American Telephone and Telegraph Company

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

ADDENDUM P30.751
Issue B, 5-20-44
Long Lines Department
Dist. Class. 600AC

14 TYPE PERFORATOR-DISTRIBUTOR SET

STATION CONNECTIONS

1. GENERAL

1.00 This issue supersedes Issue A.

1.01 This addendum, which covers the following items, has been reissued to add Item (a) and to add an optional duplex arrangement to Item (b).

(a) A change in power wiring of the perforator-distributor base for certain uses, to prevent overloading the wiring. This is covered in Part 2. This change has already been covered informally.

(b) Arrangements whereby the receipt of a "break" signal on a No. 15 or No. 26 teletypewriter set mounted on a separate table will stop the transmitter-distributor of the perforator-distributor in addition to disabling the keyboard contacts of the teletypewriter set involved. This is covered in Part 3.

2. CHANGE IN POWER WIRING

2.01 The wires in the a-c circuits of the perforator-distributor base as received from the factory are 16 gauge and are not large enough to handle the alternating current drain of the combined load of a motor-generator set, a transmitter-distributor motor and a teletypewriter motor without danger of overheating. To correct this condition, wiring changes as described in the following are required whenever that combination of equipment is used at an a-c location. Referring to Figure 1 of Section P30.751, replace with 14 gauge rubber covered house wiring or the equivalent, the following six 16 gauge wires on the perforator-distributor base:

2 wires from Terminals 11 and 12 of fuse block
to Terminals 17 and 19 of power switch;
2 wires from Terminals 18 and 20 of power switch
to Terminals 21 and 22 of Receptacle B;
2 wires from Terminals 18 and 20 of power switch
to Terminals 5 and 6 of transmitter-distributor mounting plate.

3. USE OF VARIOUS TYPES OF TELETYPEWRITER SETS WITH PERFORATOR-DISTRIBUTOR

3.01 Figure 1 of Section P30.751 shows a connection arrangement where a No. 14 teletypewriter set is mounted on a No. 77916M printer mounting plate above the perforator, and arranged so that a "break" received on the teletypewriter set will stop the transmitter-distributor in addition to disabling the keyboard contacts of the teletypewriter set. The illustrations in this addendum show how No. 15 or No. 26 teletypewriter sets, mounted on separate tables, may be associated electrically with the perforator-distributor in a like manner in place of the No. 14 teletypewriter set. The following list indicates which figures in the addendum to use when it is desired to associate the various types of teletypewriter sets with the perforator-distributor.

(a) No. 15 teletypewriter set on 15A table, operated single. Use Figure A and either Figure 1 or 2.

(b) No. 15 teletypewriter set on 15N table, operated single. Use Figure B and either Figure 1 or 2.

(c) No. 26 teletypewriter set on 26A table, operated single. Use Figure C and either Figure 1 or 2.

(d) No. 15 teletypewriter set on 15N table, with key to provide either single or duplex operation of the combination of perforator-distributor and teletypewriter set. Use Figure D and either Figure 1 or 2.

3.02 With the combinations covered by 3.01 (a), (b), (c) and (d), the line connections and transmitter-distributor control connections between the teletypewriter sets and perforator-distributor base are run via the fittings on the

teletypewriter tables. However, the power cords for the teletypewriter sets are to be plugged directly into receptacles on the perforator-distributor base.

3.03 For the various combinations covered by Section P30.751 and this addendum, rectifiers are not required for the teletypewriter sets at a-c locations as the direct current for these sets is obtained from the motor-generator set associated with the perforator-distributor. On all these combinations the power switch on the perforator-distributor base will control the a-c and d-c power to both the perforator-distributor equipment and the teletypewriter set.

3.04 Figures 1, A, B and C are reproduced from Drawing 20841-116; Figure 2 is reproduced from Drawing 20880-131; and Figure D is reproduced from Drawing S-9447-143.

