

SEE ADDENDUM

## REFERENCE

### 1A1 KEY TELEPHONE SYSTEM PACKAGED KEY TELEPHONE UNITS

#### 1. GENERAL

**1.01** This section combines identification information for the 200F (MD), 200G (MD), 200H, and 200K (MD) packaged KTUs formerly contained in Sections 518-210-100, 518-210-400, 518-210-401, 518-210-402, and 518-210-403, which are hereby canceled.

#### 2. IDENTIFICATION

**2.01** The 200F, G, and K packages provide the basic requirements for 1A1 and 6A (selector only) Key Telephone System installations. The 200H packaged units provide for the 2-talking link 6A Key Telephone System.

**2.02** The basic differences in these packages are the capacities of the apparatus mountings. The 200F, G, and K packages are equipped with a 232B KTU with a KS-15900 List 1 interrupter, which provides for flashing and winking lamps, interrupted audible signal, time-out, and manual intercom.

**2.03** A 232A (MD) or 232B KTU is furnished with each 200H-type KTU, but the KS-15900, List 1 or KS-19384, List 2 interrupter is not furnished, and if required must be ordered separately. All leads associated with the 232-type KTU are accessible at the terminal panel when a 64B1-100 cable terminal is provided.

**2.04** The dc and ac power supply may be provided by a J86471B, List 1 power unit. Direct current, 20 to 26 volts, may be supplied from local or building battery. Power supply for lamps may be supplied by a 393A (MD) or 393B transformer; ringing supply may be over a pair of leads from CO, PBX, or J86731C, List 1 power plant [107C (MD) or 107D frequency generator].

**2.05** When the 200F, G, H, and K-type KTUs are used in conjunction with other key

systems, the J86731B, List 1 power plant may be required for the lamp supply. This is provided with the 200K-type KTU only, and must be ordered separately for the 200F, G, and H type KTUs. The 10-volt capacity of the power plant is four hundred twenty-five 51A lamps.

**2.06** The 29C1 or 30C1 power units may also be used to furnish power for the 200H KTU. For information covering their use refer to 167 Division.

**2.07** Fuse requirements for the 200H KTU are as follows:

DESIG	AMP	POTENTIAL FUSED	QUANTITY
		VOLTS	
A Bat.	2	-20 to -26 tlk bat.	One per system
B Bat.	2	-20 to -26 sig bat.	

**2.08** When one or more telephone stations associated with these packaged KTUs are equipped with a TOUCH-TONE<sup>®</sup> dial, a 247A (MD) or 247B KTU must be ordered separately and mounted externally to the apparatus mounting if space is not available.

#### Ordering Guide

**2.09** A description of the KTU ordering codes, service and features, apparatus mountings, and cable terminals is shown in Table A.

**2.10** When the 64A1-50 cable terminal is equipped with a 15-foot tail, designation strips preprinted with the feature layout for 200F- and 200K-type KTUs are furnished. Two additional blank strips are furnished for field changes.

**TABLE A**  
**1A1 PACKAGED KEY TELEPHONE UNITS**

KEY UNIT CODES (SEE NOTE)	KEY TELEPHONE UNITS AND SERVICE FEATURES								APPARATUS MOUNTING	CABLE TERMINAL (PROVIDED WHEN LETTER C IS ADDED TO CODE) (SEE NOTE)
	230A OR B KTU PICKUP AND HOLD 4 CO OR PBX LINE	202C OR D KTU PICKUP AND HOLD 1 CO OR PBX LINE	232A OR B WITH KS-15900, LIST 1 INTER- RUPTER, FLASH, WINK, TIME-OUT, AND MAN. INTERCOM	207C 9-STA DIAL SELECTIVE INTERCOM	222A KTU	223A KTU	224A (MD) OR B KTU	216A KTU		
200F4	1		1						31A apparatus mounting 116A cover 173B back- board	64A1-50 cable terminal (1-GC52 terminal box 2-31D connecting blocks, 50-pr cable, with 8-ft tail)
200F4D	1		1	1						
200F5 (Fig. 1)	1	1	1							
200F6	1	2	1							
200G4	1		1						26A apparatus mounting	64B1-75 cable terminal (1-terminal plate assembly per ED-69366-50, group 3, 75-pr cable with 8-ft tail)
200G4D	1		1	1						
200G5	1	1	1							
200G5D	1	1	1	1						
200G6	1	2	1							
200G6D	1	2	1	1						
200G7	1	3	1							
200G7D	1	4	1	1						
200G8 (Fig. 2)	2		1							
	1	4								
200G9	2	1	1							
	1	5								
200K4 (Fig. 4)	1		1						16A apparatus mounting 117A cover	64A1-50 cable terminal (1-GC52 terminal box, 2-31D connecting blocks, 50-pr cable with 8-ft tail)
200K4D	1		1	1						
200K5	1	1	1							
200K5D	1	1	1	1						
200K6	1	2	1							
200K6D	1	2	1	1						
200K7	1	3	1							
200K7D	1	3	1	1					26A apparatus mounting	64B1-100 cable terminal (1-terminal plate assembly per ED-69366-50, group 3, 100-pr cable with 15-ft tail)
200H15D (Fig. 3)			1*	1	1	2	1	1		
200H18D			1*	1	1	3	1	1		

