

American Telephone and Telegraph Company

BELL SYSTEM PRACTICES
Teletypewriter and Manual
Telegraph Station and PEX
Installation and Maintenance

ADDENDUM P30.752
Issue A, 9-1-39
Long Lines Department

NO. 19 TELETYPEWRITER SET

REMOTE CONTROL OF TYPING UNIT ONLY

PRIVATE LINE STATIONS

1. GENERAL

1.01 This addendum supplements Section P30.752 to make that section applicable for use for No. 19 teletypewriter sets arranged per Connection Plan L9.08.

1.02 Connection Plan L9.08 gives instructions for modifying the No. 19 teletypewriter set so that its transmitter-distributor can be used independently from the remainder of the set when the typing unit is arranged for remote motor control.

1.03 When Connection Plan L9.08 is applied, the break contacts shall be eliminated from the transmitter-distributor circuit. This is done by modification of the connections shown in Figures 1 and 2 as covered in Paragraph 2.01.

2. MODIFICATIONS

2.01 Remove the power wire shown connected to terminal 43 and reconnect it to terminal 26 in both a-c and d-c power installations.

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1. GENERAL

1.01 At private line stations where remote control over the telegraph circuit is desired for use with a 19 teletypewriter set, the apparatus may be arranged so that the remote-control feature starts only the receiving part of the station, i.e., the typing unit, while the remainder of the set, including the rectifier at ac installations, is controlled by the switch in the table.

1.02 This section describes the method of arranging the set with a pulling-magnet typing unit for this type of control and refers to other information when a holding-magnet typing unit is used.

1.03 This section is reissued to:

- (1) Revise Figs. 1 and 2 to agree with current practices.
- (2) Include reference to BSP Section P96.066 for the method of arranging the 19 teletypewriter set when a holding-magnet typing unit is employed.
- (3) Improve the text by tabular presentation where possible.

Marginal arrows indicate the changes made.

2. SET USING PULLING-MAGNET TYPING UNIT

Apparatus Required for AC Installations

2.01 A typing unit equipped with built-in remote motor control should be provided as part of the 19 teletypewriter set. See BSP Section P32.003.

2.02 The following table lists the items required in addition to those provided for an ordinary station operated on ac power supply.

<u>QUANTITY</u>	<u>ITEM</u>	<u>USAGE</u>
1	Hubbell 9575 Duplex Receptacle	To replace the four-gang flush plate and single convenience receptacle C on the 19A table.
1	Hubbell Combination Plate GGHG .060"	
3-foot length	18-gauge SJ cord with Hubbell 9755 parallel polarized plug cap or equivalent	To supply power to the teletypewriter motor.
or 3-foot length	KS-7993 ten-foot cord with polarized plug cap, cut locally to length	
1	Hubbell 9755 parallel polarized plug cap, or equivalent	To replace plug on ac end of rectifier.
1	M2DG cord with 7092 Hubbell cap	To supply dc power to the line magnet and biasing circuit. ←
1	KS-5663, L7 rectifier*	←
1	M4K cord	Required only where it is necessary to ground the frame of the teletypewriter.

* Mount the rectifier adjacent to the 0.8-amp rectifier. Tie the cords so they do not touch the rectifier, using P-233097 cable clamps or equivalent.

Connections

2.03 The special connections required are shown in Fig. 1. In addition, all connections should be made as for an ordinary installation of a 19 teletypewriter set on ac power supply and the 15 teletypewriter arranged for remote motor control (see Plan M2.12), except that the M4K cord on the 19 teletypewriter which normally carries power to the teletypewriter motor should be used only where it is necessary to ground the frame of the teletypewriter. In this case the green ←

conductor of the M4K cord should be used to carry the ground connection to the teletypewriter frame and the other conductors (red, white and black) should be taped and tucked in at the teletypewriter end.

