PERFORMANCE REQUIREMENTS

2400- OR 2600-CYCLE SUPPLY UNIT

(SD-98092-01)

LOAD TRANSFER UNIT

(SD-98091-01)

GENERAL EQUIPMENT REQUIREMENTS

COMMON SYSTEMS

1. GENERAL

1.01 This section covers the performance requirements which the odd and even 2400- or 2600-cycle supply circuits, J98613AL, or combined supply load transfer circuit, J98613BW, shall meet before turnover to the telephone company.

1.02 This section is reissued to change the oscillator output voltage requirements and to add tolerances to levels at which the load transfer circuit operates. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 Reference shall be made to Section 800-630-180 covering General Requirements and Definitions for additional information necessary for the proper application of the requirements.

1.04 ***Test Equipment:*** Transmission measurements, specified herein, shall be made with a transmission measuring set, terminated in 600 ohms which measures dbm. A nongrounded, high-impedance vacuum tube voltmeter may also be used. Frequency measurements shall be made with the 72A frequency meter per J64072A or beat frequency checking circuit in the load transfer circuit. A nongrounded frequency counter may also be used.

1.05 Circuits under test shall be in operating condition for at least 2 hours immediately prior to the tests.

1.06 Ambient temperature shall not change more than 10°F during warmup and testing periods.

2. REQUIREMENTS

Transmission Tests

Caution: Measurements shall be made using only nongrounded meters.

2.01 Output measured at the OSC TST jacks of the odd or even supply circuit shall be:

OPTION	TMS READING dbm	VTVM READING volt
X	−6.6±0.5	0.362±0.020
W	−9.6±0.5	0.256±0.015
G & X	−6.1±0.5	0.384±0.022
G & W	−9.1±0.5	0.272±0.016

2.02 Frequencies measured at the OSC TST jacks of the odd or even supply circuit shall be within ±3 cps of the values shown in Table A.

TABLE A

AMBIENT TEMPERATURE	2600-CPS SUPPLY ADJUST FREQ	2400-CPS SUPPLY ADJUST FREQ
F	CPS	CPS
63-67	2598.6	2398.7
68-72	2599.1	2399.1
73-77	2599.5	2399.6
78-82	2600.0	2400.0
83-87	2600.5	2400.4
88-92	2600.9	2400.9
93-97	2601.4	2401.3
98-102	2601.9	2401.7
103-107	2602.4	2402.2
108-112	2602.8	2402.6

2.03 With normal output indication at even OSC TST jack, the load transfer circuit shall connect the odd load circuit to the even supply circuit when output at odd OSC TST jack drops 2 ±0.2 db below nominal value as the result of adjusting the odd OSC LEV potentiometer. The load transfer circuit shall reconnect odd load circuit to odd supply circuit when odd output is restored to 0.5 ±0.2 db below the nominal operating value. If these requirements are not met, the TR OPR and TR RST potentiometers shall be readjusted so that the load will transfer when the output is 2 ±0.1 db below the nominal value and will restore when the level is 0.5 ±0.1 db below the nominal value.

2.04 With normal output indication at odd OSC TST jack, the load transfer circuit shall connect the even load circuit to the odd supply circuit when output at even OSC TST jack drops 2 ± 0.2 db below nominal value as the result of adjusting the even OSC LEV potentiometer. The load transfer circuit shall reconnect even load circuit to even supply circuit when even output is restored to 0.5 ±0.2 db below the nominal operating value. If these requirements are not met, the TR OPR and TR RST potentiometers shall be readjusted so that the load will transfer when the output is 2 ±0.1 db below the nominal value and will restore when the level is 0.5 ±0.1 db below the nominal value.

2.05 The load transfer circuit shall reconnect each load circuit to its own supply circuit when outputs of both supply circuits are concurrently at trouble values of 2 ±0.2 db below the nominal values. All circuits shall restore to idle state after both outputs are restored to 0.5 ±0.2 db below the nominal operating values.