

## CIRCUIT DESCRIPTION

CD-64800-01  
Issue 15  
Dwg. Issue 15

5-16-61

TOLL SYSTEMS  
TOLL SWITCHBOARD NO. 3C OR 3CL  
KEYSHEET

## CHANGES

## A. CIRCUITS REMOVED FROM OR ADDED TO KEYSHEET AND REASON FOR CHANGES

A.1	Block	Removed	Added	Reason For Changes
	D12		SD-56501-01	To list the TOLL SUBSCRIBER LINE CKT. FOR USE WITH PBX TRUNK CKT. ARRANGED FOR GROUND START ON RING. Typical Connecting circuit is SD-65657-01 2 Way Central Office Trunk Ckt. in Dial PBX.
	E23	SD-56414-01	SD-56478-01	Replacing but not interchangeable with the removed circuit. The new RECORDING COMPLETING TRUNK CKT., E&M LEAD SUPERVISION, ARRANGED FOR COIN CONTROL AND RECALL USING 2 FREQUENCIES OVER TIP & RING is also arranged to function with single frequency type signaling circuits with which the replaced circuit was not designed to operate.
	E24	SD-55381-01	SD-56488-01	Replacing circuit. The new RECORDING COMPLETING TRUNK CKT., E&M LEAD SUPERVISION, WITH OR WITHOUT PULSE RERING, WITH OR WITHOUT COIN CONTROL OVER SEPARATE SINGLE TRUNK CONDUCTOR, ARRANGED FOR USE WITH EMERGENCY TRANSFER CKT. eliminates the use of A & B leads for transmission and employs wire springs instead of nonwire spring relays.
	I26		SD-95901-01	To list the ISOLATION CKT. FOR REDUCING BRIDGED CAPACITANCE EFFECTS ON CORD CIRCUITS.
	C27	SD-64553-01		This RECORDING TRUNK CKT. FROM MANUAL TANDEM OR STEP BY STEP OFFICE is rated MFR. DISC. since no future demand is anticipated.
	A32, B51	SD-62610-02		This TOLL SWITCHING TRUNK CKT. TO LOCAL OFFICE FOR COMMON BATTERY RURAL LINES, ARRANGED FOR DELAYED CUT-THRU AFTER RINGING is rated Mfr. Disc. since no future demand is anticipated.
	D32	SD-62817-01		This TOLL SWITCHING TRUNK CKT. TO STEP BY STEP "B" SWITCHBOARD is rated Mfr. Disc. to agree with the rating of the "B" switchboard.
	H32	SD-63860-01		This TOLL SWITCHING TRUNK CKT. TO LOCAL OFFICE FOR MAGNETO RURAL LINES is rated Mfr. Disc. since no future demand is anticipated.
	A34	SD-64835-01		This TOLL SWITCHING TRUNK CKT., 4 WIRE REPEATED DIALING, AUTOMATIC RINGING is rated Mfr. Disc. since no future demand is anticipated.

CD-64800-01 - ISSUE 15

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E37	SD-55358-01		This TOLL SWITCHING TRUNK CKT., 2 WAY AUTOMATIC COMPOSITE SIGNALING, ARRANGED TO REPEAT SWITCH HOOK SIGNALS FROM CALLED STATION is rated Mfr. Disc. since no future demand is anticipated.
Q48	SD-55848-01		This SELECTOR CKT. FOR HANDLING "WE HAVE" CALL, ARRANGED FOR DIGIT ABSORBING & LOOP PULSING is rated Mfr. Disc. since no future demand is anticipated.
B49	SD-55082-01		This TOLL SWITCHING AUTOMATIC INCOMING TRUNK CKT. FROM MANUAL OFFICE, ARRANGED TO REPEAT SWITCH HOOK SIGNALS FROM CALLED SUBSCRIBER is rated Mfr. Disc. since no future demand is anticipated.
Q49	SD-55846-01		This INCOMING TRUNK CKT. FROM STEP BY STEP SELECTORS FOR HANDLING "WE HAVE" CALLS is rated Mfr. Disc. since no future demand is anticipated.
Q49		SD-56492-01	To list the TRANSFERRED INFORMATION OR INTERCEPTING TRUNK CIRCUIT. The connecting circuit is SD-96514-01 Transfer Trunk Ckt. in Information Desk No. 3, 4 or 6 Type or Operating Room Desk No. 23A, B or C.
H49		SD-56496-01	To list the INCOMING TRUNK CKT. FOR PBX SERVICE, REVERSE BATTERY SUPERVISION, ARRANGED TO RECALL ORIGINATING END, FOR USE WITH CROSSBAR TANDEM OFFICE.
B51	SD-62610-02		This TOLL SWITCHING TRUNK, ARRANGED FOR CUT-THRU AFTER RINGING is rated Mfr. Disc. and is replaced by SD-55879-01 (E104).
E51	SD-62486-01		This TOLL SUBSCRIBER LINE CKT. is rated Mfr. Disc. and is replaced by SD-56389-01 (A12).
A67	SD-55849-01		This INTERTOLL DIALING OUTGOING TRUNK CKT., MFKP FROM POSITION, DP FROM SENDER, E & M LEAD SUPERVISION is rated Mfr. Disc. since no future demand is anticipated.
A75		SD-95283-01	To list the ANNOUNCEMENT CKT. EMPLOYING KS-16765, LIST 2 ANNOUNCEMENT SET.
E81	SD-96000-01	SD-98100-01	Replacing circuit. The new TRANSMISSION TEST LINE CKT. supplies additional features and employs wire spring instead of nonwire spring relays.
H84		SD-56471-01	To list the MULTIPLE LAMP TEST CKT. FOR TESTING AC OR DC IDLE INDICATING AND BUSY LAMPS.
B86 C86	SD-63833-01 SD-62883-01		These JACK CKTS. are rated Mfr. Disc. and are replaced by SD-64545-01 (block A86) which supplies all the features of the replaced drawings, thus reducing the number of drawings serving the same purpose.