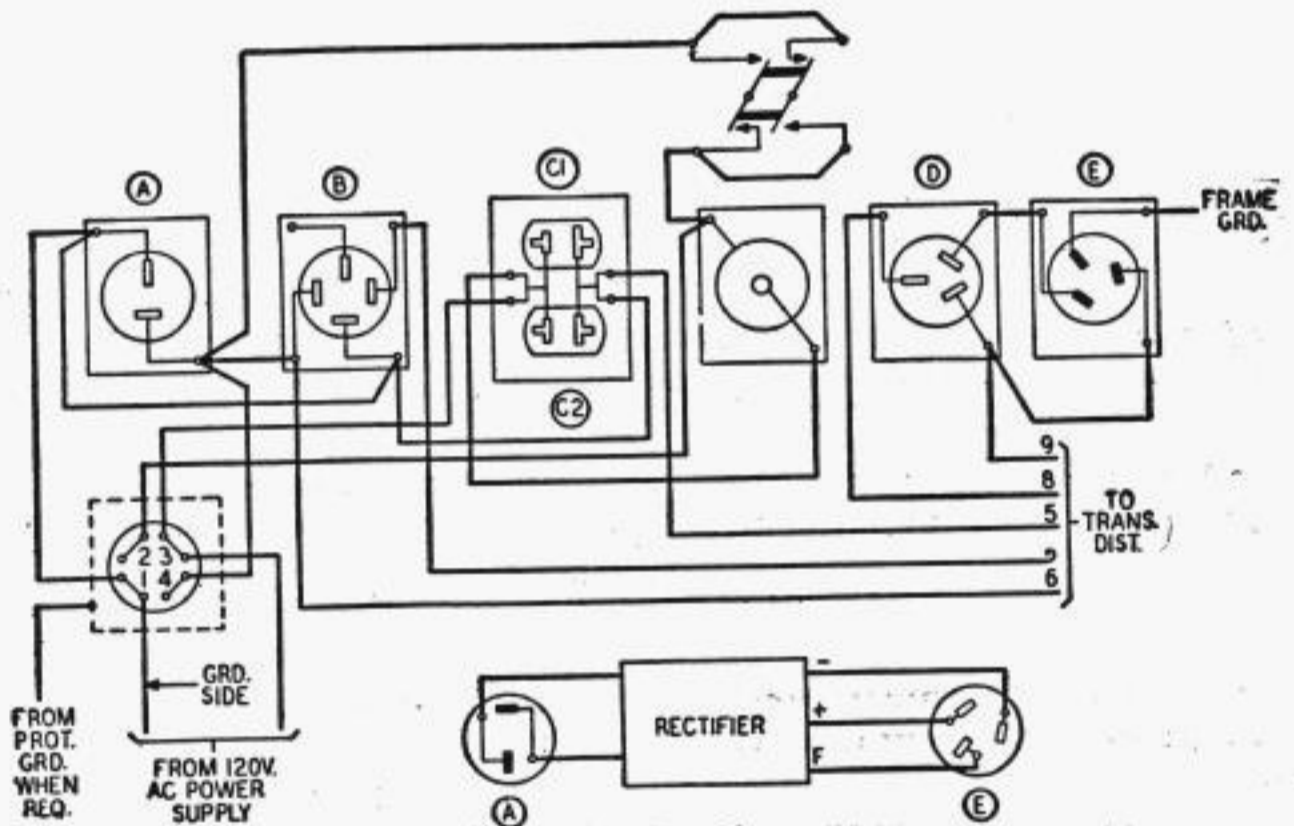
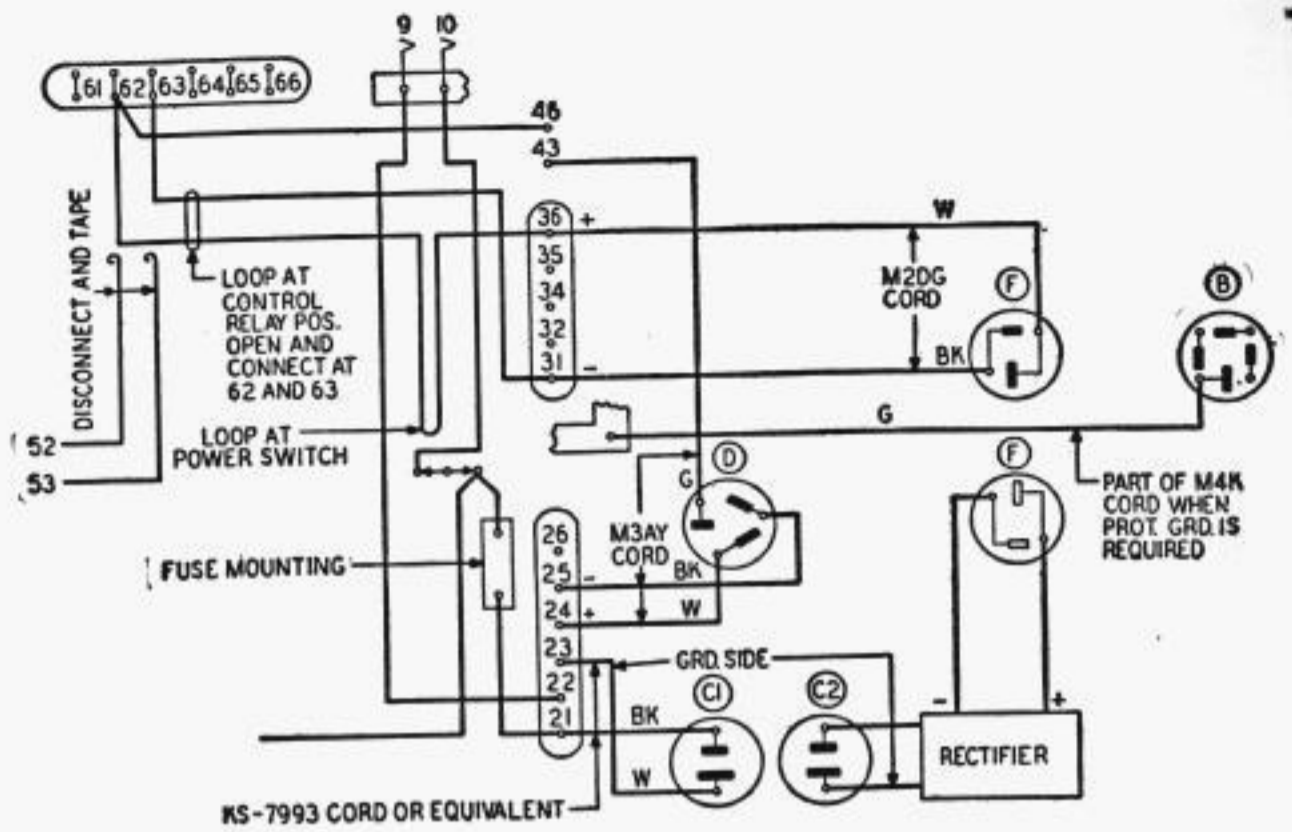
NOTE: The power switch on the 15 teletypewriter base should be left wired as prescribed so that it may be used to stop the teletypewriter motor when replacing ribbon or paper.

