

DISTRICT JUNCTOR REDISTRIBUTION

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1. GENERAL

1.1 This section provides an outline for performing a transition when a redistribution of district junctors is required.

1.2 When No. 1 Crossbar offices are equipped with AMA, the District Group Connector redistribution should be coordinated with the District Junctor Redistribution.

1.3 Since the redistribution of district junctors will vary considerably when comparing one job with another, a typical case has been selected which it is believed will cover the usual requirements.

2. PLANNING WORK SHEETS

2.1 Whenever a new group of district junctor units or line link frames are added to an existing office, the district junctor grouping frame cross connections and associated chain circuits will be rearranged to accommodate the new equipment.

2.2 Before attempting to lay out the ID-481 work sheet, analyze the T-XXXX-460 series, Schematic and Cross Connections District Junctor Distribution drawing to determine the following:

- (a) How many new district junctor groups are added.
- (b) How many new line link appearances are added.
- (c) Existing line link appearances that will serve the new junctor groups.
- (d) The new line link appearances that will serve the existing junctor groups.

2.21 The planned work should then be divided into "steps" usually covering one shift. As shown on Figure 1, in order to establish a new district junctor group, two existing groups are to be rearranged. In addition, the new junctor group will effectively be "in service" as 3 existing line link appearances make up the new group arrangement.

2.22 It is important that the steps should not be too large. As in the case of Figure 1, it will be noted that three disconnects, three connects, three chain modifications and associated testing would have to be completed in order to return the equipment to service. Ten line link appearances are out-of-service in order to perform the work specified. The work in this step therefore, could be considered as a maximum load for a shift

although rare cases might arise where the step would include another district junctor group.

2.3 Using TXXXX-460 series drawing, copy the cross connection arrangement of the groups to be included in the proposed step on ID-481, Work Sheet for District Junctor Grouping Frame Rearrangement. (shown as Figure 3).

2.31 Using the "N" drawing, which shows the existing arrangement it can be determined which cross connection cables are to be removed or added. With the appropriate symbols or colors, i.e., red-new, blue-disconnect, black-no change; this information can be added to the work sheet.

2.32 The work sheet will now show a composite arrangement of existing and future cross connection arrangements.

2.33 The G and SL chains can be laid out to conform to the cross connection arrangement. Figure 2 is an example of a completed work sheet.

3. TRANSITION WORK

3.1 Selected Example

3.11 The example that has been selected to be outlined, is illustrated in Figures 1 and 2. This is a typical case where a new district junctor group is established, by using one new line link appearance and 3 old line link appearances. In order to restore the old district junctor groups to service, temporary wiring of the chain circuit leads are provided. In later steps, when these old district junctor groups are re-established, (not outlined in the procedure), this temporary wiring would be changed as required to conform to the new arrangement.

3.2 Procedure

3.201 Make busy district junctor frame 3 group 8-9 and the following line link frame secondary switch appearances:

<u>LL FR.</u>	<u>SEC. SW.</u>
1	8-9
5	4-5
11	2-3
15	6-7
20	0-1

3.202 Disconnect the DJFG cross connection cable between district junctions and line link frame switches as follows:

DIST. JCTR.		BETWEEN		LINE LINK	
FR	GRP	FR	SEC.	SW.	
3	8-9	1	8-9		
3	8-9	15	6-7		

3.203 Disconnect the SL and G cross-connections at the DJGF, as follows:

LEAD	EQUIPMENT	TERM.	BETWEEN EQUIPMENT	TERM.
SL	DJ FR3	HOR-39	LL FR1	VERT-39
	GRP 8-9		SEC SW 8-9	
SL	LL FR1	VERT-46	LL FR5	VERT-39
	SEC SW 8-9		SEC SW 4-5	
G	LL FR1	VERT-52	LL FR5	VERT-50
	SEC SW 8-9		SEC SW 4-5	
SL	LL FR5	VERT-46	LL FR15	VERT-39
	SEC SW 4-5		SEC SW 6-7	
G	LL FR5	VERT-52	LL FR15	VERT-50
	SEC SW 4-5		SEC SW 6-7	
SL	LL FR15	VERT-46	LL FR11	VERT-39
	SEC SW 6-7		SEC SW 2-3	
G	LL FR15	VERT-52	LL FR11	VERT-50
	SEC SW 6-7		SEC SW 2-3	

3.204 Connect the SL and G cross connections at the DJGF, as follows:

LEAD	EQUIPMENT	TERM.	BETWEEN EQUIPMENT	TERM.
SL	DJ FR3	HOR-39	LL FR5	VERT-39
	GRP 8-9		SEC SW 4-5	
SL	LL FR5	VERT-46	LL FR11	VERT-39
	SEC SW 4-5		SEC SW 2-3	
G	LL FR5	VERT-52	LL FR11	VERT-50
	SEC SW 4-5		SEC SW 2-3	

3.205 Test district junctor frame 3 group 8-9, with three line link appearances on, frame 5 SEC SW 4-5, frame 20 SEC SW 0-1, and frame 11 SEC SW 2-3, remove all their busy conditions and restore it to service.

