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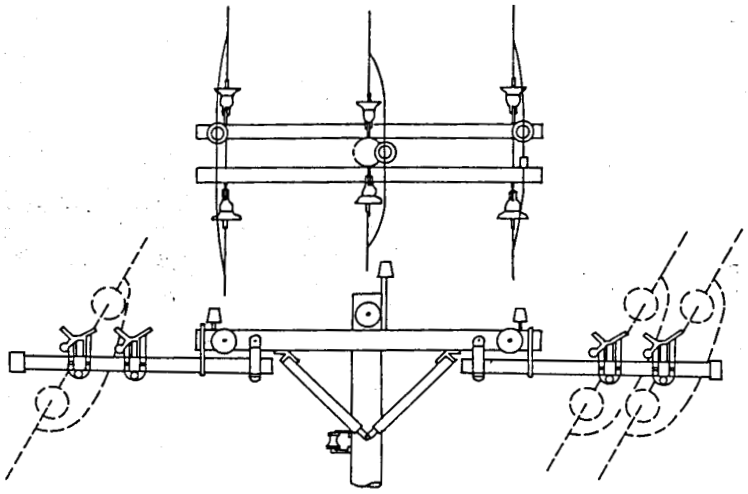
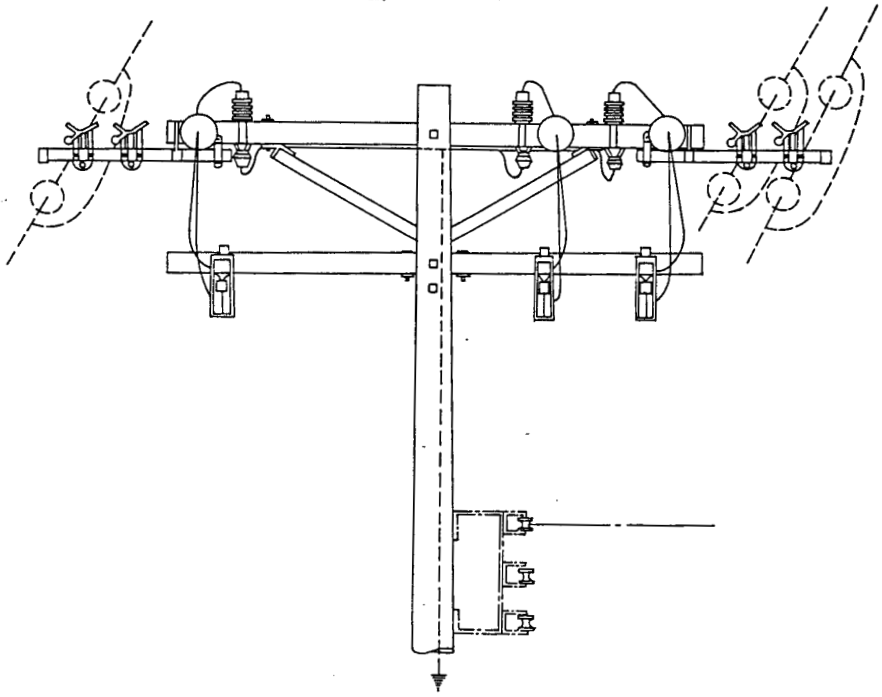


