

SK-1

KEY TELEPHONE SYSTEM

NE-564QFAI, NE-564QFBI, NE-564QFCI, NE-564QGAI,
NE-564QGBI, NE-564QGCI, NE-564QFAI, NE-565QFBI,
NE-565QFCI, NE-565QGAI, NE-565QGBI, NE-565QCI,
AND NE-2565QFAI

KEY TELEPHONE SETS

1.0 GENERAL

1.01 The SK-1 Key Telephone System consists of one or more of the above mentioned codes of telephone set plus a QSY3 Type Power Supply. The NE-564 and NE-565 type telephone sets are 6 button key telephone sets equipped with rotary dials while the NE-2565 type is a 6 button key telephone set equipped with a 12 button DIGITONE* dial.

1.02 The individual telephone set features are listed in Table A below.

1.03 The telephone sets used in the SK-1 Key Telephone System are factory wired ready to be interconnected with the appropriate power supply on the customer's premises.

1.04 Each key telephone set provides common access to 3 Central Office (CO) or PBX lines, with a common 'Hold' button, as well as 2 additional lines which may be used for auxiliary functions such as internal communication or signaling. (see Fig. 1)

TABLE A

KEY TELEPHONE SET FEATURES							KEY TELEPHONE SET CODES	
Key Button Arrangements	Exclusion Key	All Number Dial	Export Transmission Circuit	Speaker-Phone Control	Business Interphone Control	'DIGITONE' Push Button Dial	Plug Ended Cord	Spade-Tip Ended Cord
HP(P)P(P)P				•	•		NE-564QFAI	
HP(P)P(P)P		•		•	•		NE-564QFBI	
HP(P)P(P)P		•	•	•	•		NE-564QFCI	
HP(P)P(P)P				•	•			NE-564QGAI
HP(P)P(P)P		•		•	•			NE-564QGBI
HP(P)P(P)P		•	•	•	•			NE-564QGCI
HP(P)P(P)P	•			•	•		NE-565QFAI	
HP(P)P(P)P	•	•		•	•		NE-565QFBI	
HP(P)P(P)P	•	•	•	•	•		NE-565QFCI	
HP(P)P(P)P	•			•	•			NE-565QGAI
HP(P)P(P)P	•	•		•	•			NE-565QGBI
HP(P)P(P)P	•	•	•	•	•			NE-565QGCI
HP(P)P(P)P	•			•	•	•	NE-2565QFAI	

H-Hold (non-locking); P-Line Pickup (Locking); (P)-Convertible, Pickup (Locking) or Signaling (non-locking).

