

**L MULTIPLEX TERMINALS
SUPERGROUP CONNECTOR
PATCHING PROCEDURE**

This section provides patching procedures whereby regular equipment (supergroup connectors) is removed from or restored to service.

To prevent service interruptions while patching supergroup 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 signal to be monitored at the correct power.

Test Cords and Plugs as required

STEP	PROCEDURE
	<p>Caution: <i>Some patches may affect transmission levels; therefore, patching should be kept to a minimum. Before attempting any patches, read and understand the entire procedure.</i></p> <p>Note: To prevent service interruptions due to patching errors, the craftsman must:</p> <ul style="list-style-type: none"> (a) Have a thorough understanding of the transmission circuits involved. (b) Be familiar with local equipment and jack designations. (c) Be familiar with local policy regarding minimum monitoring requirements. <p>Monitoring (Fig. 1)</p>
1	Determine from management personnel the monitoring procedure to be used.
2	Prepare the receiving test equipment (RTE) to measure the signal (determined in Step 1) at the correct power.
	<p>Note: See Section 359-080-501 for level diagrams and frequency charts.</p>

STEP	PROCEDURE
3	<p>Connect the RTE to the monitoring point determined in Step 1 (Fig. 1).</p> <p><i>Note:</i> Always monitor at a point in the circuit path which is beyond the final patch point.</p> <p>Patching</p>
4	<p><i>To remove regular equipment from service, proceed to Step 5.</i></p> <p><i>To restore regular equipment to service, proceed to Step 9.</i></p> <p>Removing Regular Equipment From Service</p>
5	<p>At the receiving high-frequency patch bay (HFPB), connect the regular SG DEM OUT B jack to the spare SG CONN IN A jack [patch (1), Fig. 2].</p>
6	<p>At the transmitting HFPB,</p> <p>(a) Verify message continuity at the SG CONN OUT A jack of the spare connector.</p> <p><i>Note:</i> The supergroup pilot may be used for continuity check.</p> <p>(b) Connect the spare SG CONN OUT A jack to the regular SG MOD IN B jack [patch (2), Fig. 2].</p> <p>Requirement: Approximately a 3-dB increase in power at the monitoring point</p> <p>(c) Remove the patch from the regular SG CONN OUT A and SG MOD IN A jacks [patch (3), Fig. 2].</p> <p>Requirement: Normal power indication for the monitoring point</p>
7	<p>At the receiving HFPB,</p> <p>(a) Remove the patch from the regular SG DEM OUT A and the regular SG CONN IN A jacks [patch (4), Fig. 2].</p> <p>(b) Terminate the regular SG DEM OUT A jack into 75 ohms [patch (5), Fig. 2].</p>
8	<p>Disconnect the RTE; identify all patches.</p> <p>Restoring Regular Equipment To Service</p>
9	<p>At the receiving HFPB,</p> <p>(a) Remove the 75-ohm termination from the regular SG DEM OUT A jack [patch (1), Fig. 3].</p> <p>(b) Connect the regular SG DEM OUT A jack to the regular SG CONN IN A jack [patch (2), Fig. 3].</p>

