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UNCLASSIFIED

TECHNICAL MANUAL

for

TRANSFER SWITCHBOARD SB-3195/U

TABET MANUFACTURING CO., INC.
1336 BALLENTINE BLVD.
NORFOLK, VIRGINIA 23516

DEPARTMENT OF THE NAVY
NAVAL SHIP SYSTEMS COMMAND

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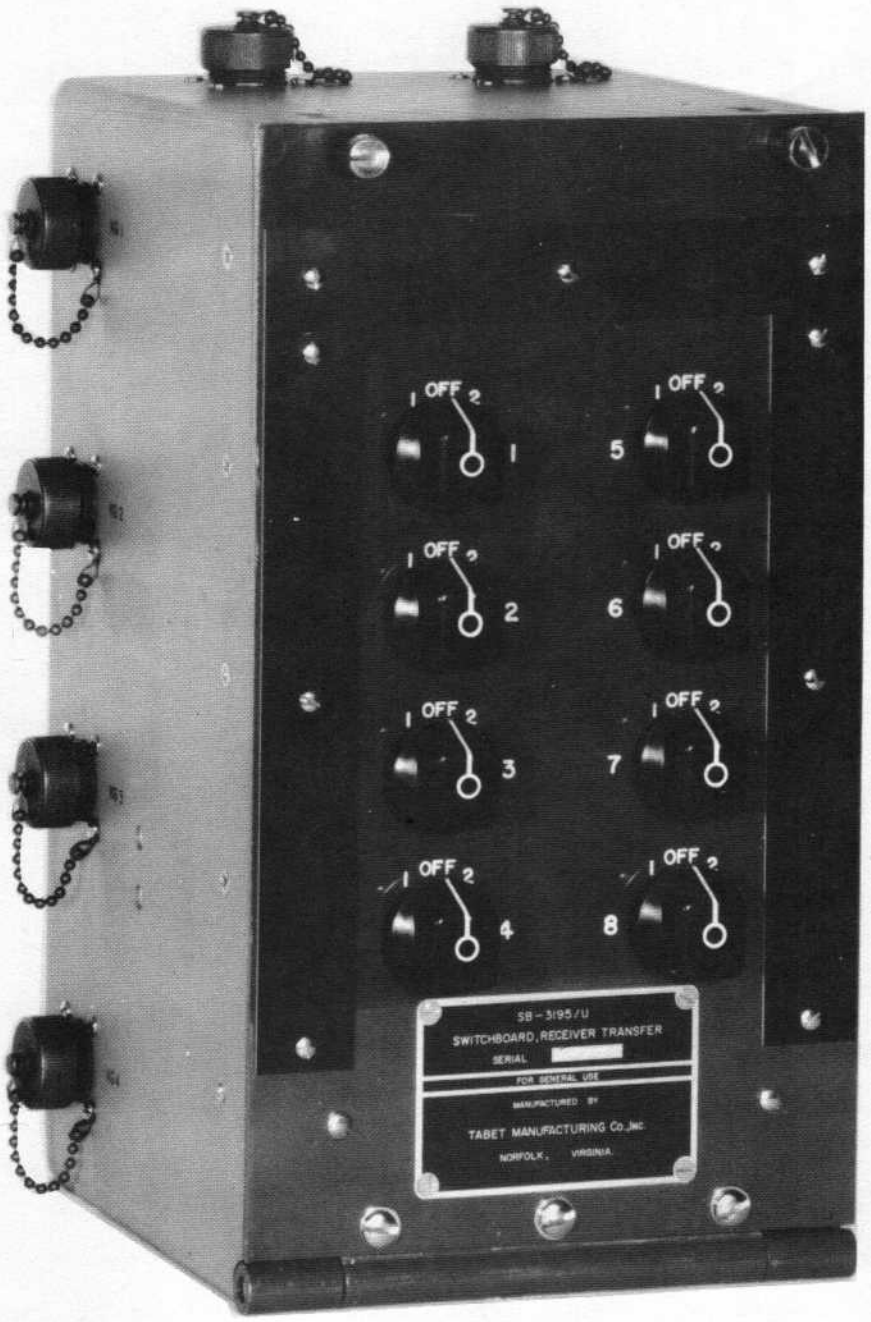