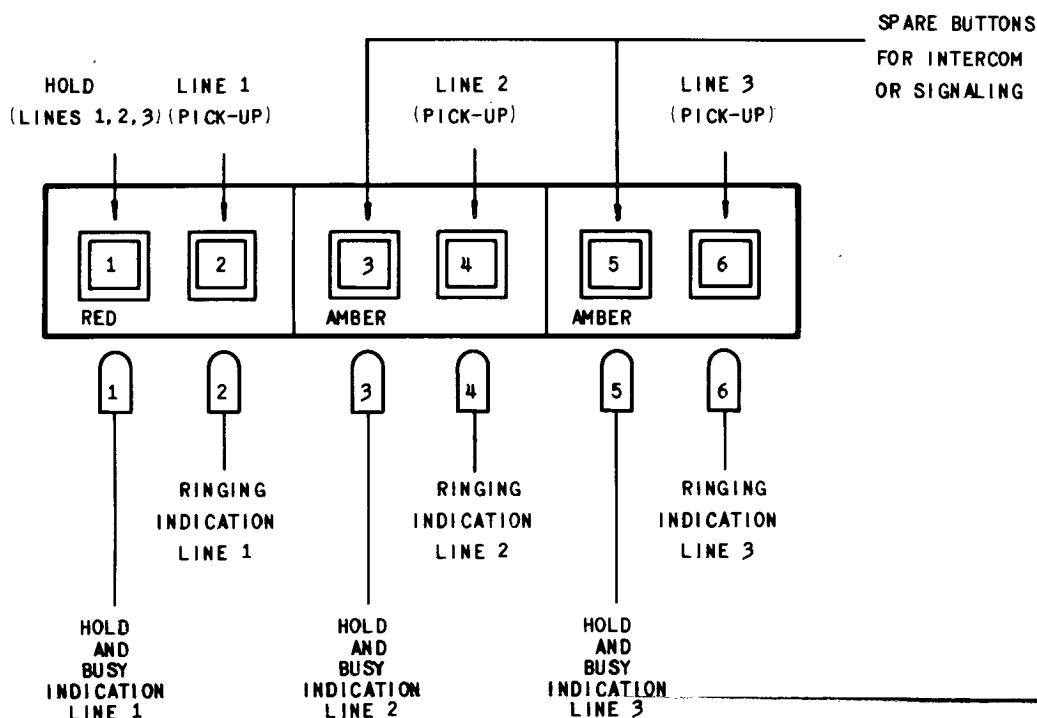


Fig. 1. - Button and Lamp Arrangement for Key Telephone Sets used in the SK-1 Key Telephone System

2.0 INSTALLATION and CONNECTIONS

2.01 When installing and connecting the key telephone sets in the SK-1 key telephone system an auxiliary QSY3 type power supply is required for system operation.

One power supply is required for every 10 telephone sets in the system or one power supply for every 5 intercom circuits.

The QSY3 type power supply is designed to mount

one flasher circuit board assembly and one intercom circuit board assembly. All power supplies are shipped, equipped with a flasher circuit board assembly but not all power supplies are equipped with an intercom circuit board assembly.

2.02 The power supply features and corresponding code numbers are listed in Table B.

TABLE B

POWER SUPPLY FEATURES				Code
Input Voltage		Flashing Circuit	Intercom Circuit	
115 V 50/60 Hz	230 V 50/60 Hz			
●				
●		●		QSY3A
●		●	●	QSY3AI
	●	●		QSY3B
	●	●	●	QSY3BI

2.03 Normal telephone installation practices should be followed when installing and interconnecting the key telephone sets and power supply of the SK-1 key telephone system. There are, however, some installation requirements which must be adhered to in order to ensure that the system functions correctly at all times. These are:

- a) Line loop resistance for any intercom circuit should not exceed 50 ohms.
- b) Interconnections between the power supply and the various telephone sets should be kept as short as possible. The line loop resistance between the power supply and the telephone sets should not exceed 25 ohms.
- c) The system is designed to operate with a CO or PBX line, having a nominal battery voltage of 48 volts, a nominal ringing voltage of 88 volts rms. at 20 Hz, and a maximum loop resistance of 1750 ohms, including the resistance of the feeding bridges.

2.04 Mounting cord leads which are insulated when the telephone set leaves the factory should remain insulated and stored until such time as the particular system feature for which they are required, is employed.

2.05 The connections for the NE-564, NE-565 and NE-2565 type telephone sets used in the SK-1 key telephone system are shown in Fig. 2, and the connector cable and mounting cord conductor arrangements are shown in Table C.

2.06 Interconnections for the telephone sets and power supplies for basic system operation are shown in Fig's. 3,4, and 5.

2.07 Connections for optional features such as:

- NE-3 Type Speakerphone
- Business Interphone 'F'
- Basic system features in conjunction with single line telephone sets
- Loud paging with an NE-107AN loudspeaker
- Selective signaling
- Signaling by grounding the ring side of the incoming line
- Optional selective ringing on any one incoming line

are shown in the appropriate NORTHERN ELECTRIC PRACTICE.