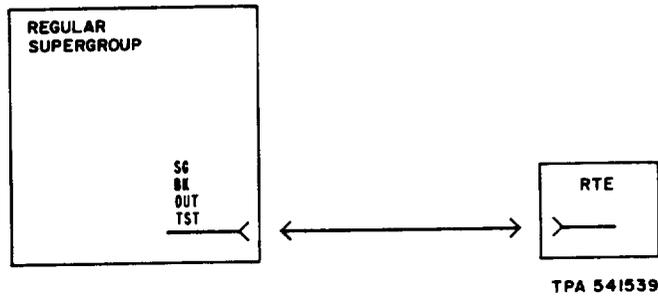


Fig. 1—Suggested Monitoring Point

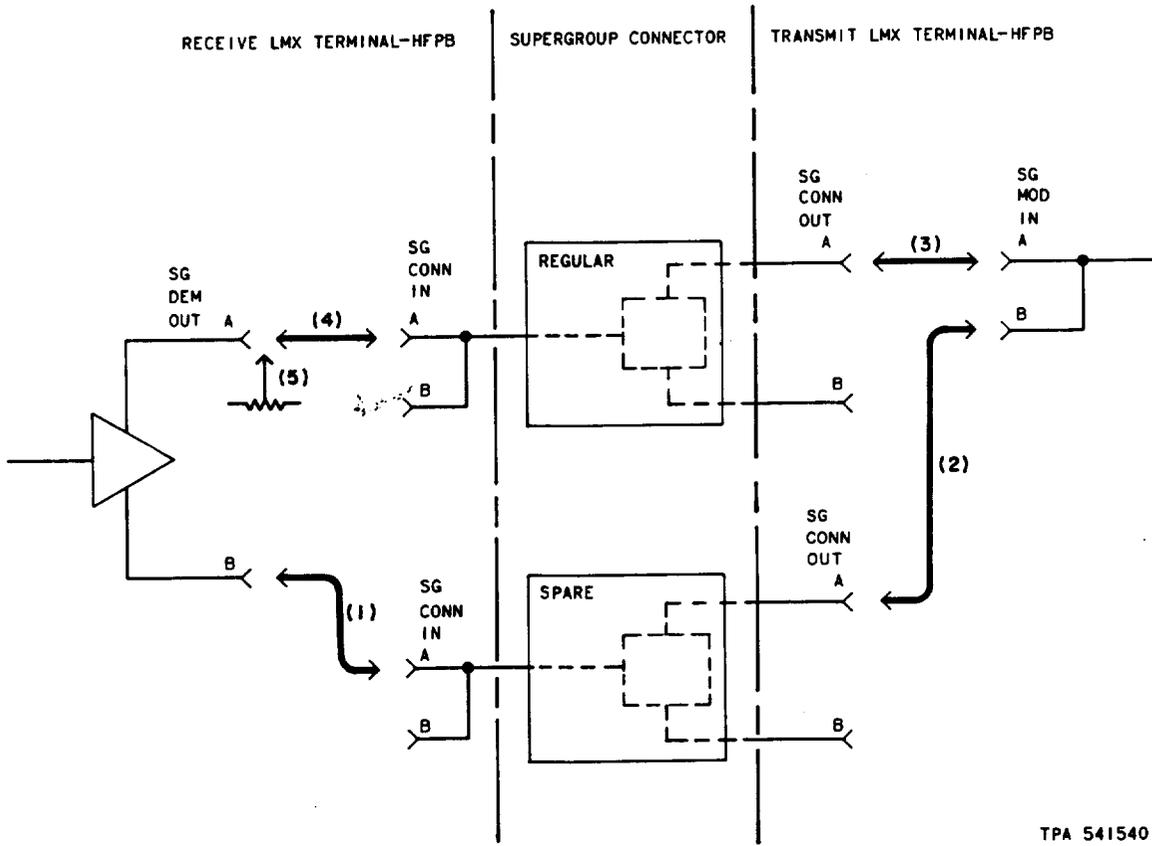


Fig. 2—Removing Regular Supergroup Connector From Service—Patching Procedure

STEP	PROCEDURE
10	<p>At the transmitting HFPB,</p> <p>(a) Verify message continuity at the regular SG CONN OUT A jack.</p> <p><i>Note:</i> The supergroup pilot may be used for continuity check.</p> <p>(b) Connect the regular SG CONN OUT A jack to the regular SG MOD IN A jack [patch (3), Fig. 3].</p> <p><i>Requirement:</i> Approximately a 3-dB increase in power for the monitoring point</p> <p>(c) Remove the patch from the spare SG CONN OUT A jack and the regular SG MOD IN B jack [patch (4), Fig. 3].</p> <p><i>Requirement:</i> Normal power indication for the monitoring point</p>
11	<p>At the receiving HFPB, remove the patch from the regular SG DEM OUT B and spare SG CONN IN A jacks [patch (5) Fig. 3].</p>
12	<p>Disconnect the RTE.</p> <div data-bbox="310 904 1466 1755" style="text-align: center;"> </div> <p style="text-align: right;">TPA 541541</p>

Fig. 3—Restoring Regular Supergroup Connector To Service—Patching Procedure