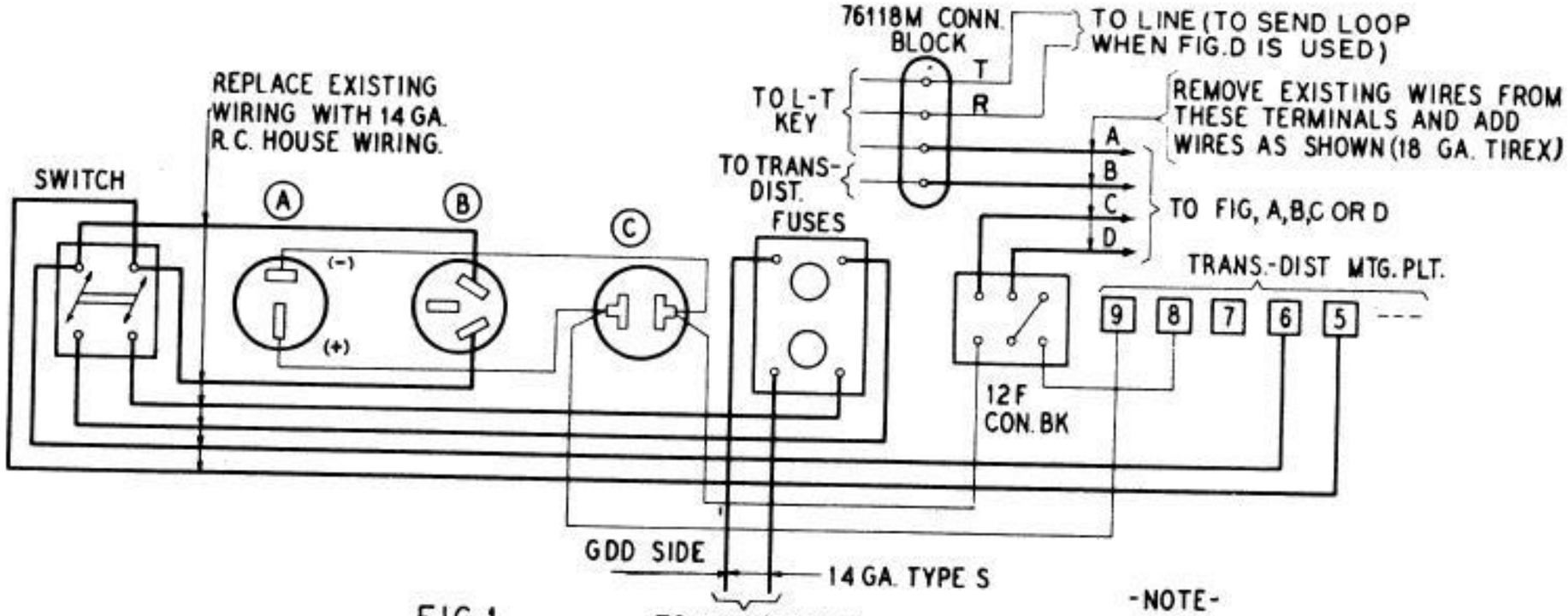


FIG 1

REPLACEMENT OF WIRING IN PERFORATOR-DISTRIBUTOR AND CONNECTIONS THERETO. FROM A 15TTY ON A 15A OR 15N TABLE OR A 26TTY ON A 26A TABLE FOR OPERATION FROM 110 VOLT AC POWER
(REFER TO FIG.1 SECTION P30.751 FOR COMPLETE WIRING.)

