L MULTIPLEX TERMINAL
LMX-2
RECEIVING GROUP BANKS
PATCHING PROCEDURES

This section provides patching procedures whereby regular receiving group banks are removed from or restored to service. Because of the numerous configurations applicable to the equipment involved, only a typical receiving group bank configuration is depicted. Each office must determine its own equipment configuration and establish applicable patching procedures.

This section is reissued to make minor changes. ***Equipment Test Lists are not affected.***

To prevent service interruptions while patching group equipment, effective monitoring procedures should be used. Three types of signals are available for monitoring purposes: test tone, message, and pilot. The most effective signal is a 1-kHz tone on a message channel; however, local policy must establish monitoring and verification procedures to keep service interruptions to a minimum.

Transmission requirements must be met for the equipment involved before proceeding.

APPARATUS

Receiving test equipment (RTE) (Section 356-010-500) having the capabilities of measuring the signal to be monitored at the correct power.

Test cords and plugs as required

STEP PROCEDURE

Caution: Some patches may affect transmission levels; therefore, patching should be kept to a minimum. Before attempting any patches, read and understand the entire procedure.

Note: To prevent service interruptions due to patching errors, the craft personnel must have a thorough understanding of the following:

(a) The transmission circuits involved

(b) The local equipment and jack designations

(c) The local policy regarding minimum monitoring requirements.

STEP	PROCEDURE

Monitoring **(Fig. 1)**

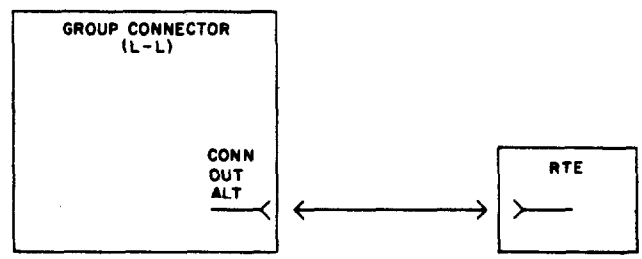
1 Determine, from management personnel, the monitoring procedure to be used.

2 Prepare the RTE to measure the signal (determined in Step 1) at the correct power.

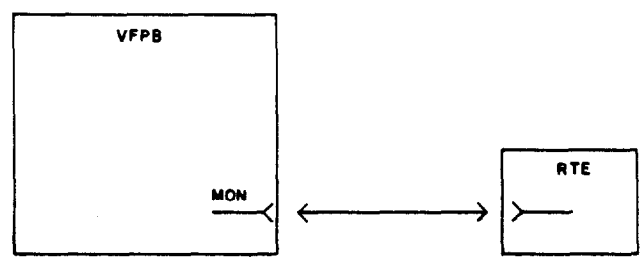
Note: See Section 359-080-501 for level diagrams and frequency charts.

3 Connect the RTE to the monitoring point determined in Step 1.

Note: Always monitor at a point in the circuit path which is beyond the final patch point.



A. GROUP CONNECTOR



B. CHANNEL BANK

Fig. 1—Suggested Monitoring Points

Patching

4 To remove regular equipment from service, proceed to Step 5. To restore regular equipment to service, proceed to Step 11.

Removing Regular Group Bank From Service **(Fig. 2)**

5 At the receiving high-frequency patch bay (HFPB),

STEP	PROCEDURE

Note: Read each step completely.

(a) Remove the patch between the SP GR TRSG TRK and SP GR BK IN A jacks [patch (1), Fig. 2]. (A major alarm occurs on SP GR BK because group pilots are removed.)

(b) Connect the REG SG DEM OUT B jack to the SP GR BK IN A jack [patch (2), Fig. 2].

6 At the scanner control panel, select each group and verify the pilots.

7 At the receiving HFPB,

(a) Connect the SP GR DEM OUT jacks to the associated CHAN BK or GR CONN IN jack for group 1 [patch (3), Fig. 2]. (See Fig. 3 for undesignated jack location.)

(b) Verify continued service on group 1.

8 Repeat Step 7 for groups 2 through 5.

9 At the receiving HFPB,

Note: Read each step completely.

