This M. of O. was prepared from issue 2 of ST-512773.

METHOD OF OPERATION
SIGNAL CIRCUIT

Motor Stop and Frame Busy - Relays Mounted on Interrupter Unit - Subscribers Sender Frame - Panel Machine Switching System.

DEVELOPMENT

1. PURPOSE OF CIRCUIT

1.1 This circuit is used to provide an audible alarm and visual signals whenever a frame drive motor slows down below its normal speed, or stops, and also to provide means for automatically imposing busy conditions on the frames affected by the particular drive motor as long as the motor is running below its normal speed, or is stopped.

2. WORKING LIMITS

2.1 This circuit functions with local circuit and has no working limits.

OPERATION

3. PRINCIPAL FUNCTIONS

The principal functions of this circuit are as follows:

3.1 To provide audible alarm signals when frame motor slows down below normal speed or stops.

3.2 To provide visual signals when motor slows down below normal speed or stops.

3.3 To make the frames affected busy when motors slow down below normal speed.

4. CONNECTING CIRCUITS

4.1 Standard sender circuits.

5. When the frame drive motor slows down to a set point below its normal speed the "Stop" contact closes to ground operating the (MS) relay and the (FB) relays. The (MS) relay operated lights the "Floor Board Motor Stop" lamp (red) and the "Trouble Desk Motor Stop" lamp (red). The (FB) relays operated connect ground to the sender test leads as a busy condition.

6. The operation of the MS key lights the "Floor Board Motor Stop" lamp (white) and releases the (MS) relay. The (MS) relay released extinguishes the "Floor Board" and the "Trouble Desk Motor Stop" lamps (red.)

7. When the motor again runs at or above its normal speed, the "STOP" contact is opened and the "Run" contact is closed. The "Stop" contact opened releases the (FB) relays. The (FB) relays released remove the ground from the test leads, restoring them to normal. The "Run" contact closed reoperates the (MS) relay. The (MS) relay operated again, lights the "Floor Board Motor Stop" and "Trouble Desk Motor Stop" lamps (red) as signals that the motor is again running at its normal speed. The MS key released releases the (MS) relay extinguishing the lamps and restoring the circuit to normal.

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