
L MULTIPLEX TERMINALS
TERMINAL CIRCUITS
TERMINAL TRUNKS
PATCHING PROCEDURES

This section describes patching procedures whereby regular terminal trunk equipment is removed from or restored to service. Because of the numerous configurations applicable to the equipment involved, only typical transmitting and receiving trunk configurations are depicted by these procedures. Each office must determine its own equipment configuration and establish applicable patching procedures.

To prevent service interruptions while patching terminal trunk equipment, effective monitoring procedures should be used. Three types of signals are available for monitoring purposes: test signal, conversation, and pilot. The most effective signal is a 1-kHz signal on a voice 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 with these procedures.

REASON FOR REISSUE: To correct Fig. 4

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 attempting any patches, read and understand the entire procedure.*

Note: To prevent service interruptions due to patching errors, the craftsman must:

- (a) Have a thorough understanding of the transmission circuits involved
- (b) Be familiar with local equipment and jack designations

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

STEP

PROCEDURE

(c) Be familiar with local policy regarding minimum monitoring requirements.

Monitoring (Fig. 1)

- 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.

Note: Whenever possible, a 1-kHz signal on a voice signal channel should be used for monitoring purposes.

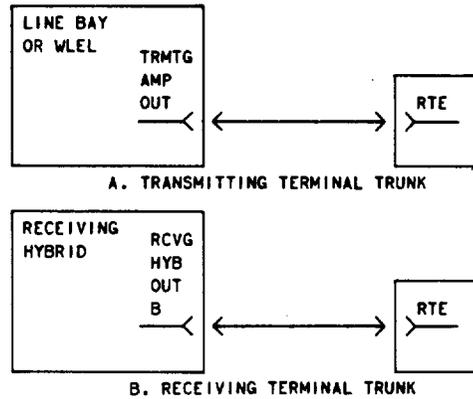


Fig. 1—Suggested Monitoring Points

- 2 Prepare the receiving test equipment (RTE) to measure the signal (determined in Step 1) at the correct power.
- 3 Connect the RTE to the monitoring point determined in Step 1 (Fig. 1).

Patching

Caution: When patching a working terminal trunk to a spare terminal trunk, both ends of the trunk must be patched simultaneously to minimize the generation of service-affecting transients.

- 4 To patch transmitting trunks, proceed to Step 5. To patch receiving trunks, proceed to Step 20.
- 5 To remove regular transmitting trunks from service, proceed to Step 6. To restore regular transmitting trunks to service, proceed to Step 13.

STEP

PROCEDURE

Removing Regular Transmitting Trunks From Service (Fig. 2)

- 6 At the LMX transmitting high-frequency patch bay (HFPB), using a 372A plug (through connection), connect the TRMTG HYB OUT B jack to the SP TERM TRK IN jack [patch (1), Fig. 2].
- 7 Observe the RTE indication.
- Requirement:** A slight decrease from normal power for the monitoring point.
- 8 At the transmitting line bay or wire line entrance link (WLEL):
- (a) Using a 372A plug, connect the SP TERM TRK OUT jack to the HYB IN B jack [patch (2), Fig. 2].
- (b) Remove the 372A plug from the REG TERM TRK OUT and HYB IN A jacks [patch (3), Fig. 2].
- 9 Observe the RTE indication.
- Requirement:** Approximately the same indication as in Step 7.
- 10 At the LMX transmitting HFPB, remove the 372A plug from the TRMTG HYB OUT A and REG TERM TRK IN jacks [patch (4), Fig. 2].
- 11 Observe the RTE indication.

Requirement: Normal power indication for the monitoring point.

