

"DATASPEED[®]" TAPE SENDERS 5A AND 5C

SCHEMATIC AND ACTUAL WIRING DIAGRAMS

1. GENERAL

1.01 This section provides the schematic diagrams, actual wiring diagrams, interconnecting diagram, and power distribution diagram for DATASPEED Tape Senders 5A and 5C. This section is reissued to provide the latest wiring diagrams and cable diagram for the Tape Senders 5A and 5C. Since this is a general revision, marginal arrows ordinarily used to indicate changes and additions are omitted.

1.02 Refer to related sections for descriptive information. Diagrams concerned with the tape reader or optional feature unit are included in standard tape reader section or the section covering the feature unit.

1.03 The attached material consists of Wiring Diagram Package WDP0004. The index of the WDP lists the title of each diagram, its Teletype identification number, and the diagram issue number.

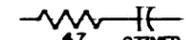
CONTROL LOGIC

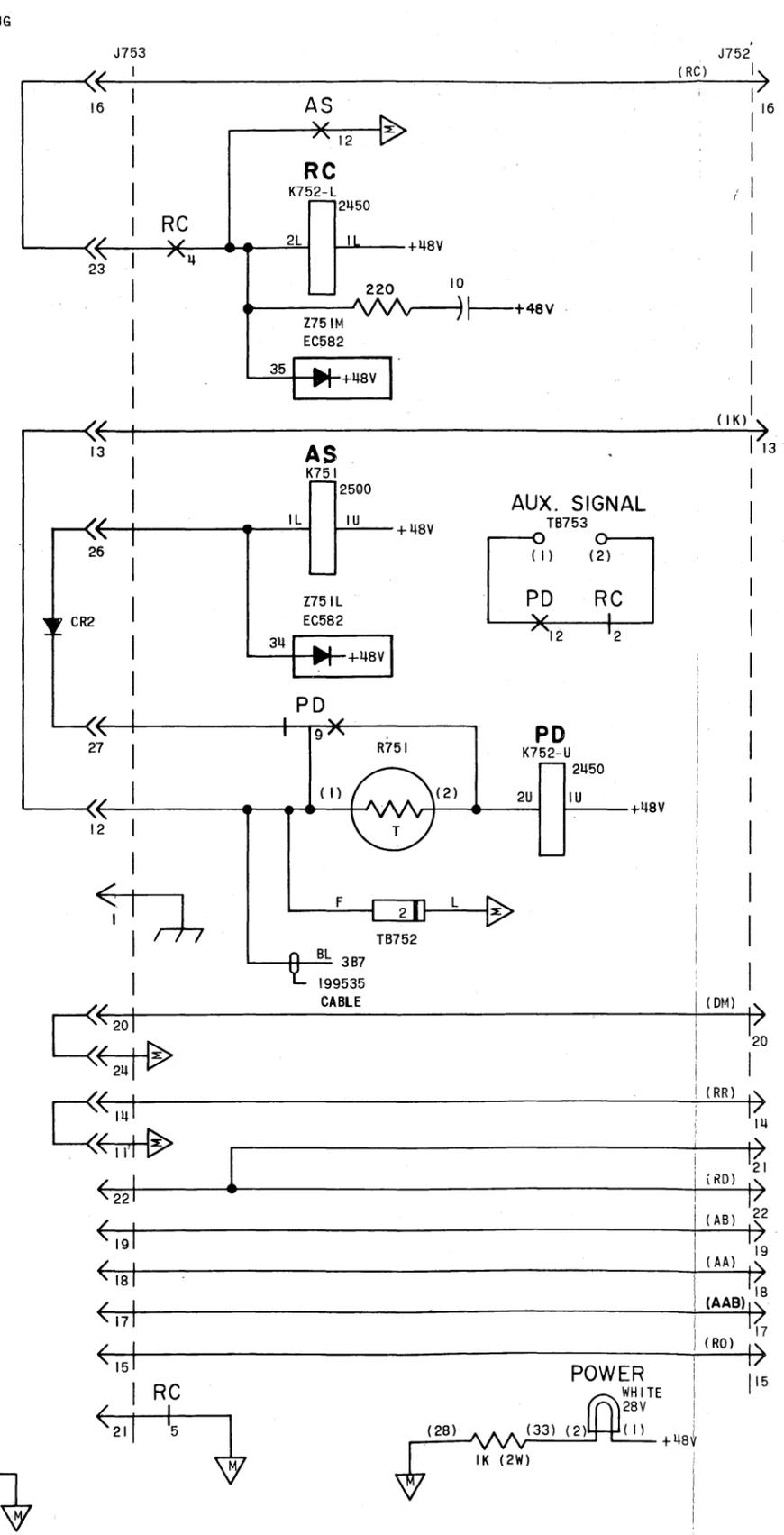
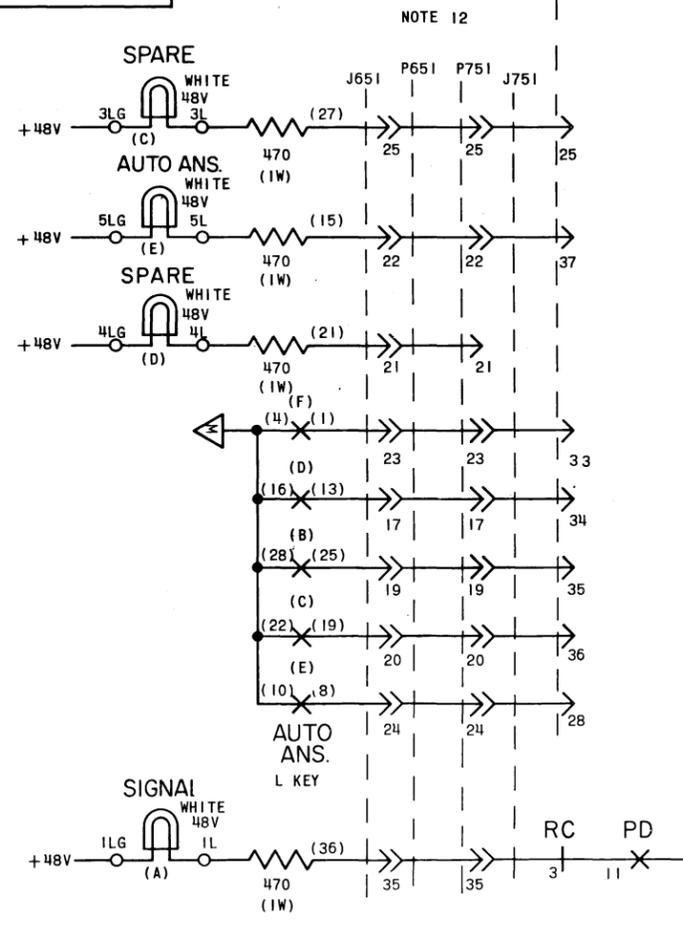
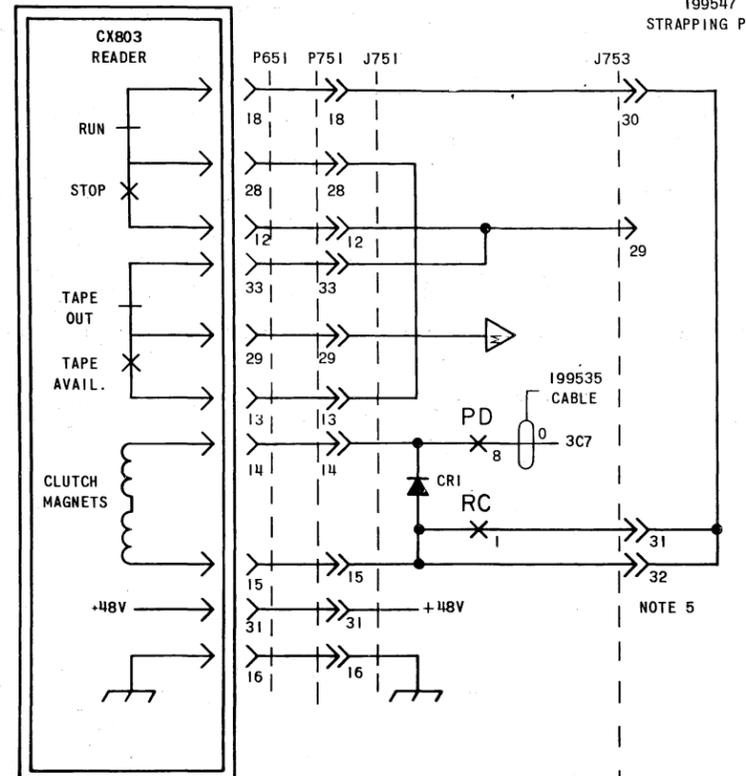
NOTE: REVISION INFORMATION MUST ALSO BE REFLECTED ON THE ISSUE CONTROL RECORD, WHICH IS A PART OF THIS DRAWING.