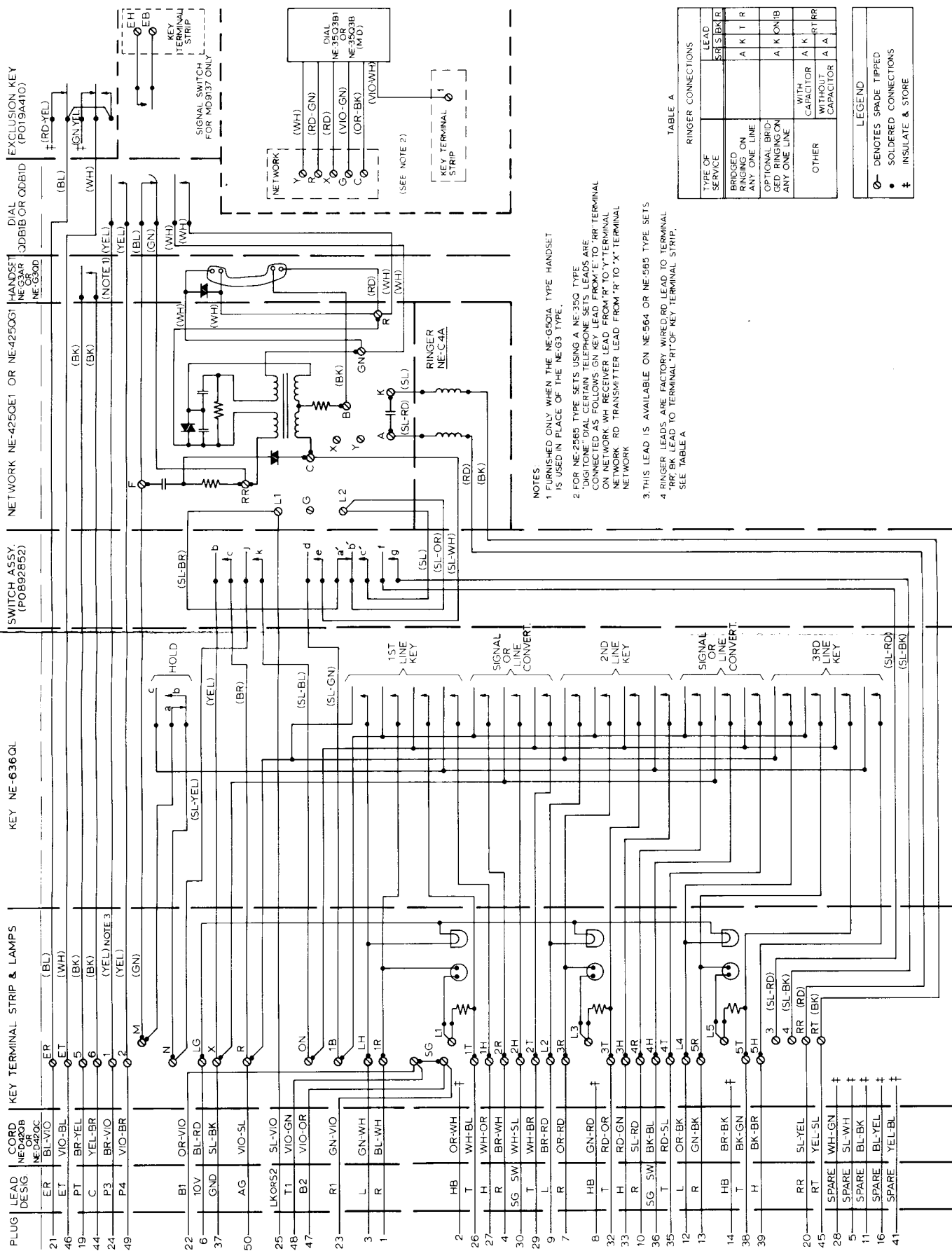


Fig. 2