-NOTE-
UNLESS SO EQUIPPED ADD 12F CONN BLOCK PER NOTE1 OF B.S.P. P30.751

-KEY-
—— EXISTING WIRING
—— ADDED OR CHANGED WIRING

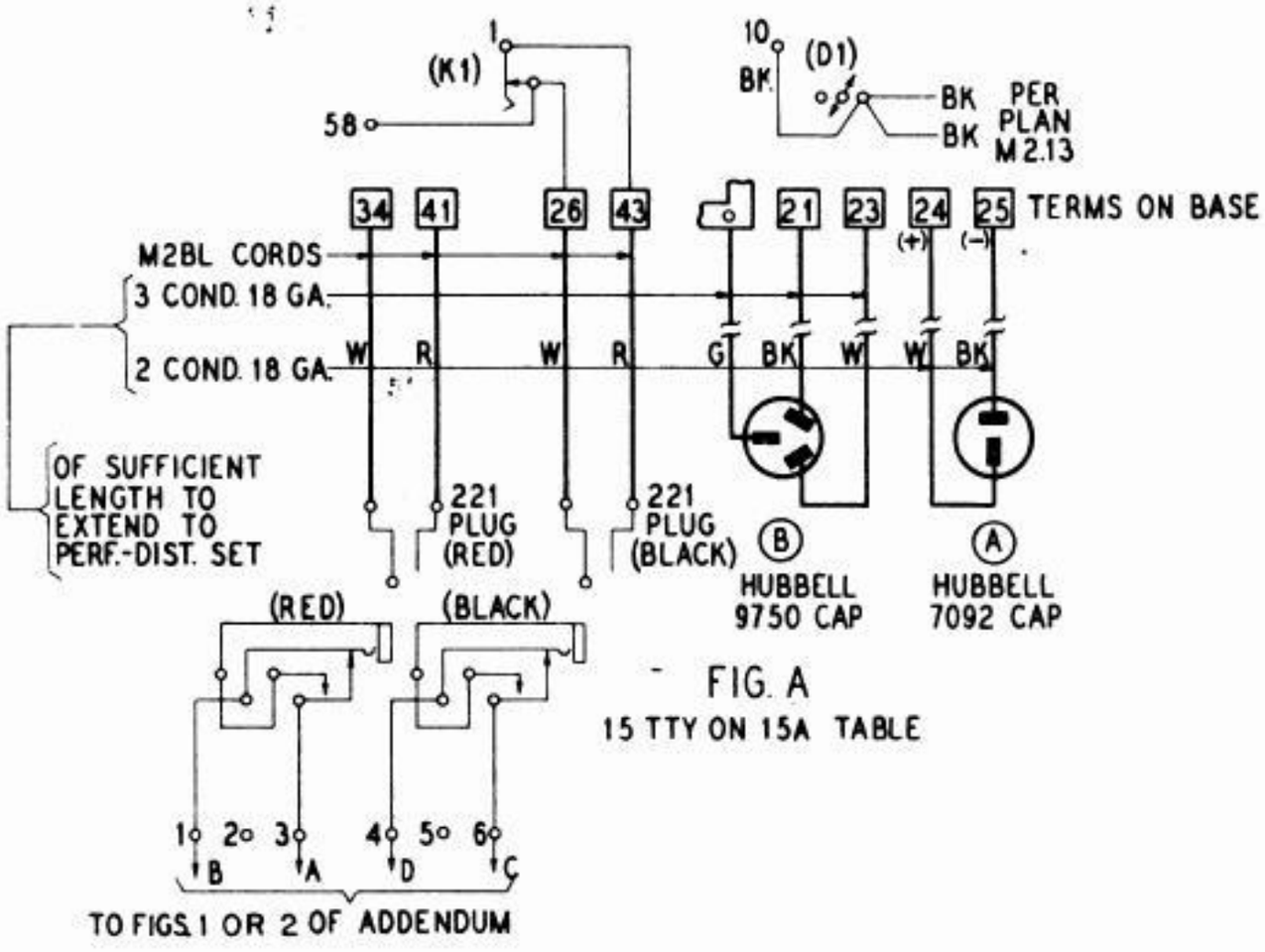


FIG. A

15 TTY ON 15A TABLE

-KEY-

EXISTING WIRING