Block	Removed	Added	Reason For Change
I86		SD-96538-01	To list the TRAFFIC WEIGHTING APPLIQUE CKT. ARRANGED FOR RELAY RACK MOUNTING, FOR USE WITH PORTABLE ANSWERING TIME RECORDER CKT. MODIFIED FOR RELAY RACK MOUNTING.
P87 C93	SD-63962-01 SD-56126-01	SD-56494-01	Replacing circuit. The new MULTIPLE LAMP RELAY CKT. FOR USE WITH DC LAMPS AND FOR SUPPLYING 24 VOLT BATTERY FOR LIGHTING LAMPS WHEN CONNECTING CIRCUITS SUPPLY 48 VOLT BATTERY supplies all the features of the replaced drawings and employs wire spring instead of nonwire spring relays.
J87	SD-55350-01		This REORDER OR PATHS BUSY CKT. FOR INCOMING TRUNKS ARRANGED FOR THRU SUPERVISION is rated Mfr. Disc. since no future demand is anticipated.
P89		SD-96532-01	To list the ANSWERING TIME RECORDER CKT., MODIFICATION OF EXISTING PORTABLE CKT. FOR RELAY RACK MOUNTING, WITH OR WITHOUT LAMP GROUP SWITCHING.
J92	SD-62676-01		This INDICATOR CONTROL CKT., IDLE INDICATING LAMPS LIGHTED WITH AC OR DC is rated Mfr. Disc. since no future demand is anticipated.
H102	SD-55847-01		This OUTGOING INTERTOLL TRUNK CKT., DC KEY PULSING, FOR HANDLING "WE HAVE" CALLS is rated Mfr. Disc. since no future demand is anticipated.
D112 I167	SD-55775-01	SD-96517-01	Replacing circuit. The new EMERGENCY TRANSFER CKT. ARRANGED TO USE EXISTING TRUNK FACILITIES TO TERMINATE EMERGENCY LINES FROM DISTANT CROSSBAR NO. 5 OR STEP-BY-STEP OFFICE is arranged to function with E & M lead supervision trunk ckts. as well as loop supervision trunk ckts. and also employs wire spring instead of nonwire spring relays.
A121	SD-55674-01		This OSCILLATORS CKTS. FOR 500 AND 500/20 CYCLES POSTED DELAY TONES USING SELF INTERRUPTING OSCILLATOR CKT. is rated Mfr. Disc. since no future demand is anticipated.
B121	SD-55662-01		This OSCILLATORS CKT. FOR 800, 800/20, 1200 AND 1200/20 CYCLES POSTED DELAY TONES USING SELF INTERRUPTING OSCILLATOR CKT. is rated Mfr. Disc. since no future demand is anticipated.
A122	SD-55667-01		This DISTRIBUTING CKT. FOR POSTED DELAY TONES is rated Mfr. Disc. since no future demand is anticipated.
A123	SD-55672-01		This PATCHING JACK AND FLASHING CKT. FOR POSTED DELAY TONES is rated Mfr. Disc. since no future demand is anticipated.
F132	SD-55851-01		This 2-WAY INTERTOLL TRUNK CKT., OUTGOING MFKP-IN, DP-OUT, INCOMING MANUAL RINGDOWN, E & M LEAD SUPERVISION is rated Mfr. Disc. since no future demand is anticipated.

