

LAMP INDICATORS

IDENTIFICATION AND INSTALLATION

1. GENERAL

1.01 This section provides information on the identification and installation of lamp indicators.

1.02 This section is reissued to:

- Add 426M diode to neon indicators when used on higher than 48-volt line circuits.

2. IDENTIFICATION

A. Purpose

2.01 The purpose is to give line and station busy indications.

B. Ordering Guide

2.02 Order as follows:

- Base, Indicator (Table A)
- Indicator, Lamp (Table A)
- Lens, Indicator (Table A)
- Kit of Parts, D-180380 (Table A).

C. Application

2.03 Used with key stations, PBX systems, and similar station systems.

3. INSTALLATION

3.01 Avoid locating indicators in direct sunlight or areas of high illumination.

3.02 To install indicator in a fixed position, use 3/4-inch, No. 6 or 8 RH wood or metal screws.

3.03 For mounting on plastic, metal, or masonry surfaces, use proper size backboard and install in accordance with accepted procedures.

3.04 For concealed wiring installations, bring wires through mounting surface and hole cut in composition base of indicator.

3.05 The 1A base separates into two parts which normally fit together with interlocking lip and grooves. This separation allows the insertion of one or more supplementary lamp units [use 2A base to create multiple lamp indicators (Fig. 3)].

3.06 To install unattached mounting:

- (1) Equip with mounting cord and attach nonskid pad to indicator base
- (2) Fasten cord on connecting block to rear of desk or table, mounted in knee well, or behind center drawer
- (3) Fold or fasten excess cordage securely to avoid creating a safety hazard.

3.07 When attaching mounting cords to indicators, take care to dress conductor leads properly in the available space. This avoids electrical short circuits, interference with positioning of housing, and blanking out the lamp signal.

3.08 Position lamps properly in their sockets.

3.09 Snap indicator housings to bases making certain they are firmly positioned.

3.10 The 358A tube in the 21-type indicator will flash as follows:

- (a) The 358A tube should flash near the top on superimposed ringing. If it does not, reverse the tip and ring conductors of the mounting cord (or inside wire) at the most accessible point.

NOTICE

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

(b) In cases where pure ac ringing current is used, the 358A tube will flash both top and bottom.

3.11 A combination of 1A indicator base and D-180380 Kit of Parts can be used in lieu of the 21C-49 "beehive" lens indicator. ♦The GE-K1D neon lamp glows when ringing current is applied.♦ Install the kit on the base per Fig. 5 and 6.

♦**Caution:** *The GE-K1D and 358A neon indicators are designed for operation in 48-volt central office circuits. If the neon indicator glows continually, a higher voltage is present [eg, 72-volt metallic facility terminal (MFT) circuit] and a 426M diode must be installed (Fig. 14 and 15).*♦

TABLE A
ORDERING GUIDE

NAME	CODE OR NUMBER	COLOR	NO. OF LAMP POSITIONS	COLOR OF LENS FURNISHED	MOUNTING CORD†	FIG. NO.	DESIGN FEATURES
Indicator Base*	1A	Light olive gray (-49)	1		Inside Wire	1 and 3	Basic indicator unit with a 1-type lens, must be rigidly mounted, may be used with one or more 2A indicator bases to form a multiple indicator.
	2A		1			2 and 3	
Indicator Lens	1A	White				4	One lens required for each indicator base (must be ordered separately).
	1B	Blue					
	1C	Green					
	1D	Amber					
	1E	Red					
	1F	Clear					
Kit	D-180380	—	1	Clear		5 and 6	An adapter which enables the 1A or 2B indicator base to use a GE-K1D neon glow lamp in place of the 51A incandescent lamp. Includes one 1F lens.
Lamp Indicators ‡	14B	Light olive gray (-49)	3	White Green Red	D4BD-49	7	Nonflush type, may be mounted in horizontal or vertical fixed position, may be terminated on a mounting cord and mounted without fastening on a horizontal surface; a nonskid pad is furnished for use when the indicator is not mounted in a fixed position.
	15D		1	White	D3BP-49	8	
	15E			Red			
	15F			Green			
	15G			Amber			
16A		3	White Green Red	NONE	9	Flush type mounting, may be mounted in standard outlet box or can be flush mounted in the same manner used for station jacks.	

