Turn On Power Button and hold The Power Button In For 2 Seconds

**GDM-17SE1, GDM-20SE1:**

1. Connect AC cable.
2. Remove Video Cable.
3. Press the Power Button in with " CNTL " button and hold for 3 seconds.

The set up procedure is completed.

# Computer Monitors Service Bulletin

CSI-111

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**Model:** GDM2038, GDM2036S, GDM1936,  
GDM20SE1, GDM17SE1, CPD17SF1,  
CPD15SF1, CPD1730, CPD1430

**No. 80**

**Subject:** Recommended DAS Process

**Date:** January 9, 1995

**Symptom:**

(\*\*\*)

DAS Menus are not in alignment order. What is the best procedure for Monitor alignment ?

**Solution:** Please apply this General Procedure when using DAS:

Step	Description
1	Read Failure Information under the ADJUSTMENT Menu. This will give you insight of any prior failures that may have occurred (Scan, ABL, HV, SW). Also, Read the Monitor ID that is required to select the appropriate model number.
2	Select Generator "VG-515" under the SETUP Menu.
3	Select appropriate Model under the SETUP Menu. Monitor ID may be req. see step 1.
4	Down Load EEPROM data to Computer under the FILE Menu.
5	<i>If the Microprocessor Board is replaced continue otherwise, skip to step 11.</i>
6	Select $\mu$ P Board under the FILE Menu.
7	Select Rotation from the ADJUSTMENT Menu. Perform a rough rotation adjustment
8	Perform H frequency Adjustments
9	Perform B+ Adjustments when applicable
10	Perform General Size/Centering adjustments
11	Perform Convergence adjustments
12	Perform Focus Adjustment
13	Perform Geometric Alignment for each Mode.
14	Place unit under Aging for over 30 min.
15	Perform White Balance for HSI Models.
16	Confirm all adjustments using the Control Signal Generator Menu.





# Computer Monitors Service Bulletin

CSI-111

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**Model:** GDM17SE1, GDM20SE1

**No. 66**

**Subject:** Selecting the Correct Monitor ID # in DAS 5.1a

**Date:** October 13, 1994

**Symptom:**

(\*\*\*)

How do I find the Monitor ID Number required by the DAS 5.1a Software ?

**Solution:**

Follow these steps to find the corresponding Monitor ID Number:

1. Select any Model from the Model Selection Menu.
2. Select "Maintenance" under the Adjustment Menu.
3. The Monitor ID is displayed at the Bottom of the Screen.

**Example:** MONITOR ID 0019.

4. Return to the Model Menu and select the Exact Model using the known ID Number.

**Example:** Select Model GDM17SE1 XX1X based on the previous example where the monitor ID was 0019

5. Complete the alignment process as normal.





Filename: C\_P0066.SB  
Directory: J:\SBDOC\OCT94  
Template: C:\WINWORD\S\_BULL.DOT  
Title: CSI-111, DAS 5.1a Monitor ID Selection  
Subject:  
Author: Hoyt Wing Lee  
Keywords:  
Comments:  
Creation Date: 10/13/94 9:35 AM  
Revision Number: 2  
Last Saved On: 10/13/94 9:35 AM  
Last Saved By: Hoyt Wing Lee  
Total Editing Time: 0 Minutes  
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As of Last Complete Printing  
Number of Pages: 2  
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Number of Characters: 942 (approx.)

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## Service Bulletin Computer Monitors

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**Model:** GDM-17SE1, GDM-20SE1

**No.** 127

**Subject:** Vertical (Top to Bottom) Line in Picture

**Date:** August 9, 1996

**Symptom:**

(\*\*\*)

If the picture shows a faint vertical bar or line located about 1/3 from left side of the screen. It is most noticeable with a white or mid-gray screen using 640x480 or 1024x768 Mode.

**Solution:**

Then, please perform the following procedure to troubleshoot causes and implement countermeasures. Critical signal and ground connectors will be checked, cleaned, reseated, and/or replaced. Inspect the connection surfaces for contamination or corrosion and for correct contact. Clean, re-seat, and/or replace connectors/cables as necessary.

1. On the A Board assembly , check and service the ground connections between the A Board, shield box assembly, and the braided cable grounds. Check both ends of the braided ground cables.
2. On the A Board, check and service the R , G, and B coaxial cable connections.
3. Also, on the A Board, check and service the CN302, CN303, and CN304 ground connections.
4. On the D Board, check and service the CN901, CN902, and CN505 ground connections.
5. On the D Board assembly , check and service the ground connections to the braided cable grounds. Check both ends of the braided ground cables.

The procedure is completed.

