

DIGITAL	FCO	CATEGORY [F]	PAGE 1 OF 9
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FIELD CHANGE ORDER	NUMBER: VR290-F001
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APPLICABILITY:

Applies to all VR290 monitors having serial numbers less than FF905xxxxxx, AND having an EHT cable dated before 01/89.

PROBLEM & SYMPTOM:

- 1.) Display out of focus, or...
- 2.) CRT socket board or APP board failed and, EHT cable older than 08/87.

SOLUTION:

Replace EHT cable where applicable.

QUICK CHECK:

1. Presence of green sticker located near serial number on rear panel.
2. EHT Cable has date code greater than 01/89.

PRE/CO-REQUISITE FCO:

N/A

MTTI HRS

0.8 Hrs.

TOOL/TEST EQUIPMENT: Anode discharge tool, DEC p/n 29-24717-00, Terminal Technician's tool kit or equivalent.

FCO PARTS INFORMATION

FCO KIT NO.	DESCRIPTION OF CONTENTS	EQ KIT VARIATION APPLICABILITY
EQ-01583-01	1 EHT Cable, 29-25545-00.D01	N/A
	10 Green Stickers	
FA-04912-01	1 FCO Document	

FCO CHARGING INFORMATION

WARRANTY/CONTRACT				NONWARRANTY/NONCONTRACT				
ON-SITE		OFF-SITE		ON-SITE		OFF-SITE		MATERIAL ONLY
TRAVEL/ INSTALL	EQ KIT	INSTALL	EQ KIT	TRAVEL/ INSTALL	EQ KIT	INSTALL	EQ KIT	ORDER-ADMIN, HANDLING PKG, SHIPPING & EQ KIT
DEC	DEC	DEC	DEC	CUS	CUS	CUS	CUS	CUS

APPROVALS

CSSE Mark Buxton	CS LOGISTICS Gloria Sitzman	FS PRODUCT SAFETY Cheryl Buis
CSSE MANAGER Kees Vonk	This Document is published on multiple media including Hardcopy, Customer Services	FCO RELEASE DATE 7 January 1991

MICROMEDIA Diane MacDonald	Microfiche Libraries, Customer Services CD-ROM and MDS Microfiche Libraries.	FCO REVISION A
POPULATION 12,500		PARTS AVAILABILITY January, 1991

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| | | | |
| d | i | g | i | t | a | l |
| - | - | - | - | - | - |

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FCO VR290-F001

PAGE 2 OF 9

This FCO has been written to correct two problems on the VR290 color monitor, both of which concern the EHT cable assembly.

The first problem concerns an internal fault in the EHT Cable that may cause damage to other VR290 FRU's. This problem is only found on cables manufactured before week 8 of year 1987.

The second problem is that EHT cables manufactured between week 27 and week 52 of year 1988 may cause the VR290 to drift out of focus. In some cases it may not be possible to correct this focus drift due to the focus potentiometer being at the end of its travel.

First, it is necessary to ensure that this FCO is required, this should be done in the following way:

1.0 CHECK THE SERIAL NUMBER LOCATED ON THE REAR PANEL.

If it is higher than FF905xxxxxx, then it is not necessary to perform this FCO.

2.0 CHECK FOR THE PRESENCE OF A GREEN STICKER LOCATED NEAR THE SERIAL NUMBER ON THE REAR COVER.

If this sticker is present, then the unit has already been checked, and it is not necessary to perform this FCO.

3.0 CHECK THE MANUFACTURING DATE CODE OF THE EHT CABLE.

3.1 Turn off the power switch and wait 60 seconds.

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*****
* Warning: The CRT stores high voltages that can injure you,      *
*           wait at least 60 seconds before continuing.           *
*****

```

3.2 Disconnect the power cord and video signal cable.
(Continued)

```
  _ _ _ _ _
|d|i|g|i|t|a|l|
|_ _ _ _ _|
```

FCO VR290-F001

PAGE 3 OF 9

-
- 3.3 Face the rear of the monitor. Loose the four captive screws and slide the cover off towards you.
(See Figure 1)

```
  _ _ _ _ _
|d|i|g|i|t|a|l|
|_ _ _ _ _|
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FCO VR290-F001