TABLE A (Contd)

ORDERING GUIDE

NAME	CODE OR NUMBER	COLOR	NO. OF LAMP POSITIONS	COLOR OF LENS FURNISHED	MOUNTING CORD†	FIG. NO.	DESIGN FEATURES	
Lamp Indicators ‡ (Contd)	17C	Light olive gray (-49) (Contd)	2	Green Red	D3BP-49	10	Nonflush type, may be mounted in horizontal or vertical fixed position, may be terminated on a mounting cord and mounted without fasten- fastening on a horizontal surface, a nonskid pad is furnished for use when the indicator is not mounted in a fixed position.	
	17D			White Red	D4BD-49			
	17E			Red Red				
	17F			White Amber				
	18B		3	White Green Red	D4BD-49	11		
	18C							Green Amber Red
	20B		4	Red White Green Amber	D6W-49	12		
	21B (MD)		1	Clear	D3BP-49	13		Contains a 2-element cold cathode tube which operates on ringing voltage and provides a visual line lamp during ringing interval.
	21C							

* Use 51A lamps with 10-volt power supply and 52A lamps with 24-volt power supply. Lamps must be ordered separately.

† Associated mounting cord, when required, must be ordered separately.

‡ Use a switchboard lamp or key equipment lamp. Lamp must be ordered separately.