ADDED OR CHANGED WIRING

14-TYPE
PERF.-DIST. SET
STATION CONNECTIONS

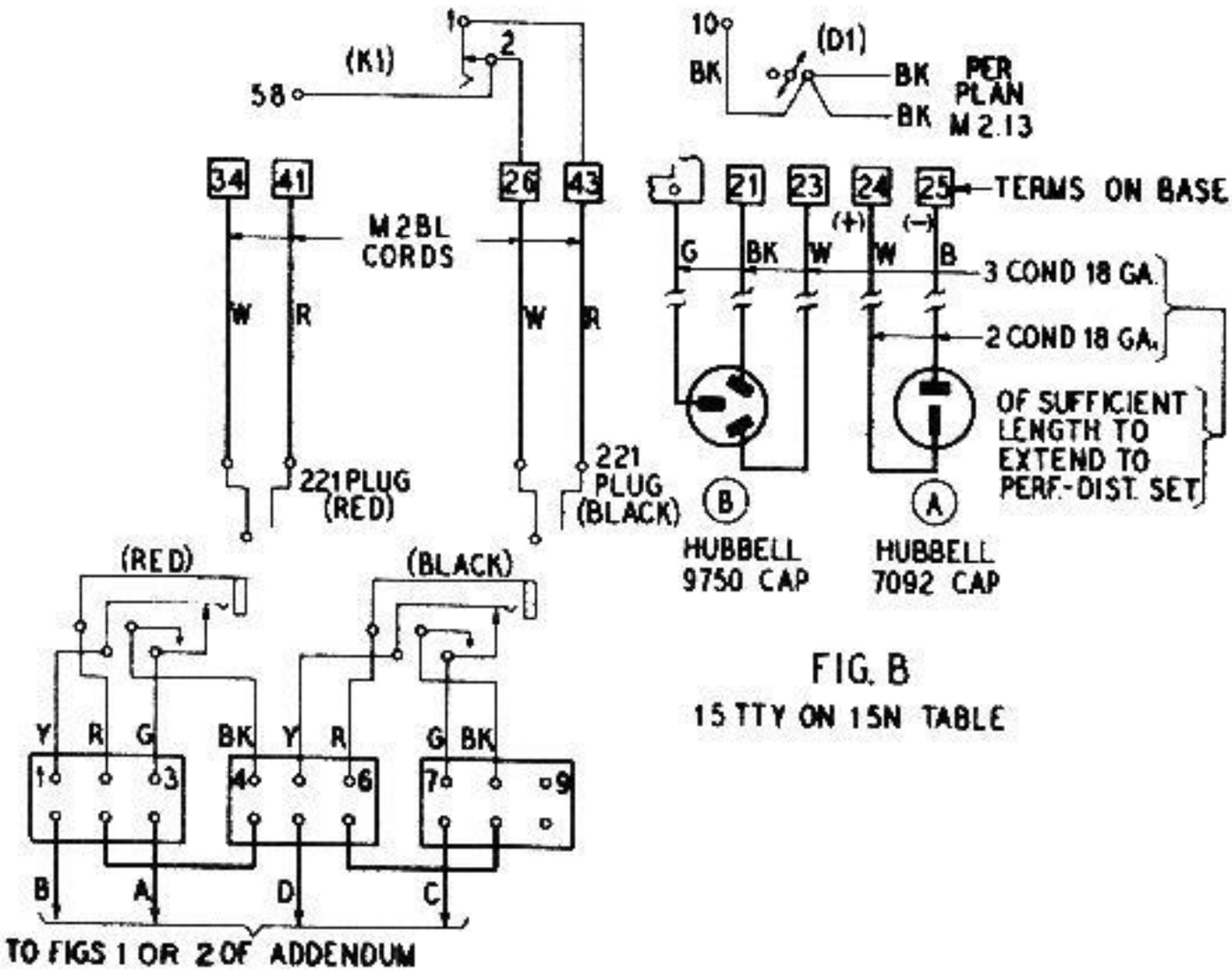


FIG. B

15 TTY ON 15N TABLE

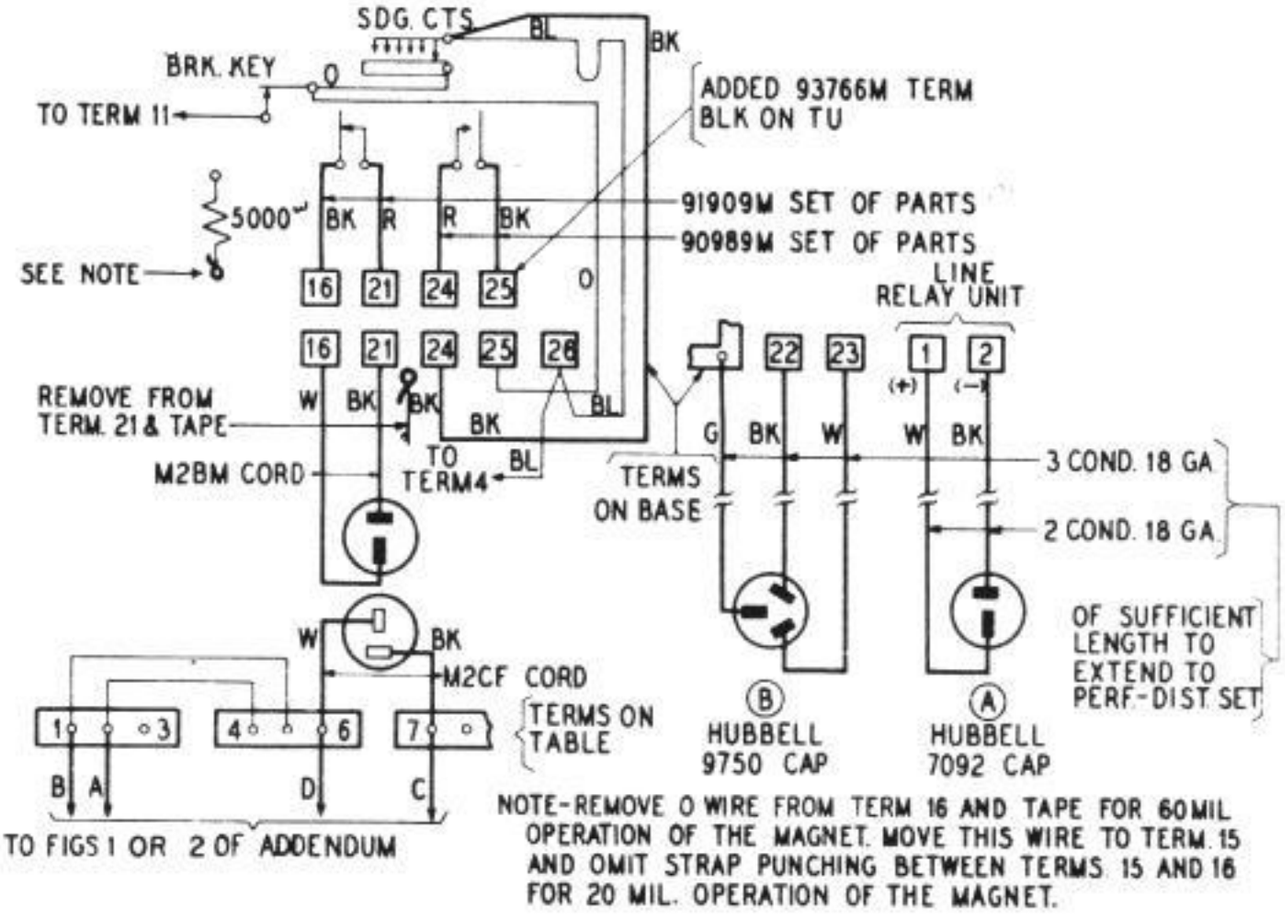
-KEY-

EXISTING WIRING

ADDED OR CHANGED WIRING

FIG. C

26 TTY ON 26A TABLE
(REFER TO B.S.P. P91.017)



NOTE-REMOVE O WIRE FROM TERM 16 AND TAPE FOR 60 MIL OPERATION OF THE MAGNET. MOVE THIS WIRE TO TERM. 15 AND OMIT STRAP PUNCHING BETWEEN TERMS 15 AND 16 FOR 20 MIL. OPERATION OF THE MAGNET.