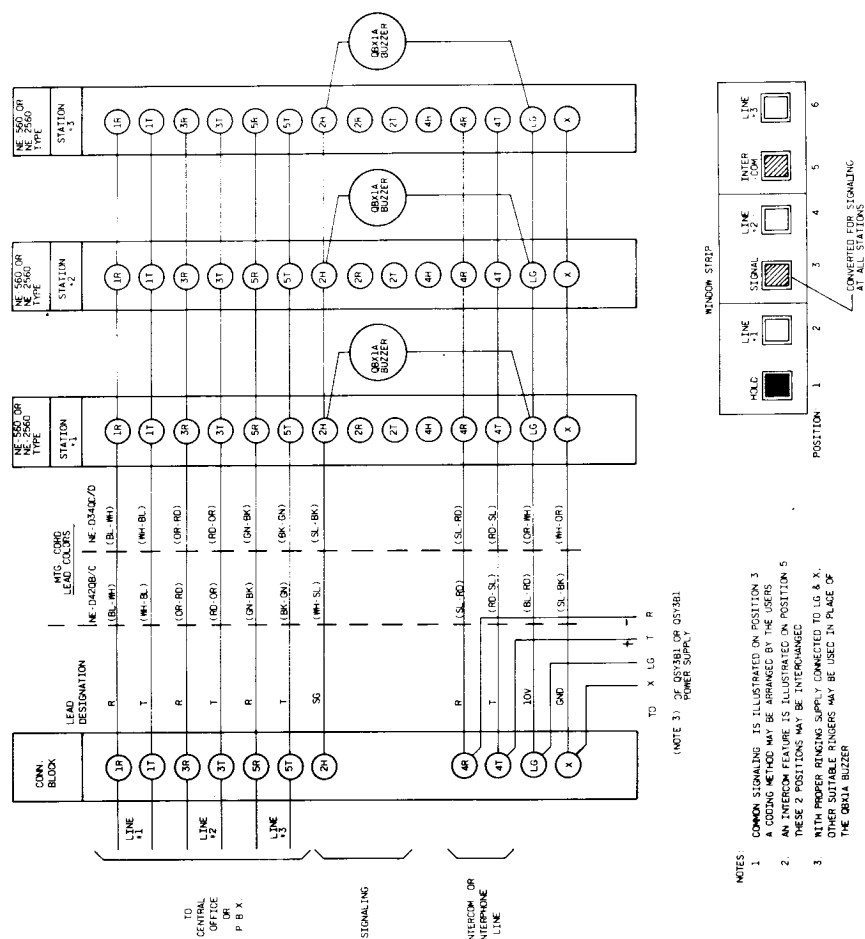
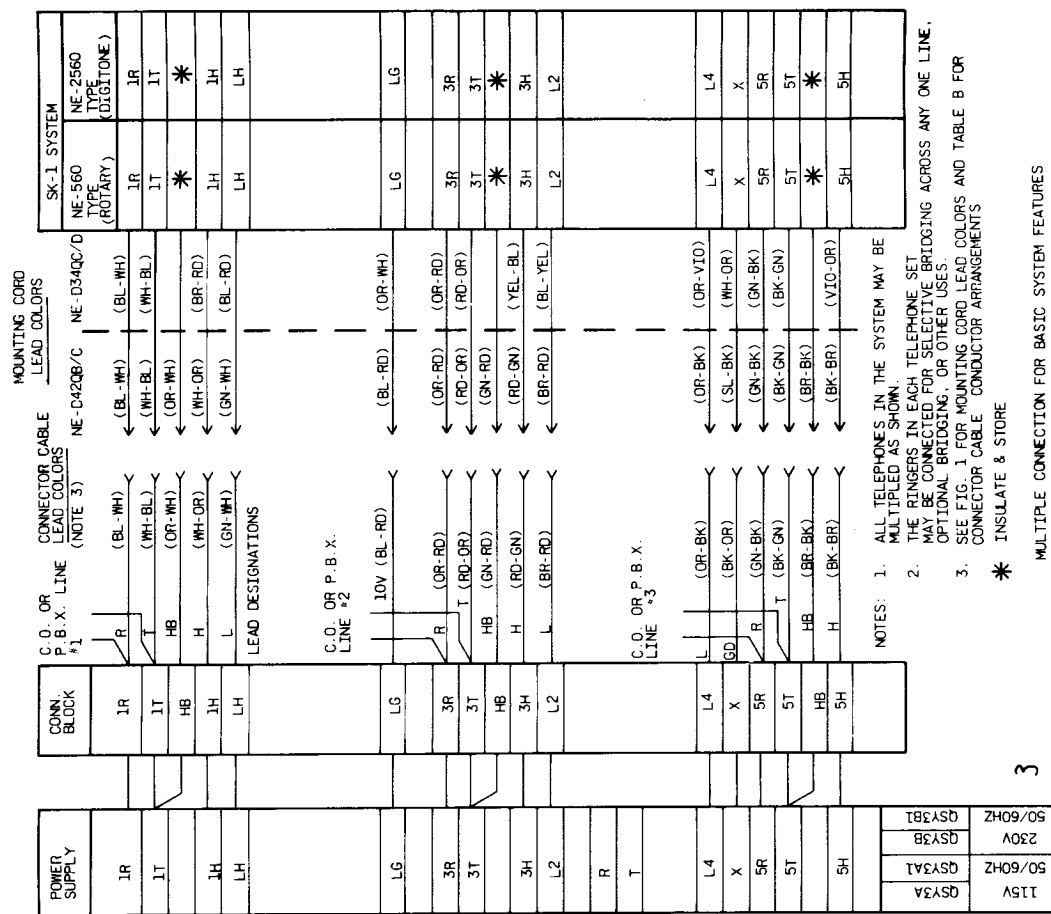


