

**LINE LINK CONTROLLER REASSIGNMENT**

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**1. GENERAL**

1.1 This section outlines the transition plan for reassigning or replacing an emergency line link controller on the miscellaneous frame with a regular controller on a line link frame.

**2. DESCRIPTIVE NOTES**

2.1 Functions of a line link frame may be controlled by the regular controller circuit on its own frame or by either an emergency controller on the miscellaneous frame or by a regular controller on another line link frame.

2.11 Accordingly, a regular line link controller connector circuit will be cabled to either an emergency controller on the miscellaneous frame or to another regular line link frame controller.

2.2 When a crossbar unit has an odd number of line link frames, the "last" line link frames' controller connector circuit is cabled to an emergency controller on the miscellaneous frame.

2.21 When the next installation furnishes additional line link frames, this "last" line link frame will be disconnected from the emergency controller and reconnected to a regular controller on one of the new line link frames.

2.3 Each start circuit is divided into an A and B portion. The A portion is used with the "home" controller on its own line link frame, and the B portion is used with the "mate" controller of the line link frame it is mated with, or else, the emergency controller.

2.31 When a make busy plug is inserted in the MB jack of the controller circuit, it causes the controller to test busy and makes the A portion of the start circuit inoperative.

Under this condition, the line link frame would use the B portion of the start circuit and the "mate" controller of the line link frame it is mated with, or else, the emergency controller.

**3. PRELIMINARY WORK**

- 3.1 Erect the new line link frame.
- 3.2 Run all cable and connect all leads at the new line link frame end.
- 3.3 Complete all apparatus adjustments on the new line link frame.
- 3.4 Block non-operated the AC, BC, HCO-HC3 and MCO-MC3 relays at the new line link frame.
- 3.5 Connect the following cable leads at the old line link frame, making busy the A or B portion of the start circuit as indicated:

Terminals	Between		Term. Associated	Term. Associated
	Old LL Frame Strip With Relay	New LL Frame Strip With Relay		

(Make busy the "B" start circuit of the old LL frame.)

3-59	Mate	BC	Home	AC
60-64,	Mate	MC	Home	HC
70-76,				
80-93,				
100-118				

(Remove the busy condition from the "B" start circuit and make busy the "A" start circuit of the old LL frame.)

3-59	Home	AC	Mate	BC
60-64,	Home	HC	Mate	MC
70-76,				
80-93,				
100-118				

(Remove the busy condition from the "A" start circuit of the old LL frame.)

3.6 Test the controller circuit on the new line link frame as far as practicable, without interfering with the working equipment.

3.7 Do not connect leads 1 to 18 terminals 121 to 138 on either home or mate terminal strip of the old LL frame and maintain the block of the controller circuit relays of the new LL frame until during the transition period.

**4. TRANSITION WORK**

- 4.01 Make busy the "B" start circuit of the old LL frame.