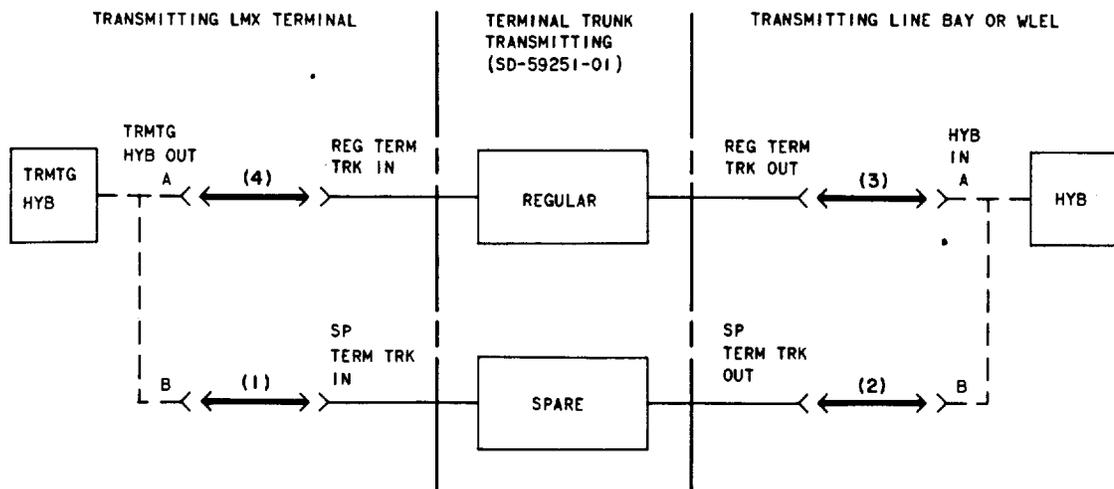


Fig. 2—Removing Regular Transmitting Trunks From Service—Patching Procedure

STEP	PROCEDURE
------	-----------

12	Identify all patches; disconnect the RTE.
----	---

Note: Attach tags containing essential information.

Restoring Regular Transmitting Trunks to Service (Fig. 3)

13	At the LMX transmitting HFPB, using a 372A plug (through connection), connect the TRMTG HYB OUT A jack to the REG TERM TRK IN jack (patch (1), Fig. 3).
----	---

14	Observe the RTE indication.
----	-----------------------------

Requirement: A slight decrease from normal power for the monitoring point.

15	At the transmitting line bay or WLEL:
----	---------------------------------------

(a) Using a 372A plug, connect the REG TERM TRK OUT jack to the HYB IN A jack [patch (2), Fig. 3].

(b) Remove the 372A plug from the SP TERM TRK OUT and HYB IN B jacks [patch (3), Fig. 3].

16	Observe the RTE indication.
----	-----------------------------

Requirement: Approximately the same indication as in Step 14.

17	At the LMX transmitting HFPB, remove the 372A plug from the TRMTG HYB OUT B and SP TERM TRK IN jacks [patch (4), Fig. 3].
----	---

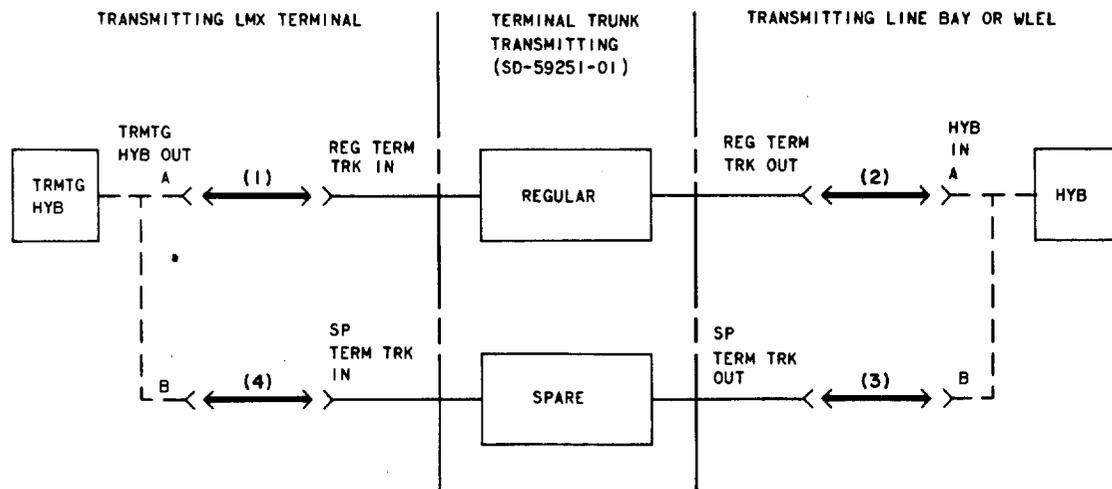


Fig. 3—Restoring Regular Transmitting Trunks to Service—Patching Procedure

STEP	PROCEDURE
------	-----------

18 Observe the RTE indication.

Requirement: Normal power indication for the monitoring point.

19 Disconnect the RTE.

20 To remove regular receiving trunks from service, proceed to Step 21. To restore regular receiving trunks to service, proceed to Step 28.

Removing Regular Receiving Trunks From Service (Fig. 4)

21 At the receiving line bay or WLEL, using a 372A plug, connect the CHAN OUT B jack to the SP TERM TRK OUT jack [patch (1), Fig. 4].

22 Observe the RTE indication.

Requirement: A slight decrease from normal power for the monitoring point.

23 At the LMX receiving HFPB:

(a) Using a 372A plug, connect the REC HYB IN B jack to the SP TERM TRK IN jack [patch (2), Fig. 4].

(b) Remove the 372A plug from the REC HYB IN A and REG TERM TRK IN jacks [patch (3), Fig. 4].

