operate path as well as the operate path for the BY1 relay; (c) holds relay T (Fig. 19) operated under control of the TC lead and Fig. 32, if provided, preventing the release of the selector and thus registering the dialed code; (d) connects a start signal to the associated flashing circuit or Visual and Audible Signal Circuit; and (e) connects the BZ lead to the winding of relay A (Fig. 19). Vibrator V (Fig. 34) operates when the B relay (Fig. 19) places ground on the ST lead, and a tone signal, resulting from the discharge across the operating winding, is connected to the calling station telephone set under the control of the operating flashing circuit and BZ lead. This signal indicates to the calling station, as well as to any other station which may pick up, that the system is now camped on. If the calling station abandons the camp-on, the BY relay will release, releasing control of the camped-on station.

2.49 The TB1 relay will release when the last station associated with the talking connection hangs up, causing relay BY to release. The release of relay BY allows the B1 relay to operate, and closes through a ground signal to the called station LS relay under control of the previously operated selector circuit. The LS relay operates, and the called station is signaled.

STATION BUSY

2.50 The station busy circuit (Fig. 35) is intended to be used with key telephone system No. 6A stations that are also connected to CO or PBX lines. This circuit will connect a busy tone to a calling key telephone system No. 6A station, and operates the camp-on circuit when a station that is connected to Fig. 35 and is busy with a CO or PBX call, is signaled on the 6A system. Fig. 35 may be connected to two stations. The BL lead of the telephone station and the A lead of the 6A pickup key are connected to Fig. 35.

N. Station Is Busy with a CO or PBX Call

2.51 When a station goes off-hook, the associated station-busy relay in Fig. 35 (either CA2 or MS) operates over the BL lead. If the busy station is signaled on key telephone system No. 6A from another station, the ground signal over the C or S lead is connected to the SB lead through a make contact of the station-busy relay. This in turn operates the BY relay of the busy signal and camp-on control circuit (Fig. 34), which performs as described in 2.47 through 2.49. Relay BY locks up through make contacts of the station-busy relay, which connect the LU and J leads.

O. Station Makes a Key Telephone System No. 6A Call

2.52 When a station goes off-hook and the intercommunication pickup key is operated, the station-busy relay will be shunted down or prevented from operating by the ground connection from the A lead of the station to the CB1 or CB2 shunt resistor. A ground signal from the C or S lead will go through break contacts of the station-busy relay to the F lead of the station signaling circuit, operating the called LS relay and associated circuits, as described in 2.13 through 2.20.

P. Camp-On plus Station Busy

2.53 When a station-busy circuit (Fig. 35) is operated, the lockup path through an SB relay is partially completed for the BY relay (Fig. 34) by connecting together the LU and J leads. If the camp-on feature is used by a station not equipped with the station-busy feature, the BY relay will operate and lock up, as described in 2.47 through 2.49. If the camped-on station concludes the intercommunication call while a station-busy condition is operated, the camp-on circuit will not cut through until all station-busy circuits are released. This is due to the parallel lockup path of the BY relay through the station-busy relay contacts.

TIME-OUT CONTROL LEAD FOR KEY TELEPHONE SYSTEM NO. 1 OR 1A1

2.54 A ground signal is provided under the control of relay B1 and relay TB1 (Fig. 24), which may be connected to an associated key telephone system No. 1A or 1A1 or to a Visual and Audible Signal Circuit, to prevent the operation of the time-out feature while a station is using the intercommunicating facilities. This is needed particularly when the associated key telephone system flashing circuit is used for key telephone system No. 6A.