-KEY-

EXISTING WIRING

ADDED OR CHANGED WIRING

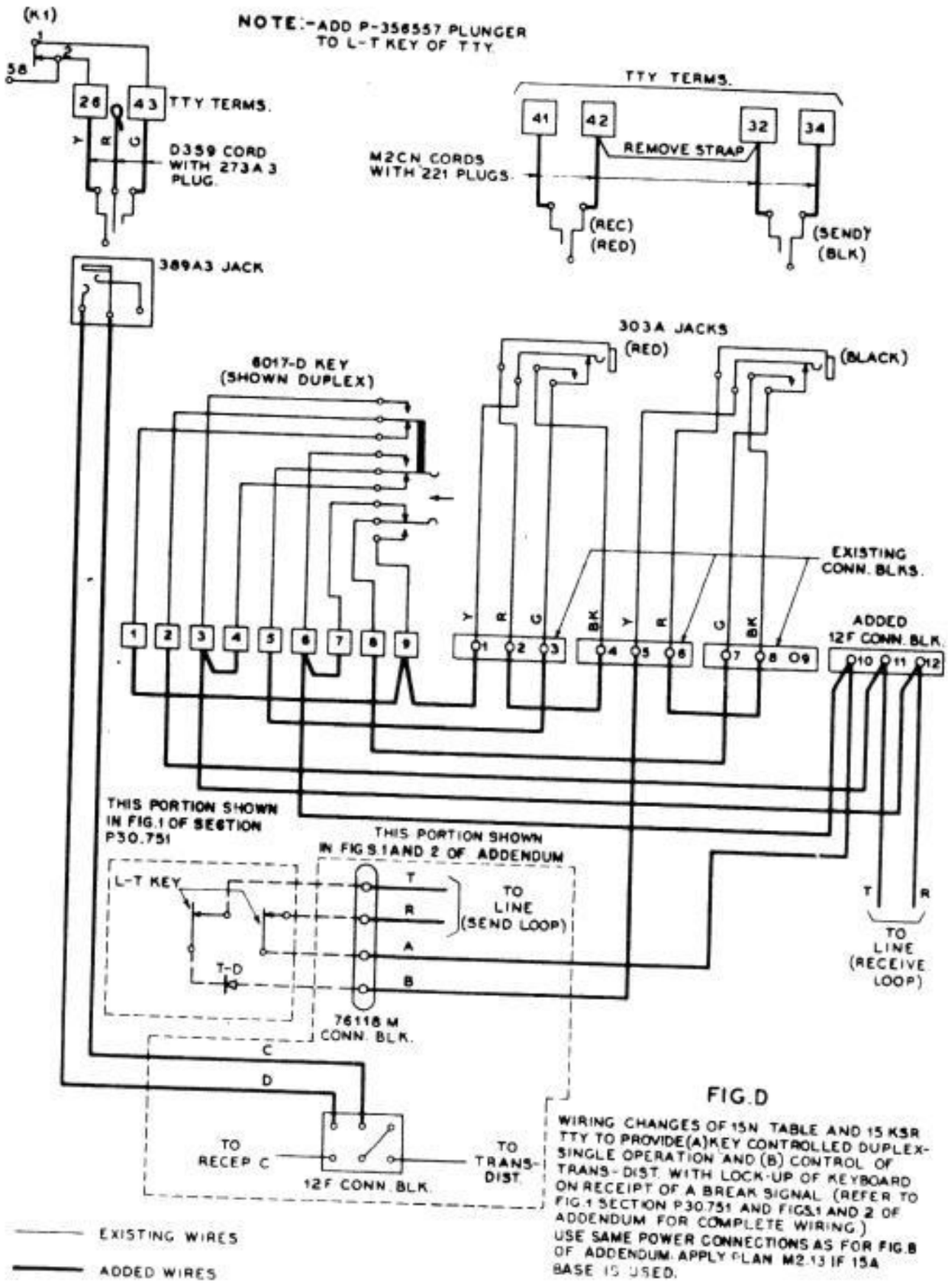


FIG.D

WIRING CHANGES OF 15N TABLE AND 15 KSR TTY TO PROVIDE (A) KEY CONTROLLED DUPLEX-SINGLE OPERATION AND (B) CONTROL OF TRANS-DIST. WITH LOCK-UP OF KEYBOARD ON RECEIPT OF A BREAK SIGNAL. (REFER TO FIG.1 SECTION P30.751 AND FIGS.1 AND 2 OF ADDENDUM FOR COMPLETE WIRING.)
USE SAME POWER CONNECTIONS AS FOR FIG.B OF ADDENDUM. APPLY PLAN M2.13 IF 15A BASE IS USED.