\* The KS-15900, List 1 interrupter must be ordered separately.

200K-type KTUs are furnished with the J86731, List 1 power plant.

**Note:** The 200F, 200G, and 200K KTUs and the 64A1-50 terminal box are rated (MD).

**2.11** These pressure-sensitive tapes are designated as:

- Forms E-4842 and E-4843 which consist of two dual strips preprinted to conform to the layout of the 200F- and 200K-type KTUs, respectively
- Form E-4848 which consist of four blank strips to be marked as necessary to fit the need.

## DESIGN FEATURES

**2.12 200F-Type KTU** (Fig. 1) provides:

- Pickup and hold on four to six CO or PBX lines, or
- Pickup and hold on four CO or PBX Lines with a 9-station dial selective intercom circuit.

Fig. 5 shows the arrangement, coding (without cable terminal), and KTUs used in the 200F-type KTU.

**2.13 200G-Type KTU** (Fig. 2) provides:

- Pickup and hold on four to nine CO or PBX Lines, or
- Pickup and hold on four to eight CO or PBX Lines with 9-station dial selective intercom circuit.

Fig. 6 shows the arrangement, coding (without cable terminal), and KTUs used in the 200G-type KTU.

**2.14 200H-Type KTU** (Fig. 3) provides:

- Intercommunication facilities for a maximum of 18 codes
- A primary and secondary talking link which enables a system to carry two simultaneous and independent conversations.
- Camp-on. The 224B KTU permits the camp-on station to cut through when the primary or secondary link becomes available.
- A busy tone to the station originating camp-on and to any other stations which may try to originate a call after the system has been camped on.
- Automatic cutoff.

Fig. 7 shows the arrangement, coding (without cable terminals), and KTUs used in the 200H-type KTU.

**2.15 200K-Type KTU** (Fig. 4) provides:

- Pickup and hold on four to seven CO or PBX Lines with or without a 9-station dial selective intercom circuit
- J86731D, List 1 Power Plant

Fig. 8 shows the arrangement, coding (without cable terminal), and KTUs used in the 200K-type KTU.

**2.16** Refer to Division 518, sections entitled "Service, 1A1, 200F, G, and K Packaged Units" and "Service, 1A1, 200H Packaged Units" for connections.