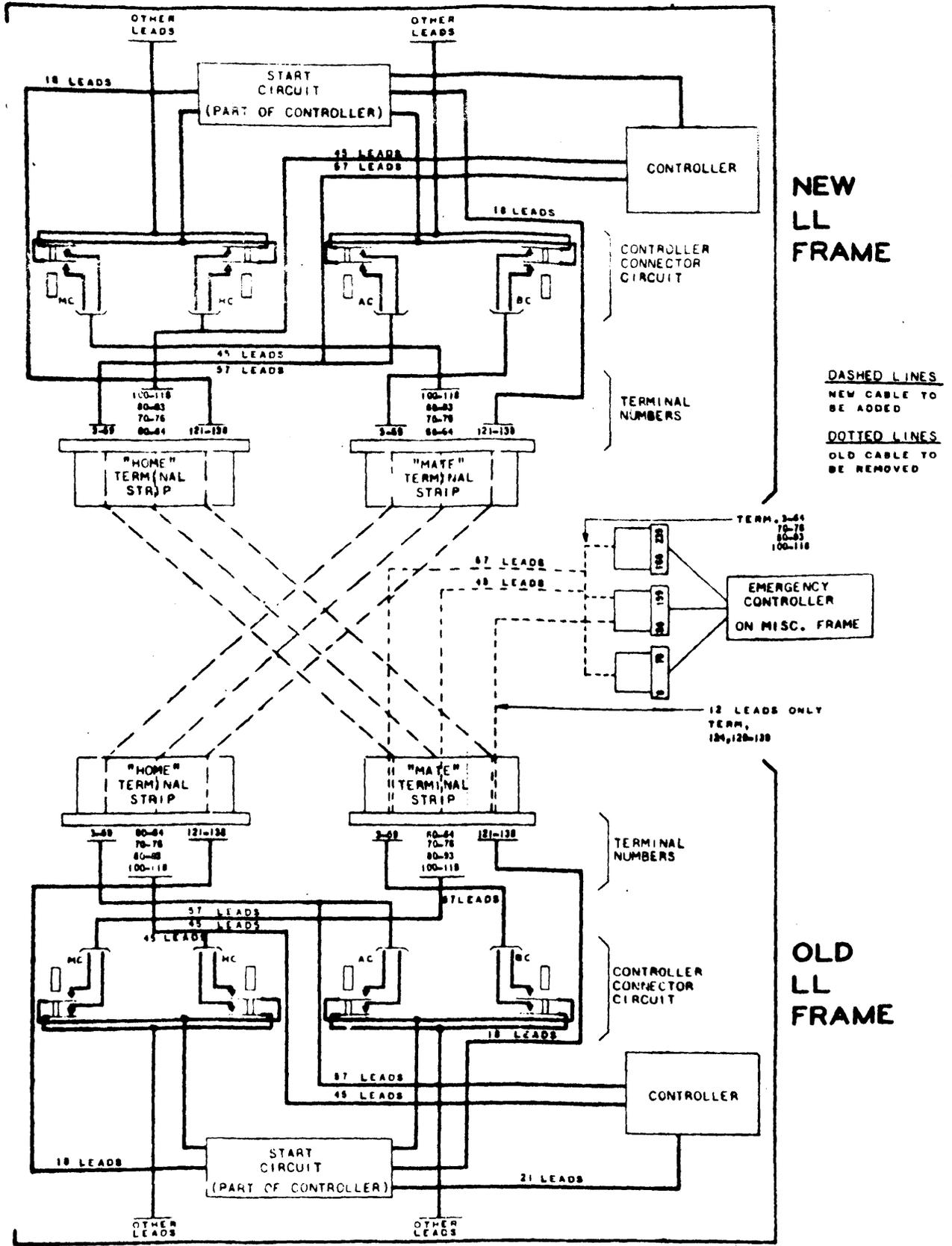


FIG. 1 CABLING ARRANGEMENT OF THE EMERGENCY AND REGULAR LINE LINK CONTROLLER CIRCUITS

4.02 Disconnect the following cable leads associated with the emergency controller circuit.

Terminals	Between		
	Old LL Frame Strip	Term. Associated With Relay or Circuit	Emergency Controller
3-59	Mate	BC	"
60-64, 70-76, 80-93, 100-118	Mate	MC	"
124, 129, 130-139	Mate	Start	"

4.03 Connect the following cable leads:

Terminals	Between			
	Old LL Frame Strip	Term. Associated With	New LL Frame Strip	Term. Associated With
121-138	Mate	Start Ckt.	Home	Start Ckt.

4.04 Remove the block from the AC and HCO-HC3 relays of the controller circuit of the new LL frame.

4.05 Remove the busy condition from the "B" start circuit of the old LL frame.

4.06 Test the controller and the "A" portion of the start circuit of the new LL frame with the working equipment of the old LL frame.

4.07 Let the controller and the "A" portion of the start circuit of the new LL frame serve the traffic requirements of the old LL frame and make busy the "A" portion of the start circuit of the old LL frame.

4.08 Connect the following cable leads:

Terminals	Between			
	Old LL Frame Strip	Term. Associated With	New LL Frame Strip	Term. Associated With
121-138	Home	Start Ckt.	Mate	Start Ckt.

4.09 Disconnect the "w" wiring strap shown on SD-25553-0110, Figure 114, from between the following terminals on the old LL frame:

On Term. Strip	Between Terminals
Home	121 and 122
Home	125 and 126
Mate	123 and 124
Mate	127 and 128

4.10 Remove the block from the BC and MCO-MC3 relays of the controller circuit of the new LL frame.

4.11 Remove the busy condition from the "A" start circuit of the old LL frame.

4.12 Test the controller and the "B" portion of the start circuit of the new LL frame with the working equipment of the old LL frame.