6442 WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	4-24-64	81276
3	8-18-64	83081
4	9-30-64	83086
5	10-28-64	84262
6	11-20-64	84982
7	4-25-65	86362
8	4-29-65	86363
9	5-19-65	87240
10	5-29-65	87244
11	8-11-65	88019
12	9-11-65	88020
13	5-23-66	88028
14	11-1-66	88034
15	11-23-66	92189-RC
16	4-18-68	95614

- NO. NOTES**
- REFER TO 6443WD, 6444WD & 7103WD FOR ACTUAL WIRING DIAGRAMS. 6446WD
 - TERMINAL DESIGNATIONS IN PARENTHESIS () ARE FOR REFERENCE ONLY AND NOT MARKED ON COMPONENTS.
 - SL-BL INDICATES SLOW BLOWING.
 - ALL VOLTAGES DC UNLESS OTHERWISE SPECIFIED.
 - REMOVE PIN 32 WHEN CIRCUIT ASSURANCE AND BREAK FEATURE IS TO BE USED.
 - INDICATES MODULE SIGNAL GROUND
 - NETWORK:
 165027
 120 0.3 μF
 - P853 PLUGS INTO WALL OUTLET ON VS227 AND INTO J1703 ON ELECTRICAL SERVICE PANEL IN VS229.
 -
 - ALL RESISTORS 1/2 WATT AND RESISTANCE IN OHMS, UNLESS OTHERWISE SPECIFIED.
 - ALL CAPACITANCE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
 - THE CONNECTION BETWEEN P651 & P751 MAY BE A GRAY CORD ON THE VS227 OR CABINET WIRING ON THE VS229.
 - NETWORK:
 309892
 8 0.5MFD
 SOME UNITS EQUIPPED WITH 309899
 309899
 4.7 0.33MFD
 - SOME UNITS HAVE A 1 AMP SL-BL FUSE (F853)



TO DATA SET

SEE ISSUE CONTROL RECORD FOR COMPLETE LIST OF SHEETS COMPRISING THIS W.D.