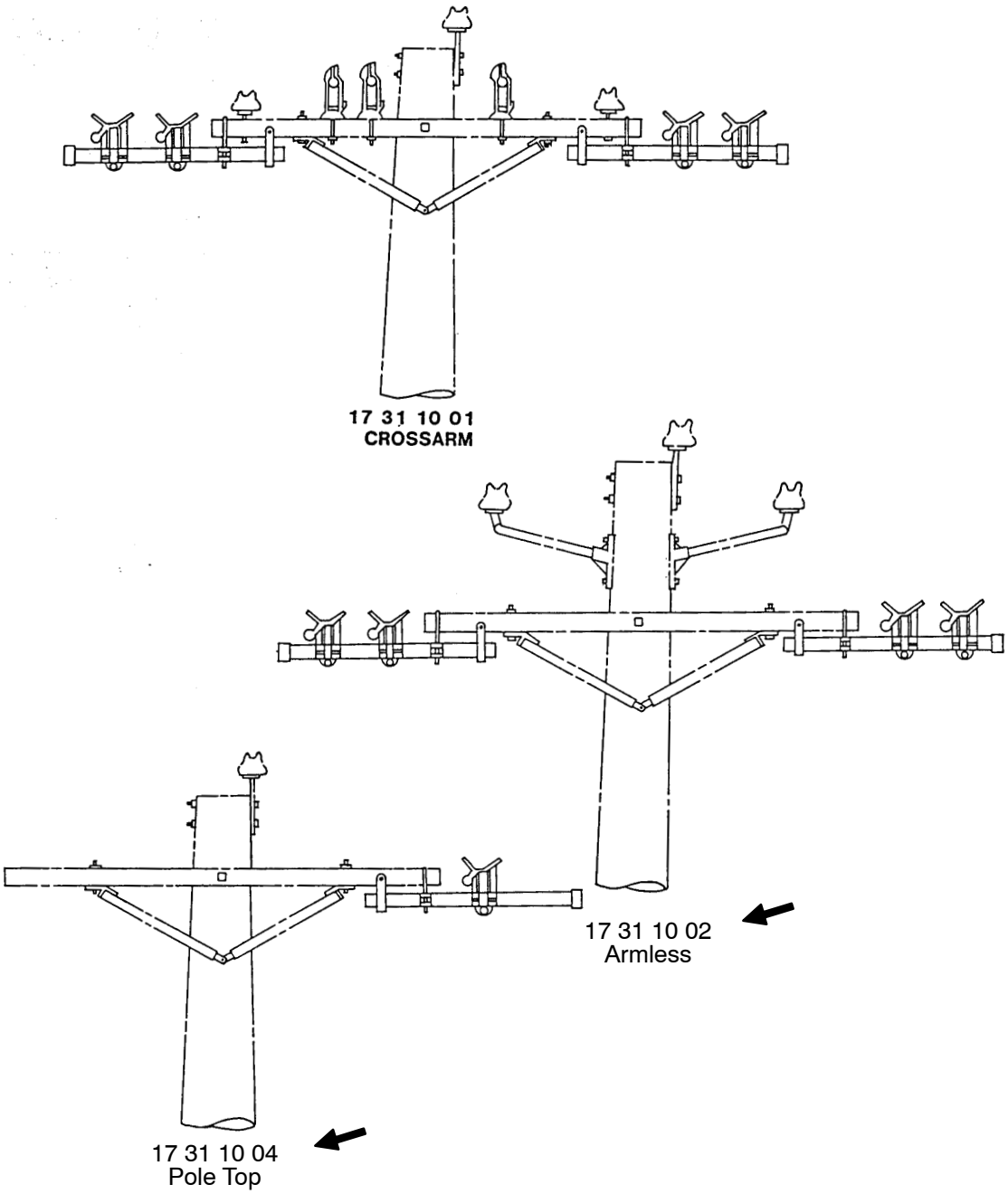
3Ø 17 21 40 01
2Ø 17 21 40 02



3Ø 17 21 40 03
2Ø 17 21 40 04

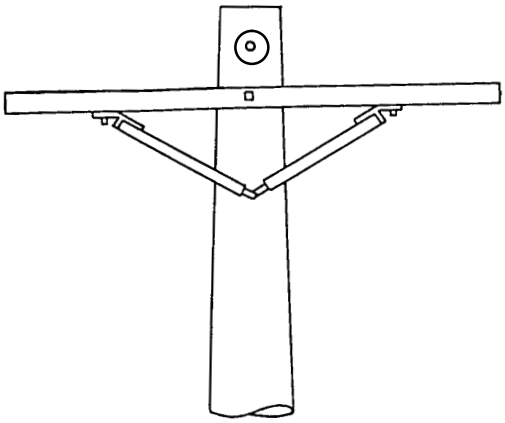
1. Above quantities assume that new switches will be installed.
2. If switch is not replaced or R&R'd, Estimate 4 additional Code 260s per switch.

		Description **17 21 40 ****	**01**	**02**	**03**	**04**
	996	Epoxi Arms	4	4	4	4
	912	R & R Disc Insulators	6	4	6	4
1 2	260	Jumper	12	8	6	4



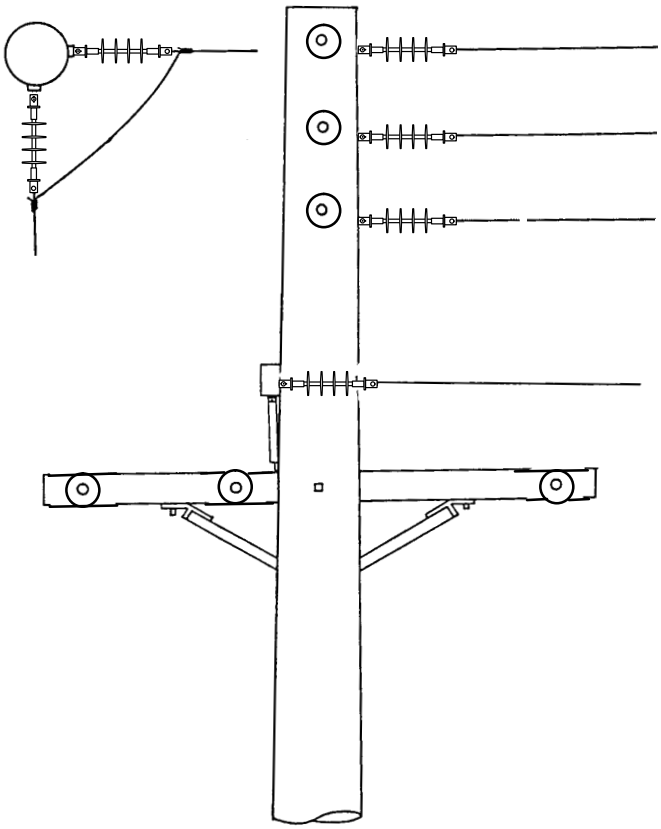
	Stnd. / Stk. No.	Description 17 31 10 **	01	02	04
	996	Epoxi Arms	4	4	2
	TARM	Crossarm Single, 6 Ft.		2	2

