L MULTIPLEX TERMINALS
MASTERGROUP CONNECTORS
J68882AP (MMX-2 TO MMX-2)
PATCHING PROCEDURES

This section describes patching procedures whereby regular equipment (mastergroup connectors) can be removed from or restored to service.

To prevent service interruptions while patching mastergroup equipment, effective monitoring procedures should be used. Three types of signals are available for monitoring purposes: test tone, conversation, and pilot. The most effective signal is a 1-kHz tone on a voice channel. However, local policy establishes 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 (Section 356-010-500) capable of measuring the power of the signal to be monitored

Patch Cords and Plugs as required

STEP	PROCEDURE
	Caution: Some patches may affect transmission levels; therefore, patching should be kept to a minimum. Before making any patches, read and understand the entire procedure.
	Note: To prevent service interruptions due to patching errors, the craftsman must have a thorough understanding of the following:
	(a) Transmission circuits involved
	(b) Local equipment and jack designations
	(c) Local policy regarding minimum monitoring requirements.
	Monitoring
1	Determine the monitoring procedure to be used (established by local policy).
	Caution: Always monitor at a point in the circuit path beyond the final patch point.

STEP	PROCEDURE
2	Prepare the receiving test equipment (RTE) to measure the signal (determined in Step 1) at the correct power. *Note:* Section 359-200-520 provides level diagrams and frequency charts.
3	Connect the RTE to the monitoring point determined in Step 1 (Fig. 2).
	Patching
4	To remove regular equipment from service, proceed to Step 5. To restore regular equipment to service, proceed to Step 15.
5	Determine the direction of transmission (E-W or W-E) of the regular connector to be patched.
6	Locate the jacks on the front panels of the regular and spare equipment to be patched (Fig. 1).
7	Remove the 442A plugs (75-ohm terminations) from the IN and OUT jacks of the spare connector [patches (1) and (2), Fig. 3].
8	Using a P2EB cord, connect the TRK OUT jack of the regular connector to the IN jack of the spare connector [patch (3), Fig. 3]. *Note:* Connect the patch cord to the spare connector first.