SHEET 1 WDP

SCHEMATIC WIRING DIAGRAM FOR TYPE 5 DATA SPEED TRANSMITTER CIRCUIT (VS227 & VS229) (VS247 & VS248)
 ASSEMBLY NO. 198001

APPROVALS	
D AND R <i>ae</i>	E OF M
E-NUMBER	
PROD. NO. 6442WD	
DATE 8-26-63	
P.D. FILE NO. I-A143AA	
DRAWN A.H.P.	CHKD. <i>ae</i>
ENGD. J.H.H.	APPD. <i>ae</i>

TELETYPE CORPORATION

6442 WD

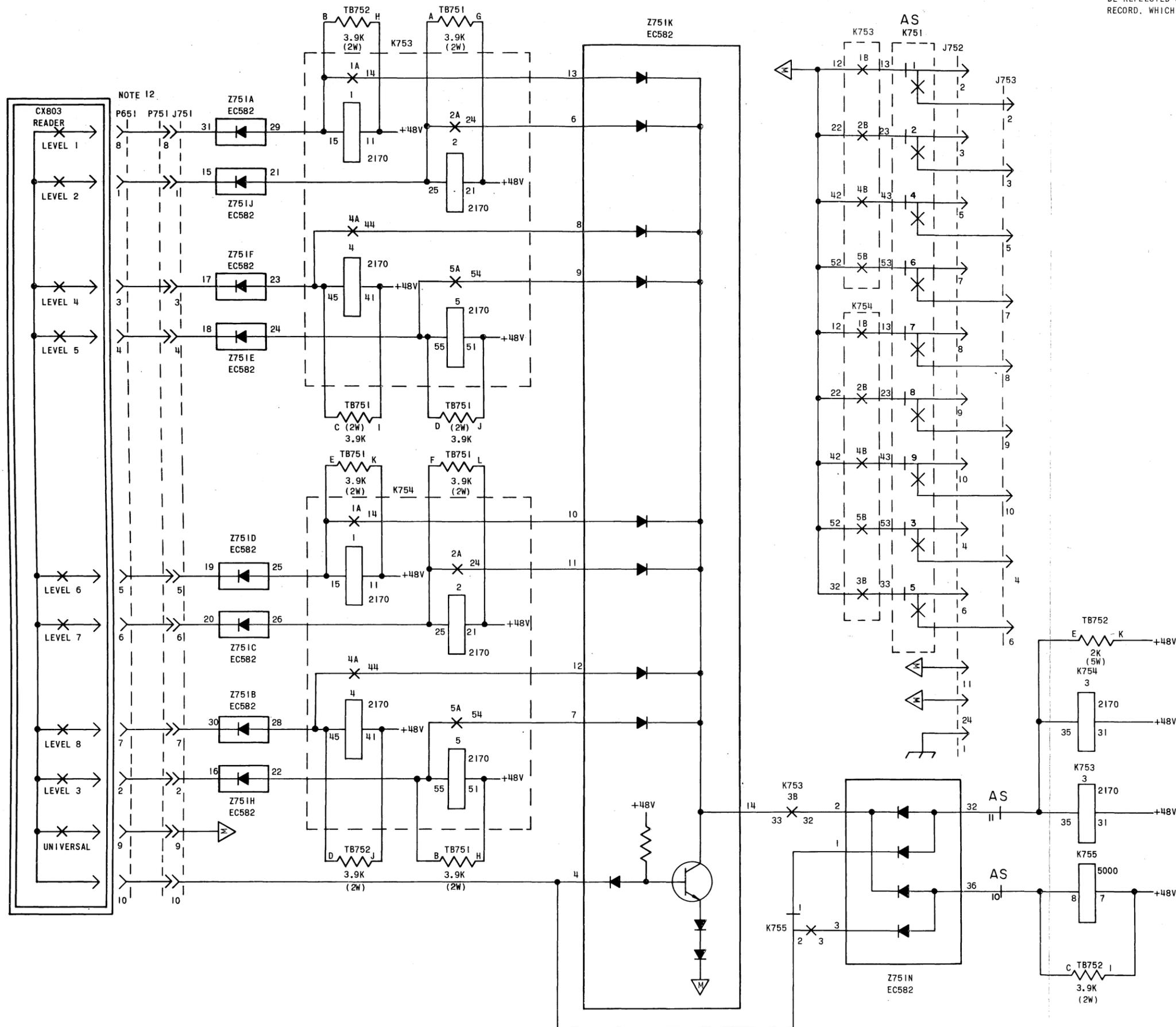
RELAY STORAGE AND TIMING LOGIC

NOTE: REVISION INFORMATION MUST ALSO BE REFLECTED ON THE ISSUE CONTROL RECORD, WHICH IS PART OF THIS W.D.

6442 WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	4-24-64	81276
3	8-18-64	83081
4	9-30-64	83086
5	10-28-64	84262
6	11-20-64	84989
7	4-26-65	86362
8	4-29-65	86363
9	5-19-65	87240
10	6-29-65	87244
11	8-11-65	88019
12	9-11-65	88020
13	5-23-66	88028
14	11-1-66	88034
15	11-23-66	9289-RC



SEE ISSUE CONTROL RECORD FOR COMPLETE LIST OF SHEETS COMPRISING THIS W.D.