(a) Remove the patch between the REG SG DEM OUT A and REG GR BK IN A jacks [patch (4), Fig. 2]. (A major alarm will occur on each REG working group.)

(b) Verify continued service at voice-frequency patch bay (VFPB).

(c) Terminate, into 75 ohms, the REG SG DEM OUT A jack [patch (5), Fig. 2].

10 Disconnect the RTE; identify (tag) all patches.

Restoring Regular Group Bank To Service **(Fig. 3)**

11 At the receiving HFPB,

(a) Remove the 75-ohm termination from the REG SG DEM OUT A jack [patch (5), Fig. 2].

(b) Connect the REG SG DEM OUT A jack to the REG GR BK IN A jack [patch (4), Fig. 2].

12 At the scanner control panel, select each group and verify the pilots.

13 At the receiving HFPB,

Note: Read each step completely. (See Fig. 3 for undesignated jack location.)

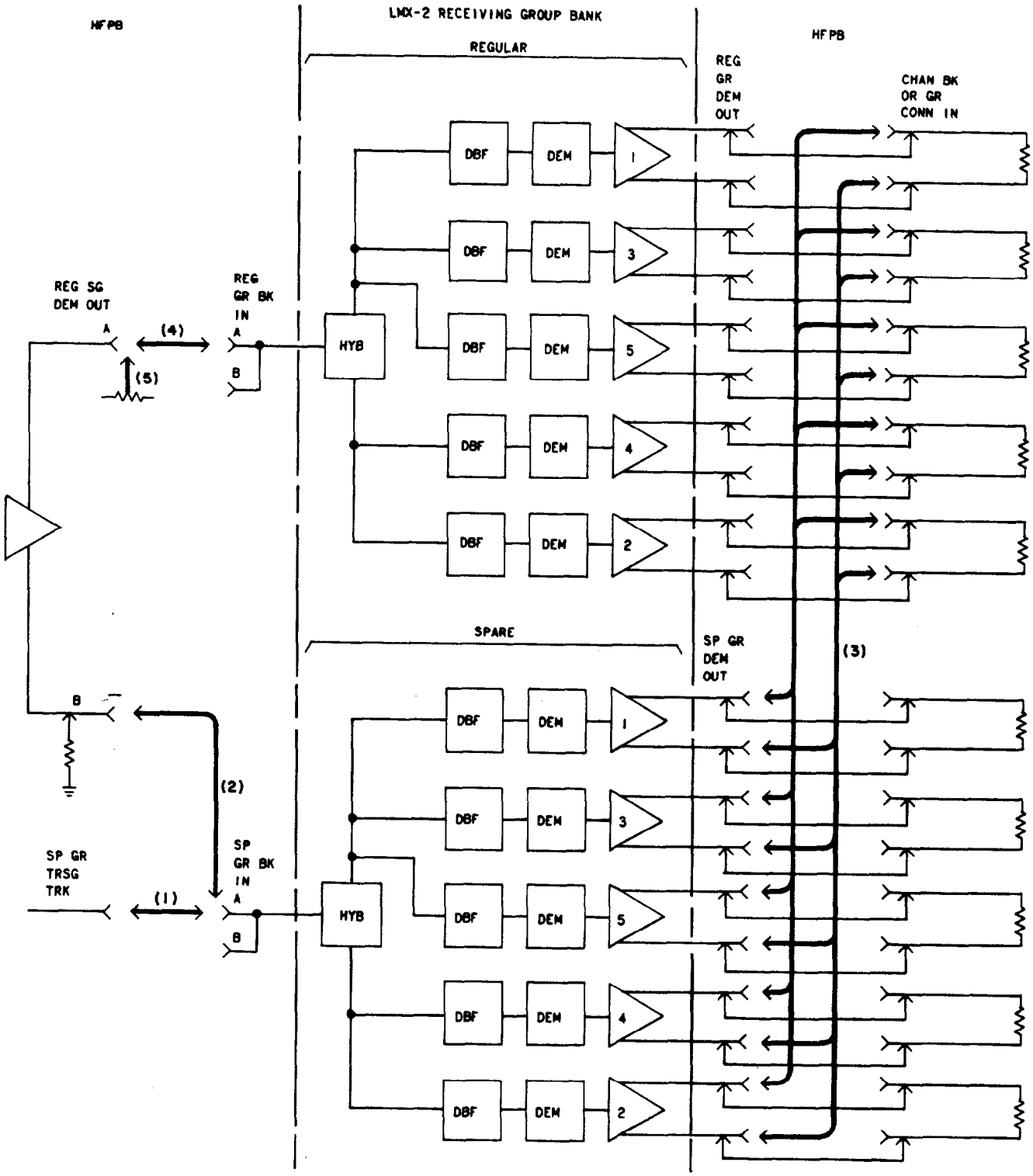