Figure 1-1
Transfer Switchboard
SB-3195/U

TRANSMITTER TRANSFER SWITCHBOARD SB-3195/U

SECTION I
GENERAL INFORMATION

1-1. Purpose

Transfer Switchboard SB-3195/U is designed to transfer the five wire circuits of either one of two TSEC/KWR-37 equipments to any one or all of eight TSEC/KG-14 equipments.

1-2. General Description

The switchboard consists of an unventilated aluminum cabinet 12¾" high x 8" wide x 8" deep having a hinged front panel and is completely RF shielded. See Figure 1-1.

Eight rotary switches are mounted on the front panel in two vertical columns. The switches are connected to the shielded plug receptacles by a cable assembly and a connector plug and receptacle. Each rotary switch represents one TSEC/KG-14 equipment. Each one of the two positions of the rotary switch represents one TSEC/KWR-37 equipment. See Figure 1-2.

1-3. Internal Wiring

Internal connections from the eight rotary switches are made to a cable plug assembly. Connections to the external equipments are made to the shielded plug receptacles.

1-4. Switch Assembly

Each rotary switch contains one printed circuit wafer assembly. The conductors are etched circuits on an insulating base. Each wafer has five circuits and three positions. The switch utilizes three circuits on one side of the wafer and two circuits on the other side. The circuits and printed wiring are arranged so that the wafer is reversible and can be inserted without regard for front or back.

SECTION II
INSTALLATION

2-1. Location

The Transfer Switchboard should be located giving consideration to the accessibility and convenience and with ample allowance for the multiconductor cables necessary. Four holes, 9/32 inch diameter, on 8½ by 5 inch mounting centers are provided on the back for mounting the cabinet. Sufficient clearance must be provided for the hinged front panel to swing through a 90 degree arc. See Figure 1-2.

The entire front panel may be removed to facilitate installation or maintenance by withdrawing the cable assembly plug from the receptacle and removing the three hinge screws at the botton of the panel.

2-2. Wiring

The Transfer Switchboard SB-3195/U is connected to the external equipment through five (5) pin, shielded plug receptacles.

There are ten (10) shielded receptacles mounted on the cabinet, four (4) on each side and two (2) on the top.

The two (2) on the top are intended for TSEC/KWR-37 equipment. The receptacle on the left is connected to position 1 of the selector switches and the receptacle on the right is connected to switch position 2.

The four (4) receptacles on each side are connected to the adjacent selector switch and are for TSEC/KG-14 equipments.

