

TYPE N1 CARRIER TELEPHONE SYSTEM — TERMINAL EQUIPMENT
GROUP SWITCHING
SWITCHING GROUP UNITS WITH THE 2N SWITCHING SET

The substitution of an alternate transmitting or receiving group unit for a working transmitting or receiving group unit may be done, without interruption to service on the system, by the use of a switching circuit. This substitution facilitates the maintenance of the N1 carrier system. To replace a group unit, the 2N switching set is connected to one of the switching jacks with a patch cord. Another patch cord connects the switching set to the alternate group unit. A key in the switching set provides means for switching back and forth between the regular and alternate units.

Caution should be exercised to avoid causing hits on a system transmitting SAGE or telegraph.

APPARATUS:

- 1 — Group Unit (same type as unit to be switched)
- 1 — 2N Group Unit Switching Set (J94002N)
- 1 — W13A Cord (ALT REC GRP) (2-foot cord for connecting alternate receiving group unit to switching set)
- 1 — W20D Cord (REG REC GRP) (10-foot cord for connecting switching set to J13 or J14)
- 1 — ED-92346-01, G1 Cord Assembly including W12B Cord (ALT TRANS GRP) (2-foot cord for connecting alternate transmitting group unit to switching set)
- 1 — ED-92345-01, G1 Cord Assembly including W20E Cord (REG TRANS GRP) (10-foot cord for connecting switching set to J15 or J16)
- 1 — W4AU Cord (for connecting power to switching set)
- 1 — 2J Repeater Test Set (J94002J)
- 2 — 1W13A Cords equipped with P36A918 Cord Tips (Used to connect 2J test set to group outputs on 2N switching set)

STEP	PROCEDURE
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: left;"> <p>Switching Transmitting Group</p> </div> <div style="text-align: left;"> <p>Switching Receiving Group</p> </div> </div>
1	<div style="display: flex; justify-content: space-around;"> <div style="text-align: left;"> <p>Determine the type of unit to be switched; HGT or LGT.</p> </div> <div style="text-align: left;"> <p>Determine the type of unit to be switched; HGR or LGR.</p> </div> </div>
2	<div style="display: flex; justify-content: space-around;"> <div style="text-align: left;"> <p>Connect a similar alternate group unit to the ALT GRP jack of the 2N set with the ALT TRANS GRP cord.</p> </div> <div style="text-align: left;"> <p>Connect a similar alternate group unit to the ALT GRP jack of the 2N set with the ALT REC GRP cord. Set the SLOPE control of the alternate group unit the same as the regular unit.</p> </div> </div>

STEP	PROCEDURE	
	Switching Transmitting Group (Cont'd)	Switching Receiving Group (Cont'd)
3	Connect the W4AU power cord from BAT jack of the 2N set to TEST PWR jack of the N1 terminal.	Connect the W4AU power cord from BAT jack of the 2N set to TEST PWR jack of the N1 terminal.
4	Check that the switching key of 2N set is in REG position.	Check that the switching key of the 2N set is in REG position.
5	Remove the group connector from J15 or J16, connect the REG GRP jack of the 2N set to J15 or J16 using the REG TRANS GRP cord, and then remove the other group connector from J15 or J16.	Remove the group connector from J13 or J14, connect the REG GRP jack of the 2N set to J13 or J14 using the REG REC GRP cord, and then remove the other group connector from J13 or J14.
6	Using the 1W13A cords connect the DBM jacks of the 2J test set to REG OUT jacks of the 2N set and measure the total power output of the regular group unit.	
7	Remove the test cords from the REG OUT jacks and connect to ALT OUT jacks. If a receiving group unit, allow 15 minutes for the alternate group unit to regulate. Measure the total power output of the alternate group unit.	
8	When the outputs of the regular and alternate group units are within 1.5 db of each other the switching key of the 2N set is operated to the ALT position and the regular group unit may be removed from its mounting or its tubes replaced without service interruptions.	
9	Replace the group unit with a similar unit in its mounting. If a receiving group unit, check that the SLOPE adjustment is set correctly and allow 15 minutes for the alternate unit to regulate.	
10	With the 2J test set measure the total power output as in Steps 6 and 7 and when the measurements are within 1.5 db the switching key of the 2N set is operated to REG position.	
11	Replace the group connector in the switching jack of the group unit and remove the regular group cord from the other switching jack and replace the group connector.	
12	Disconnect the power cord and alternate group cord.	

