

LINE FINDER START AND TRIP CIRCUITS

Routine Tests
and Inspections
107.201-AR

LINE FINDER CHAIN CIRCUIT TEST

1. GENERAL:

1.1 These tests are used to check the switchover feature, the MB relay chain circuits, the TR relay chain circuits, and the chain circuit path through the T jacks.

1.2 These tests are performed by manually operating relays of either the start or the trip circuit. The district circuits do not move off normal.

2. TESTING EQUIPMENT:

<u>Amount</u>	<u>Code</u>	<u>Description</u>
1	136	Tool for blocking punched type relays in operated or non-operated position.
As required	184	Make busy plugs.

3. ROUTINE TEST NO. 263.003:

3.1 Switchover and MB Relay Test.

3.11 Using No. 184 plugs, make busy all line finders in the A sub-group.

3.12 Note the line finder selector on which the selector distributor of the B sub-group is resting and make that line finder selector busy by inserting a No. 184 plug in the associated MB jack.

3.13 Using a No. 136 tool, block in the operated position the BA relay of any trip circuit. Note each selector in the B sub-group is sent to tell-tale in the proper sequence, that no two selectors are rising at the same time, and that each selector is returned to normal.

3.14 Remove the No. 184 plug from the MB jack of the selector in the B sub-group before the selector distributor switch has completed a revolution.

3.15 Repeat operations 3.11, 3.12, 3.13 and 3.14 for the B subgroup.

3.16 Remove No. 136 tool and all No. 184 plugs.

3.2 Check of MB Relay Lock Up Feature.

3.21 Operate the GA relay manually. Block operated the ST-A relay using a No. 136 tool. The GA relay locks. By operating the GA relay

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first, the selector is prevented from being sent to tell-tale.

3.22 Using No. 184 plug, make busy the first line finder selector in the A sub-group.

3.23 Remove the plug from the first line finder selector MB jack and note that the associated MB relay remains operated. Release the MB relay.

3.24 Make busy the next line finder selector and remove the plug, noting that the associated MB relay remains operated. Release the MB relay.

3.25 Repeat operations for all line finder selectors in order. The GB and ST-B relays are used when testing selectors in the B sub-group.

3.3 Check of TR Chain Circuits:

3.31 Block in the non-operated position the ST-A and ST-B relays with No. 136 tools.

3.32 Step the group distributor switch to the first terminal. Operate the TR and TR-1 relays of the last trip circuit. They lock.

3.33 Operate the TR relay of the next circuit. It locks. The TR and TR-1 relays of the previous circuit release.

3.34 Operate the TR-1 relay of the same circuit and note that it locks.

3.35 Continue the foregoing operations until all trip circuits have been tested.

3.36 It will be necessary to step the group distributor switch to the last terminal and operate the TR relay of the last trip circuit to release the TR and TR-1 relays of the first.

3.37 A check of the TR chain circuit is also made when making a line finder exercise test.

3.4 Check of Chain Circuit Path Through T Jack.

3.41 Set the A and B selector distributor on the No. 1 terminal.

3.43 Starting with T jack No. 1 on the front of the frame insert a No. 184 plug in every other jack, that is No. 1, No. 5, No. 9, etc., and starting with T jack, No. 2 on the rear of the frame insert a No. 184 plug

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in every other jack No. 2, No. 6, No. 10, etc.

3.43 With a No. 136 tool block operated the BA relay in any trip circuit. Note that every other line finder selector in the A sub-group is sent to tell-tale and restored to normal. It will be noted that some selectors are seized twice in succession. This is due to the fact that the selectors are chosen in advance of the selector distributor and is not an indication of trouble.

3.44 Remove the No. 136 tool from the BA relay and block operated the BA-1 relay. Note that every other selector in the B sub-group is sent to tell tale and returned to normal.

3.45 Repeat for other selectors.

4 NOTES:

4.1 Restoring Equipment to Service.

4.11 On completion of test remove all testing equipment.

4.12 Circuits in trouble shall be made busy or removed from service and referred to the proper source for clearing.