ALARM CIRCUITS FOR THE 30, 60, AND 120 I.P.M. INTERRUPTER, TRANSFER, AND DISTRIBUTING CIRCUIT SD-95099-01

TOLL SYSTEMS

1. GENERAL

1.01 This section describes a method of testing the alarms on the 120 I.P.M. interrupter supply for the 30, 60, and 120 I.P.M. interrupter, transfer and distributing circuit SD-95099-01.

1.02 The tests covered are:

(A) Open Circuit

(B) Trouble Ground

1.03 Tests on the interrupter supply and alarm circuits shall preferably be made during periods of light traffic so as not to interfere with service.

1.04 A check of the multiple alarm lamps and audible signals shall be made when multiple appearances are provided.

2. APPARATUS

Test (B)

2.01 One No. 716E (or No. 528) Receiver attached to a 2WAB Cord equipped with two No. 360 Tools (2W21A Cord) and one KS-6278 Tool and one No. 411A Tool.

3. METHOD

(A) Open Circuit

3.01 This test checks that visual and audible minor alarms are given for an open circuit condition on either of the 120 I.P.M. supply leads, and that there is an automatic transfer of the load of the 30, 60, and 120 interrupters and the alarm circuit to a new source, with an indication as to which 120 interrupter supply failed. Upon failure of both 120 interrupter supplies, visual and major audible alarms are operated.

24V Operation

3.02 Momentarily open the 120 I.P.M. supply to the alarm control circuit by insulating the No. 2 top contact of the T relay. Check that after a slight delay the visual and minor audible alarms are operated and that the 1ST INT or 2ND INT (green) lamp lights indicating which supply source was opened. (The circuit is designed to provide a minimum delay of .3 second.)

3.03 Operate the IA RLS key. The ALM RLS (white) lamp should light. The visual and minor audible alarm should be released.

48V Operation

3.04 Momentarily open the 120 I.P.M. supply to the alarm control circuit by insulating the No. 2 bottom contact of the T relay. Check that after a slight delay the visual and major audible alarms are operated. (The circuit is designed to provide a minimum delay of .3 second.) The 1ST INT or 2ND INT (green) lamp, opposite to the one operated in 3.02, should light.

3.05 Operate the MA RLS key. The visual and major audible alarm should release.

3.06 Release the IA RLS key. Observe that the ALM RLS (white) lamp remains lighted.

3.07 Operate the TRNS RLS key. The INT (green) lamp should be extinguished, and the alarm control circuit restored to normal.

3.08 Release the MA RLS key.

3.09 Release the TRNS RLS key. The ALM RLS (white) lamp should be extinguished.

(B) Trouble Ground

3.10 This test checks that visual and audible minor alarms are given for a trouble ground condition on either of the 120 I.P.M. supply leads, and that there is an automatic transfer of the load of the 30, 60, and 120 interrupters and the alarm circuit to a new source, with an indication as to which 120

interrupter supply failed. Upon failure of both 120 interrupter supplies, visual and major audible alarms are operated.

24V Operation

3.11 Apply ground momentarily through a test receiver to No. 2 top contact of the T relay. Check that the visual and minor audible alarms are operated and that the 1ST INT or 2ND INT (green) lamp lights indicating which supply source was grounded.

3.12 Operate the IA RLS key. The ALM RLS (white) lamp should light. The visual and minor audible alarm should be released.

48V Operation

3.13 Apply ground momentarily through a test receiver to No. 2 bottom contact of the T relay. Check that the visual and major audible alarms are operated. The 1ST INT or 2ND INT (green) lamp, opposite to the one operated in 3.11, should light.

3.14 Operate the MA RLS key. The visual and major audible alarm should release.

3.15 Release the IA RLS key. Observe that the ALM RLS (white) lamp remains lighted.

3.16 Operate the TRNS RLS key. The INT (green) lamp should be extinguished, and the alarm control circuit restored to normal.

3.17 Release the MA RLS key.

3.18 Release the TRNS RLS key. The ALM RLS (white) lamp should be extinguished.

4. REPORTS

4.01 The required record of these tests should be entered on the proper form.