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### **Philips 25ML8300/05B (FL1.7AA Chassis)**

There was no sync – the field and line scans could be seen slipping slowly through. A scope check at pin 5 of IC7400 showed that the sync signal from the high-end box (where 100Hz scanning conversion takes place) was missing, though it was present at pin 6 of ribbon cable H/S20. There was a crack in the print where the track runs along the edge of the board. When this had been bridged however the fault had hardly changed. R3228 in the high-end box was misadjusted.

Incidentally your eyes are not deceiving you when you look at the circuit diagram: yes, there are two TDA2579B chips in this set! **P.B.**

### **Grundig GT2101 (G1000 Chassis)**

Loss of one colour has become a common problem with these sets lately. So far we have had two causes: either the 330Ω emitter bias resistors (R903, R908 or R913) for the RGB output transistors on the CRT base panel, or the BC847 RGB emitter-follower transistors (TR801/2/3) on the main panel. The resistors go open-circuit while the transistors develop base-emitter leakage.

There's a trap for the unwary. Because of its auto grey-scale action, the video processor chip IC800 will probably be producing a greater output in the channel affect-

# TV Fault Finding

ed than in the other two. So in the case of an open-circuit 330Ω resistor the faulty channel is the one with the largest signal on the main board! **P.B.**

### **Sharp DV5935H (BCTV-A Chassis)**

The 2SD1546 line output transistor Q600 was short-circuit in one of these sets. As I was removing it I noticed that R619 (39Ω, 0.5W) and R632 (39Ω, 0.5W fusible) in the line scan circuit were both burnt. The 0.56μF line scan coupling capacitor C607 was open-circuit. Normal operation was restored when these four items had been replaced, using components obtained from Sharp. **P.B.**

### **Philips CP90 and CP110 Chassis**

Problems in the IF department are becoming more common as these sets age. The IF/sync module is meant to be replaced rather than repaired, but the price of the module is prohibitive. Probably the most common symptoms are ringing on the picture, with herringbone patterning and loss of teletext. In this case coil L5082 is usually the culprit. I have not so far been able to find a source of replacement coils, and instead rob them from old modules. **P.B.**

### **Hitachi C2114R**

If one of these sets keeps reverting to standby, check that the 112V HT supply is correct – measure it at the cathode of D951. If the voltage is high, suspect that R951 (39kΩ, 0.5W 5%) has risen in value. In one set I had in recently the high voltages had killed the TA8427K field output chip IC601. **P.B.**

### **Child Lock**

A **Tatung Model TU2C52** was stuck on ch. 1 and there was no

control of the analogue functions, either via the on-board controls or by remote control. Before you suspect the microcontroller chip or an EEPROM problem, don't forget the child lock. The set proved to be in this lock-out mode. To return to normal operation, hold in the programme + button whilst switching the set on.

While on this subject, with **Ferguson ICC5** series sets you use the Fasttext keys to remove the child lock: press red, green and blue and hold yellow until successful (usually after a few seconds). **S.L.**

### **Philips K40 Chassis**

This set was dead with the line output stage screaming to be put out of its misery. When the supply to the line output stage was disconnected, the HT voltage returned to normal. The BU508A line output transistor T7162 turned out to be leaky. A replacement didn't alter the symptoms however.

When I disconnected the scan coils there was EHT, sound and the tube's heaters lit up. With some relief, I fitted a replacement scan yoke. Sadly, this didn't cure the basic fault.

I eventually found that someone had fitted two 47kΩ, 1W resistors in parallel in the feed to the line driver transistor. As there should be a 680Ω resistor in this position, the supply was insufficient. For those who are not aware of it, the line driver stage is actually on the power supply board which is mounted centrally beneath the neck of the CRT. **S.L.**

### **Sony KVM1421 (BE2A Chassis)**

This set, the teletext version of the KVM1420, was stuck in standby. Only the standby light could be seen, though the power supply was