

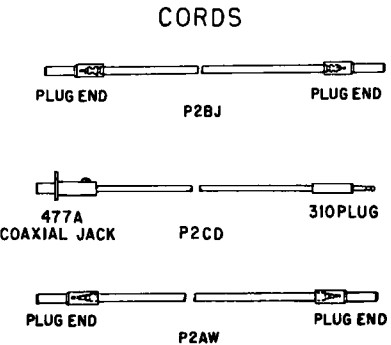
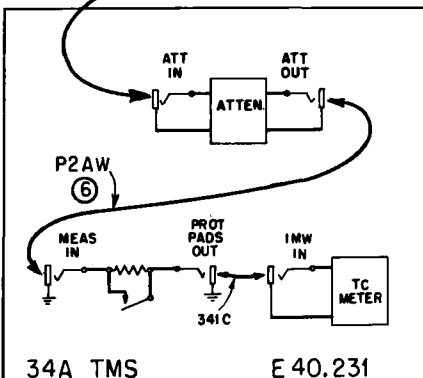
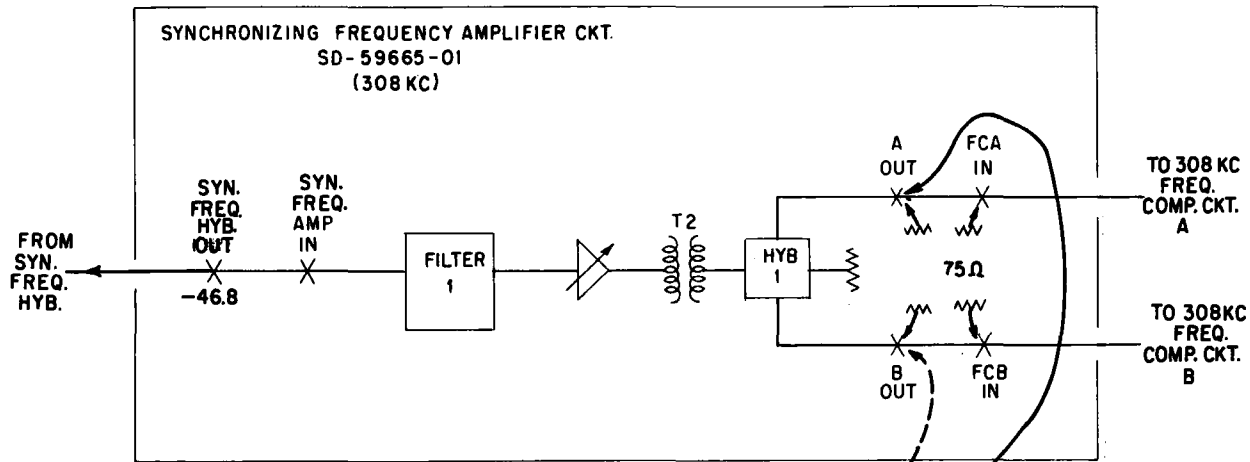
L3 CARRIER - OVER-ALL TESTS AND ADJUSTMENTS
OF AN L3 SYSTEM - TERMINAL TO TERMINAL

308 KC SYNCHRONIZING FREQUENCY AMPLIFIER OUTPUT CHECK

At an L3 office where the carrier and pilot supply is controlled, the 308 kc synchronizing frequency amplifier selects and amplifies the 308 kc controlling frequency obtained from the L3 line. This is a straight power amplifier with no feedback. The output of the 308 kc synchronizing frequency amplifier is fed to the A and B 308 kc frequency comparator panels which compare it with the locally generated 308 kc frequency. The purpose of this test is to measure the output of the 308 kc synchronizing frequency amplifier.

- Apparatus:
- 1 - 34A - TMS
 - 1 - Receiving Console - J68827B
 - 3 - 386C Plugs (75 ohms)
 - 1 - P2CD Cord
 - 1 - P2BJ Cord
 - 1 - P2AW Cord

STEP	PROCEDURE
1	Calibrate the 37B TMS for 308 kc.
2	Connect the 37B TMS to the SYN FREQ HYB OUT jack and check the reading (terminated). <u>Requirement:</u> -46.8 dbm. This is merely a check on the input to the synchronizing circuit and, if the 308 kc pilot is normal, the requirement will be met.
3	Remove the connection to the SYN FREQ HYB OUT jack.
4	Set the B ATT to 16.0 db.
5	Terminate the B OUT, FCA IN, and FCB IN jacks with 386C plugs.
6	Make patches designated ⑥
7	Read the 37B TMS meter indication. <u>Requirement:</u> -1.0 ± 1 db.
8	Remove the termination from B OUT and move the P2CD patch cord from A OUT to B OUT, terminating the A OUT jack in 75 ohms.
9	Repeat Step 7. <u>Note:</u> If the requirement of Step 7 is not met, while performing either Steps 7 or 9, check the electron tubes in the amplifier. A defective tube replacement will usually bring the output within limits, if not, further trouble shooting procedures should be followed.
10	With the patch cord remaining in B OUT, remove the termination from A OUT. <u>Requirement:</u> The output as measured in Step 9 shall not change by more than ± 2.0 db.
11	Move the P2CD patch cord to A OUT and terminate B OUT.
12	Read the meter indication and then remove the termination from B OUT. <u>Requirement:</u> The output should not change more than ± 2.0 db. <u>Note:</u> The tests made in Steps 11 and 13 are a check on the HYB balance, condition of transformer T2, and the condition of the output circuit of the amplifier. If the requirement of either or both of the steps are not met, appropriate trouble shooting procedures should be started.



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AMPLIFIER OUTPUT CHECK.