Fig. 2—Removing Regular Receiving Group Bank from Service

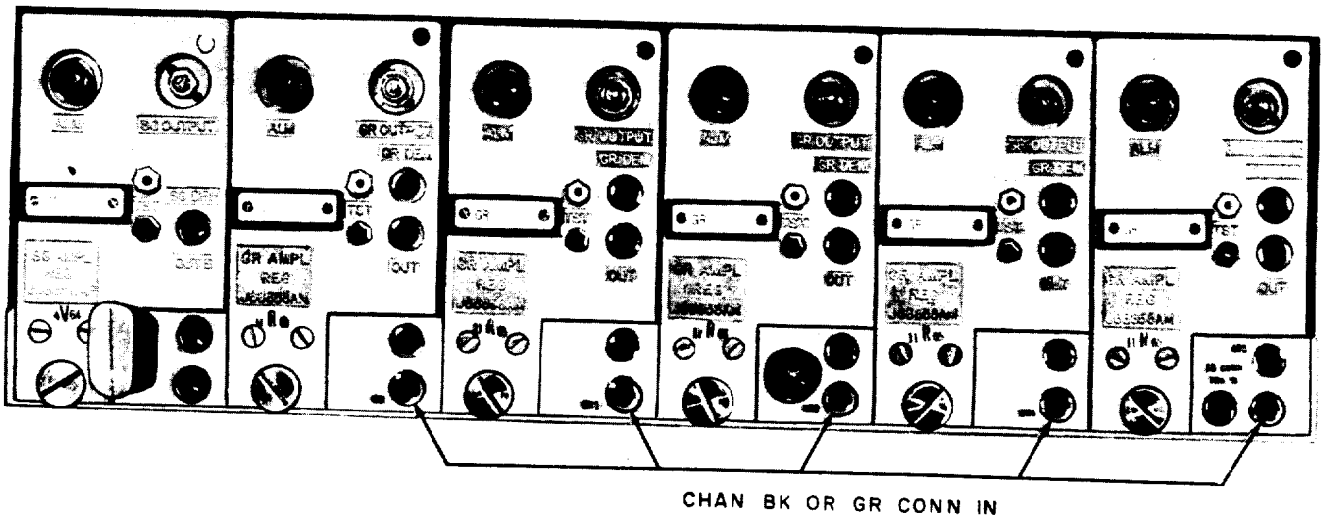


Fig. 3—Receiving Supergroup and Group Bank Amplifiers

STEP	PROCEDURE
	(a) Remove the patch from the CHAN BK or GR CONN IN jacks for group 1 [patch (3), Fig. 2].
	Caution: Remove end of patch cord from REG CHAN BK or GR CONN IN first, and then from SP GR DEM OUT, or service outage will occur.
	(b) Verify continued service on group 1.
	(c) Remove the patch from the SP GR DEM OUT jack for group 1 [patch (3), Fig. 2].
14	Repeat Step 13 for groups 2 through 5.
15	At the receiving HFPB,
	(a) Remove the patch between the REG SG DEM OUT B and SP GR BK IN A jacks [patch (2), Fig. 2]. (A major alarm will occur on SP GR BK.)
	(b) Connect the SP GR TRSG TRK jack to the SP GR BK IN A jack [patch (1), Fig. 2].
16	Disconnect the RTE.