CD-64800-01 - ISSUE 15

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F148		SD-56482-01	To list the TOLL SWITCHING TRUNK CKT., MF KEY PULSING, REVERSE BATTERY SUPERVISION, ARRANGED FOR COIN CONTROL AND RERING USING 2 FREQUENCIES OVER TIP AND RING.. A typical terminating ckt. with which it functions is SD-26123-01 MF Incoming Trunk Ckt. in Crossbar Office No. 5.
H148		SD-56480-01	To list the TOLL SWITCHING TRUNK CKT., DCKP-IN, DP-OUT, REVERSE BATTERY SUPERVISION, ARRANGED FOR COIN CONTROL AND RE USING 2 FREQUENCIES OVER TIP AND RING. Typical terminating ckts. with which it functions are SD-26123-01 DP Incoming Trunk Ckt. in Crossbar Office No. 5 and SD-32289-01 Coin Control Trunk Ckt. in Step by Step Office.
D149	SD-56416-01	SD-56483-01	Replacing but not interchangeable with the removed circuit. The new TOLL SWITCHING TRUNK CKT., MF KEY PULSING, E AND M LEAD SUPERVISION, ARRANGED FOR COIN CONTROL AND RERING USING 2 FREQUENCIES OVER TIP AND RING, makes no provision for controlled initial ringing of the called station.
D150	SD-56423-01	SD-56481-01	Replacing but not interchangeable with the removed circuit. The new TOLL SWITCHING TRK. CKT., DCKP-IN, DP-OUT, E AND M LEAD SUPERVISION, ARRANGED FOR COIN CONTROL & RERING USING 2 FREQUENCIES OVER TIP & RING, WITH OR WITHOUT ACCESS FROM DIAL SWITCHING OFFICE makes no provision for controlled initial ringing of the called station. A typical terminating ckt. with which it functions is SD-26123-01 DP incoming Trk. Ckt. in Crossbar Office No. 5.
J150	SD-56421-01		This TOLL SWITCHING TRUNK CKT., REPEATED DIALING, E AND M LEAD SUPERVISION, SINGLE FREQUENCY RINGING SIGNAL, COIN CONTROL USING SINGLE OR 2 FREQUENCIES OVER TIP & RING is rated Mfr. Disc.
B167		SD-95779-01	To list the MF PULSING RECEIVER ADJUSTING CKT. USING ONE MILLIWATT 1000 CYCLE SUPPLY SOURCE.
H168		SD-95867-01	To list the MULTIFREQUENCY SIGNAL GENERATOR CIRCUIT.
B188		SD-56474-01	To list the 2 WAY TRUNK CKT., DCKP-IN, DP-OUT, HIGH-LOW REVERSE BATTERY SUPERVISION ARRANGED FOR COIN CONTROL & RERING USING 2 FREQUENCIES OVER TIP & RING, WITH OR WITHOUT ACCESS FROM DIAL SWITCHING OFFICE.
D188		SD-56476-01	To list the 2 WAY TRUNK CKT., REPEATED DIALING, HIGH-LOW REVERSE BATTERY SUPERVISION, ARRANGED FOR COIN CONTROL & RERING USING 2 FREQUENCIES OVER TIP & RING, WITH OR WITHOUT ACCESS FROM DIAL SWITCHING OFFICE.

Block	Removed	Added	Reason For Change
F188		SD-56475-01	To list the 2 WAY TRUNK CKT., DCKP-IN, DP-OUT, E & M LEAD SUPERVISION, ARRANGED FOR COIN CONTROL AND RERING USING 2 FREQUENCIES OVER TIP & RING, WITH OR WITHOUT ACCESS FROM DIAL SWITCHING OFFICE.
H188		SD-56477-01	To list the 2 WAY TRUNK CKT., REPEATED DIALING, E & M LEAD SUPERVISION, ARRANGED FOR COIN CONTROL & RERING USING 2 FREQUENCIES OVER TIP & RING, WITH OR WITHOUT ACCESS FROM DIAL SWITCHING OFFICE.

**B. OTHER CHANGES ON KEYSHEET**

.1	Block	Circuit	Changes
	I47	SD-64553-01	The title of this Incoming Trunk is changed to include Panel Sender Tandem and Crossbar Tandem Offices.
	Title Page		The note "For Current Drain Data See SD-64800-02" is added.
	Current Drain		The Current Drain Pages are removed since this information is shown on SD-64800-02.

**1. PURPOSE OF KEYSHEET**

1.1 This KEYSHEET lists the circuits for use in the NO. 3C OR 3CL SWITCHBOARD, indicates the manner in which the circuits interconnect and shows tables covering circuit details of sender and trunk circuits to facilitate the selection of

options in the connecting circuits in other offices.

**2. EXPLANATION OF CONVENTIONS**

2.1 For explanation of conventions see Page 1 of the Master Keysheet SD-90250-01.

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