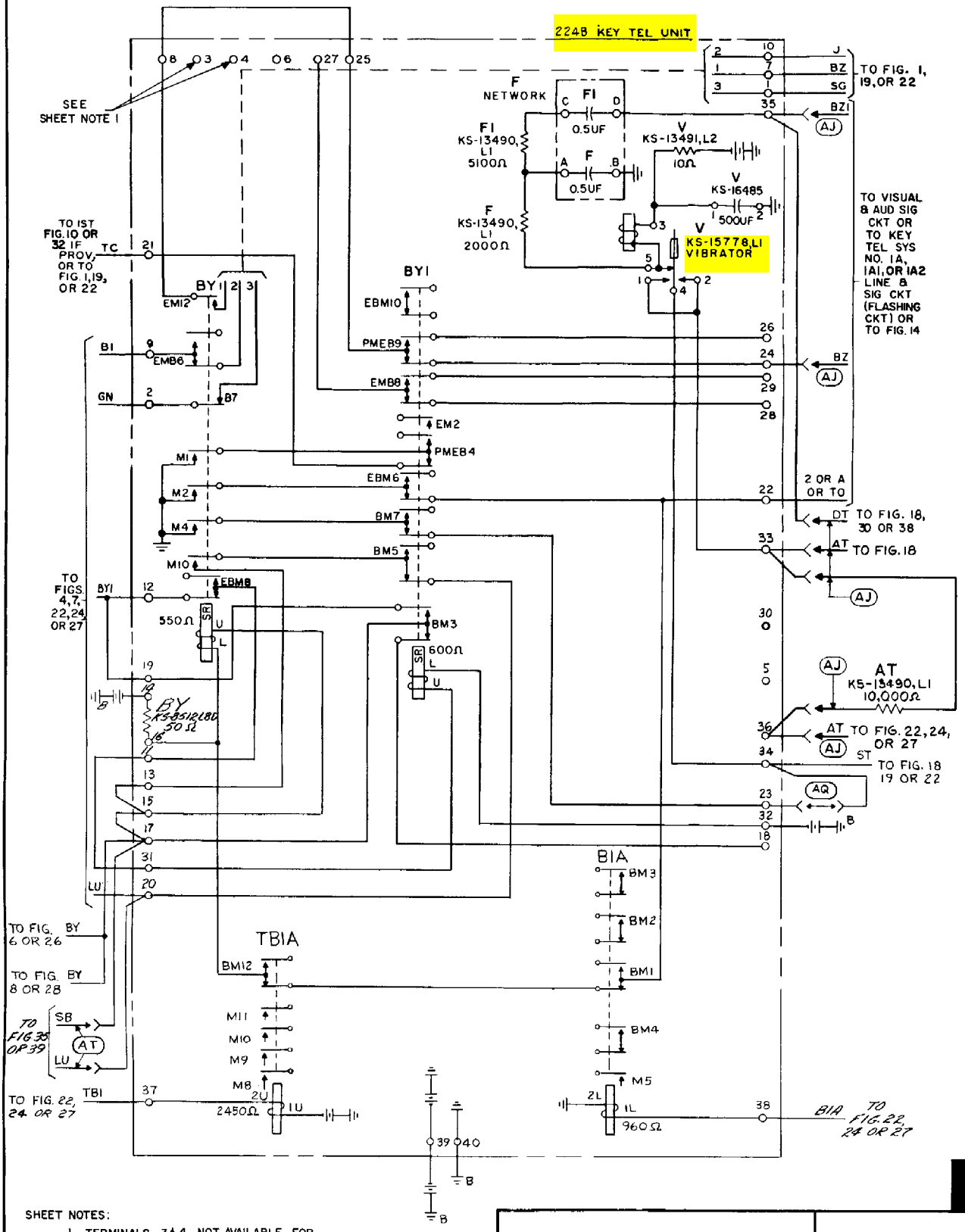
3. TWO-TALKING LINK ARRANGEMENT

LINE SEIZURE

3.01 All stations are connected to the selector circuit (Fig. 19) under control of their associated station signaling circuits (Fig. 26 or 28). When a station picks up, the associated relay L operates but performs no useful function at this time. Relay A in the selector circuit (Fig. 19) also operates, operating relay B (Fig. 19). Relay B operated (a) prepares the circuit for stepping the A selector, and (b) applies a ground signal to the J lead, operating relay B1 (Fig. 27) under control of relay TB1 (Fig. 27).

3.02 When dial tone is provided, relay B applies ground to the ST lead to start vibrator V (Fig. 34), which applies dial tone to the tip side of the line through the winding of relay A under control of the MS relay (Fig. 30). The operation of the B1 relay (a) lights the busy lamps steadily at all stations, (b) applies a ground start

FIG. 34
BUSY SIGNAL AND CAMP-ON CONTROL CIRCUIT



DRAWING ISSUE	
6D	LJL DHC PD
7D	JHC RAB PEB

STATION SYSTEMS
KEY TELEPHONE SYSTEM NO. 6A
INTERCOMMUNICATING LINE CIRCUIT

SD-69286-01-C32

BELL TELEPHONE LABORATORIES INCORPORATED

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