DEADEND



4 kV 17 31 11 01
12kV 17 31 11 03

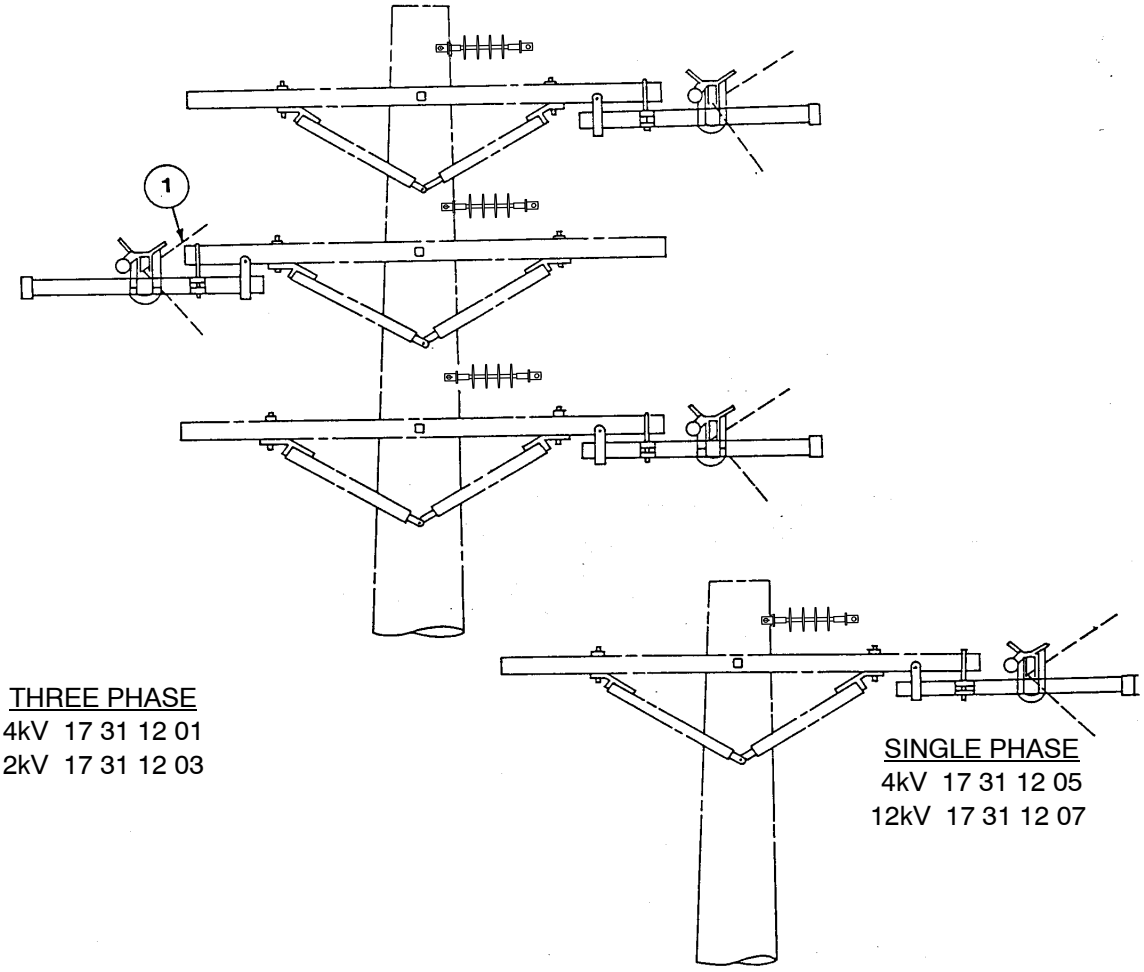
90° CORNER



4 kV 17 31 11 05
12kV 17 31 11 07

1. Minus out each 255 jumper on which a 252 connector is installed.

	Stnd. / Stk. No.	H/C	Description 17 31 11 **	01	03	05	07
	TARM		Crossarm Sgle, 6 Ft.	2	2		
	TARM		Crossarm Sgle, 8 Ft.			4	4
	912		R&R Insulator	1		6	
	912	H	R&R Insulator		1		6
	260		Jumper Inst & REM			12	6
	255		Jumper Inst & REM				6
@	252		Connector Energized Ea	@	@	@	@