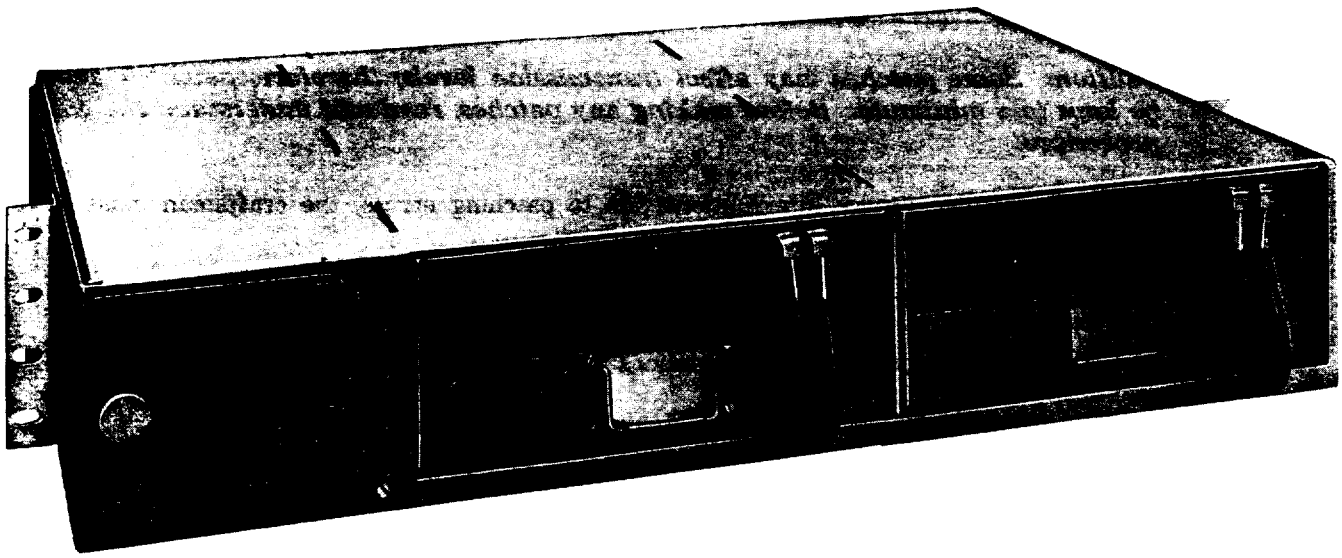


Fig. 1—MMX-2 to MMX-2 Mastergroup Connector (Front View)

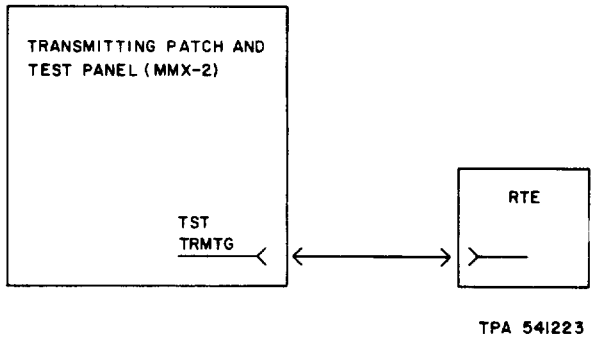
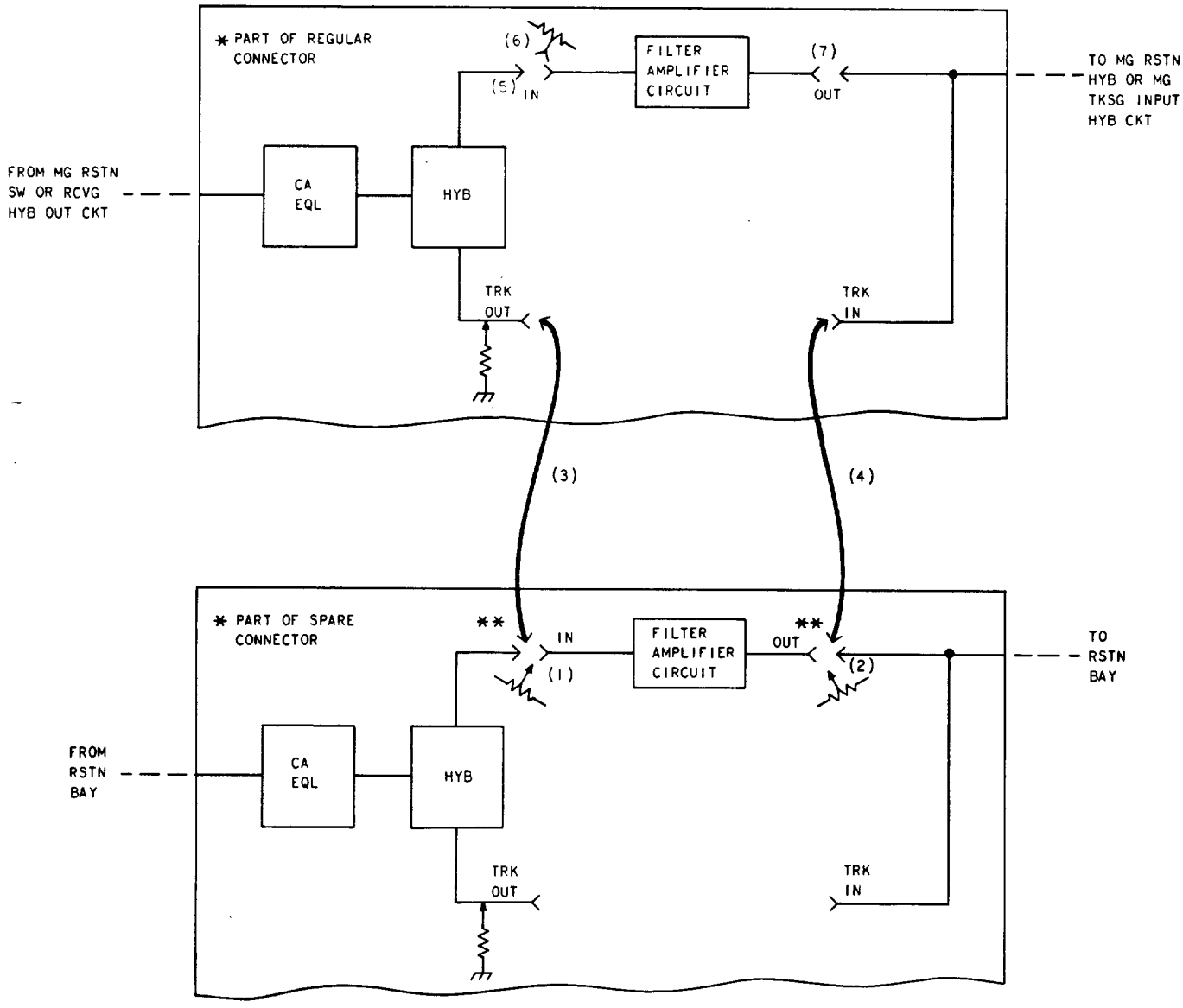