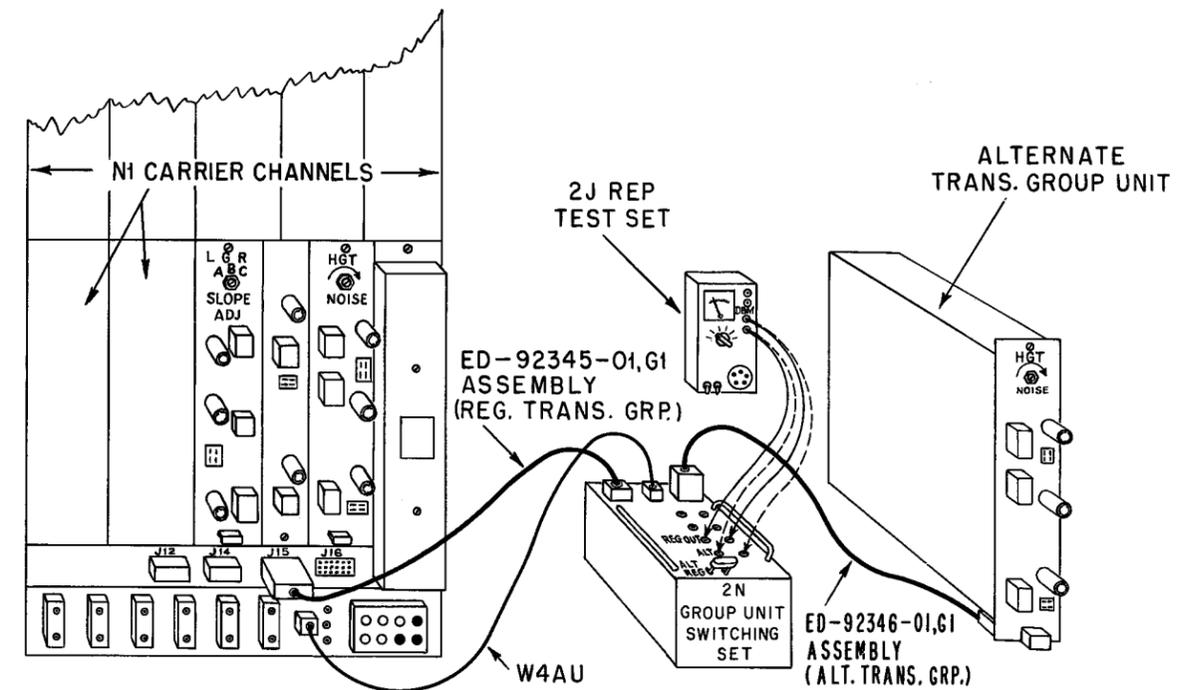


FIG. 1-SET-UP FOR SWITCHING TRANSMITTING GROUP UNIT

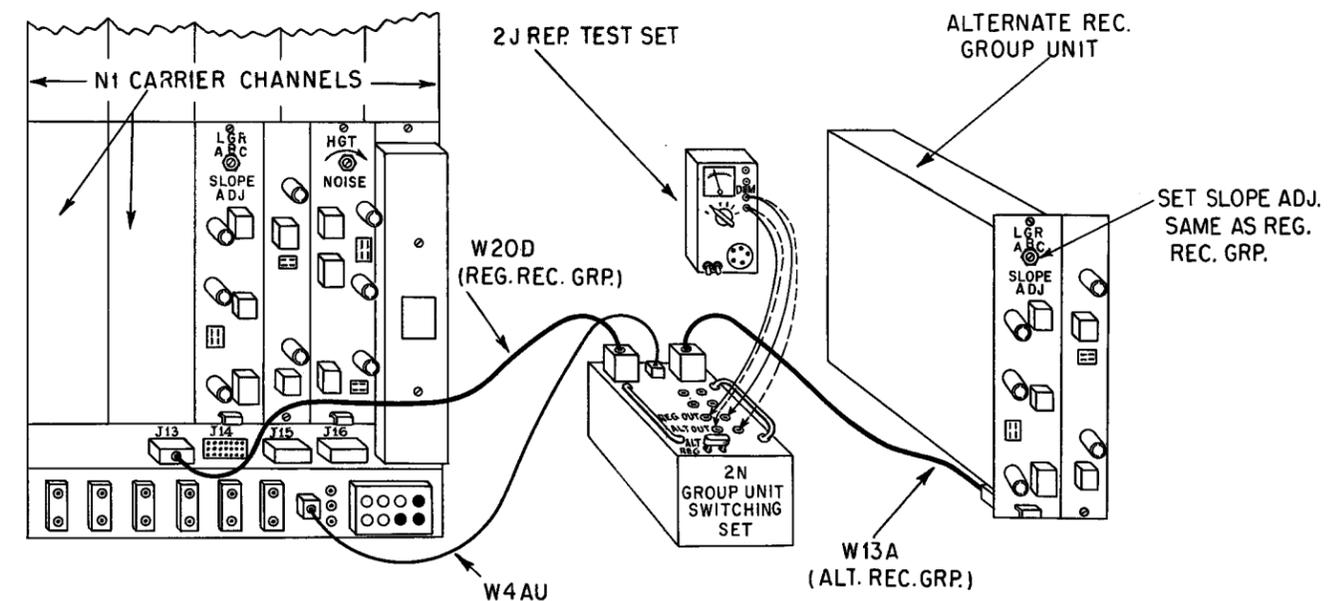


FIG. 2 SET-UP FOR SWITCHING RECEIVING GROUP UNIT

SWITCHING GROUP UNITS