Fig. 3 - Multiple Connection for Basic System Features

Fig. 4 - Connections for Common Signaling with Intercom

TABLE C CONNECTOR CABLE AND MOUNTING CORD CONDUCTOR ARRANGEMENTS

QSY3 TYPE POWER SUPPLY	CONN. BLOCK	LEAD DESIGNATION & FUNCTIONS	CONNECTOR CABLE LEAD COLOUR	PLUG PIN NO.	SK-1 TELEPHONE SET NE D428B/OC MOUNTING LEAD COLOURS	TERMINALS
JR	JR	R } 1st C.O. OR P B X LINE	NE-A25B BL-WH	1	BL-WH	JR
IT	IT	T } 1st C.O. OR P B X LINE	WH-BL	26	WH-BL	IT
H	H	H	OR-WH	27	OR-WH	*
LH	LH	L	WH-OR	28	WH-OR	JH
		SPARE	GN-WH	29	GN-WH	LH
		INTERCOM	WH-GN	30	WH-GN	*
		R } 2nd C.O. OR P B X LINE	BR-WH	31	BR-WH	2R
		T } 2nd C.O. OR P B X LINE	WH-BR	32	WH-BR	2T
		SG OR SW	SL-WH	33	SL-WH	*
		10V	WH-SL	34	WH-SL	2H
		SWITCHING	BL-RD	35	BL-RD	LG
		R } 2nd C.O. OR P B X LINE	RD-BL	36	RD-BL	
		T } 2nd C.O. OR P B X LINE	OR-RD	37	OR-RD	3R
		H	RD-OR	38	RD-OR	3T
		L	GN-RD	39	GN-RD	*
		R } INTERCOM	RD-GN	40	RD-GN	3H
		T } INTERCOM	BR-RD	41	BR-RD	L2
		SG OR SW	RD-BR	42	RD-BR	
		10V	SL-RD	43	SL-RD	4R
		SWITCHING	RD-SL	44	RD-SL	4T
		R } 3rd C.O. OR P B X LINE	BL-BK	45	BL-BK	*
		T } 3rd C.O. OR P B X LINE	BK-BL	46	BK-BL	4H
		SG OR SW	OR-BK	47	OR-BK	4H
		10V	BK-OR	48	BK-OR	L4
		SWITCHING	GN-BK	49	GN-BK	X
		R } 3rd C.O. OR P B X LINE	BK-GN	50	BK-GN	5R
		T } 3rd C.O. OR P B X LINE	BR-BK	51	BR-BK	5T
		H	BK-BR	52	BK-BR	5H
		L	SL-BK	53	SL-BK	
		R } SPARE	BK-SL	54	BK-SL	
		T } SPARE	BL-YEL	55	BL-YEL	*
		SG OR SW	OR-YEL	56	OR-YEL	*
		10V	YEL-OR	57	YEL-OR	
		SWITCHING	GN-YEL	58	GN-YEL	
		R } B I F	BR-YEL	59	BR-YEL	5
		T } B I F	YEL-BR	60	YEL-BR	6
		COMMON	SL-YEL	61	SL-YEL	RT
		RINGING	YEL-SL	62	YEL-SL	RT
		EXCLUSION	BL-VIO	63	BL-VIO	ET
		R } B I F	VIO-BL	64	VIO-BL	ET
		T } B I F	OR-VIO	65	OR-VIO	N
		SPEAKERPHONE	VIO-OR	66	VIO-OR	ON
		SEE FIGS.	GN-VIO	67	GN-VIO	1R
		6, 7, 8	VIO-GN	68	VIO-GN	RR or 07
		P3 OR 1R	BR-VIO	69	BR-VIO	2
		P4 OR 1T	VIO-BR	70	VIO-BR	1
		LK OR S2	SL-VIO	71	SL-VIO	L1
		AG	VIO-SL	72	VIO-SL	R