14-TYPE PERF.-DIST. SET STATION CONNECTIONS

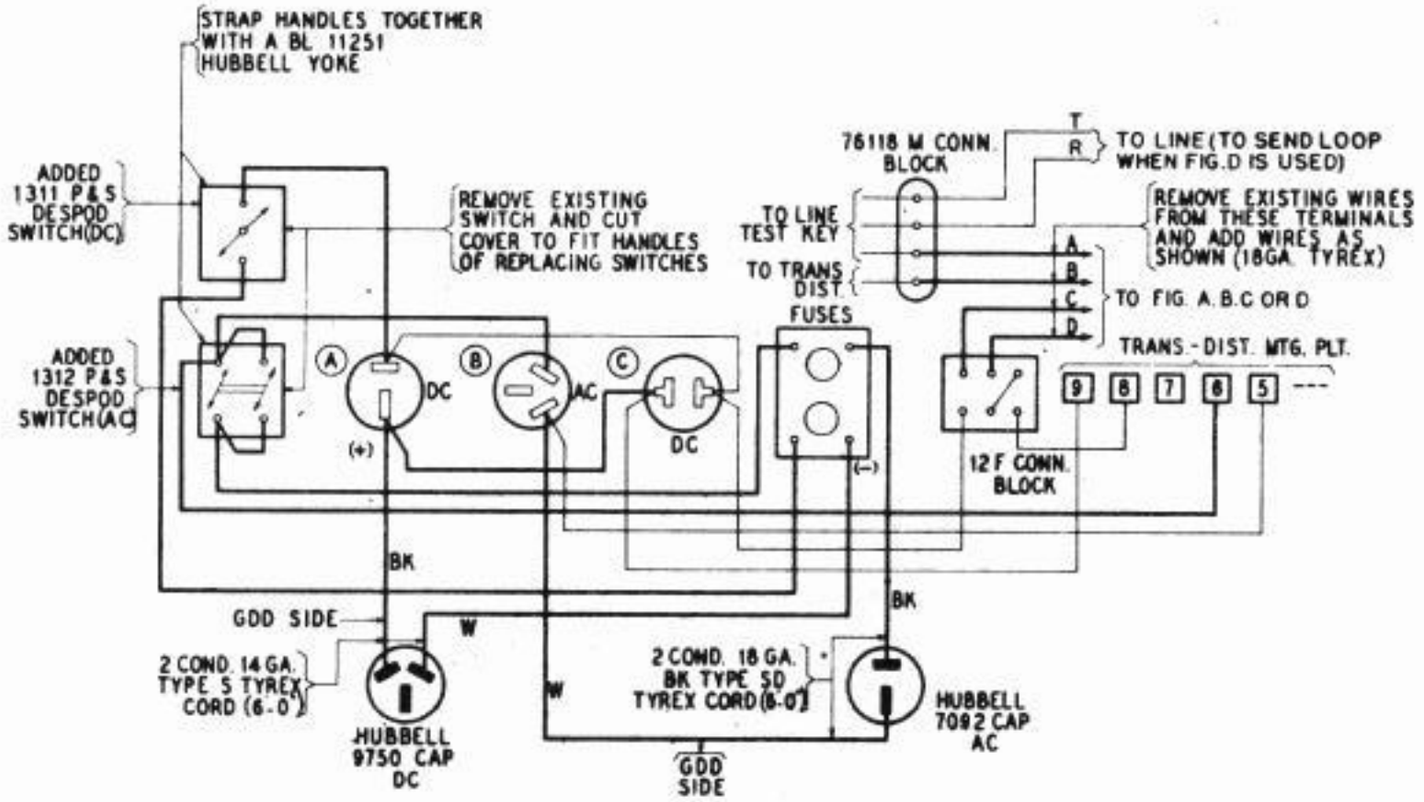


FIG. 2

WIRING CHANGES OF PERFORATOR-DISTRIBUTOR AND CONNECTIONS THERETO FROM A 15 TTY ON A 15A OR 15 N TABLE OR A 26 TTY ON A 26A TABLE FOR OPERATION FROM SEPARATE SOURCES OF A.C. AND D.C. POWER (REFER TO FIG. 1 SECTION P30.751 FOR COMPLETE WIRING)

- NOTE -

UNLESS SO EQUIPPED ADD 12F CONN. BLK. PER NOTE 1 OF B.S.P. P30.751
ALL A.C. WIRING 14 GA. RC HOUSE WIRING
ALL D.C. WIRING 18 GA. RC HOUSE WIRING

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SECTION P30.751
Issue 2, March, 1937
AT&T Co. Standard

