This note relates to the "delay charge" interrupter used by the SD-31529-02 coin trunk. I will discuss the coin control interrupter in a separate note. (There is one small wrinkle I have yet to attend to in that regard.)
******

Introduction

There are two types of interrupters used to provide charge delay timing for the coin trunks. They are found in different types of SXS office. They present different interfaces to the coin trunks. They require two different wiring options (H *vs*. J) in the coin trunk (in the area of relays T and T1).

The "PKU-INT lead" interrupter (option J)

This presents two leads to the coin trunks, PKU ("pickup") and INT ("interrupter"). The cadence is as follows (nominally):

1. PKU is grounded for 0.5 seconds.

2. No lead is grounded for the next 2.0 seconds.

3. INT is grounded for 0.5 seconds.

This cycle (3.0 seconds long) then repeats.

Wiring option J is required in the coin trunk to work with this interrupter interface.

Circuit operation is as follows:

When the loop polarity from the switch train is reversed *answer supervision"), polar supervisory relay P2 operates. This completes the path for relay T to regard lead PKU.

The next time PKU is grounded (that might be right away), T operates fully (although it is a two-step relay) and locks (but remains dependent on P2 being operated). This completes the path for T1 to regard lead INT.

When INT is grounded (that will be 2 seconds later), T1 operates and locks.

T1 operated, combined with C being operated, sets up the condition for coin control to send CC+ (collect).

If, while waiting for INT to operate T1, P2 should release (the reverse battery being fleeting), T is released and that spoils the operation. If P2 should re-operate later ("as in the case of "flashing supervision"), the cycle starts anew. But if P2 does not stay operated long enough this time, T will again be released before INT operates T1, and again the cycle does

not complete.

If T1 does not operate, then, even though C may have operated from the initial battery reversal (detected by P and P1), the condition for coin control remains set to send CC- (return).

The PKU lead goes to PQ 30 (porcupine quill). The INT lead goes to PQ 8.

The "A lead" interrupter (option H)

This presents a single lead to the coin trunks, A The cadence is as follows (nominally):

1. A is grounded for 0.5 seconds.

2. A is ungrounded for the next 2.5 seconds.

This cycle (3.0 seconds long) then repeats.

Wiring option H is required in the coin trunk to work with this interrupter interface.

Circuit operation is as follows:

When the loop polarity from the switch train is reversed *answer supervision"), polar supervisory relay P2 operates. This completes the path for relay T to regard lead A.

The next time A is grounded (that might be right away), T operates halfway (it is a two-step relay) and locks (but remains dependent on P2 being operated).

When the ground on A ends, T operates fully. This completes the path for T1 to regard lead A.

When INT is grounded (that will be 2.5 seconds later), T1 operates and locks.

The rest of the story is the same as for the other interrupter.

T1 operated, combined with C being operated, sets up the condition for coin control to send CC+ (collect).

If, while waiting for INT to operate T1, P2 should release (the reverse battery being fleeting), T is released and that spoils the operation. If P2 should re-operate later ("as in the case of "flashing supervision"), the cycle starts anew. But if P2 does not stay operated long enough this time, T will again be released before INT operates T1, and again the cycle does not complete.

If T1 does not operate, then, even though C may have operated from the initial battery reversal (detected by P and P1), the condition for coin control remains set to send CC- (return).

The A lead goes to PQ 30.