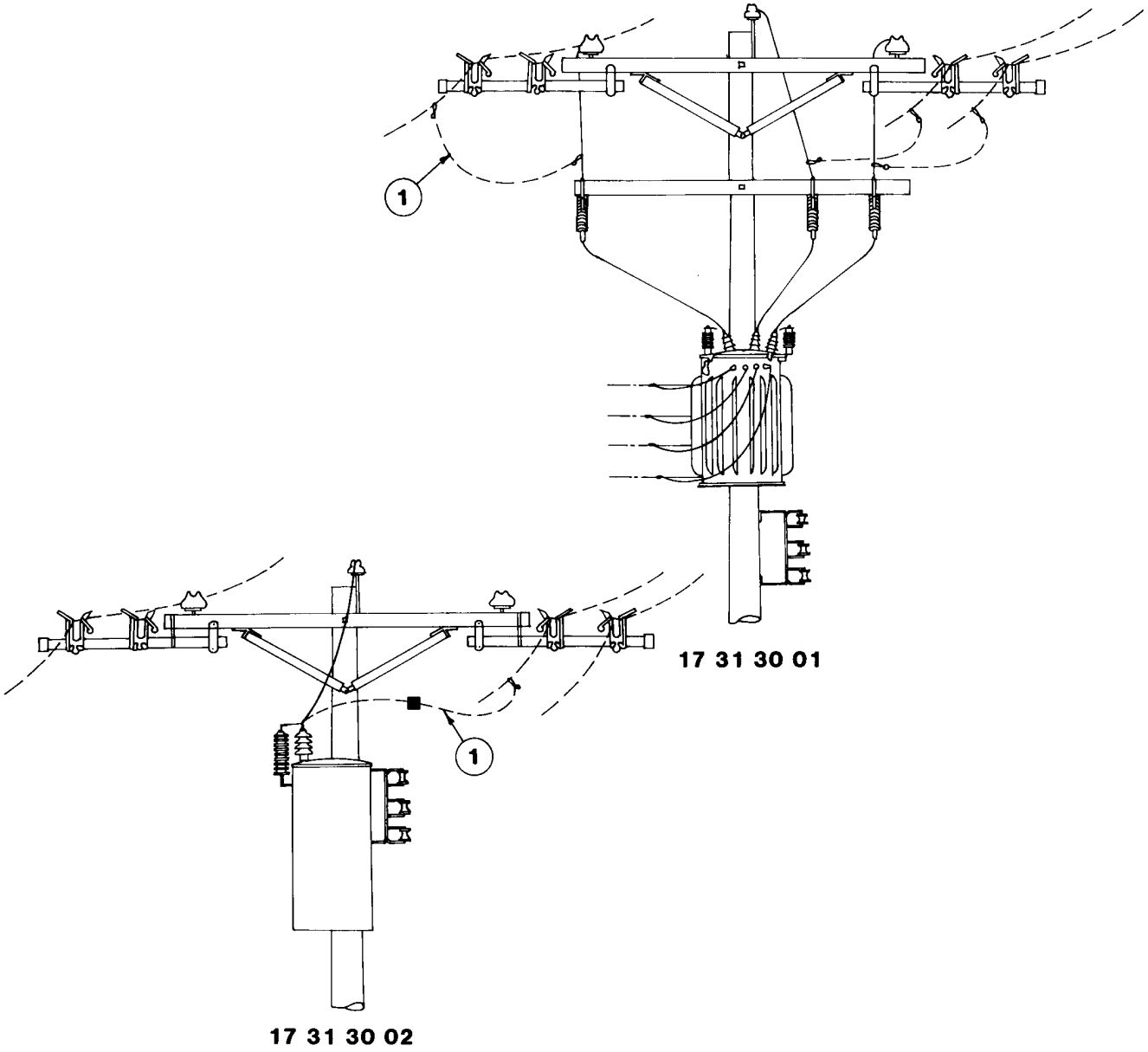


THREE PHASE
4kV 17 31 12 01
12kV 17 31 12 03

SINGLE PHASE
4kV 17 31 12 05
12kV 17 31 12 07

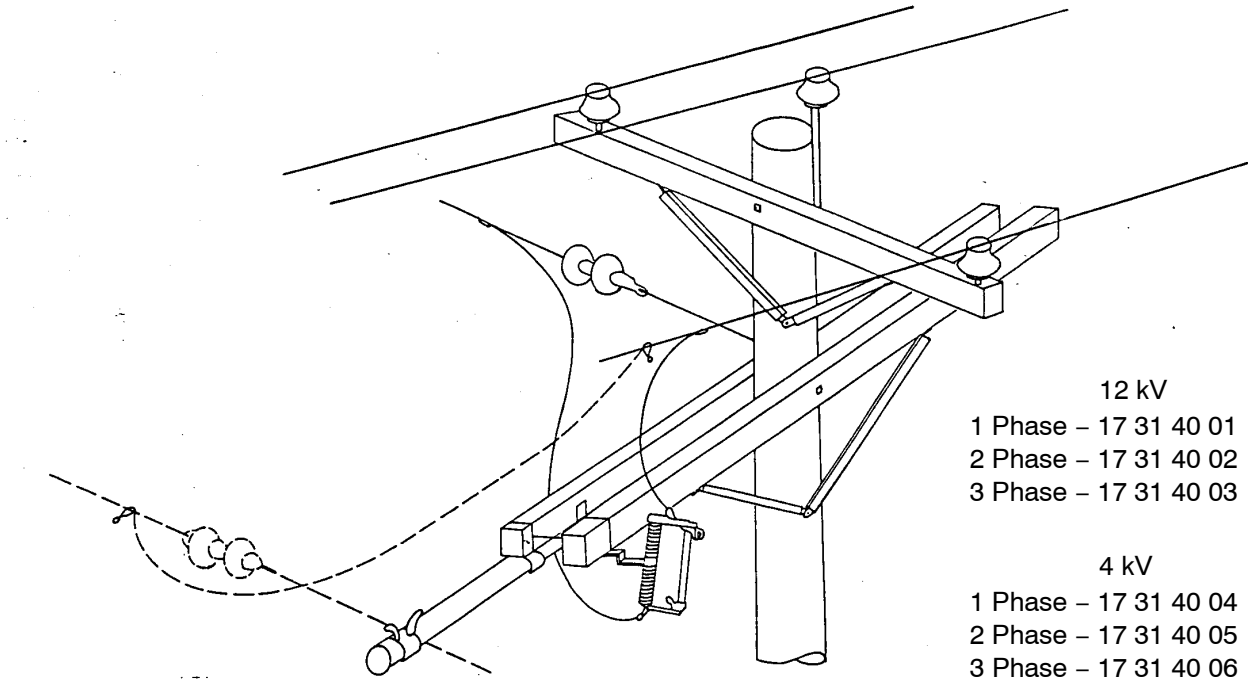
1. Splice – Add approx. 6” length of wire
2. 270 – De energized wire, #6–4/0 is spliced under tension.
3. 275 – De energized wire. 336 or larger is spliced under tension.
4. H 270 – Energized, 12 kV or above, wire, #6–4/0 is spliced.
5. H 275 – Energized, 12 kV or above, wire, 336 or larger is spliced.