* INSULATE & STORE
+ TERMINALS ON THE NE-425 TYPE NETWORK

Fig. 6

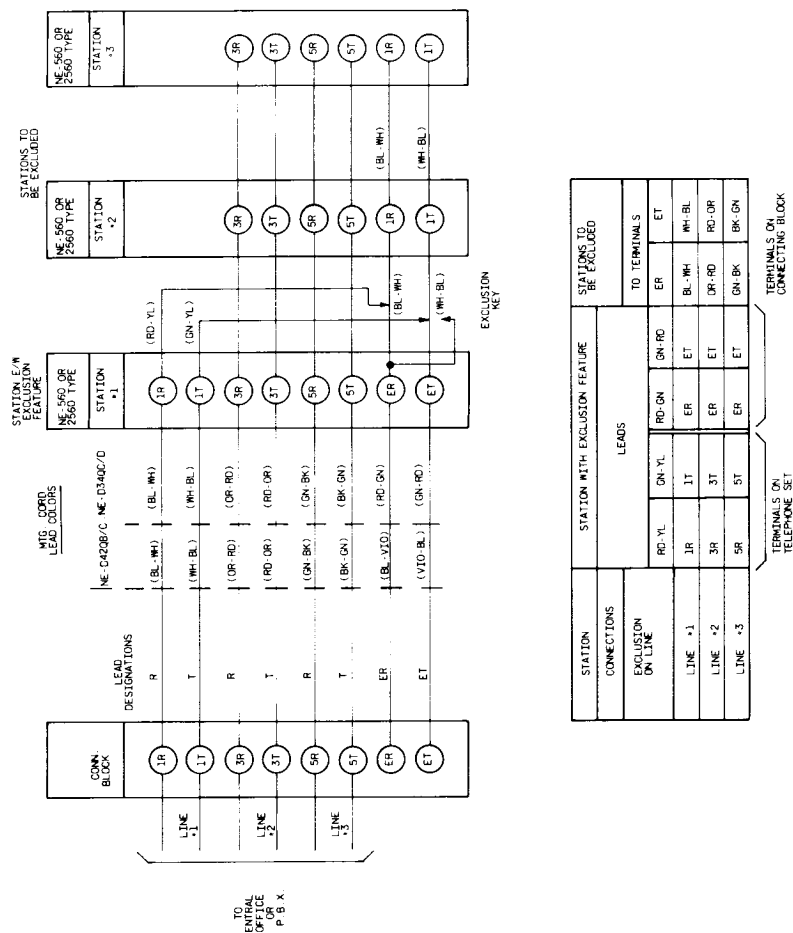


Fig. 5 - Connections for Exclusion Features