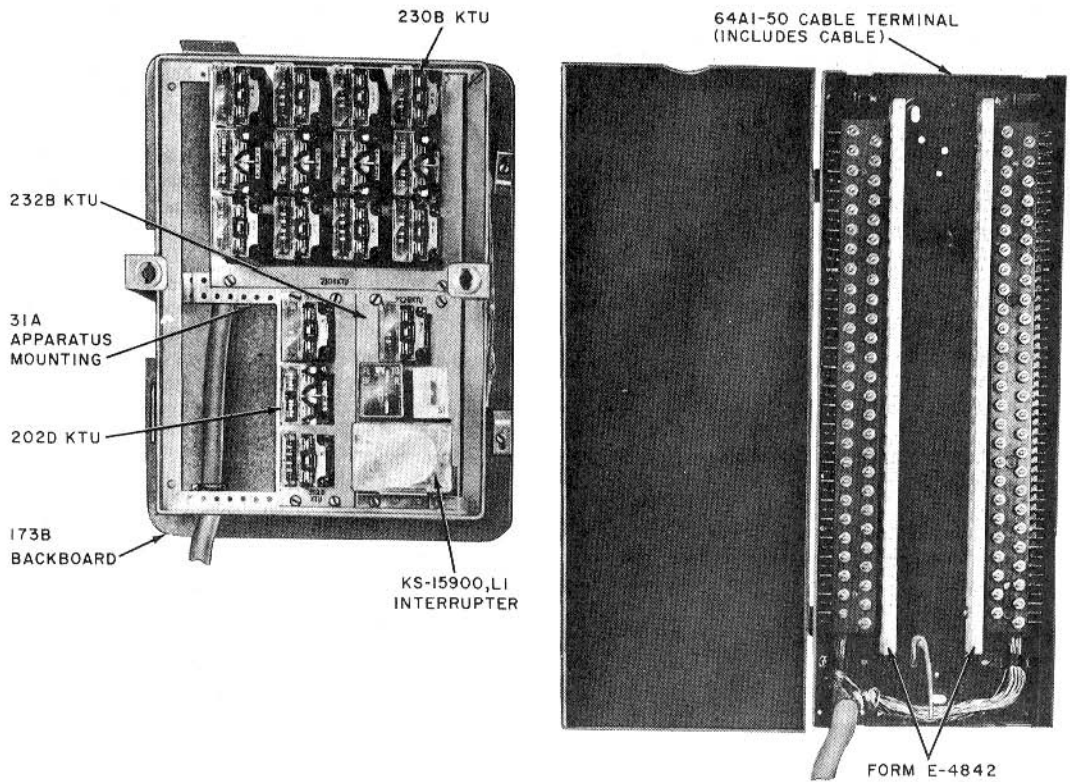


Fig. 1—200F5C KTU (Without Cover)

