

TYPE L3 CARRIER SYSTEM

TERMINALS, REPEATERS AND OVER-ALL SYSTEM

INITIAL LINE-UP PROCEDURES — POWER, PILOT AND OVER-ALL TESTS

1. GENERAL

1.01 This section and associated sections in this subdivision describe the service maintenance instructions for the type L3 carrier system.

1.02 This section is reissued to include a test for HTR 2 BIAS.

1.03 This section outlines the initial line-up procedures on the power, repeater equipment, terminal equipment and the over-all tests to be performed on the type L3 carrier system as follows:

- (1) Power control unit
- (2) Power line-up
- (3) Power loading adjustment
- (4) Power supply measurements
- (5) Auxiliary and main repeater adjustments
- (6) Gain equalization line-up
- (7) Over-all synchronizing frequency check
- (8) Over-all terminal line-up

1.04 *Caution: Power Control Unit and Power Line-up.*

The AC line voltage on the L3 carrier system may be in excess of 3500 volts. All safety procedures and cautions, as outlined in the sections, should be followed when working on the coaxial cable conductors or power supply equipment.

TEST	SECTION REFERENCE
POWER CONTROL UNIT	
Operation of power control unit	359-020-513
POWER LINE-UP	
Initial line-up of a power section	359-020-511
Adj. of power loading	359-020-512

TEST

SECTION REFERENCE

AUXILIARY REPEATERS

Power supply meas.	359-020-500
HTR 2 BIAS meas.	359-020-500
Electron tube tests	359-025-500
Meas. of pilots	359-025-500
Adj. of pilots	359-025-500
Adj. of pilot alarm units	359-025-500

EQUALIZING AUXILIARY REPEATERS

Power supply voltage meas.	
Filament and bias	359-020-500
130V met. rect.	359-020-500
A-B-C power supplies	Note 1
HTR 2 BIAS meas.	359-020-500
Electron tube tests	359-035-500
Gain eql. line-up — (Not equipped for TV branching)	359-076-500
Gain eql. line-up — (Equipped for TV branching)	359-076-500
Delay distortion eql. — (TV branching)	359-077-500

EQUALIZING MAIN REPEATERS

Power supply voltage meas.	
Filament and bias	359-020-500
130V met. rect.	359-020-500
Plate supplies	359-020-500
HTR 2 BIAS meas.	359-020-500
Electron tube tests	359-035-500
Gain eql. line-up	359-076-500

SWITCHING MAIN AND TERM. REPEATER — CONSTANT VOLTAGE FEED

Power supply voltage meas.	
Filament and bias	359-020-500
130V met. rect.	359-020-500
Plate supplies	359-020-500
HTR 2 BIAS meas.	359-020-500
Electron tube tests	359-035-500
Gain eql. line-up	359-076-500

SECTION 359-010-304

TEST	SECTION REFERENCE
SWITCHING MAIN AND TERM. REPEATER — CONSTANT VOLTAGE FEED (Cont'd)	
Delay distortion eql. —	
TV branching	359-077-500
Adj. of 336A eql.	
TV branching	359-077-502
SWITCHING MAIN AND TERM. REPEATER — CONSTANT CURRENT FEED	
Power supply voltage meas.	
Filament and bias	359-020-500
130V met. rect.	359-020-500
A-B-C power supplies	Note 1
HTR 2 BIAS meas.	359-020-500
Electron tube tests	359-035-500
Gain eql. line-up	359-076-500
Delay distortion eql. —	
TV branching	359-077-500
Adj. of 336A eql.	
TV branching	359-077-502
SYNCHRONIZING FREQUENCY AMP.	
308 KC sync. freq. amp. output	359-078-501
64 KC sync. freq. amp. output	358-080-509
4 KC SUPPLY	
4 KC supply, synchronizing check	359-078-502

TEST	SECTION REFERENCE
MASTERGROUP EQUIPMENT	
Level meas. at rec. MG OUT jacks	359-078-503
SUBMASTERGROUP EQUIPMENT	
Level meas. at rec. SM OUT jacks	359-078-503
SUPERGROUP EQUIPMENT	
Level meas. at SG MODS OUT	358-080-502
Meas. and adj. level at SG DEM OUT	
Intermediate office	358-080-503
Terminal or branching	358-080-504
GROUP EQUIPMENT	
Level meas. at GR BANK OUT	358-080-501
Meas. and adj. level at GR DEM OUT	358-080-505
CHANNEL BANK EQUIPMENT	
Channel net loss meas. and adjustment	358-080-506
<i>Note 1:</i> Measure plate 1 and 2 voltages with the 1AL power test set connected to the V TST jack on the auxiliary power unit under test or on one of the appropriate transmission panels and apply the require- ments given for auxiliary repeater power supply as shown in BSP Section 359-020-500.	