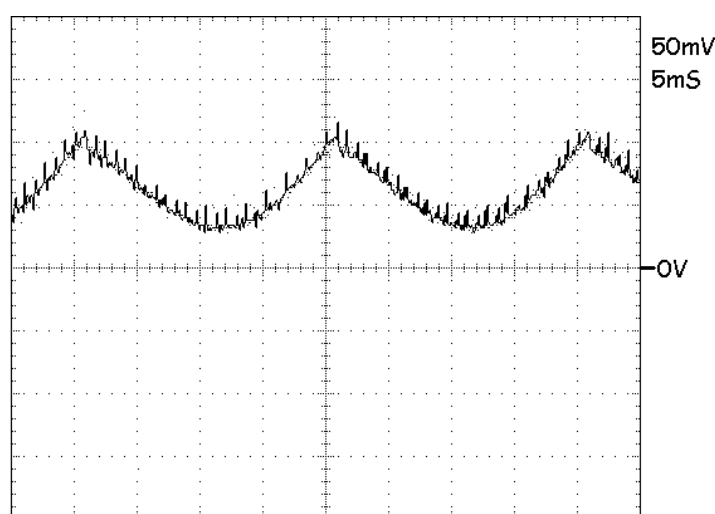


<b>MODELS</b>	<b>56FW53H</b>	<b>66FW53H</b>	<b>66FW54H</b>	<b>76FW53H</b>
	<b>76FW54H</b>	<b>59ESD7H</b>	<b>66ESD7H</b>	<b>66GF63H</b>
	<b>76GF63H</b>	<b>76GF64H</b>	<b>28HW53H</b>	<b>32HW53H</b>

### Faults in the East/West Circuit

When fault finding in the east/west circuit, it is important to ascertain in which part of the circuit the fault lies. Check the control output of IC801 – pin 32. There should be a parabola waveform on this pin at a base frequency of 50Hz. It will change wave shape depending upon the amount of correction applied, so it is important to enter the service mode and ensure that none of the adjustments are at minimum or maximum.



If this waveform is present, and changes as adjustments are made, then the fault will lie in the drive or output circuitry. Faults in this area include:

1. R519 going high or open circuit – it is a 100k $\Omega$  connected to the 150V supply.
2. Q506 going short, open or overheating – change L603, L604, D502, D503, D504, D516 and C528.
3. D603 and D604 going open or short-circuit.
4. Dry joint on C601 and/or C610.

If the waveform is not present, or is severely distorted, or the adjustment range is poor, then the fault could be caused by the memory IC – IC1003 or the VDP - IC801. It is recommended that if this is the case, then the NVM is blanked or reflashed first. If this does not cure the problem, then it is probable that IC801 is at fault.

Sometimes it will not be possible to set the geometry correctly in all modes after blanking the NVM. In this case it will be necessary to ensure that the EPROM (IC1002) is correct (see CTV2001 05 04). When the correct EPROM is fitted, the NVM will have to be blanked to enable the correct information to be downloaded into it. Replacement EPROM's have been produced so that minimal geometry adjustments are required. If the picture geometry is very poor after following the above procedure, the fault will be elsewhere in the east/west circuitry.

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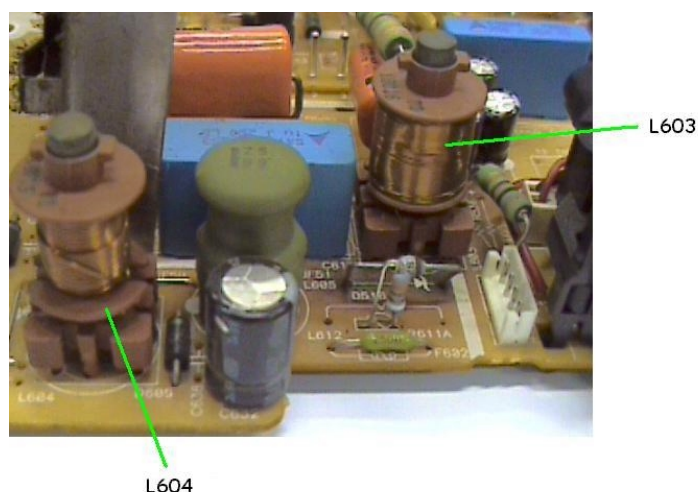
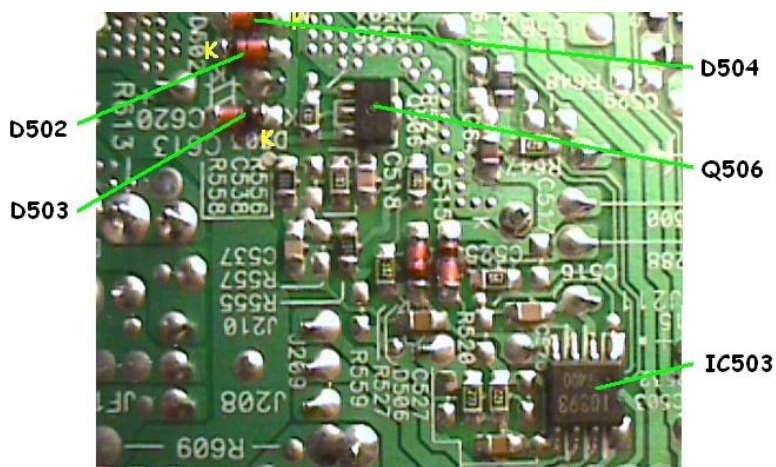
Reference AVW 06062003 - 1  
Revision 1

White – Carry out as required  
Yellow – Carry out as required and whenever the unit comes in for service  
Red – Carry out on all units

Reference	Function	Part Number	Comment
C528	Reservoir capacitor	VCEAGA1JW106M	Leaky
D502/3/4	Clamping diodes	RH-DX0551BMZZ	Intermittently faulty
D516	Clamping diode	RH-EX0837BMZZ	Intermittently faulty
D603	East/west modulator diode	RH-DX0299BMZZ	Open or short circuit
D604	East/west modulator diode	RH-DX0302BMZZ	Open or short circuit
IC1003	NVM	RH01X1603BMZZ	Corrupted - reprogram
IC801	VDP 3120C2	RH-IX1688BMN2	No output
IC801	VDP 3130Y	RH-IX1858BMZZ	No output
L603	Feed coil	RCLIP0286BMZZ	Low resistance – normally 8Ω
L604	Line earth return coil	RCLIP0284BMZZ	Low resistance
Q506	East/west output transistor	RH-TX0151BMZZ	Open or leaky – SMD
R519	Ramp charging resistor	VRD-RA2HD104J	Goes high or open – on component side of PWB

### Notes

- The component list above shows the various component part numbers for parts mentioned in this Technical Bulletin - it is not a list of components to change for east/west or geometry problems.
- IC801 can either be a 3120 or 3130 - please check before replacement.
- D516 is not shown on the GF circuit diagram, although it is fitted to the chassis.
- R519 is sometimes a 150kΩ resistor, check the value before replacing, as fitting the incorrect value will result in poor east/west geometry performance.



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