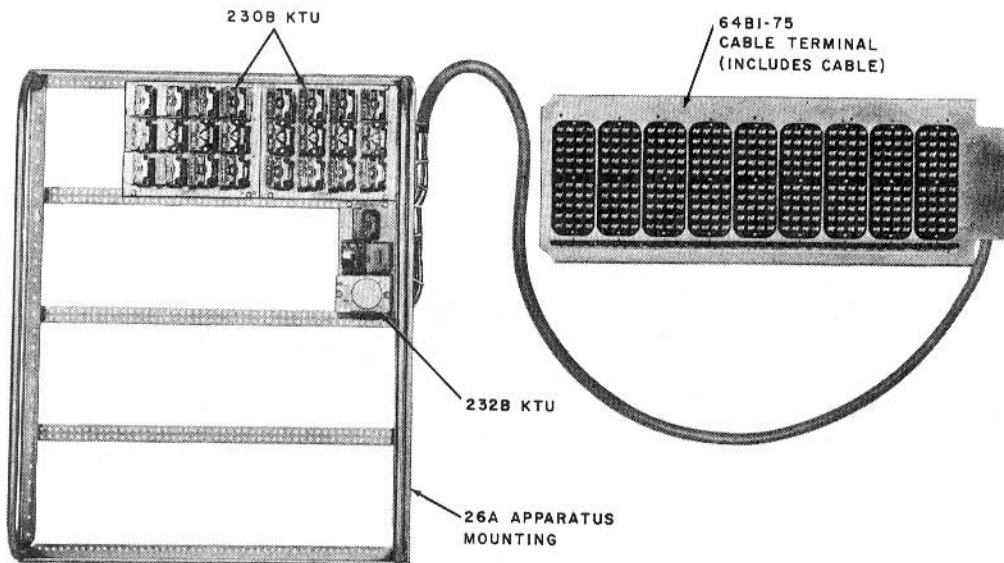


Fig. 2—200G8C KTU

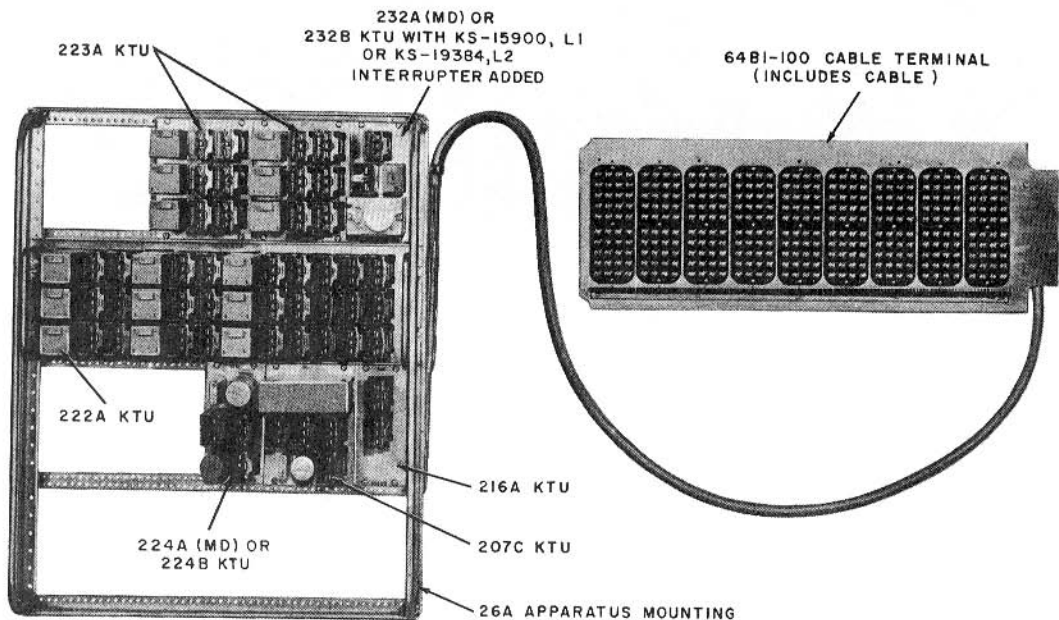
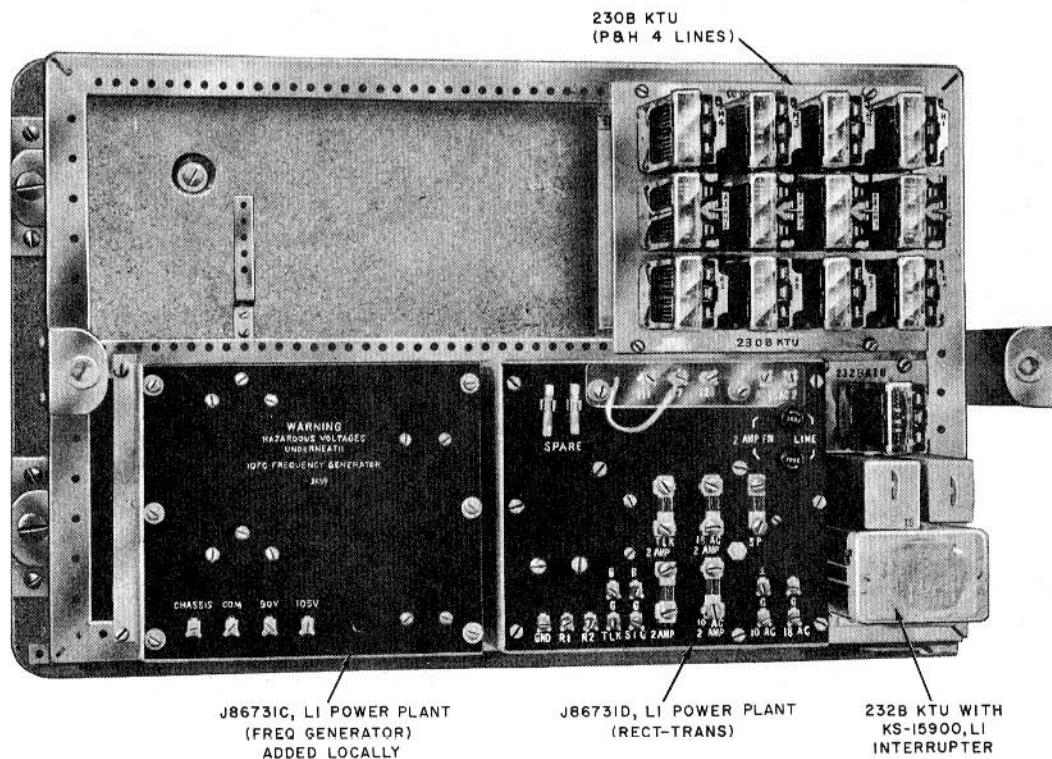


