

4 ELECTRICAL ADJUSTMENT PROCEDURES

TEST EQUIPMENT AND TOOLS

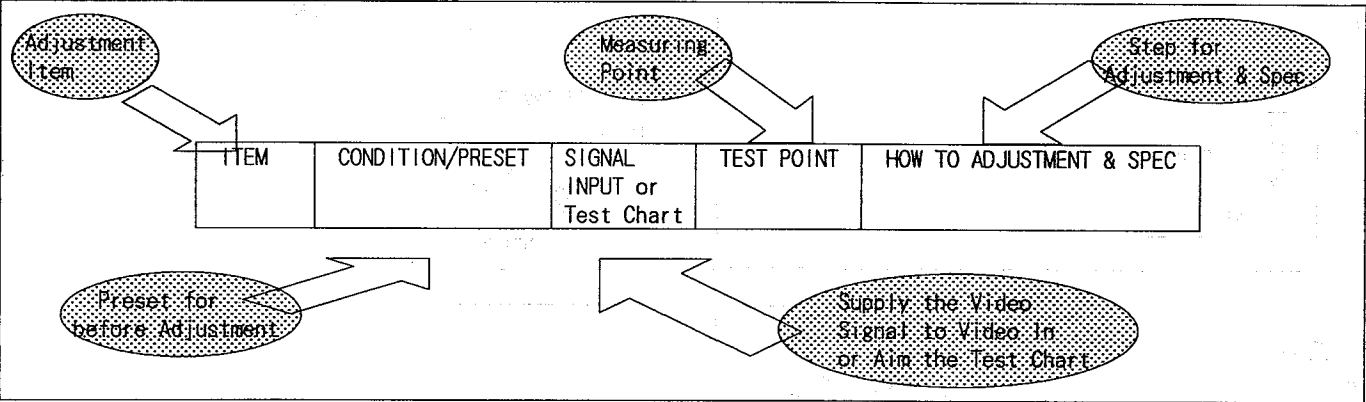
The following equipment are required for adjustment of the VTR & E.V.F section of VHS-Movie.

Item & Spec/Range		Item & Spec/Range	
1	VFK0668	4	Video Sweep Generator
2	Dual Trace Oscilloscop		Frequency Range: 0.0 ~50MHz
	Voltage Range : 0.01~50V		Frequency Range: 0.0 ~50MHz
3	Probe for Oscilloscop	5	Colour Monitor TV
	Voltage Range : 0.01~50V	6	Plastic Tip Driver
	(10:1 or 1:1Probe)	7	VHS-C Movie Alignment Tape(VFM8081HQPP)
		8	VHS-C Blank Tape
		9	Colour Bar Chart/Gray Scale Chart/Black & White Chart

PREPARATION:

- (A). Remove the Casing panels.
- (B). Connect the Viewfinder to unit with Extension Cable VFK0668(24Pin).
- (C). The camera unit must be completely aligned before viewfinder adjustment.
- ⇒Please Refer to Fig.E1

How to Read the Adjustment Procedure



Preparation for Electrical Adjustment

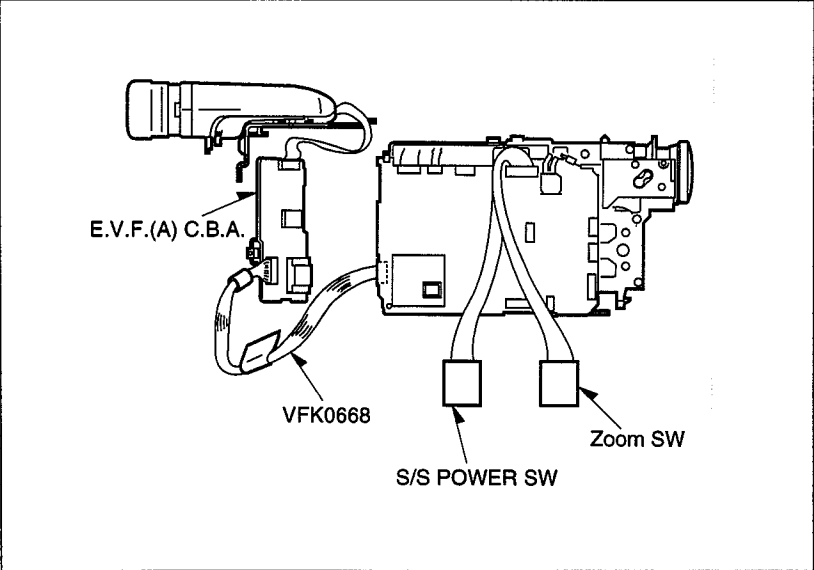


Fig. E1

Note:Triggering the Oscilloscope
To trigger the Oscilloscope, following test point is used.