SHEET 2

**SCHEMATIC WIRING
DIAGRAM FOR
TYPE 5 DATA SPEED
TRANSMITTER CIRCUIT
(VS227 & VS229)
(VS247 & VS248)**
ASSEMBLY NO. 198001

APPROVALS

D AND R <i>oak</i>	E OF M
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E-NUMBER
PROD. NO. 6442WD
DATE 8-26-63
P.D. FILE NO. 1-A143AA
DRAWN AHP
ENGD. JHH

TELETYPE CORPORATION

15 6442 WD

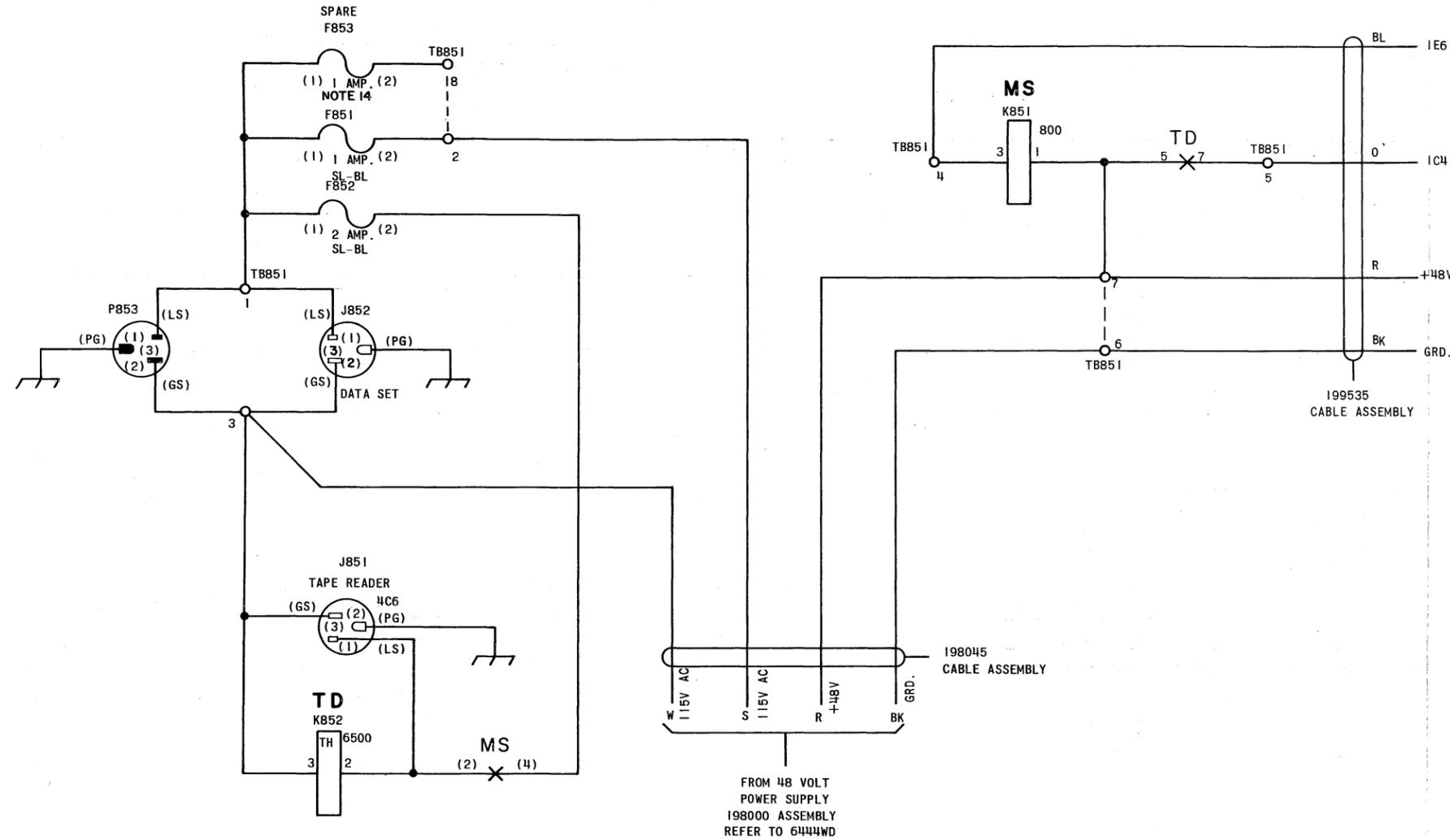
MOTOR CONTROL LOGIC

NOTE: REVISION INFORMATION MUST ALSO BE REFLECTED ON THE ISSUE CONTROL RECORD, WHICH IS A PART OF THIS W.D.

6442 WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	4-24-64	81276
3	8-18-64	83081
4	9-30-64	83086
5	10-28-64	84262
6	11-20-64	84989
7	4-26-65	86362
8	4-29-65	86363
9	5-19-65	87240
10	6-29-65	87240
11	8-11-65	88019
12	9-11-65	88020
13	5-23-66	88028
14	11-1-66	88034
15	11-23-66	92189-RC
16	4-19-68	95614



FROM TRANSMITTER 198001 ASSEMBLY

198045 CABLE ASSEMBLY

FROM 48 VOLT POWER SUPPLY 198000 ASSEMBLY REFER TO 6444WD

199535 CABLE ASSEMBLY

SEE ISSUE CONTROL RECORD FOR COMPLETE LIST OF SHEETS COMPRISING THIS W.D. SHEET 3

SCHEMATIC WIRING DIAGRAM FOR TYPE 5 DATA SPEED TRANSMITTER CIRCUIT (VS227 & VS229) (VS247 & VS248) ASSEMBLY NO. 198048

APPROVALS

D AND R E OF M

E-NUMBER

PROD. NO. 6442 WD

DATE 8-26-63

P.D. FILE NO. 1-A143AA

DRAWN A.P.H. CHKD. *[Signature]*

ENGD. J.H.H. APPD. *[Signature]*

TELETYPE CORPORATION

16 6442 WD

SEE SHEET 1 FOR NOTES.