Fig. 3—200H15DC KTU



**Fig. 4—200K4 KTU (Without Cover)**

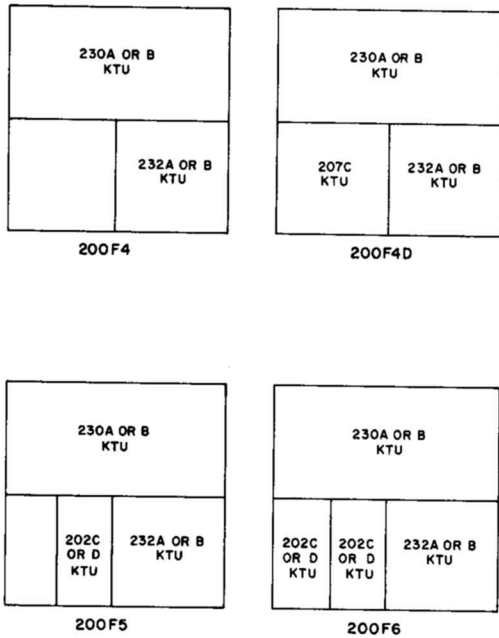


Fig. 5—200F-Type KTU, Arrangements

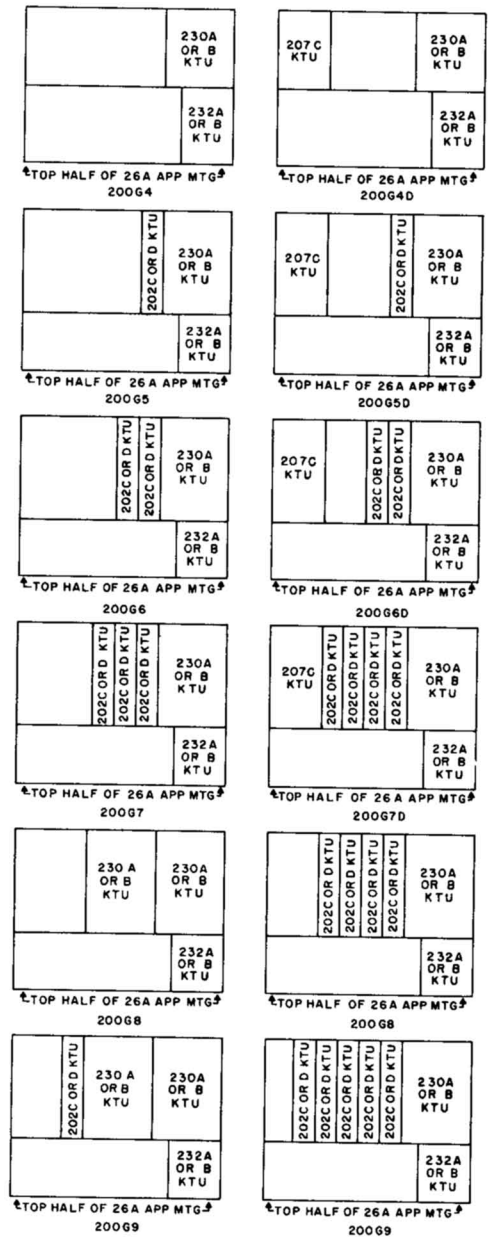


