1. The digit stored in the second storage relay set is the second digit of an arithmetical order and defines the tens group in which the sending address is located, or the fourth digit of a nonarithmetical order which defines the tens group of:-

   (a) The address to which an examination order refers.

   (b) The address to which control is to be transferred.

   (c) The address of the tape reader on which a search is required.

   (d) An unused address (the round-off generator) in the case of print layout, signal, and shift order.

2. When AS is operated, with DSA and DSB operated the D_2 relay set marks out a digit on one of the ten leads $D_2$51 to $D_2$69 (Numerical values 1 to 0). When OS is operated with LS operated, and LRA and LRB normal the digit stored in the L_1 relay set is marked out onto the same ten leads through $L_1$2 to $L_2$20 (numerical values 0 to 1). From whichever source the digit marking is derived it operates a tens group relay and is extended over checking contacts to operate the "digit marked out" relay DM.

3. In the case of "transfer of control" orders LRA, LRB and NRC are operated and checked (see C 47588) before the D_2 relay set is allowed to mark out. This digit operates one of the relays LA to LK and is extended by the operated contact of this relay and normal contacts of other relays in the group via LRB and NRC operated to operate DM. The L relay which has been selected is held by a circuit shown on C 47586 until the next change on control is required.

4. With OS and LS operated and LRA and LRB normal the tens digit of the order source address is marked out by the earth from LS 25.26 via some L relays normal and one L relay operated, to the appropriate digit lead.

5. For all other conditions digits 1,2,3 and 4 from $D_2$51, 53, 55, 57 via LRA and LRB contacts normal operate the send relays SSA-SSD in a storage group and the marking earth is extended over the operated SSC contact and the normal SSC contact in following groups to NRC 7.8 normal and the DM relay.

6. Similarly digits 5,6,7 and 8, from $D_2$59, 61, 63, 65 are available if a second rack of storage units is added. At present the check circuit is bypassed by a strap between tags 9P and 9Q.

7. Digit 0 from $D_2$69 operates three tens relays in parallel; the RT relay in each reader control set and GSG in the accumulator chassis, and is extended over contacts of these three relays in series, via the stores SSC relays normal to DM.

8. A special case arises when the computer is first started. Under these conditions there is no order source address stored in the L relay sets. The primary sequence circuit (C 47594) recognises the starting condition and operates JGA and JGB which connect the 5 unit code generation circuit of J relay set onto the 5 wire input (C 47579). In order to provide the usual starting condition for the 0 secondary sequence (C 47593) it is necessary to operate the DM relays in D_2 and D_3 before the initial orders generated by J can be accepted. In the case of D_2 relay set this difficulty is overcome by earth from OS 8.9 via JGA 5.6 operating.