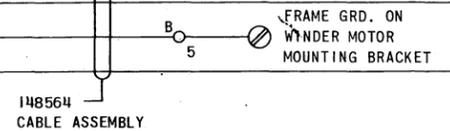
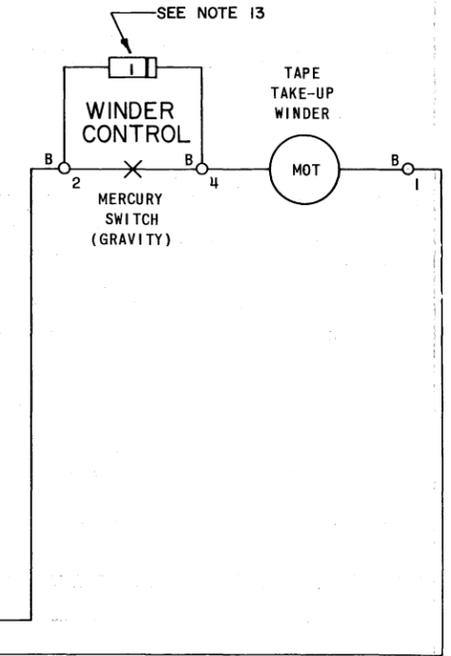
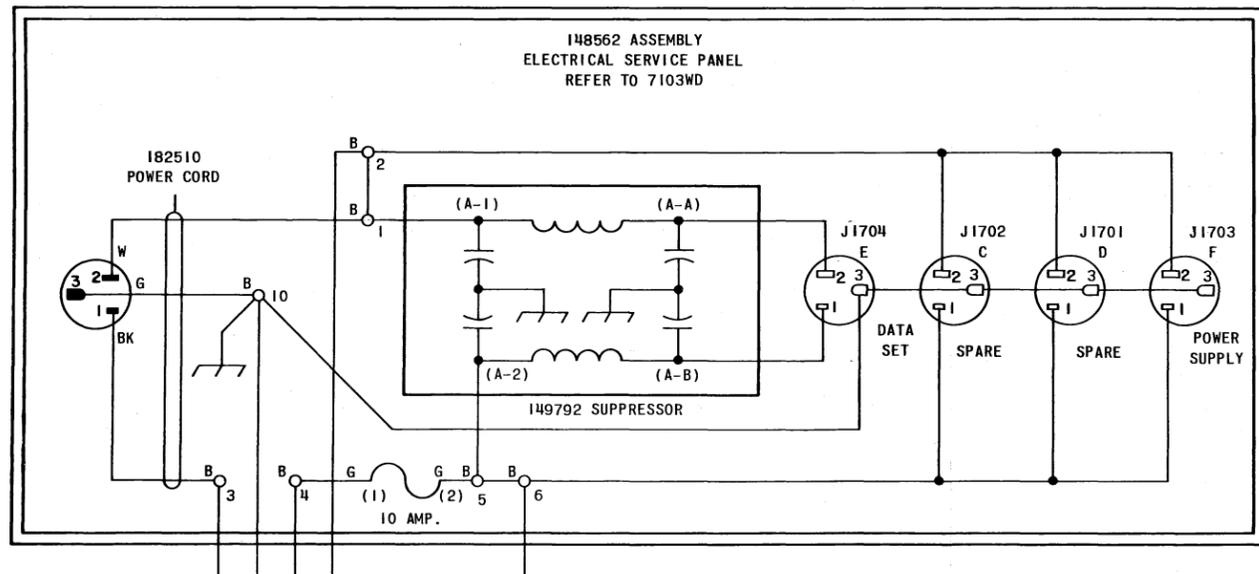
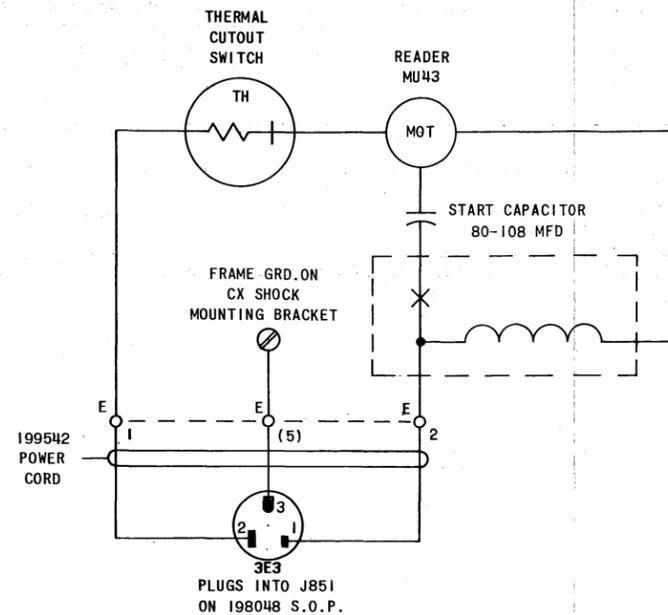
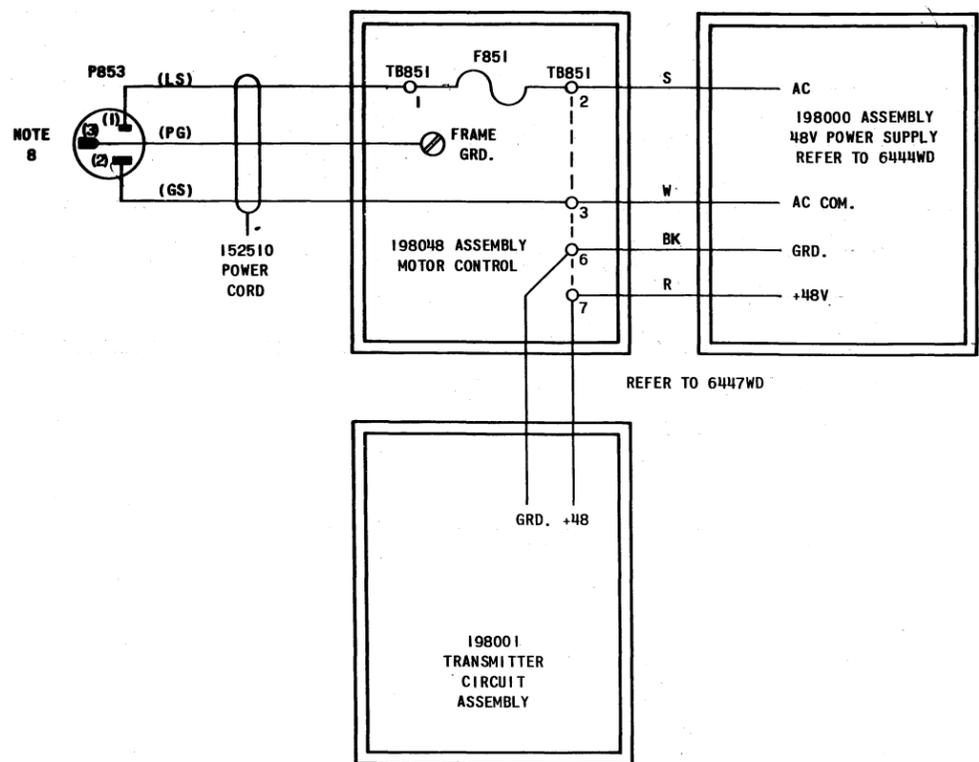
POWER DISTRIBUTION