3.206 Make busy new district junctor frame 5 group 8-9 and present district junctor frame 3 group 4-5, and the following line link frame secondary switch appearances.

LL FR	SEC. SW.
0	6-7
10	0-1
13	4-5
14	8-9
20	2-3
(New) 24	0-1

3.207 Disconnect the DJGF cross connection cable between district junctions and line link frame switches as follows:

DIST. JCTR.		BETWEEN		LINE LINK	
FR	GRP	FR	SEC.	SW.	
3	4-5	20	2-3		

3.208 Disconnect the SL and G cross connections at the DJGF, as follows:

LEAD	EQUIPMENT	TERM.	BETWEEN EQUIPMENT	TERM.
SL	LL FRO	VERT-46	LL FR20	VERT-39
	SEC SW 6-7		SEC SW 2-3	
G	LL FRO	VERT-52	LL FR20	VERT-50
	SEC SW 6-7		SEC SW 2-3	

3.209 Connect the G cross connection at the DJGF, as follows:

LEAD	EQUIPMENT	TERM.	BETWEEN EQUIPMENT	TERM.
G	LL FRO	VERT-52	LL FRO	VERT-49
	SEC SW 6-7		SEC SW 6-7	
(LL FR 0 SS 6-7 becomes a "last" appearance.)				

3.210 Test district junctor frame 3 group 4-5, with four line link appearances on, frame 14 SEC SW 8-9, frame 13 SEC SW 4-5, frame 10 SEC SW 0-1 and frame 0 SEC SW 6-7, remove all their busy conditions and restore it to service.

3.211 Connect the DJGF cross connection cable between new district junctions and line link frame switches as follows:

DIST. JCTR.		BETWEEN		LINE LINK	
FR	GRP	FR	SEC.	SW.	
5	8-9	1	8-9		
5	8-9	24	0-1		(Preliminary Work)
5	8-9	15	6-7		
5	8-9	20	2-3		

3.212 Connect the SL and G cross connections at the DJGF as follows:

LEAD	EQUIPMENT	TERM.	BETWEEN EQUIPMENT	TERM.
SL	DJ FR5	HOR-39	LL FR1	VERT-39
	GRP 8-9		SEC SW 8-9	
SL	LL FR1	VERT-46	LL FR24	VERT-39
	SEC SW 8-9		SEC SW 0-1	
G	LL FR1	VERT-52	LL FR24	VERT-50
	SEC SW 8-9		SEC SW 0-1	
SL	LL FR24	VERT-46	LL FR15	VERT-39
	SEC SW 0-1		SEC SW 6-7	
G	LL FR24	VERT-52	LL FR15	VERT-50
	SEC SW 0-1		SEC SW 6-7	
SL	LL FR15	VERT-46	LL FR20	VERT-39
	SEC SW 6-7		SEC SW 2-3	
G	LL FR15	VERT-52	LL FR20	VERT-50
	SEC SW 6-7		SEC SW 2-3	
G	LL FR24	VERT-52	LL FR24	VERT-49
	SEC SW 0-1		SEC SW 0-1	

3.213 Test new district junctor frame 5 group 8-9, with four line link appearances, on frame 1 SEC SW 8-9, frame 24 SEC SW 0-1, frame 15 SEC SW 6-7 and frame 20 SEC SW 2-3, remove all their busy conditions and place this new group into service.

4. SEQUENCE OF OPERATIONS

4.1 A sequence of the district junctor group to be worked on should be prepared that will enable the transition to be done with a minimum of equipment to be released from service. This is generally accomplished by establishing and placing in service the new district junctor groups as the first part of the transition.

4.2 The following chart provides a condensed outline of the sequence of operations for the transition work of one district junctor group.

Operation		Sequence									
1	Complete all preliminary work	—									
2	Make busy the New district junctor group		—								
3	Make busy the old district junctor groups whose SEC. SW. appearances are to be re-used			—							
4	Disconnect the old SEC. SW. appearances				—						
5	Modify the LL chain Ckt. so as to return the old district junctor groups to service					—					
6	Connect the old SEC. SW. appearances to the new district junctor group						—				
7	Wire the LL chain cct. of the new district junctor group							—			
8	Test and place the new district junctor group in service								—		

→ Arrowed lines indicate new or changed information.

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 Engineer of Installation

ATTACHMENT
 Figures 1 to 3 on Pages 4 to 6.

Reason for Reissue:
 Correction Paragraph 2.2 and employee's suggestion change, Paragraph 1.2

Replaces Section 60 dated 10- 7-54.