	Stnd. / Stk. No.	H/C	Description 17 31 12 **	01	03	05	07
	TARM		Crossarm Single 6 Ft.	6	6	2	2
2 @	996		Epoxi Arm	6	6	2	2
3 @	270		Splice 6 Thru 4/0	2			
4 @	275		Splice 336 & Above	2			
5 @	270	H	SP 6 Thru 4/0 12kV		2		
	275	H	SP 336 & Above 12kV		2		
	260		Jumper	2			
	255		Jumper		2		



1. If transformer outage can be obtained, use Code 260.

		Description 17 31 30 **	01	02
	996	Epoxi Arms	4	4
@	255	Jumper	12	4
@	260	Jumper	12	4

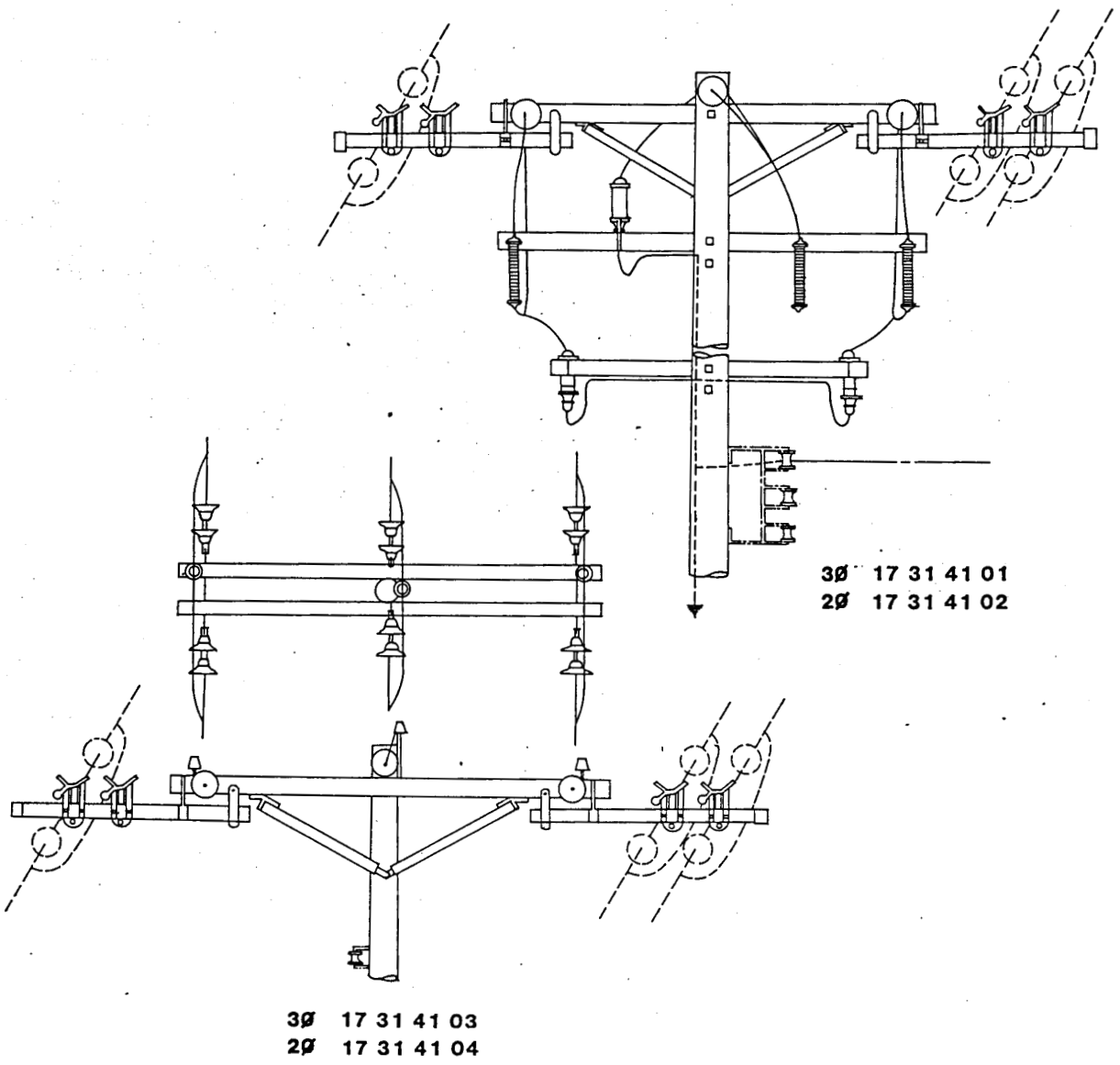


12 kV
1 Phase – 17 31 40 01
2 Phase – 17 31 40 02
3 Phase – 17 31 40 03

4 kV
1 Phase – 17 31 40 04
2 Phase – 17 31 40 05
3 Phase – 17 31 40 06

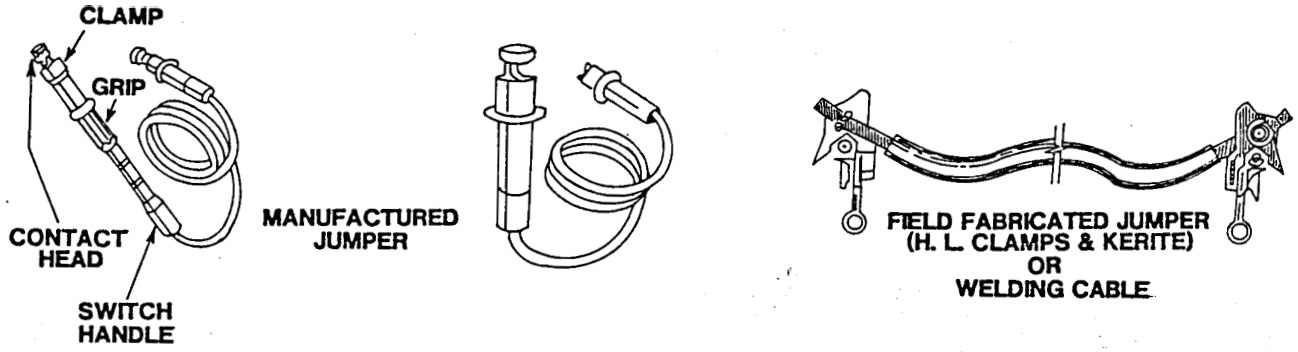
1. Group for 12kV #6 thru 1/0 existing switch is refused or converted to solid blade.
2. Group for 12kV 336 thru 556 complete switch may be replaced.
3. Where P.G. connections are installed using rubber gloves, estimate a Code 255 and minus out one corresponding Code 252. 252 energized connectors (each). Minus out one 255 for each jumper on which a 252 connector is installed.

		H/C	Description 17 31 40		01	02	03	04	05	06
	996		Epoxi Arms		2	4	4	2	4	4
	912		R&R Insulators					1	2	3
	912	H	R&R Insulators		1	2	3			
			Breakoff Description		Quantities Estimated/Reported					
5 @			Existing Breakoff	New Breakoff						