CAUTION: The local attendant should be cautioned to leave the power switch in the ON position except when changing paper or ribbon.

Apparatus Required for DC Installations

2.04 A typing unit equipped with built-in remote motor control should be provided as part of the 19 teletypewriter set.

2.05 The following table lists the items required in addition to those provided for a station of the ordinary type operated on dc power supply.



19TTY SET
 POWER CONNECTIONS FOR REMOTE CONTROL OF TTY MOTOR
 120V AC POWER SUPPLY
 ALL OTHER CONNECTIONS ARE NORMAL
 TRANS. DIST. AND RECTIFIER ARE CONTROLLED ONLY BY TABLE POWER SWITCH

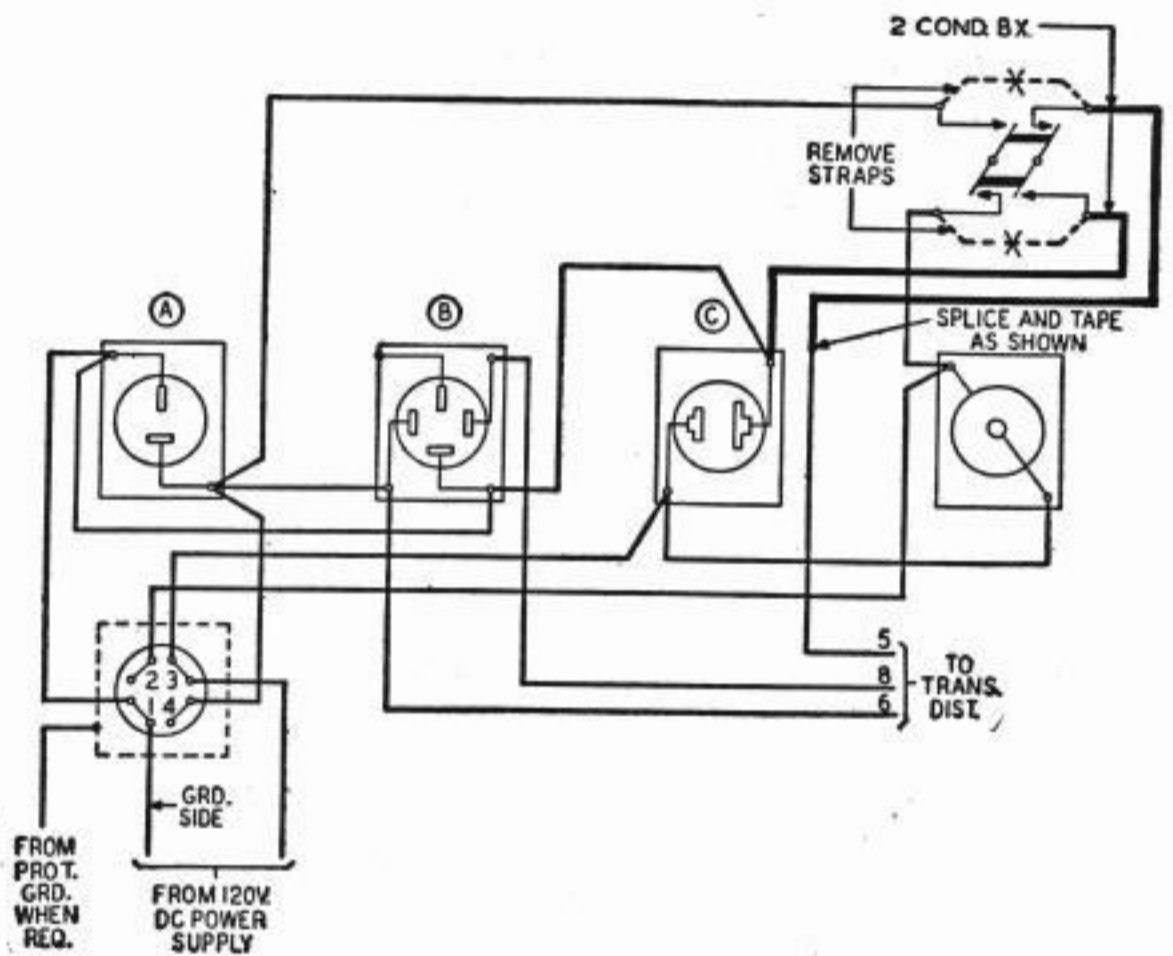
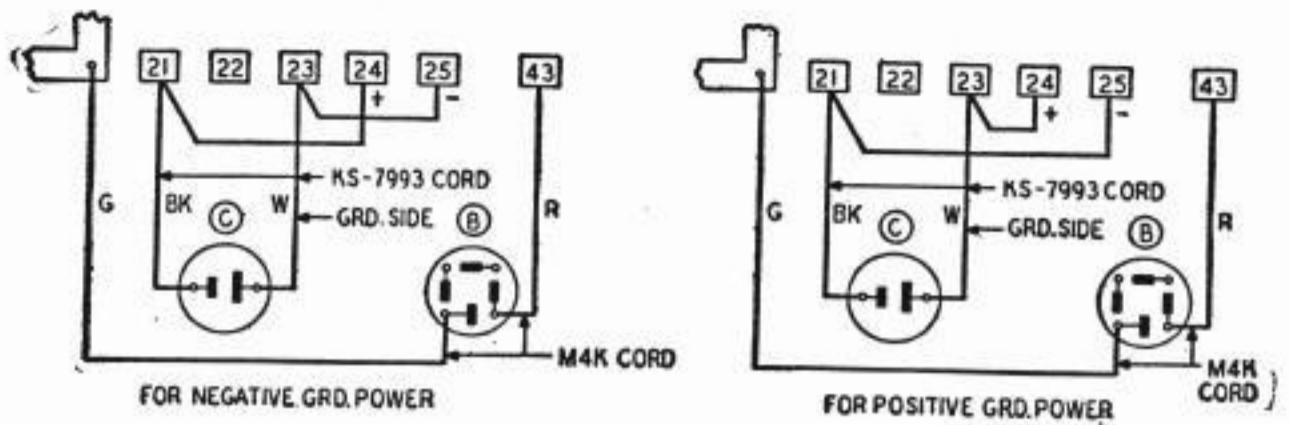
Fig. 1