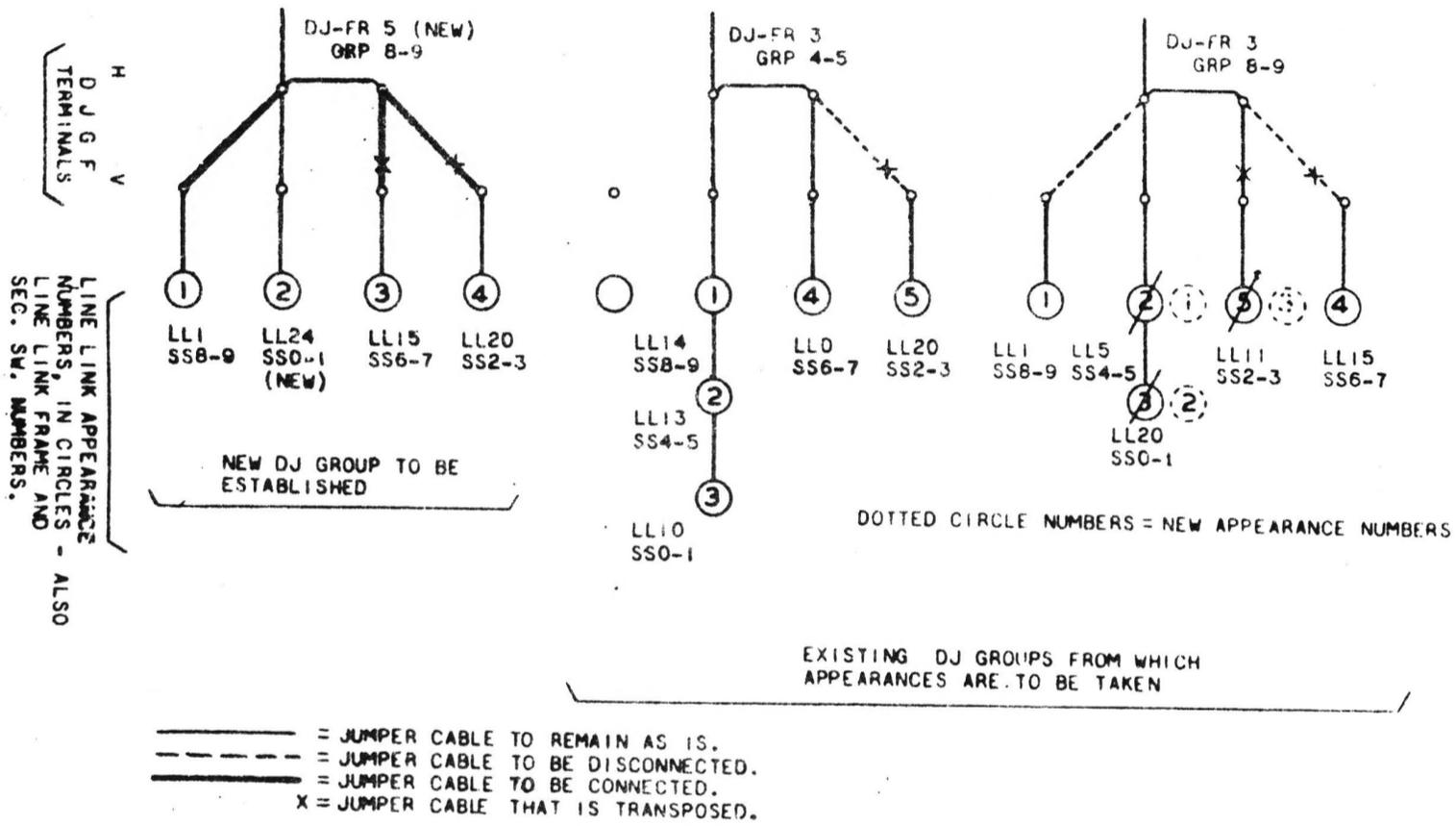


FIG. 1 OLD AND NEW DIST. JUNC. GROUPS USED FOR STUDY IN TRANSITION PROCEDURE

STEP NO. 1

ID-481 (5-54)

DISCONNECT --- DIST. JUNCT. FR. 5 GRP 8-9
 CONNECT ——— NEW OLD
 REMAINS IS ———
 HDJGF

DIST. JUNCT. FR. 3 GRP 4-5
 NEW OLD

DIST. JUNCT. FR. 3 GRP 8-9
 NEW OLD



FIG. 2 COMPOSITE ARRANGEMENT OF OLD AND NEW LINE LINK APPEARANCES OF NEW DISTRICT JUNCTOR GROUP OUTLINED IN TRANSITION PROCEDURE

DIST. JUNCT. FR. GRP _____					DIST. JUNCT. FR. GRP _____					DIST. JUNCT. FR. GRP _____				
NEW <input type="checkbox"/> OLD <input type="checkbox"/>					NEW <input type="checkbox"/> OLD <input type="checkbox"/>					NEW <input type="checkbox"/> OLD <input type="checkbox"/>				
HDJGF					HDJGF					HDJGF				
VDJGF <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					VDJGF <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					VDJGF <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
LL FRAME SWITCH <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					LL FRAME SWITCH <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					LL FRAME SWITCH <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
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SL	VDJGF	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48
LL	FRAME													
LL	FRAME	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52
G	VDJGF	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52
SL	VDJGF	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48	39 45 46 48
LL	FRAME													
LL	FRAME	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52
G	VDJGF	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52	49 50 51 52

FIG. 3 WORK SHEET - TO BE USED IN PREPARING JOB REQUIREMENTS FOR DISTRICT JUNCTIOR REDISTRIBUTION AS SHOWN IN FIGURE 2