Fig. 2—Suggested Monitoring Point



* E-W AND W-E MARKINGS IDENTIFY THE DIRECTION OF TRANSMISSION FOR EACH FUNCTIONAL PART OF THE CONNECTOR
** CONNECT PATCH CORDS TO SPARE CONNECTOR FIRST

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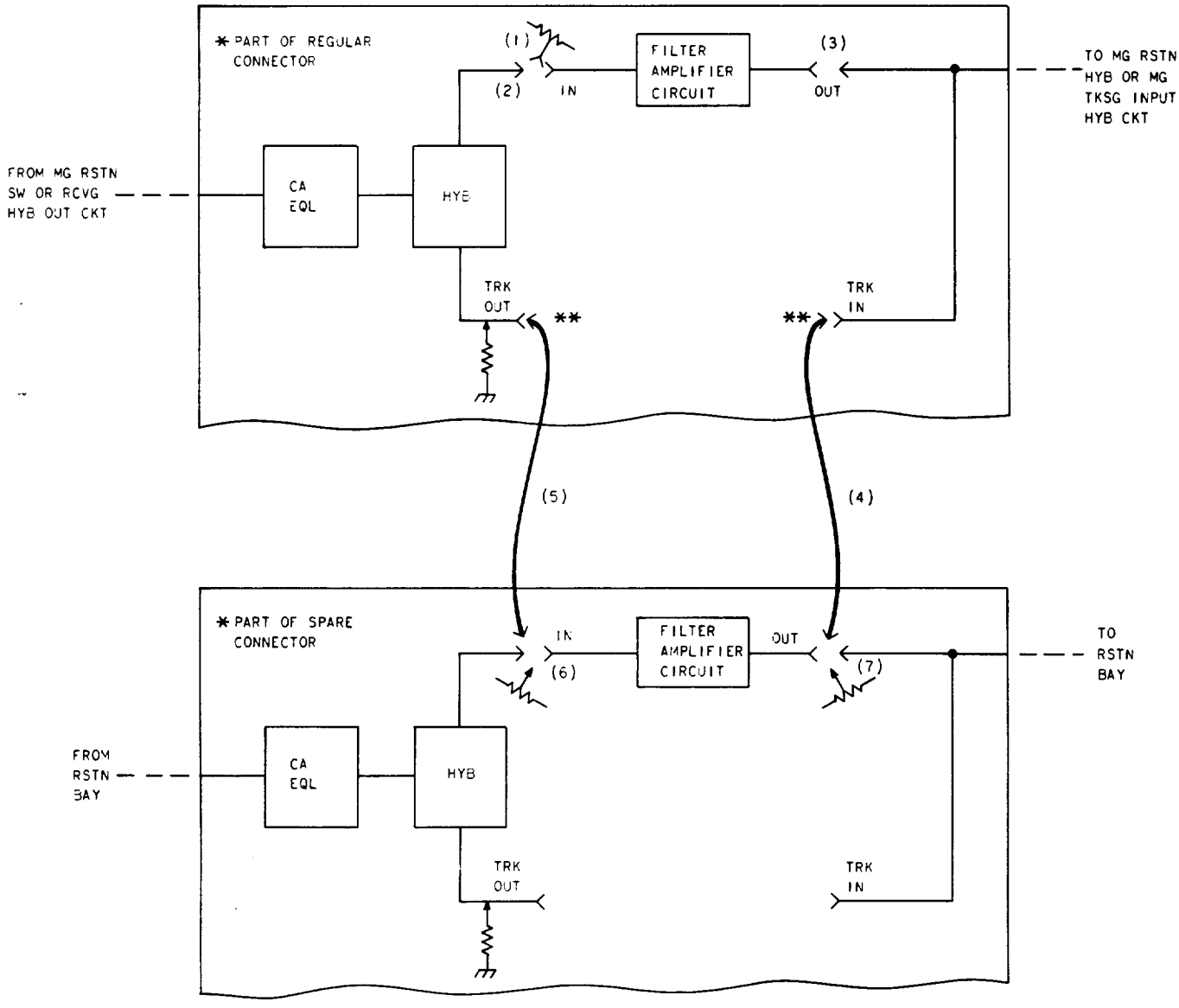
Fig. 3—Removing Regular Equipment from Service—Patching Procedures

