

STEP BY STEP SYSTEMS
NO. 1 OR 350A WITH AT
NO. 1 WITH AMA
MISCELLANEOUS CIRCUIT
IDENTIFIER FRAME

CHANGES

B. CHANGES IN APPARATUS

B.1 Superseded Superseded By
KS-8060 Res. - KS-13492, L2, Res. -
12,000 ω - 12,000 ω -
Fig. 3 - "X" Opt. Fig. 3 - "W" Opt.

B.2 Added

1 - 238 type jack - Fig. 6
1 - 238 type jack - Fig. 7

D. DESCRIPTION OF CIRCUIT CHANGES

- D.01 The KS-8060 resistance, which is not available, is superseded by the KS-13492, L2, resistance.
- D.02 Connecting information to the sender, identifier and transverter test circuit is added to Fig. 4.
- D.03 Connecting information to the trouble recorder connector circuit is added to Fig. 2.
- D.04 The connecting information at the "p" lead in Fig. 1 is changed to include "AMA".
- D.05 Fig. 6 is added to provide a trunk to the distributing frame.
- D.06 Fig. 7 is added to permit control of the automatic trunk test circuit from the identifier frame.
- D.07 The rating is changed from AT&T Co Provisional to AT&T Co Standard.
- D.08 Reference to Fig. 7 is added to the "Misc" ground in note 101.
- D.09 Options "w" and "x" and Figs. 6 and 7 are added to note 102 and the options used table.
- D.10 The title is changed; it formerly read:

STEP BY STEP SYSTEMS
NO. 1 OR 350A
MISCELLANEOUS CIRCUIT
IDENTIFIER FRAME
FOR AUTOMATIC TICKETING

D.11 Figs. 55 and 56 are added and Figs. 51, 52, 53 and 54 are changed.

All other headings under Changes, no change.

1. PURPOSE OF CIRCUIT

1.1 To provide audible and visual signals and to make the identifier circuit busy when a 48 volt fuse operates on the identifier frame.

1.2 To provide audible and visual signals when the Long Timer (TMA) and the Trouble Indicator Timer (XTI) circuits in the identifier circuit "time out".

1.3 To show miscellaneous circuits for the equipment mounted on the Identifier Frame.

2. WORKING LIMITS

2.1 None.

3. FUNCTIONS

3.1 To cause the operation of the Alarm Circuit for Automatic Ticketing and a (PA) lamp signal when a 48 volt fuse operates on this frame.

3.2 To light the (ITA) lamp and signal the Miscellaneous Circuit for the Trouble Indicator Frame or Trouble Recorder Connector to start the major audible alarm, when the Long Timer (TMA) and the Trouble Indicator Timer (XTI) circuits "time out".

3.3 To provide Frame Test Battery Jack and Terminals and Remote Control Jacks for testing.

4. CONNECTING CIRCUITS

When this circuit is listed on a key-sheet, the connecting information thereon is to be followed.

- 4.1 Identifier Circuit - SD-31957-01.
- 4.2 Miscellaneous Circuit Trouble Indicator Frame - SD-31942-01.
- 4.3 Sender and Identifier Test Circuit - SD-31945-01.
- 4.4 Alarm Circuit for Automatic Ticketing or AMA SD-32068-01.

- 4.5 Sender, Identifier and Transverter Test Circuit - SD-32208-01.
- 4.6 Trouble Recorder Connector Circuit - SD-32210-01.
- 4.7 Automatic Trunk Test Circuit - SD-32206-01.

DESCRIPTION OF OPERATION

5. FIG. 1 - FUSE ALARM

When a 1-1/3 amp. 48 volt fuse operates on the identifier frame, the (FA) relay operates in series with a relay in the Alarm Circuit for Automatic Ticketing or AMA. This latter relay also operates and starts the major audible alarm. The (FA) relay operated locks to the (AR) key in Fig. 5. The (FA) relay when operated connects ground to the "IB" lead of the identifier to hold it busy. The (FA) relay operated also lights the (FA) lamp.

When the operated fuse is removed, the series relay in the Alarm Circuit releases and retires the audible alarm. The (FA) lamp remains lighted until the (FA) relay is released by operating the (AR) key in Fig. 5.

The (FA) resistance in series with the (FA) relay winding is used to protect the alarm lead in case of a trouble ground between the relay and the resistance at the fuse panel.

6. FIG. 2 - IDENTIFIER TIME ALARM

When either the long timer (TMA) or the Trouble Indicator Timer (XTI) circuit in the Identifier Circuit reaches the end of its timing period and "times out", the

(ITA) relay will be operated. The (ITA) relay locks to the (AR) key in Fig. 5, lights the (ITA) lamp and operates a relay in the Miscellaneous Circuit for the Trouble Indicator Frame or Trouble Recorder Connector Circuit. The latter relay operates the major audible alarm. The (ITA) lamp remains lighted until the (AR) key is operated which releases the (ITA) relay, provided that the operating circuit in the identifier has been released.

7. FIG. 4 - REMOTE CONTROL JACK (RC)

This jack (RC) is provided so that the Sender Identifier Test Circuit can be controlled from the identifier frame using a #32A test set.

The white button corresponds to the "start" key and the red button to the "release" key in the test circuit.

8. FIG. 3 - FRAME TEST BATTERY AND JACK

Ground, high resistance battery and 48 volt battery terminals and a battery jack are provided for battery and ground supply for testing purposes.

9. FIG. 6 - SPARE JACK (SP)

The (SP) jack provides a trunk to the distributing frame where it can be cross-connected to spare jacks on other frames as required.

10. FIG. 7 - AUTOMATIC TRUNK TEST REMOTE CONTROL JACK (RCT)

The (RCT) jack permits control of the automatic trunk test circuit from the identifier frame.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 2353-MBB-EWO-AR