H. Rate: Video Output
V. Rate: PP3001-10(Head Amp Switching Signal)

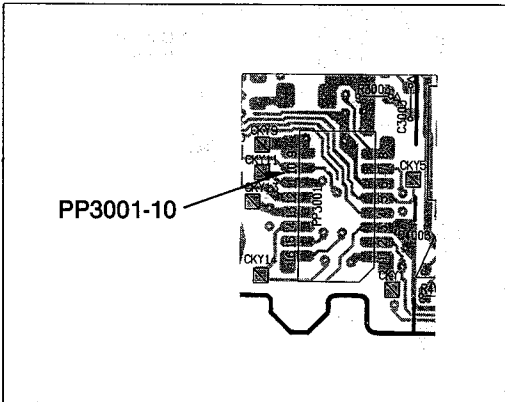


Fig. E2

4-1. ELECTRICAL ADJUSTMENT FOR COLOUR E V F SECTION

Note: The camera unit must be completely aligned before viewfinder adjustment.

ITEM	CONDITION/PRESET	SIGNAL INPUT or Test Chart	TEST POINT	HOW TO ADJUSTMENT & SPEC
1. POWER VOLTAGE	1. Connect the Digital Volt Meter to CL804.		CL804.	1. Turn VR809 so that the voltage at CL804 become $12.0 \pm 0.03V$.
2. PICTURE CENTREING	1. Aim the Camera at the Colour bar Chart.	Colour Bar Chart	CL807 (Or IC802-12)	1. Turn VR808 until $t1 = t2 \pm 0.1\text{usec}$. (Please refer to Fig. E3.)
3. PEDESTAL LEVEL	1. Aim the Camera at the Gray-Scale Chart. 2. Connect the oscilloscope to CL803.	Gray-Scale Chart	CL803.	1. Turn the VR810 so that the "A" level becomes $2.4 \pm 0.1V$. (Please refer to Fig. E4.)
4. COLOUR G LEVEL	1. Aim the Camera at the Gray-Scale Chart. 2. Connect the oscilloscope to CL803.	Gray-Scale Chart	CL803.	1. Turn the VR802 so that the "A" level becomes $1.9 \pm 0.1V$. (Please refer to Fig. E5).
5. TINT	1. Aim the Camera at the Colour-bar Chart. 2. Connect the oscilloscope to CL801/CL802	Colour-bar Chart	CL801. (IC802-43)	1. Turn the VR804/VR803 so that the R/B level become Fig. E6. (Please refer to Fig. E6). Also please check Viewfinder, Picture become natural colour.
6. WHITE BALANCE	1. Aim the Camera at the Gray-Scale Chart.	Gray-Scale Chart	E.V.F	1. Turn the VR805 & VR806 so that the pictur on E.V.F become black and white.