5. ALTERNATE METHOD

NOTE: Approval of the Operating Company should be obtained in advance if it is planned to follow this method.

5.1 Preliminary Work

5.11 Preliminary work as specified in Paragraphs 3.1 to 3.4 and 3.6 should be performed.

5.2 Transition Work

5.21 Make busy the "B" start circuit of the old LL frame.

5.22 Disconnect the following cable leads associated with the emergency controller circuit.

Terminals	Between		
	Old LL Frame Strip	Term. Associated With Relay or Circuit	Emergency Controller
3-59	Mate	BC	"
60-64, 70-76, 80-93, 100-118	Mate	MC	"
124, 129, 130-139	Mate	Start	"

5.23 Connect the following cable leads at old line link frame.

Terminals	Between			
	Old LL Frame Strip	Term. Associated With Relay	New LL Frame Strip	Term. Associated With Relay
3-59	Mate	BC	Home	AC
60-64, 70-76, 80-93, 100-118	Mate	MC	Home	HC
121-138	Mate	Start Ckt.	Home	Start Ckt.

5.24 Remove the block from the AC and HCO-HC3 relays of the controller circuit of the new LL frame.

5.25 Remove the busy condition from the "B" start circuit of the old LL frame.

5.26 Test the controller and the "A" portion of the start circuit of the new LL frame with the working equipment of the old LL frame.

5.27 Let the controller and the "A" portion of the start circuit of the new LL frame serve the traffic requirements of the old LL frame and make busy the "A" portion of the start circuit of the old LL frame.

5.28 Connect the following cables at the old line link frame.

Terminals	Between			
	Old LL Frame Strip	Term. Associated With Relay	New LL Frame Strip	Term. Associated With Relay
3-59	Home	AC	Mate	BC
60-64, 70-76, 80-93, 100-118	Home	MC	Mate	MC
121-138	Home	Start Ckt.	Mate	Start Ckt.

5.29 Disconnect the "W" wiring strap shown on SD-25553-0110, Figure 114, from between the following terminals on the old LL frame:

<u>On Term. Strip</u>	<u>Between Terminals</u>
Home	121 and 122
Home	125 and 126
Mate	123 and 124
Mate	127 and 128

5.30 Remove the block from the BC and MCO-MC3 relays of the controller circuit of the new LL frame.

5.31 Remove the busy condition from the "A" start circuit of the old LL frame.

5.32 Test the controller and the "B" portion of the start circuit of the new LL frame with the working equipment of the old LL frame.

**6. CLEAN-UP WORK**

6.1 Clean-up work would involve such items as follows:

- (a) disconnection of dead cable of emergency controller.
- (b) disposing of spare leads.
- (c) general inspection for verification items

No arrows are shown due to extensive changes.

**7. CABLING ARRANGEMENT OF EMERGENCY AND REGULAR LINE LINK CONTROLLER CIRCUITS**

7.1 Figure 1, shown on page 2, provides a composite cabling arrangement of an emergency controller, shown with dotted lines and a regular controller of a new LL frame, shown with dashed lines, with an old line link frame.

7.2 The emergency controller circuit cable has 57 leads that close through the BC relay and 45 leads that close through the MC relay of the controller connector circuit and 12 leads that are connected through to the start circuit, of the old LL frame.

7.3 The regular controller circuit cable of the new LL frame has provision for the following leads:

<u>Terminals</u>	<u>Between</u>			
	<u>New LL Frame</u>	<u>Old LL Frame</u>	<u>Term. Relay</u>	<u>Term. Relay</u>
	<u>Strip</u>	<u>Strip</u>	<u>or Ckt.</u>	<u>or Ckt.</u>
3-59	Home	AC	Mate	BC
60-64,70-76,80-93,100-118	Home	HC	Mate	MC
121-138	Home	Start	Mate	Start
3-59	Mate	BC	Home	AC
60-64,70-76,80-93,100-118	Mate	MC	Home	HC
121-138	Mate	Start	Home	Start

Engineer of Installation