Fig. 6—200G-Type KTU, Arrangements

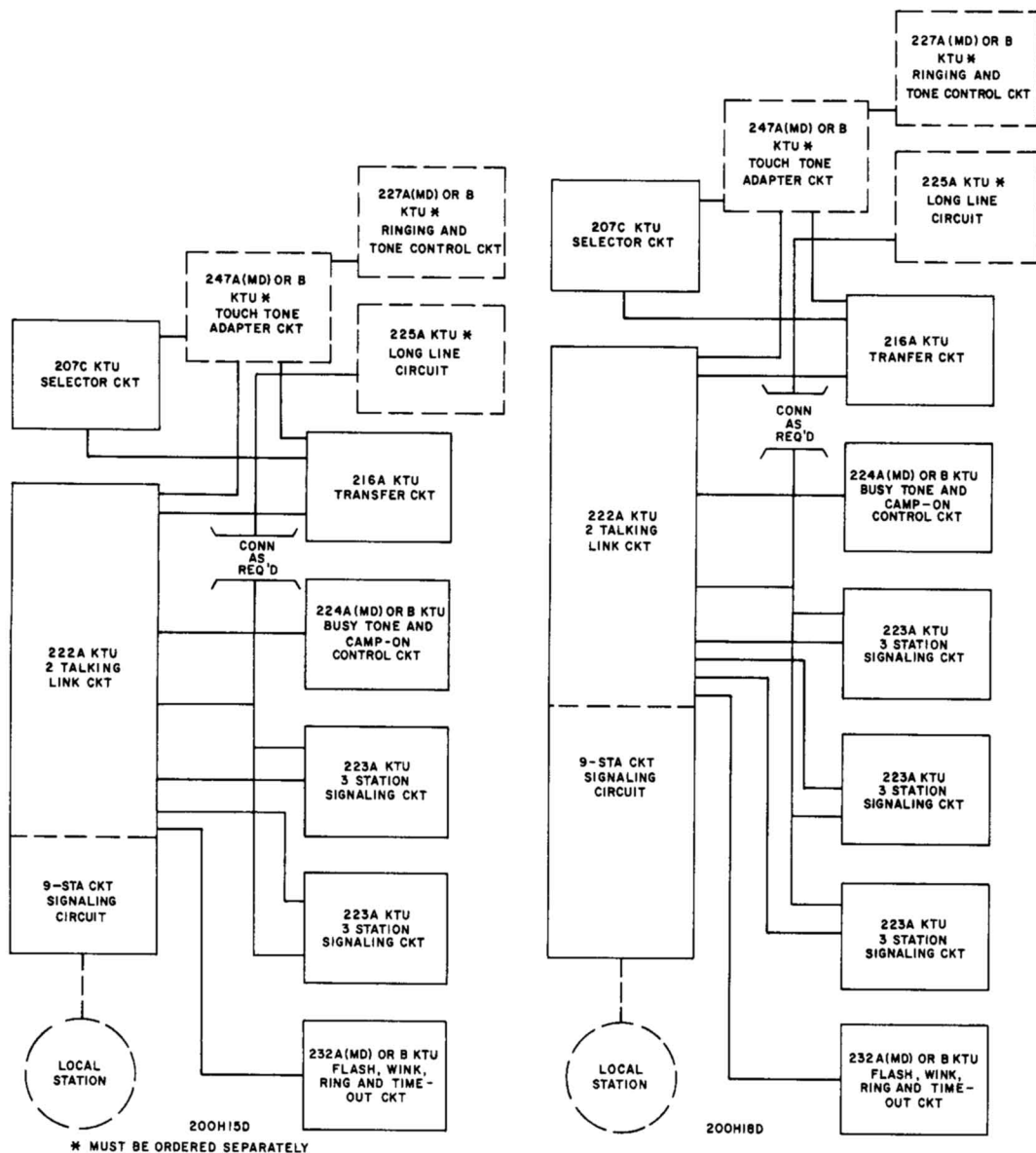


Fig. 7—200H-Type KTU, Arrangements



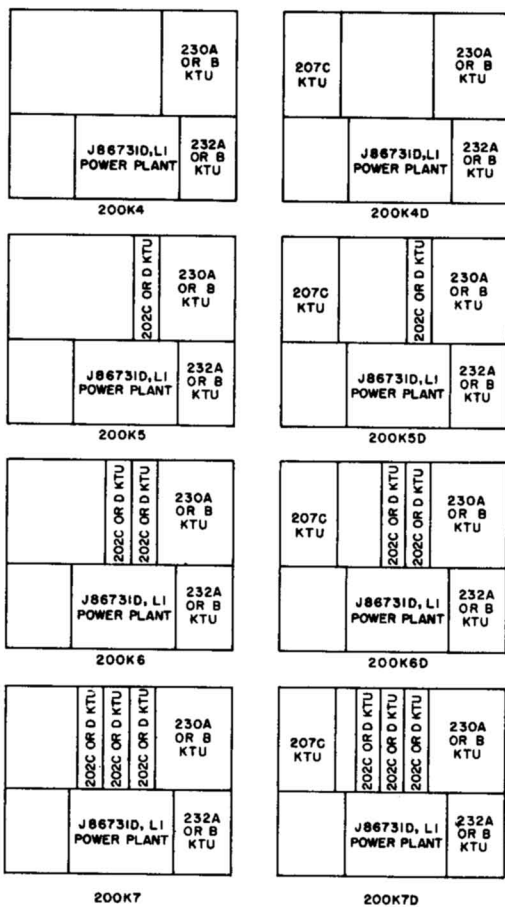


Fig. 8—200K-Type KTU, Arrangements