SECTION III
MAINTENANCE

3-1 Replacement of Switch Wafers

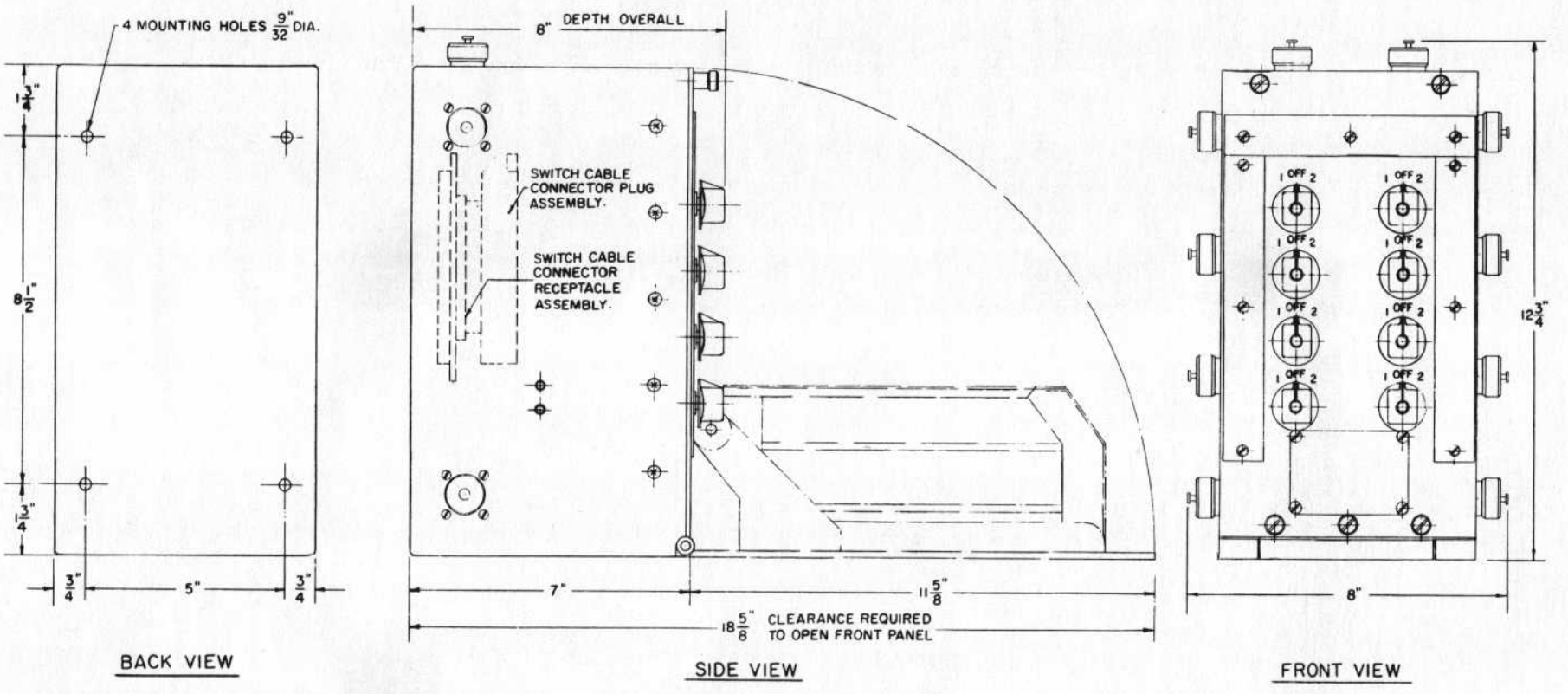
Be certain the switches are in the "OFF" position. Lower the front panel to a horizontal position and slide out the side panels covering the switch wafers. With switches in the "OFF" position, the wafer can be removed by pulling it straight out. A new wafer may be inserted by pressing it firmly into the receptacle. No soldering or hand tools are required for replacement of the wafers.

The woven wire RF gasket located at the opening of the cabinet should be inspected periodically to ensure complete shielding when the front panel is closed.

SECTION IV
PARTS LIST

4-1. Introduction

Table 4-1 is a maintenance parts list which includes the Reference Designation, description, and part numbers for the maintenance parts.



WEIGHT (NET)	12 LBS.
WEIGHT (BOXED)	14 LBS.
OVERALL DIMENSIONS (BOXED)	$8\frac{5}{8}$" x $13\frac{7}{8}$" x 9
CUBICAL CONTENTS (BOXED)	.623 CU. FT.