NOTE: REVISION INFORMATION MUST ALSO BE REFLECTED ON THE ISSUE CONTROL RECORD, WHICH IS PART OF THIS W.D.

6442 WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	6-29-65	87244
3	11-1-66	88034
4	11-23-66	92189RC



SEE ISSUE CONTROL RECORD FOR COMPLETE LIST OF SHEETS COMPRISING THIS W.D.
SHEET 4

SCHEMATIC WIRING DIAGRAM FOR TYPE 5 DATA SPEED TRANSMITTER CIRCUIT (VS227 & VS229) (VS247 & VS248)

APPROVALS

D AND R <i>A.L.</i>	E OF M
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E-NUMBER

PROD. NO. 6442WD

DATE 8-26-63

P.D. FILE NO. 1-A143AA

DRAWN A.H.P. CHKD. *A.L.*

ENG. J.H.H. APPD. *A.L.*

TELETYPE CORPORATION

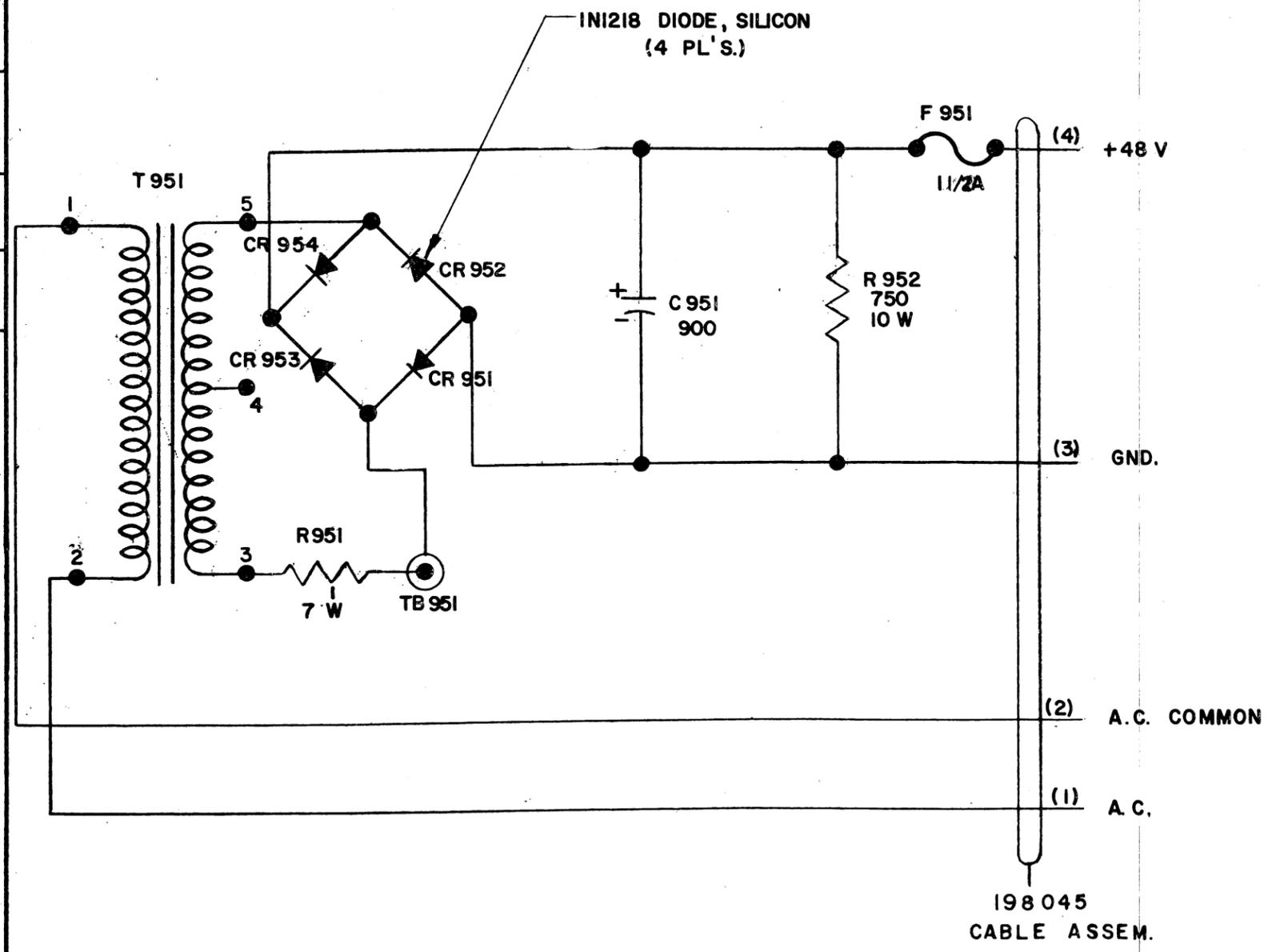
6442 WD

6444 WD

ISSUE	DATE	AUTH. NO.
A2	12-5-63	79534
3	2-26-65	86063
4	6-20-66	88030

- NOTES**
- REFER TO 6441 WD FOR ACTUAL WIRING DIAGRAM.
 - ALL VOLTAGES DC UNLESS OTHERWISE SPECIFIED.
 - RESISTANCE VALUES OF WINDINGS ON TRANSFORMER T951

BETWEEN TAPS	RESISTANCE
1 & 2	4 Ω
3 & 4	0.526 Ω
4 & 5	0.6 Ω
 - TERMINAL DESIGNATIONS IN PARENTHESES () ARE FOR REFERENCE ONLY AND ARE NOT MARKED ON COMPONENTS.
 - ALL RESISTORS 1/2 WATT AND RESISTANCE VALUES IN OHMS, UNLESS OTHERWISE SPECIFIED.
 - ALL CAPACITANCE VALUES IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.



WDP

SCHMATIC WIRING DIAGRAM FOR 48 VOLT POWER SUPPLY ASSEMBLY NO. 198000

APPROVALS

D AND R	E O P M
<i>[Signature]</i>	<i>[Signature]</i>
E-NUMBER	
PROD. NO. 6444 WD	

DATE: 8-29-63
 P.D. FILE NO. 1-A143AA
 DRAWN. AHP CHKD. *[Signature]*
 ENGD. JHH APPD. *[Signature]*