<u>QUANTITY</u>	<u>ITEM</u>	<u>USAGE</u>
3-foot length	18-gauge SJ cord with Hubbell 9755 parallel polarized plug cap or equivalent	} To supply power to the teletypewriter motor.
or 3-foot length	KS-7993 ten-foot cord with polarized plug cap, cut locally to length	
28-inch length	Two-conductor BX*	To run from the table power switch to con- venience outlet C.
1	Outlet Box No. 14 National Electrical Products Co.	To replace the table switch outlet box.
1	Hubbell 9575 Duplex Receptacle	} To provide an addi- tional service outlet on the 19A table, if desired.
1	Hubbell Combination Plate GGHG .060"	

* Strip the BX to allow 6" conductors at each end.

Connections

2.06 The special connections required are shown in Fig. 2. In addition, all connections should be made as for an ordinary installation of a 19 teletypewriter set on dc power supply and the 15 teletypewriter arranged for remote motor control (see Plan M2.12). The M4K cord on the 19 teletypewriter which normally carries power to the teletypewriter should be used and the black and white conductors should be taped and tucked in at the teletypewriter end. Where local regulations do not require grounding the frame of the teletypewriter, the green wire should also be cut back and taped. ←



19TTY SET
 POWER CONNECTIONS FOR REMOTE CONTROL OF TTY MOTOR
 120V.DC POWER SUPPLY
 HEAVY LINES SHOW CHANGE IN TABLE WIRING
 TRANS.-DIST. IS CONTROLLED ONLY BY TABLE POWER SWITCH

Fig. 2

NOTE: Refer to the 19A Teletypewriter Table Circuit Label SD-64052-81 for wiring the table for dc power supply. Note that the A and B leads are removed from terminals 9 and 8 on the transmitter mounting plate and individually taped. With the + side of power grounded, terminals 6 and 9 on the transmitter mounting plate should be strapped. With the - side of power grounded, terminals 5 and 9 should be strapped. The C lead should be connected to terminal 8.

NOTE: The power switch on the 15 teletypewriter base should be left wired as prescribed so that it may be used to stop the teletypewriter motor when replacing ribbon or paper.

CAUTION: The local attendant should be cautioned to leave the power switch in the ON position except when changing paper or ribbon.

3. OPERATION

3.01 The typing unit may be turned on and the set put in operation for receiving or for transmission from the keyboard only, by opening and then closing the line circuit either at a distant station or locally by means of the BREAK key. After this has been done, the rest of the 19 set may be put in operation for perforating tape, or simultaneously sending from the keyboard and perforating tape, by operating the power switch in the table to the ON position.

3.02 To shut down the typing unit, the uppercase H signal should be transmitted either locally or from the calling station. The power switch in the table should be then operated to the OFF position to turn off the rest of the 19 set. (If the typing units connected to the circuit have been equipped with the TP87403 set of parts for stopping on the FIGS Blank H combination, it will be necessary to transmit this combination in order to stop the typing unit.)

4. SET USING HOLDING-MAGNET TYPING UNIT

4.01 Reference should be made to BSP Section P96.066 for the method of arranging the 19 teletypewriter set when a holding-magnet typing unit is used.

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