

## SECTION 19

### LINE PHASE DISCRIMINATOR UN1/519

The UN1/519 accepts a picture-frequency pulse input, line-frequency ramp and pulse inputs and three d.c. inputs; it produces a sine-wave output signal with a controlled nominal frequency at twice-line frequency. While the picture-frequency pulses are present the frequency of the twice-line-frequency oscillator is controlled by a circuit in which the line-frequency pulses sample the line-frequency ramp waveform. If the picture-frequency pulses are not present the sampling circuit is inhibited by one d.c.

input and a second d.c. input provides the oscillator-control voltage. The third d.c. input operates a relay which transfers the frequency control to a fixed voltage.

The UN1/519 operates on the 405-line standard only. It is constructed on a CH1/12A chassis with index peg positions 7 and 14. The circuit is given in Fig. 19.1 but full details and description are given under the heading UN1/531.

MJR 8/66

*See overleaf for Fig. 19.1*

19.2

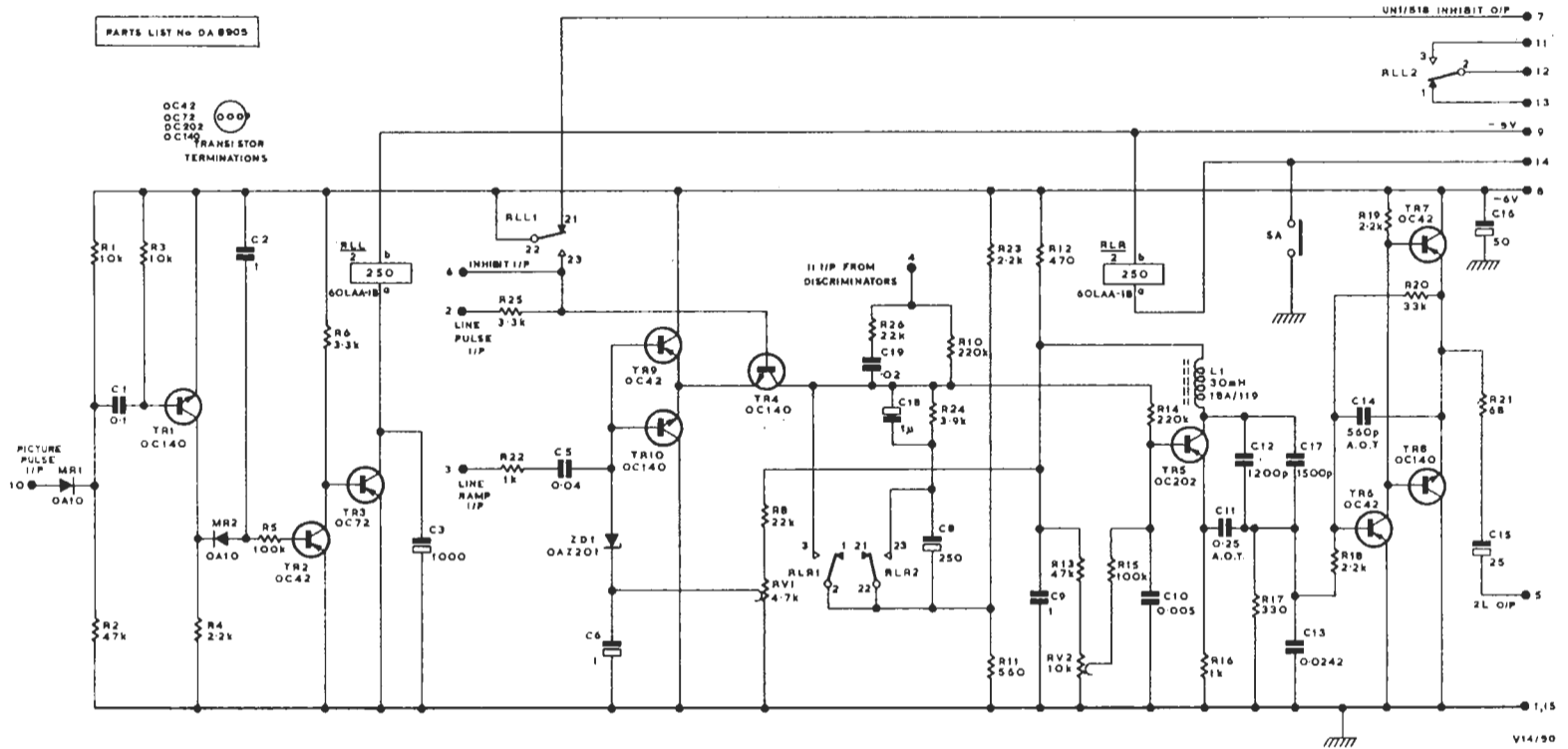


Fig. 19.1 Circuit of the UNI/519