4-2 Fig For ELECTRICAL ADJUSTMENT OF COLOUR E.V F. SECTION

PICTURE CENTREING ADJUSTMENT

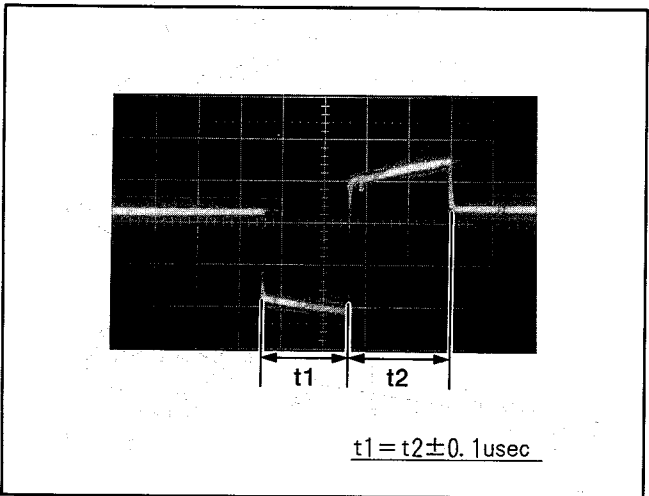


Fig. E3

PEDESTAL LEVEL ADJUSTMENT

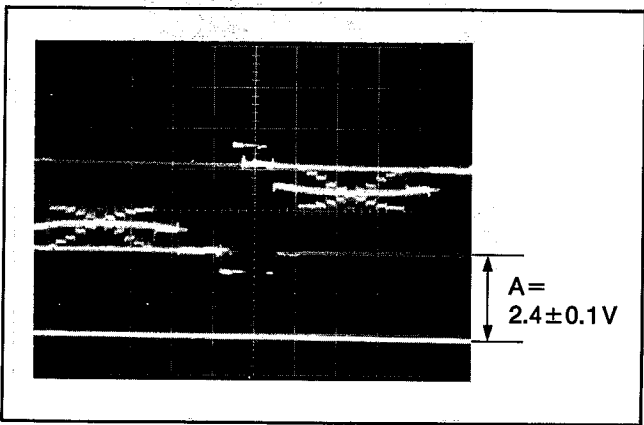


Fig. E4

COLOUR G LEVEL ADJUSTMENT

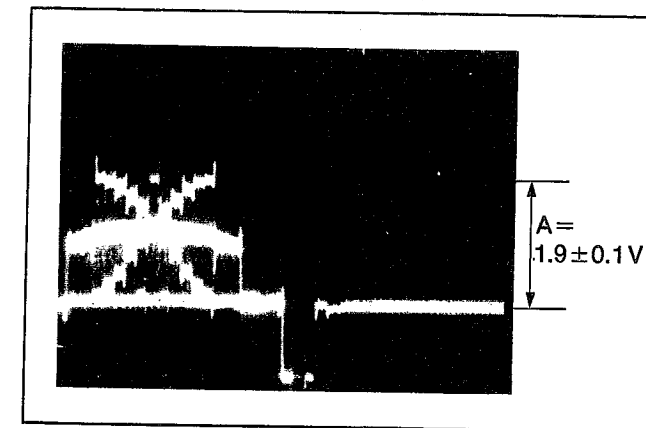
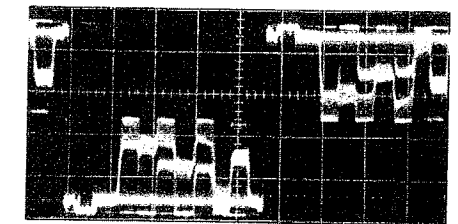


Fig. E5

TINT ADJSUTMENT

Before Adjustment



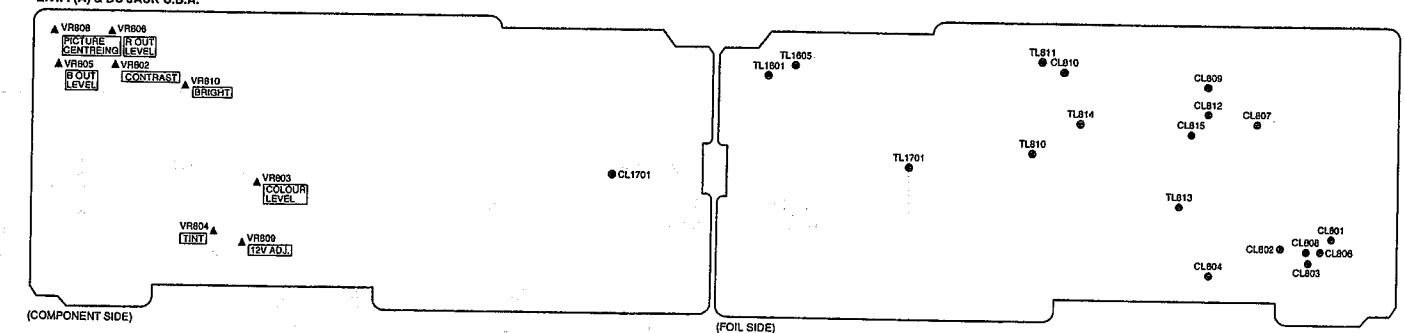
After Adjustment



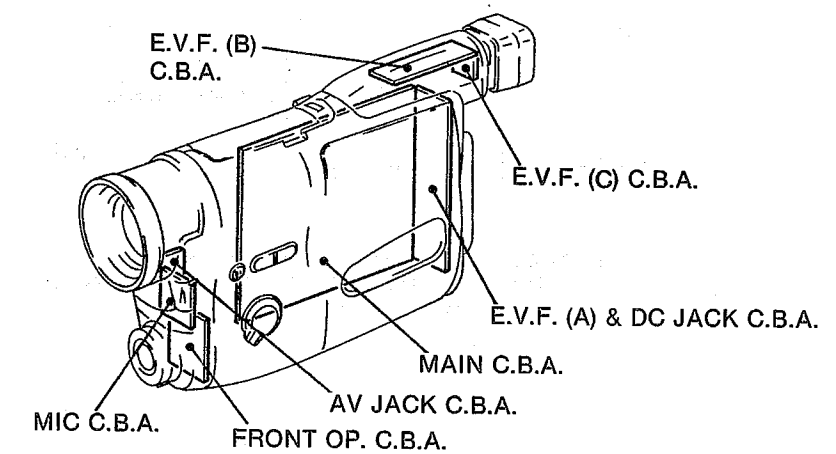
Fig. E6

LOCATION OF TEST POINTS & CONTROLS

E.V.F. (A) & DC JACK C.B.A.



5 CIRCUIT BOARD LAYOUT



Note: Adjutment for CAMERA/VTR Section requied EVR fixture.
So, adjustment procedure described on Service manual VMD9603M117