PAGE 4 OF 9

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*****
* WARNING: Keep your free hand away from any part of the CRT *
*           during the anode discharge process.                 *
*                                                                 *
* NOTE: Avoid tapping or scratching the CRT glass when         *
*           inserting or removing the anode discharge tool.     *
*****
```

- 3.4 Connect the clip of the anode discharge tool, DEC P/N 29-24717-00, to the chassis near the region of the CRT. Using ONE HAND, carefully slip the anode discharge tool under the CRT anode connector cup until it touches the connector prongs. Maintain contact for at least 10 seconds. (See Figure 2)

FIGURE 2

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  _ _ _ _ _
|d|i|g|i|t|a|l|
|_ _ _ _ _|
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FCO VR290-F001

PAGE 5 OF 9

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- 3.5 Pull up the rubber cap of the CRT anode lead from the glass surface.
- 3.6 Disconnect the CRT anode wire from the CRT by pushing first in

one direction to free one prong, then in the other direction to free the second prong. (See Figure 3)

FIGURE 3

3.7 Examine the underside of the grey bleeder box located on the anode cable for the date code. This code will be in the format WW/YY where WW=week and YY=year of manufacture.

3.8 If this date is;

Before 08/87 or not date is present go to step 5.

In the range 09/87 to 26/88, then go to step 4.

In the range 27/88 to 52/88 then go to step 5.

After 89/01 then go to step 4.

d	i	g	i	t	a	l	

FCO VR290-F001

PAGE 6 OF 9

4.0 RE-ASSEMBLE UNIT

4.1 Re-connect the CRT anode cap ensuring that you insert both prongs.

4.2 Re-install the rear cover.

4.3 Re-connect power and video signal cables.

4.4 Power-on monitor and check for correct operation.

4.5 Go to Step 7.0.

5.0 EHT CABLE REMOVAL

5.1 Facing the rear of the unit, loosen the two captive screws at the base of the video sub-assembly, Swing up the video sub-assembly and push it straight back to lock it into place. (See Figure 4)

FIGURE 4

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  _ _ _ _ _  
 | | | | | | | |
 | d | i | g | i | t | a | l |  
 | _ | _ | _ | _ | _ | _ | _ |
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FCO VR290-F001

PAGE 7 OF 9

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- 5.2 Disconnect the EHT cable from the APP board by grasping the plastic ring on the EHT connector using needlenose pliers, turn the ring counterclockwise, and release the EHT connector. (See Figure 5)

FIGURE 5

- 5.3 Disconnect the EHT cable from the CRT socket board by first releasing the ground straps from the video board and chassis. Then removing the red, blue and green and G1 voltage cables from their respective sockets on the neck of the CRT and turn it so the component side faces upwards. By GENTLY depressing the small lever on the EHT focus lead connector, remove the connector from its socket. (See Figure 6)

NOTE: If you break the lever, it will be necessary to replace the whole connector. A spare connector can be found in the VR290 miscellaneous spares kit, DEC P/N 29-25543-00.

FIGURE 6

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  _ _ _ _ _  
 | | | | | | | |
 | d | i | g | i | t | a | l |  
 | _ | _ | _ | _ | _ | _ | _ |
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FCO VR290-F001

PAGE 8 OF 9

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- 5.4 Release the EHT cable from the plastic harness.
- 5.5 Pull the two ends of the cable through the assembly toward the rear. The cable is now free.

6.0 REPLACEMENT

The replacement of the EHT cable is the reverse of the removal

procedure, a summary of which follows.

- 6.1 Re-thread the EHT cable through the chassis.
- 6.2 Connect the anode wire to the CRT and replace the anode cap.
- 6.3 Place the EHT cable in the plastic harness.
- 6.4 Connect the EHT focus lead to the CRT socket board by snapping in the connector.
- 6.5 Carefully place the CRT socket board onto the neck of the CRT and secure all associated cabling.
- 6.6 Connect the EHT cable to the APP board, by pushing the cable into the hole of the flyback transformer until you feel the cable tip snap into place then, push the plastic ring on the cable against the flyback transformer case and using needlenose pliers turn the pliers turn the plastic ring clockwise to secure the cable.
- 6.7 Close the video subassembly by tilting it upwards, then pulling it towards you, secure the two captive screws.
- 6.8 Power on the monitor and perform the focus adjustment as described on Page 64, Section 5.2.2 of the VR290 Illustrated Service Manual p/n EK-VR290-SV.
- 6.9 Power down the monitor.
- 6.10 Replace the cover and secure with the four screws.
- 6.11 Power-on monitor and check for correct operation.

7.0 MARKING FOR FUTURE IDENTIFICATION

Place one of the green stickers supplied in the FCO kit below the serial number on the rear panel to aid identification in the future.

NOTE: An extra supply of stickers has been provided for those cases where it is necessary to mark the unit without performing the FCO.

8.0 REPORTING

- 8.1 Where applicable, update the Site Management Guide to reflect this FCO.
- 8.2 Report this FCO activity on the LARS form in the "Fail Area / Module / FCO / Comments" column as follows:

CATEGORY F	USA	GIA	EUROPE
Activity -			
(a)Contract and Warranty	W	U	Y
(b)IN-DEC Contract	K		
Hardware Segment Code	111		
Non Contract/Non Warranty	F	F	F
(c)RTD/Off-site Agreement	F		
Product Line	01		
DEC Option	VR290-Dx	VR290-Dx	VR290-Dx
Type of Call	M	M	M
Action Taken	D	D	I
Fail Area-Module-FCO-Comments	VR290-F001	VR290-F001	VR290-F001
Material Used	EQ-01583-01	EQ-01583-01	EQ-01583-01

- (a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements.
- (b) Applies to INDEC AREA ONLY - Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements.
- (c) RTD=Return to Digital or Off-site Agreements; If Field Engineer On-site, use Activity Code "F".

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 \\BUXTON
 \\1991
 \\JAN
 \\FCO_DOCS