	260		Switched	Switched	5	10	15	6	12	18
	255				1	2	3	0	0	0
	260		Not Switched	Not Switched	2	4	6	4	8	12
3 @	255				2	4	6			
4 @	260		Not Switched	Switched	1	2	3	3	6	9
5 @	255				2	4	6			
	260		Switched	Not Switched	2	4	6	3	6	9
	255				1	2	3	0	0	0
			New Wire 336 or Larger							
@2	260		100 Amp 200 Switch	600 Amp Switch	1	2	3	2	4	6
@3	255				1	2	3	0	0	0
@2	252				1	2	3			
@3	260		Not Switched	Not Switched	2	4	6	4	8	12
@2	255				2	4	6			
@3	252				@	@	@			
@2	260		Not Switched	600 Amp Switch	1	2	3	3	6	9
@3	255				2	4	6			
@2	252				1	2	3			
@3	260		Switched	Not Switched	2	4	6	3	6	9
@2	255				1	2	3			
@3	252				@	@	@			

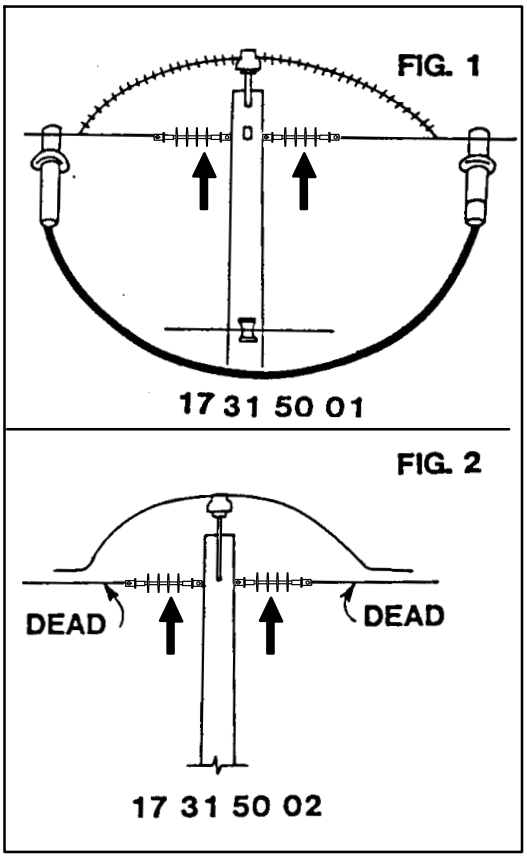


1. Above quantities assume that new switches will be installed.
2. If switch is not replaced or R&R'd, Estimate 4 additional Code 260s per switch.

	Stk. No or Code	H/C	Description 17 31 41 **	01	02	03	04
	996		Epoxi Arms	4	4	4	4
	912	H	R&R Insulators	6	4	6	4
1	255		Jumper	3	2	6	4
1 2	260		Jumper	3	2	6	4



Stnd. / Stk. No.	Description 17 31 50 **	01	02	03	04	05	06
260	Inst. & REM. 5kV, Jumpers, Loopovers	2					
260	5 & 12kV, Dead Loopovers		1				
260	1st, Conn. REM. De–energizes jumper Loopover			1			
260	Secondary Split				2		
260	Inst. or REM. Primary Taps – Phase Cuts Etc.					1	
260	Open Loop & Reconnect to Itself Hot						1