24 Observe the RTE indication.

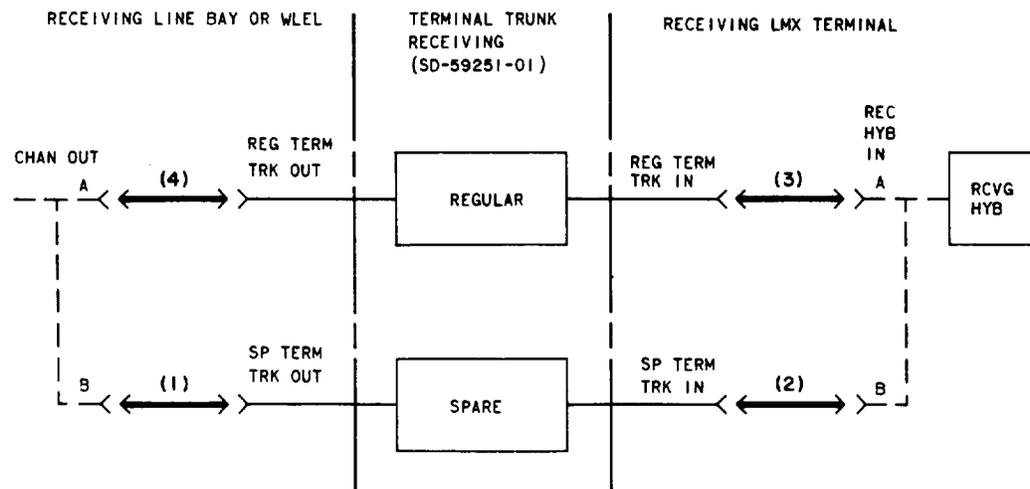


Fig. 4—Removing Regular Transmitting Trunks From Service—Patching Procedure

STEP

PROCEDURE

Requirement: Approximately the same indication as in Step 22.

25 At the receiving line bay or WLEL, remove the 372A plug from the CHAN OUT A and REG TERM TRK OUT jacks [patch (4), Fig. 4].

26 Observe the RTE indication.

Requirement: Normal power indication for the monitoring point.

27 Identify all patches; disconnect the RTE.

Note: Attach tags containing essential information.

Restoring Regular Receiving Trunks to Service (Fig. 5)

28 At the receiving line bay or WLEL, using a 372A plug, connect the CHAN OUT A jack to the REG TERM TRK OUT jack [patch (1), Fig. 5].

29 Observe the RTE indication.

Requirement: A slight decrease from normal power for the monitoring point.

30 At the LMX receiving HFPB:

(a) Using a 372A plug, connect the REG TERM TRK IN jack to the REC HYB IN A jack [patch (2), Fig. 5].

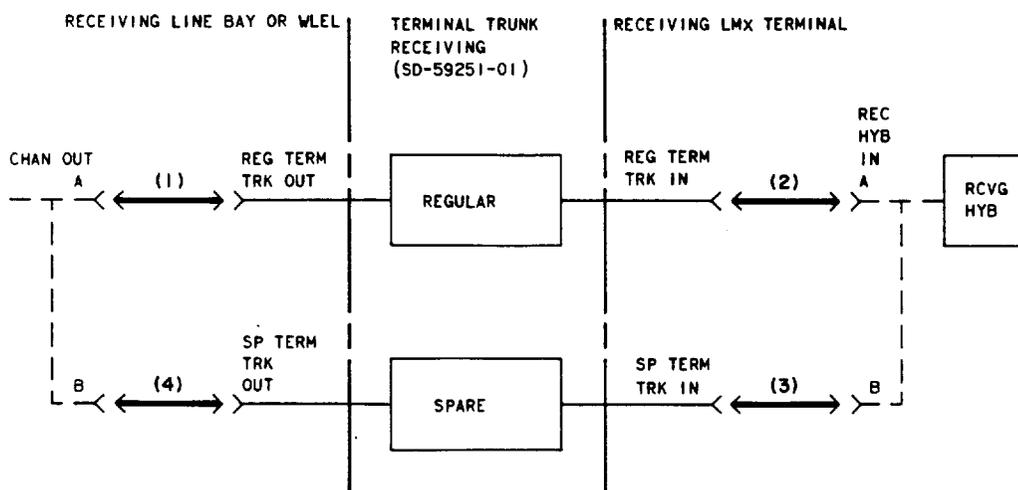


Fig. 5—Restoring Regular Receiving Trunks to Service—Patching Procedure

STEP	PROCEDURE
	(b) Remove the 372A plug from the SP TERM TRK IN and REC HYB IN B jack [patch (3), Fig. 5].
31	Observe the RTE indication. Requirement: Approximately the same indication as in Step 29.
32	At the receiving line bay or WLEL, remove the 372A plug from the CHAN OUT B and SP TERM TRK OUT jacks [patch (4), Fig. 5].
32	Observe the RTE indication. Requirement: Normal power indication for the monitoring point.
33	Disconnect the RTE.