STEP	PROCEDURE
9	Using a P2EB cord, connect the TRK IN jack of the regular connector to the OUT jack of the spare connector [patch (4), Fig. 3].
	Note: Connect the patch cord to the spare connector first.
10	Observe the RTE indication.
	Requirement: A 3-dB increase in power
11	Remove the 448A plug from the IN jack of the regular connector [patch (5), Fig. 3]. Terminate the plug into 75 ohms [patch (6), Fig. 3].
	Note: Use an adapter to make the termination.
12	Remove the 448A plug from the OUT jack of the regular connector [patch (7), Fig. 3].
13	Observe the RTE indication.
	Requirement: Normal power indication for the monitoring point
14	Disconnect the RTE; identify all patches.
	Restoring Regular Equipment To Service
15	Identify the equipment to be restored to service.
16	Locate the patches and jacks involved in restoring the regular equipment to service (Fig. 1).
17	Remove the 75-ohm termination from the 448A plug which normally connects to the IN jack of the regular connector [patch (1), Fig. 4].
18	Connect the 448 plug (Step 17) to the IN jack of the regular connector [patch (2), Fig. 4]. Connect the second 448A plug to the OUT jack of the regular connector [patch 3, Fig. 4].
19	Observe the RTE indication.
	Requirement: A 3-dB increase in power
20	Disconnect the P2EB cord from the TRK IN jack of the regular connector and the OUT jack of the spare connector [patch (4), Fig. 4].
	Note: Disconnect the patch cord from the regular connector first.
21	Disconnect the P2EB cord from the TRK OUT jack of the regular connector and the IN jack of the spare connector [patch (5), Fig. 4].
	Note: Disconnect the patch cord from the regular connector first.

STEP	PROCEDURE
22	Observe the RTE indication. ***Requirement:*** Normal power indication for the monitoring point
23	Insert 442A plugs (75-ohm terminations) into the IN and OUT jacks of the spare connector [patches (6) and (7), Fig. 4].
24	Disconnect the RTE.



* E-W AND W-E MARKINGS IDENTIFY THE DIRECTION OF TRANSMISSION FOR EACH FUNCTIONAL PART OF THE CONNECTOR
** DISCONNECT PATCH CORD FROM REGULAR CONNECTOR FIRST.

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Fig. 4—Restoring Regular Equipment to Service—Patching Procedures