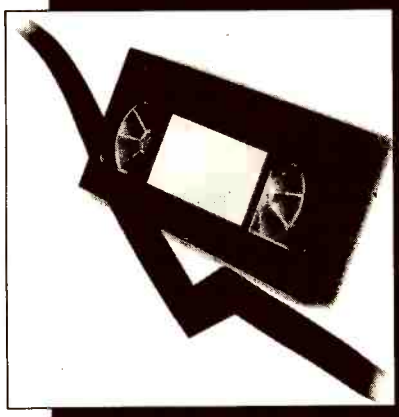

VCR Clinic

Reports from
Philip Blundell, AMIEEIE
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Toshiba V423

The sound would mute and field sync would be lost when there was a lot of white in the picture being played back. A scope check at pin 1 of the mute chip showed that with the pictures concerned the video signal had no sync pulses. When I traced back along the circuit to find the source of this input I came to an AN3248 luminance processing chip. To cut a long story short, I eventually found that the associated 3·3µF electrolytic capacitor CN09 had fallen in value. **P.B.**

Philips VR727

A tape would sometimes jam in this machine, with the loading motor in operation but unable to fulfil its purpose. A replacement drive belt seemed to cure the problem, but the fault recurred. With the power off, the loading cycle could be performed without any problems, but insert a cassette and there was lock up.

The cause of the trouble was eventually traced to a wonderful Philips innovation, the 'intermediate lever'. It sits under the arm mechanism, controlling the tape in the capstan and audio/control head area. You see it as a flat bit of plastic (item 32 in the Philips diagram) that goes over part of the main timing gear. Take it out and look at its underside. There's but a single tooth – in this machine half a tooth. Philips, which is always "Years Ahead", is ready for you with Service Kit F. It contains parts 29 to 32. **R.M.**

Sony SLV425

This machine was playing dead – it couldn't be switched on. The operate switch had no LED indication, but the drum was twitching. Suspicion fell on the power supply, where C5030 had fallen in value. It should be 47µF but read only 2µF. **R.M.**

Ferguson 3V43/JVC HRD725

Playback picture dropouts appeared on the screen in exaggerated form instead of being filled by the dropout compensator. IC8 in the dropout compensator circuit switches between the main (pin 12) and delayed (pin 6) signals. When a dropout is recognised, IC4 generates a switching command (at pin 15) which is sent to pin 14 of IC8. The delayed signal is produced by IC9 (type TL8704P), using charge-coupling techniques. There was an input at pin 11 of this chip but no output at pin 7. So IC8 had been switching to nothing instead of the delayed dropout fill-in signal. A new TL8704P chip from Willow Vale cured the problem. **R.M.**

Samsung VIK350

When this VCR was powered the supply reel would turn for a few seconds, the lift would shuffle then the machine would go to standby. The problem was cured by replacing the lift side chassis and attending to dry-joints on the LED tower. **R.B.**

JVC HRD820

Tape spilled from the spool in the reverse search mode. There was no further trouble once we'd replaced the mode state switch. **R.B.**

Daewoo V2000

The customer complained about wow with the playback sound. A new back-tension band cured the wow. **R.B.**

Nikkai J2

The 800mA fuse in the power supply had blown and there was a hum bar in the E-E mode. Normal operation was restored by replacing the fuse and the 100µF, 50V electrolytic capacitor in the power supply. **R.B.**

Philips VR2547

This machine would shut down after three seconds in play. It uses a permutation of the deck mechanics originally designed for JVC 540/560 series VCRs. In this case the cause of the trouble was a faulty take-up sensor, something that's quite common with the earlier JVC machines.

Note that in this machine the tape-end stop sensors are mounted on the deck PCB, not on the cassette lift, with two plastic light guides for coupling. To prevent the sensors operating and causing additional, misleading symptoms, shield the deck from strong light while working with the lid off. **P.G.**

Mitsubishi HS621V

It was not possible to load a cassette and, under certain lighting conditions, the cassette housing (more correctly the 'bottom unit') would shuttle forwards and back – reminiscent of something useful in the cotton industry a couple of hundred years ago!

After a time spent delving amongst the many optical devices used on this deck I found that D5B5 was faulty. It's a LED-type