

Norchard Exchange Outgoing Junction

Two-Circuit Distributor

After some time spent recording the number of calls passed over the outgoing junctions from Norchard, it became clear that the first junction of the two carried virtually all the traffic on all the outgoing routes. This was obvious at Lydney Junction Signal Box exchange where the uniselector final on the second junction failed to operate due to a dirty bank. Several rotations of the uniselector cleared the problem. The need for something to distribute the traffic more evenly over the two junctions on each route became clear.

In this circuit the first junction of a route is marked as free by the 150 ohm battery from this distributor. This is in place of the battery from the outgoing junction relay set. The loop is extended to the outgoing junction relay set, which returns an earth on its P wire to operate relay HA in the distributor. HA1 holds relay HA. The P wire earth is then extended back to the group selector via the rectifier and HA2 to hold the call.

When the call clears, the junction relay set removes the earth from the P wire to release the group selector, linefinder etc. However relay HA holds via its HA1 contact and prevents the 150 ohm battery from being applied to the P wire. The P wire remains extended through to the junction relay set, but the rectifier prevents the battery from the relay set from marking the P wire as free.

Relay HA remains operated until the second outgoing circuit is taken into use, when relay HB will operate to the earth on the P wire. HB1 releases relay HA so that it can reconnect the 150 ohm marking battery and so mark junction one as free again.

Norchard - O/G Jcn 2 Circuit Distb Notes		
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