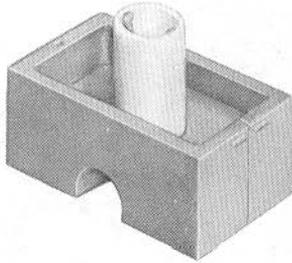


Fig. 1—1A Indicator Base

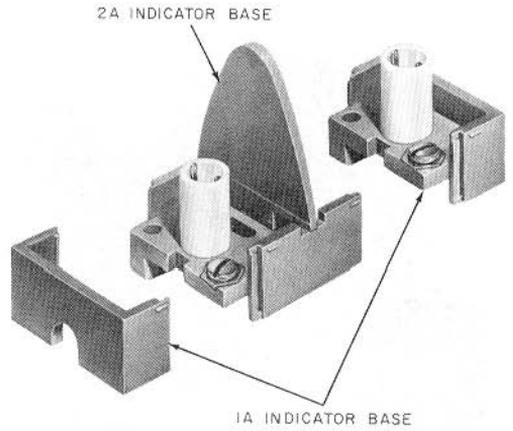


Fig. 3—1A and 2A Indicator Bases Used to Form a 2-Lamp Indicator

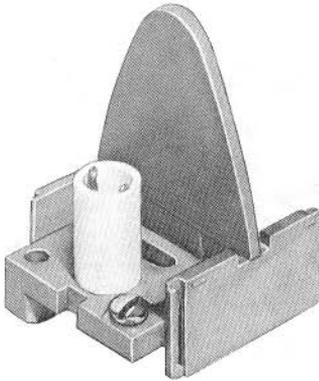


Fig. 2—2A Indicator Base

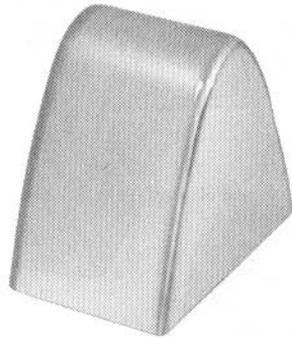


Fig. 4—1-Type Indicator Lens

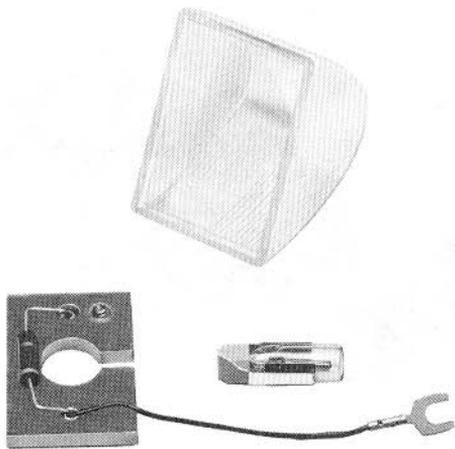


Fig. 5—D-180380 Kit of Parts

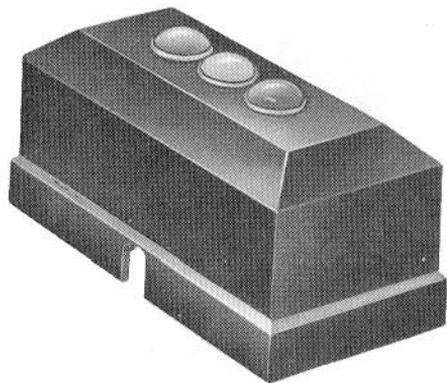


Fig. 6—D-180380 Kit of Parts and 1A Indicator Base
(Can be Used in Place of 21C Indicator)

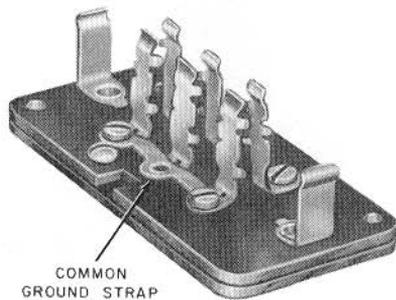


Fig. 7—14B Indicator

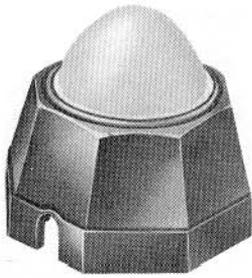


Fig. 8—15-Type Indicator

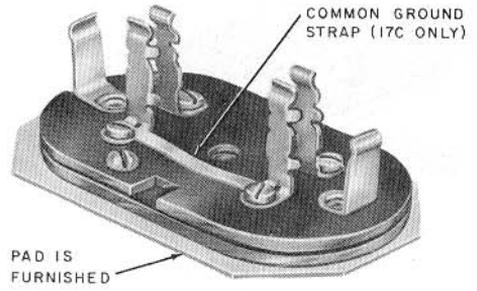
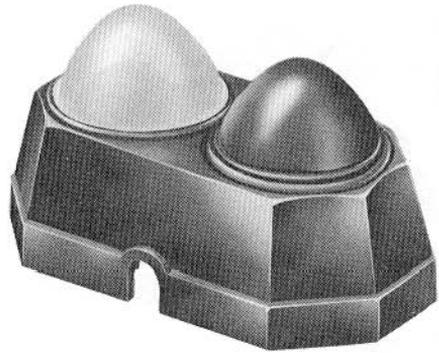


Fig. 10—17-Type Indicator

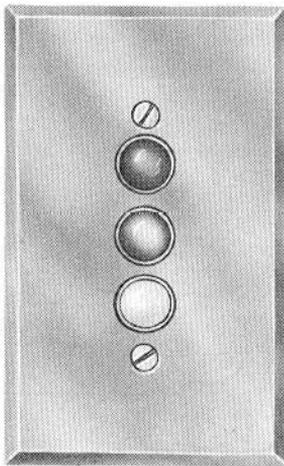
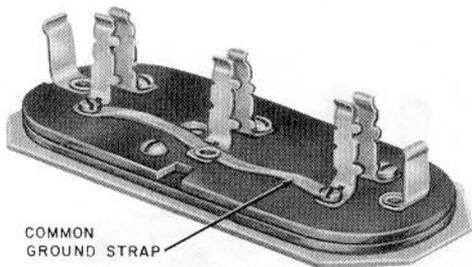
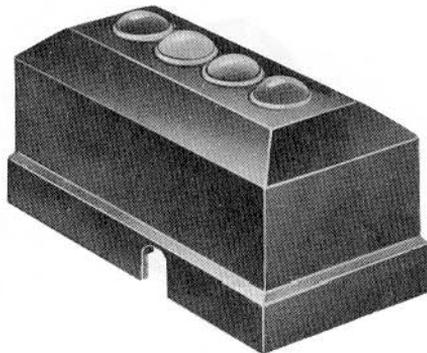
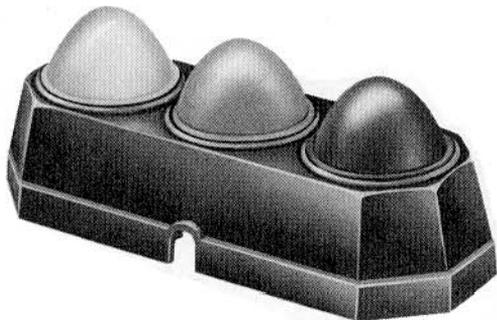
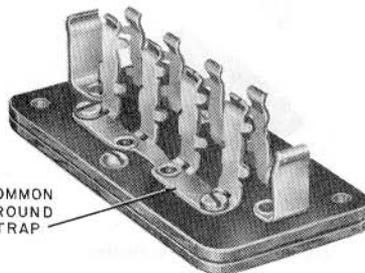