Figure 1-2
Outline Drawing

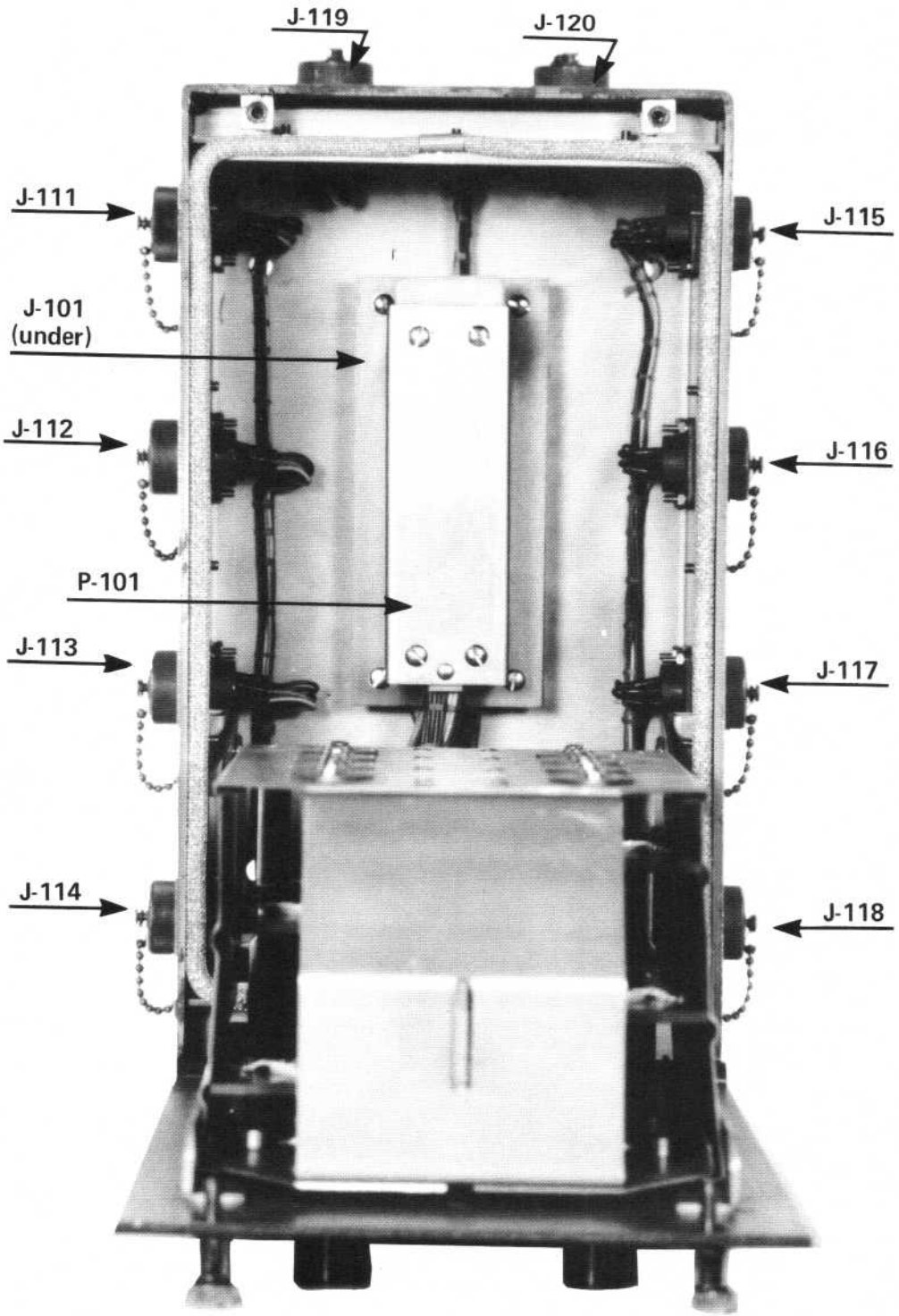


Figure 2-1A
Front Panel Lowered
To Show Internal Arrangement

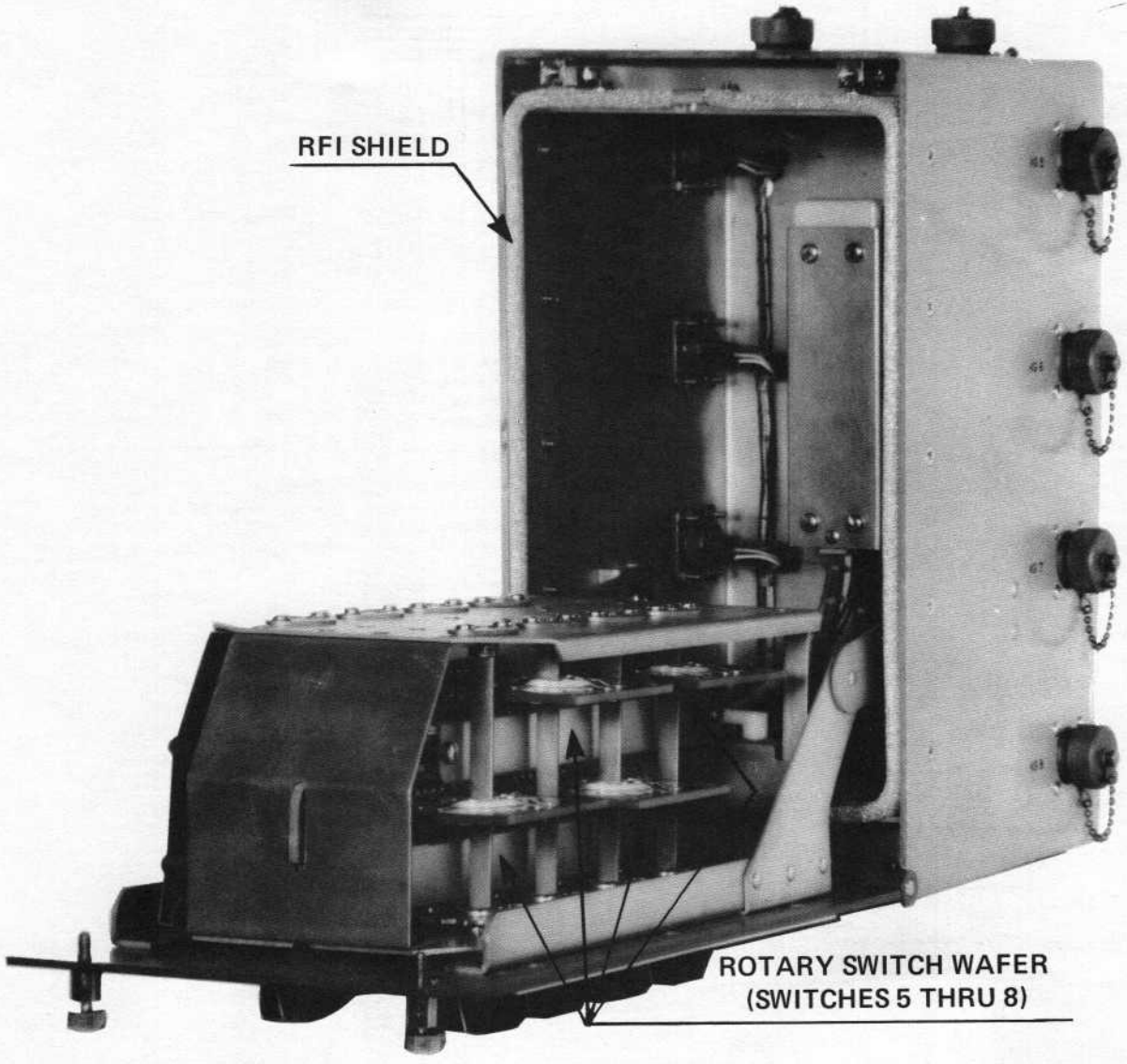


Figure 2-1B
Front Panel Lowered,
Rotary Switch Cover Removed

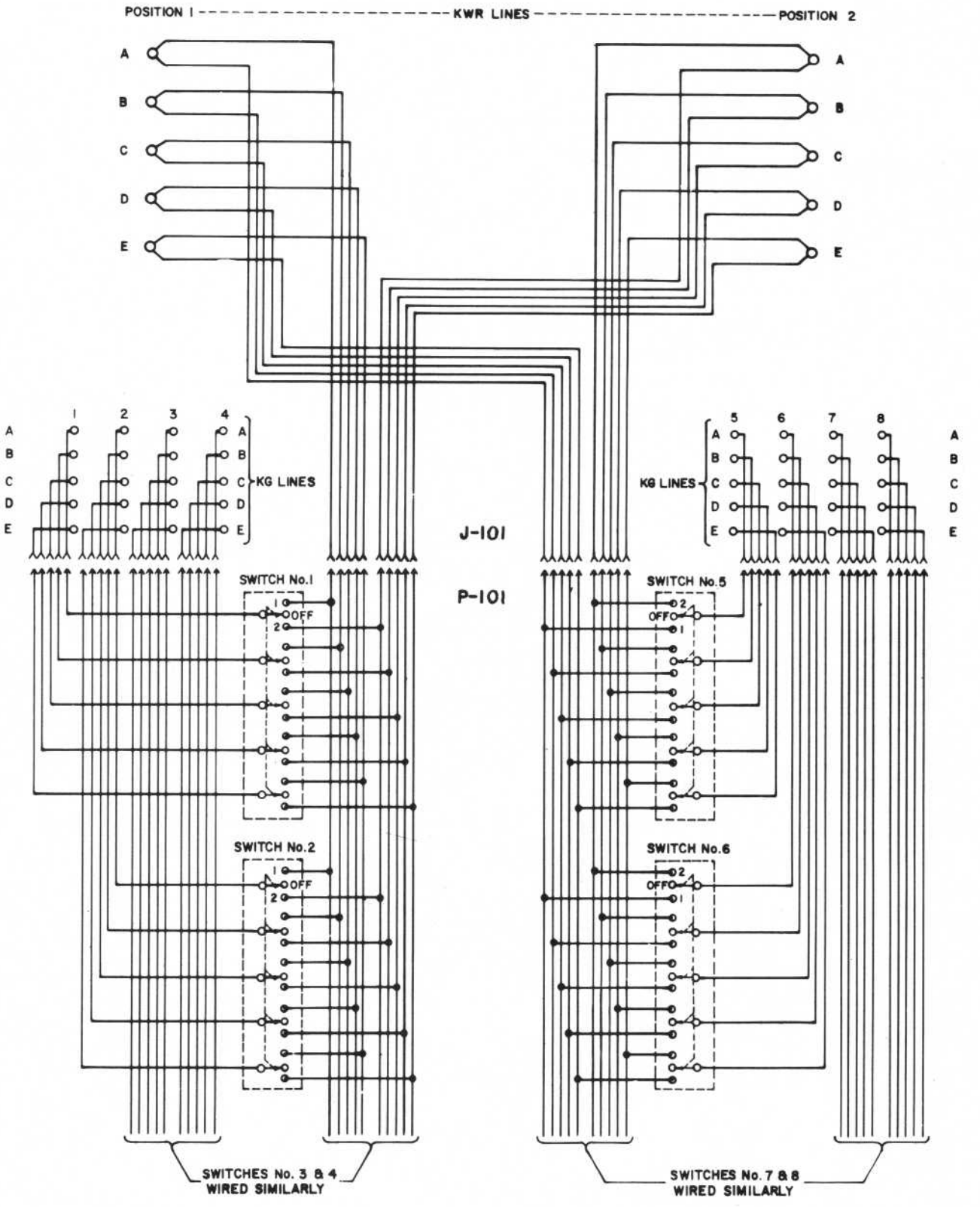


Figure 2-2
Transfer Switchboard-Model SB-3195/U
Schematic Diagram

SECTION IV
PARTS LIST

TABLE 4-1

Reference Designation	Description	Contractor's Part No.
E-101 through E-108	Wafer Switch: Printed circuit with integral rotor mechanism, 5 circuit, 3 position.	R-291
J-101	Receptacle Assembly: Cable assembly connector; 60 terminals; consists of two receptacles with 30 terminals each.	R-321
J-102 through J-110	Receptacle: Switch wafer connector; 16 terminals.	R-320
P-101	Plug Assembly: Cable assembly connector; 60 terminals; consists of two plug with 30 terminals each.	R-319
MP-101	Knob: black phenolic skirted with pointer 1-1/8" diam. skirt.	R-316
J-111 through J-120	Receptacle: For shielded external connector; 5 pin; Amphenol MS3102A-14S-5S.	R-292