

CODE 102 — 1-MILLIWATT, 1000-CYCLE TESTING POWER WITH TIMED DISCONNECT

Code 102 provides access to 1000-cycle test power on a timed disconnect basis in various switching systems for one-way transmission measurements.

The circuit features of this test line are:

- (1) Sends test power for approximately 10 seconds. The power is then removed to assure that the test line will be disconnected from intermediate (intertoll) trunks using single frequency signaling.
- (2) An OFF-HOOK supervisory signal is returned when testing power is connected, and an ON-HOOK signal when the timing circuit disconnects it.
- (3) At pad control offices a resistance simplex is provided as a mark to control switch pads in the intermediate trunks. The resistance value of the mark will vary in different types of pad control offices as shown on the respective SD drawings.

These arrangements permit a testboard attendant to check transmission on outgoing and 2-way intermediate trunks by pulsing forward code 102 over the trunk to be tested. During the time test power is connected at the far end, the attendant measures the terminal net loss in the receiving far-to-near direction.

Intermediate trunks terminated at via net loss (VNL) in 2-wire toll switching offices are operated at VNL in both the terminal as well as the switched condition. Switching pads are omitted and subscriber lines are reached via terminal (toll connecting) trunks that have more than 2 db loss. Shorter trunks are equipped with a pad. In these offices a 2 db pad is provided with this test line, and the transmitting 1000-cycle testing level is adjusted to -2 dbm at the switch appearance of the test line. To avoid the necessity for making a 2 db correction on every transmission measurement, the test pad loss is shown on the circuit layout card for the trunk as OTHER EQUIPMENT (TP2). The *terminal net loss shown on the card includes the 2 db loss of the test pad.*

Note: Code 102 should not be used in testing trunks containing type "M" carrier channels. Any testing power at a level higher than -20 dbm at the input of the "M" channel will cause the limiting action of the terminal equipment to become effective. This will result in erroneous measurements on these channels.

Schematic drawings covering the above test line are listed below:

SWITCHING SYSTEM

NO. 4 CROSSBAR	NO. 5 CROSSBAR	CROSSBAR TANDEM	STEP-BY-STEP
SD-68095-01	SD-98100-01	SD-98100-01	SD-98100-01
	SD-96000-01 (MD)	SD-96000-01 (MD)	SD-96000-01 (MD)

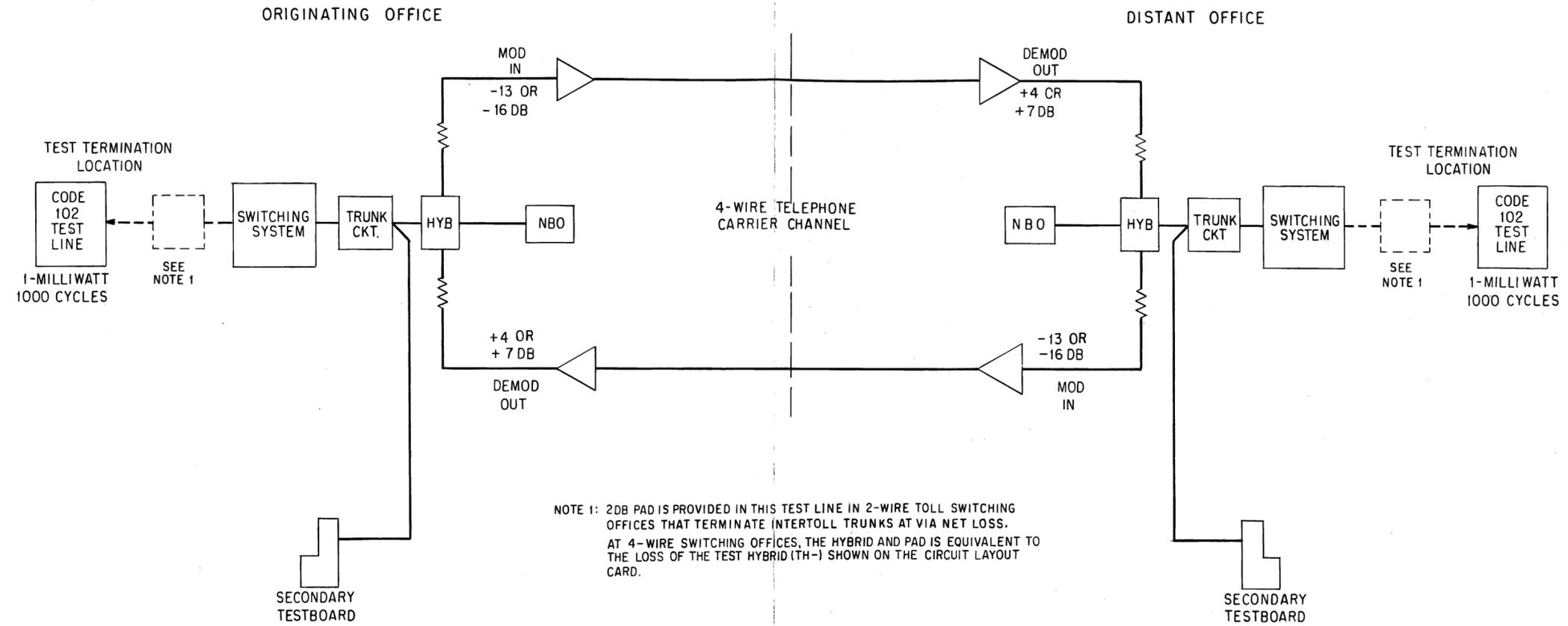


Fig. 1 — Code 102 — Showing Arrangement in 2-Wire Toll Switching Offices