Fig. 9—16A Indicator



COMMON
GROUND STRAP

Fig. 11—18-Type Indicator



COMMON
GROUND
STRAP

Fig. 12—20B Indicator

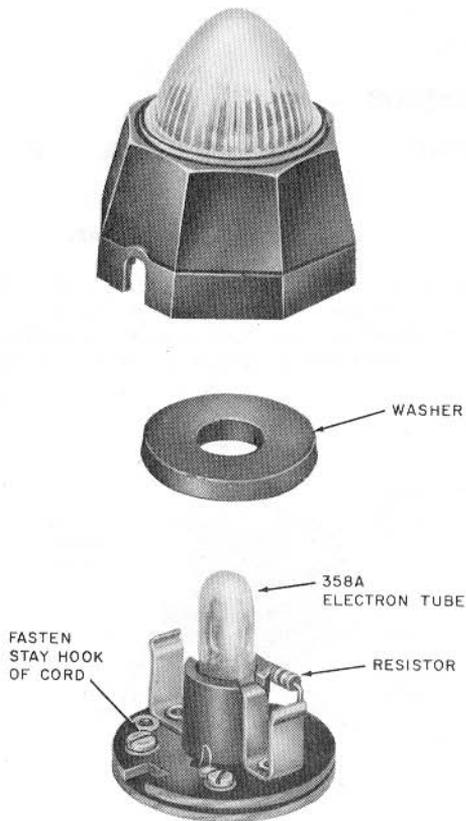


Fig. 13—21-Type Indicator

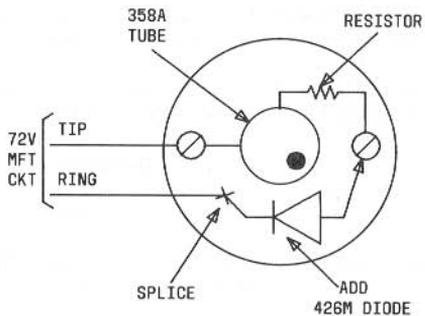


Fig. 14—21C Indicator Circuit With Diode Application for 72-Volt MFT Circuit

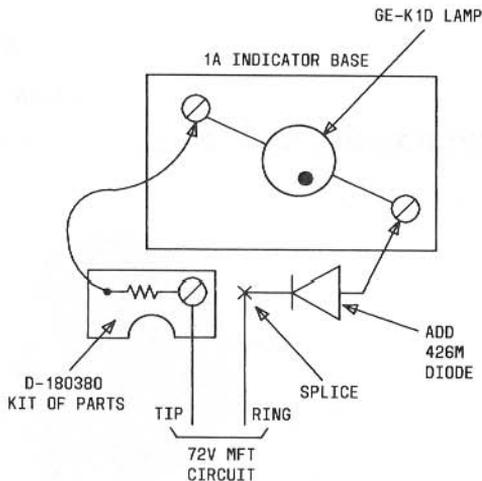


Fig. 15—1A Indicator Base With D-180380 Kit of Parts and Diode Application for 72-Volt MFT Circuit