

1. The digit stored in the third storage relay set is the third digit of an arithmetical order and defines the units relay of the group in which the sending address is located, or the fifth digit of a non-arithmetical order which defines the units position of:
 - (a) the address to which an examination order refers;
 - (b) the address to which control is to be transferred;
 - (c) the address of a 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 orders
2. When AS, DSA and DSB relays are operated the D_3 relay set makes out a digit on one of the ten leads $D_{351} - D_{369}$ (numerical values 1 to 0). When OS and LS are operated with LRA and LRB normal the units digit of the order source stored in the L_2 relay set is marked out onto the same ten leads through L_{22} to L_{220} (numerical values 0 to 1). From whichever source the digit marking is derived it is routed by a tens group relay to operate a units relay and is then extended over check 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_3 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 control is required.
4. With OS and LS operated and LRA, LRB normal the units 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. When the tens group is the "0" group, relays RT and GSG are operated. The digit 8 from D₃65, via LRB 8.7 normal, and GSG 5.6 operated is routed to operate the relays GSM, GSN, GSO and is extended to DM over GSM 2.2 and NRC 21.22. These relays select the lower half of the accumulator as the sending store. At the same time FSA is operated over GSE 4.5 normal.
- ⁹ The digit 9 from D₃67, via LRB 22.21 and GSG 25.26 operates GSC, GSD, GSE, GSF in the lower chassis and GSA and GSB in the upper chassis. These select the whole accumulator as the sending address. The earth is extended via GSE 3.2 over GSN and NRC normal to operate DM. At the same time FSA is operated over GSE 6.5.
- The digit 0 from D₃69 via LRA 2.1 and GSG 22.23 operates GDC and GDD in the lower chassis and GDA and GDB in the upper chassis. FSR is also operated in parallel. The earth is extended over GDD 26.25 to operate DM.

Digits 1 to 7 from D₃51 - D₃63 are routed by RT contacts to operate a tape reader units relay and are checked by contacts of these relays.

6. When the tens group is 1, 2, 3 or 4 the digits 1 to 0 from D₃51 - D₃69, with LRA and LRB released are routed over connector 7 to the storage rack, enter the selected tens group over the SSC and SSB contacts and operate a units relay SA to SK. The earth is extended over contact 23.22 of the selected units relay contacts 21.22 of the succeeding units relay and contacts SSC 24.25 to a common point with the other groups on the rack. Provision is made for a second rack reached via connector 9 and the check earths from the two racks, returning over leads 7R and 9R operate relay FSS to signify the sending address is a store.

When this store is selected for an arithmetical operation OS and OPA are normal and the check earth is extended over the route already detailed to operate DM. If the store has been selected as the order source address (i.e. the digit has been marked out from L₃ relay set) we have OS operated. The check earth then operates OPB, OPA and VR in series, to insert the translator between the order source address and the digit storage relay set. With OPA operated the check is extended to operate DM.

7. Again in order to generate the initial orders, DM is operated directly over JGA contact.