

1. The sign of the send and receive stores and of the accumulator is monitored by plug-in units on the GA and GB units. These units were originally designed to detect three conditions; positive sign, negative sign, and disconnection. There is now no distinctive condition at the input to the sign inspection plug-in unit when disconnected and the two relays A and B are used in parallel, both operated for positive sign and both released for negative sign or disconnection.
2. The anode supply for the plug-in sign inspection units (plug A 6) is controlled by GST 24.23 so that while a transfer is taking place (GST operated) and the sign is liable to frequent changes the anode supply is disconnected to reduce wear of the relays A and B.
3. The sign represented by relays A and B in the plug-in units is marked out when plug B 2 is earthed. This occurs when:
 - (a) relays ES 25.26, ER 25.26 or ET 28.29 are operated for print out, read in or single transfers respectively;
 - (b) relay GMD 28.29 is operated for multiplication or division;
 - (c) the first order digit is 0 (earth from D₁ 69 via NA 22.21).

4. The output from the receive store sign inspection unit operates relay FRP or FRN. Whichever relay operates establishes a holding circuit for itself (not shown) and disconnects the operating circuit of the other relay.

The output from the accumulator sign inspection circuit operates relays FAP and FAM or relay FAN. FAP or FAN establishes a hold circuit for itself and disconnects the operating circuit of the other. Relay FAM continues to follow the output of the sign inspection circuit and is used in the division control circuit (C 47583) to monitor the sign of the dividend.

The output from the send store sign inspection circuit is usually routed over NEX and FST normal to operate, FSN or FSP. FSN or FSP establishes a hold circuit for itself and disconnects the operating circuit of the other. For sign examination orders relay NEX is operated and the output of the send sign inspection circuit is used to operate NSP or NSN (see also C 47588). If the sending address is a tape reader, i.e. for reading in, relay FST is operated, and the output of the send sign inspection circuit is not used. A negative sign read from the tape is decoded onto C 73 and operates FSN. FSN 5.6 and FST 25.26 forward a check that the sign has been registered. A positive sign read from the tape is decoded onto C 71 and operates FSP over QRC 24.25. Again a check is forwarded when FSP operates. If the sign character read from the tape is an asterisk it is decoded onto C 75 and operates QRC via QRB 23.24. QRC holds in and forwards the earth over QRC 26.25 to operate FSP.