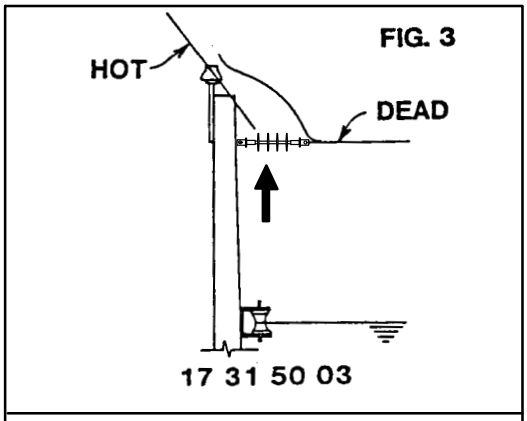


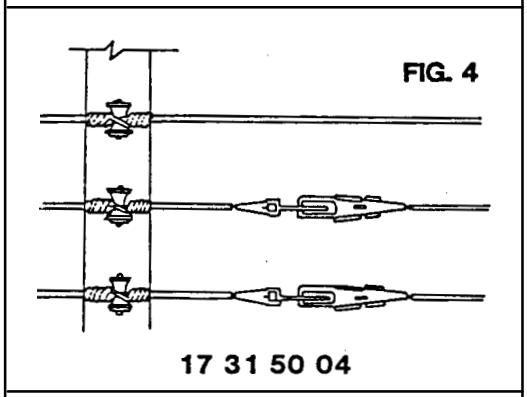
INSTALL OR REMOVE JUMPERS

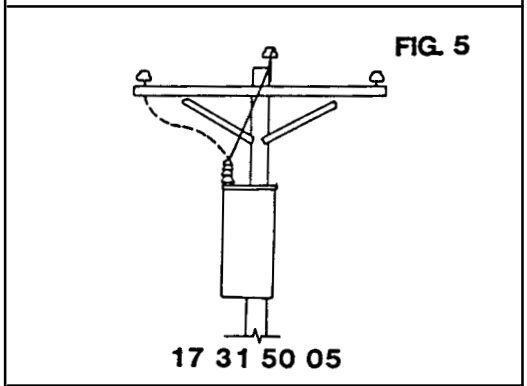
This operation code is to be estimated in the following cases. Do not report with Code 255 or 252.

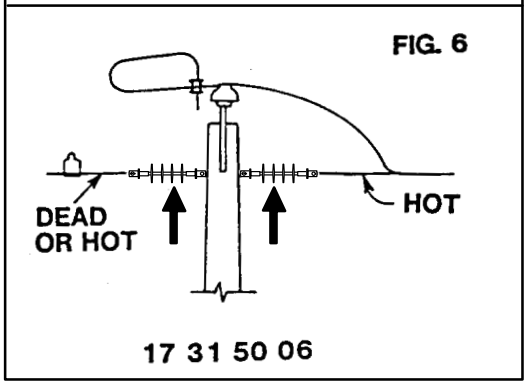
Installing or removing 5kV jumpers, loopovers, or looparounds. (Fig. 1)

Installing 12kV jumpers, loopovers, or looparounds and the first connection is to de–energized primary. (Figs. 2 & 3)









The first connection (connector or clamp) removed de–energizes the jumper, loopover or looparound. (Fig. 3)

Opening or closing secondary splits (Fig. 4), grounding single phase primary (Fig. 3), installing or removing temporary jumpers (Fig. 1), or as a supplemental ground from the neutral to the ground rod on a three phase cluster grounding set.

Installing or removing energized primary taps (hot line clamps) and no major items are reported. (Figs. 3 & 5)

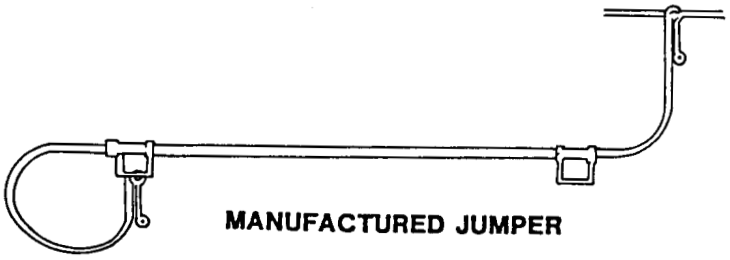
If an energized jumper is disconnected, remains energized and is reconnected to itself or the same energized phase (using hot line clamps or stirrups), estimate Code 260. (Fig. 6)

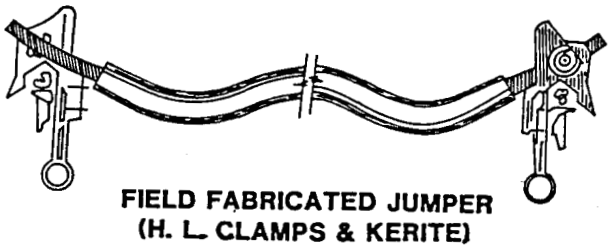
Installing or removing energized primary connections on existing reclosers and sectionalizers.

Do not estimate Code 260 when estimated major material items, such as switches, are connected or disconnected.

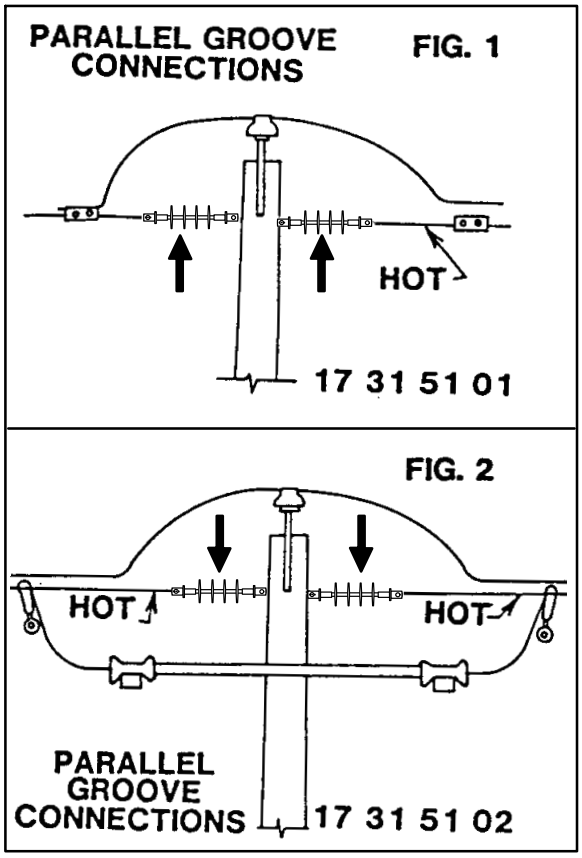
Do not estimate with stirrup clamps or with hot line clamps that are not already connected to a loopover, looparound, or loopunder. Not to be used for permanent connections on secondary or neutral.

