Satellit 400 Grundig

The Satellit 400 has a very basic test mode:

With the radio switched on, press "AUX". Enter 30652 on the keypad, then press "STORE". The LCD display will show "HALLO" – This is js=ust to confirm you are in the test mode.

Turning the tuning knob up or down will cause it to count up or down from 1 or -1, all the way to 127 or -128, when it will fly to the other end, (ie/ - 128 or 127, then carry on through the sequence again. This is a test of the tuning knob incremental intervals, to ensure the mechanics of the tuning knob are working correctly. One full rotation of the knob should cause an increase or decrease of 24. The Satellit 500 & 700 use the knob to select letters for the alphanumeric name programming, so this test is easy to check on those models, just by programming a name.

To test all LCD segments, with the radio in test mode, press and hold "FREE", all segments in the LCD display should come on.

To clear all memories and clock/timer settings, in test mode, press "STORE" again. This has the same effect as removing the AA memory backup batteries. Be careful! Don't do this unless you want to lose all the memory/clock/timer settings! You will now find the test and alignment frequencies used in procedures detailed in the service manual are now allocated to the presets. Don't worry, they can be overwritten in the normal way.

Should you wish to open up the coverage of a Satellit 400 Professional to 30 MHz, as opposed to the standard 26.1 MHz, you need to disconnect diode D23 on the processor board (The one with the LCD and keypad on it.)

American owners have long been mildly annoyed by the fact that the 400 is set to 9kHz AM/MW spacing in search mode (It tunes in 1 kHz increments manually). Fear not, Grundig did cater for you, they just didn't publicise it very well. By disconnecting the diode D18, again on the processor board, AM search tuning is set to 10 kHz, AND FM is changed to 100 kHz too, in place of the standard 50 kHz setting.

1988 models have provision for the new spacing of LW frequencies above 200 kHz (which I wasn't even aware of, as I seldom use LW, except for RTE on 252, and BBC R4 on 198) by disconnecting diode D19. This is according to the service manual. Now, it begs the question, Is the diode fitted on 1986 and 87 models? And if so, why?

One final item of interest: On the schematic, there is a diode D24 shown in dotted print, and marked "Amateur". Diode D23 is marked "Internat", so, was "amateur" a version they never took to final production? And if so, why?