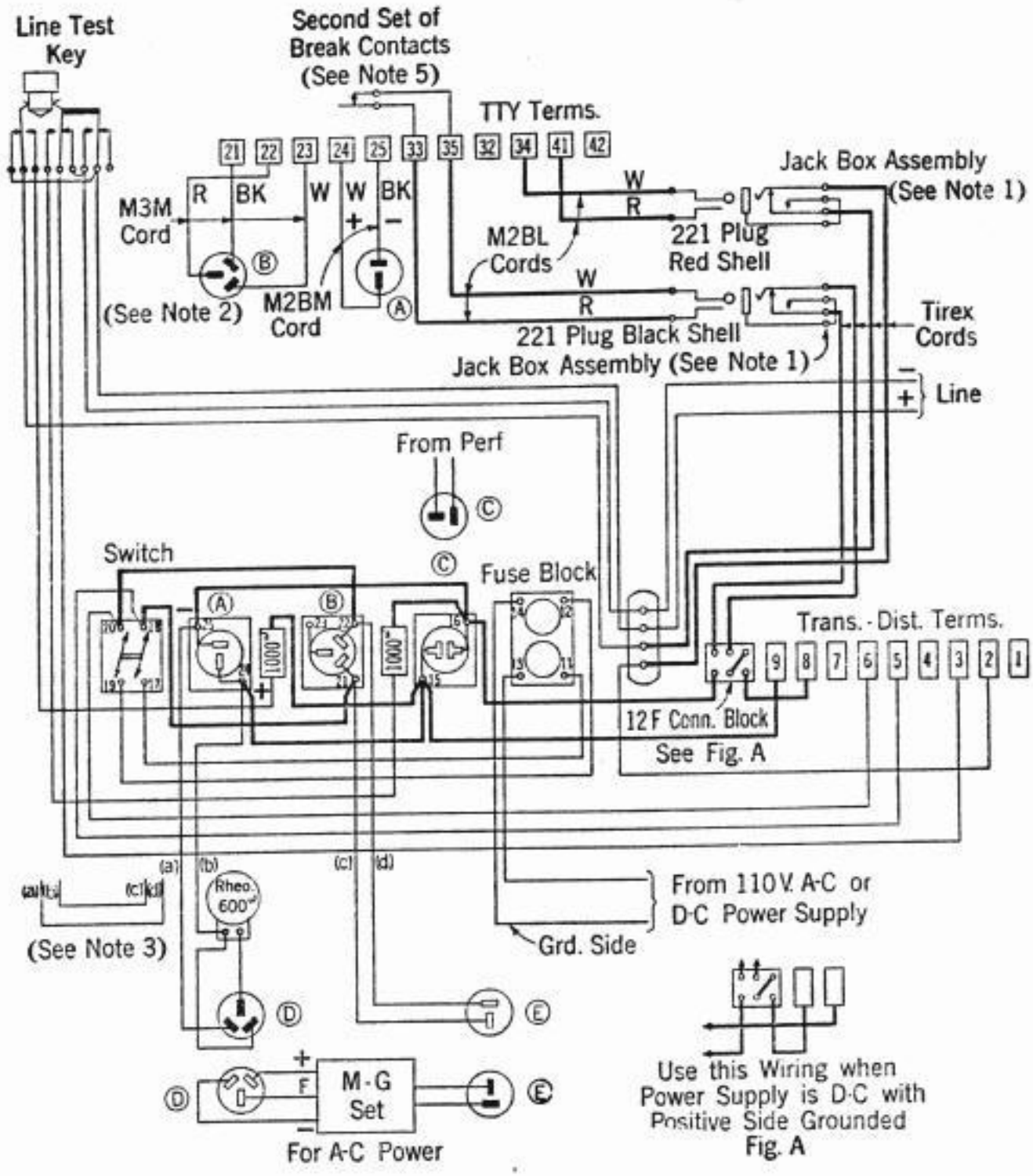

Fig. 1

14 Type Perf.-Dist. Set with Typing Unit Arranged to Stop Transmitter Distributor on a "Break" and with Typing Unit Interchangeable on Regular 14-B Table or Customer's Table.

For Notes see Page 2

Notes

1. Provide a 211C jack mtg. equipped with two 303A jacks. They may be mounted in an outlet box 3-1/2 inches deep as used in the 15N table "Outlet box and cover per dwg. ED70065-01, Group 1 and Group 11." Mount outlet box on under side of 77916 printer mounting plate, with flat side of box next the plate. Provide a 12F connecting block and mount it adjacent to present connecting block. The strap is provided so that it may be removed if desired and the control circuit extended to other apparatus.

2. When power supply is D-C use connection plan PM2.01 or PM2.03.

3. When power supply is D-C omit MG set and connect as indicated to provide proper polarity at outlet (A). See Fig. A when power supply is D-C with positive side grounded.

4. Heavy lines indicate wiring changed as compared with wiring as furnished.

5. Provide second set of break contacts, mount with existing set and wire to terminals 33 and 35 as shown.

7. Where potential ground is required it will be necessary to modify the connections and bond the framework of the various units as may be required by local regulations.

8. The circuit in Fig. 1 has been changed as compared to Issue 1 to avoid exposed potentials on the BLACK plug and on the sleeves of the jacks.