Estimate only a quantity of one ”each” for the installation or removal of a jumper, loopover, loopunder, or looparound.





Stnd. / Stk. No.	Description 17 31 51 **	01	02	03	04	05	06
252	Install Hot Connection (Parallel Groove)	1					
255	Inst. Jumper & Loopovers (Parallel Groove)		3				
255	Remove Connection – Tap Remains Hot			1			
255	Inst. or REM. Hot Taps & Jumpers				6		
255	Inst. or REM. Hot Taps & Jumpers					2	
255	Install Temporary Jumpers						3



252
INSTALL OR REMOVE ENERGIZED (12KV OR ABOVE) PRIMARY CONNECTIONS

Estimate this operation code in the following cases:

Installing connector, such as a parallel groove clamp, on energized primary using hot sticks. (12kV or above) (Fig. 1)

Only a quantity of one Code 252 should be estimated unless two connectors (such as parallel groove clamps) on the same jumper are installed hot. In this case, a quantity of 2 Code 252s should be estimated. (Figs. 2 & 5) If the above is installed using rubber gloves, replace Code 252 with Code 255. If energized P.G. clamp is removed using hot sticks or gloves, report as Code 255.

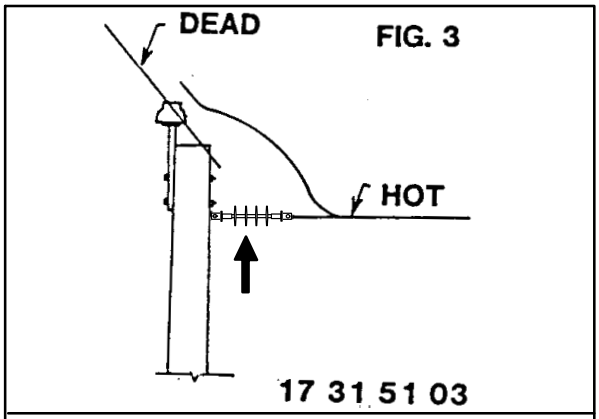


FIG. 3

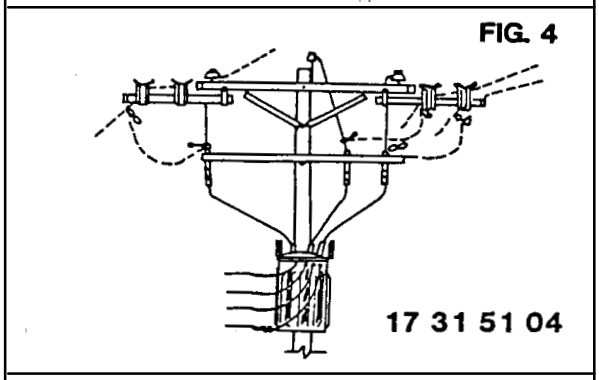


FIG. 4

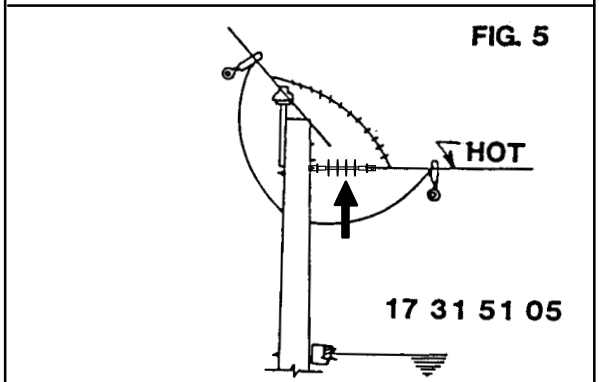


FIG. 5

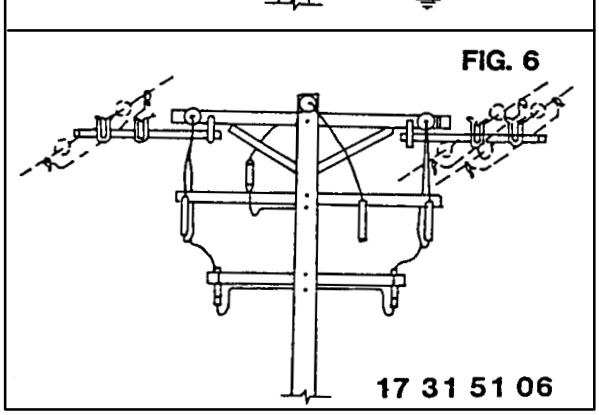


FIG. 6

<u>255</u>

Installing loopovers, looparounds, or jumpers and the first end connected (Hot Line Clamp) is to energized primary. (12kV or above) (Fig. 2, 4, & 5)

If an energized jumper is disconnected, remains energized, and is reconnected to itself or the same energized phase using hot line clamps or stirrups, estimate Code 260 (Fig. 6)

Do NOT estimate Code 255 with Code 260 or when major material, such as switches, are connected or disconnected when working on 5kV. Do NOT estimate Code 255, 260, or 252 on the same jumper.

Do NOT estimate Codes 255 or 260 for closing or opening a switch.