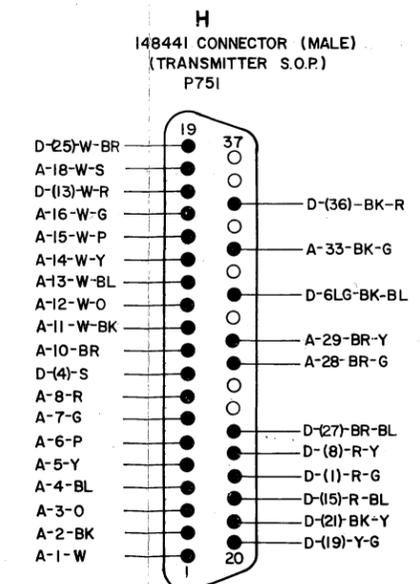
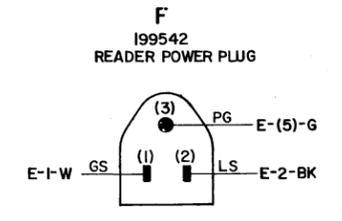
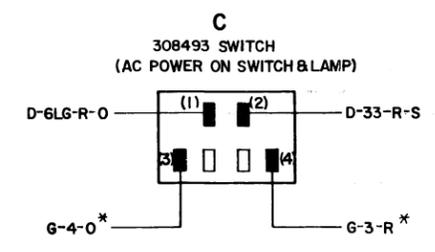
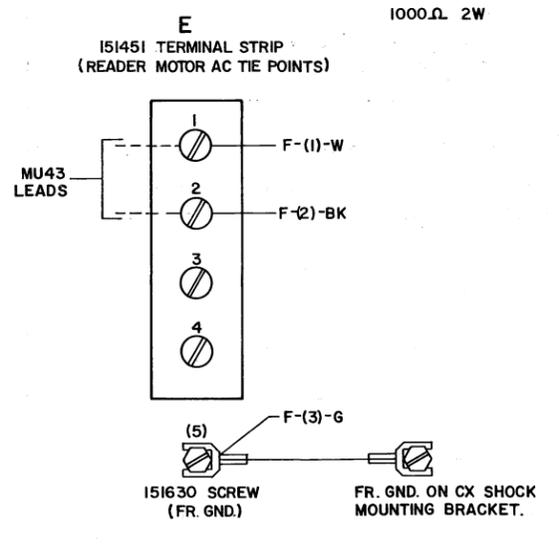
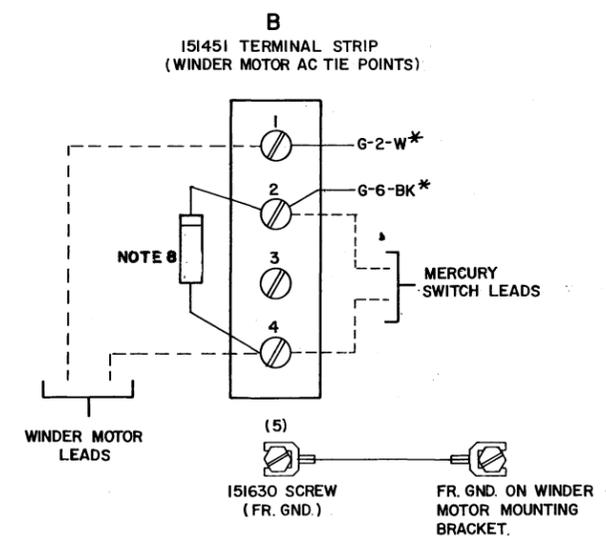
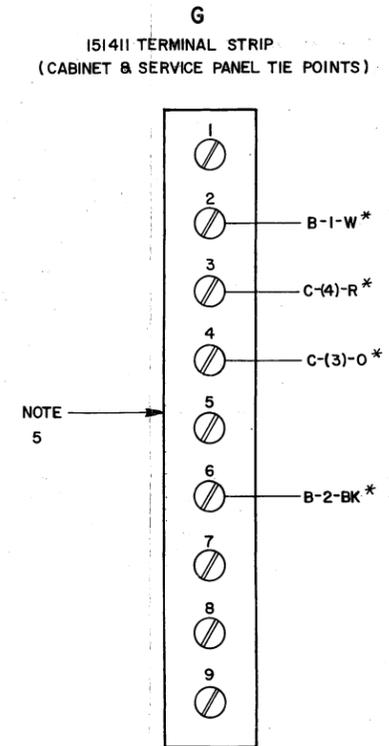
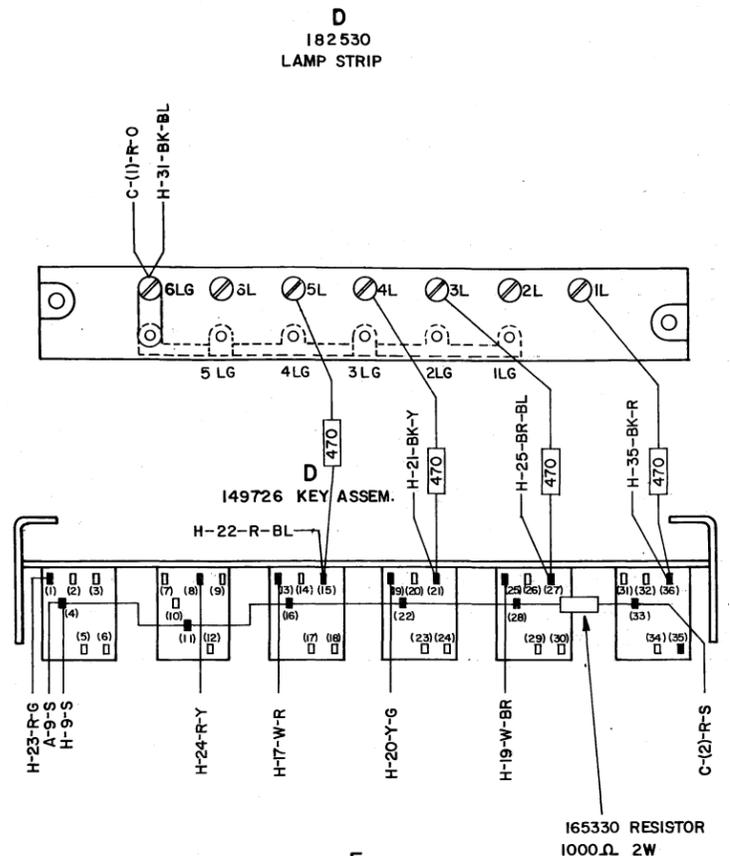
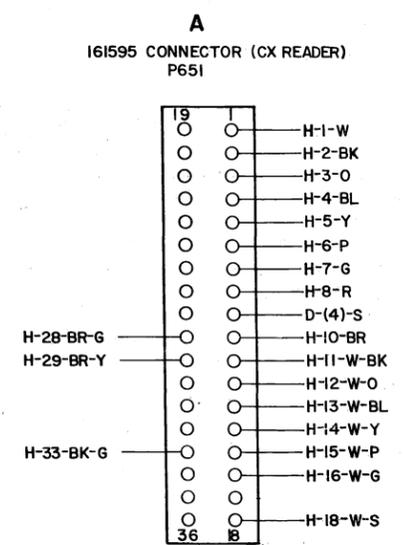
TELETYPE CORPORATION
 6444 WD

6414 WD

REVISIONS

ISSUE	DATE	AUTH. NO.
1	2-22-65	16407-R
2	6-29-65	87244
3	8-4-65	88340
4	11-30-65	89110
5	8-16-66	88033
6	11-21-66	92180
7	12-19-66	88031

- NOTES**
1. WIRING LEGEND
 DISTANT TERMINATING AREA
 DISTANT TERMINAL DESIGNATION
 WIRE COLOR CODE
 H-1-W
 2. COLOR CODE
 W-WHITE P-PURPLE
 G-GREEN Y-YELLOW
 R-RED BL-BLUE
 S-SLATE BK-BLACK
 O-ORANGE BR-BROWN
 3. TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESES () ARE NOT MARKED ON THE COMPONENTS.
 4. * DENOTES 18GA WIRE.
 5. REFER TO 7103WD FOR ELECTRICAL SERVICE PANEL WIRING.
 6. REFER TO 6442WD FOR SCHEMATIC WIRING DIAGRAM.
 7. ALL CONNECTORS ARE VIEWED FROM WIRING SIDE.
 8. NETWORK 309512
 LATER UNITS HAVE 309899 NETWORK FOR IMPROVED ARC SUPPRESSION



ACTUAL WIRING DIAGRAM FOR AC364 DATA SPEED TRANSMITTING TERMINAL

APPROVALS

D AND R <i>AGK</i>	E OF M <i>[Signature]</i>
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E-NUMBER

PROD. NO. 6414WD

DATE 12-23-64

P.D. FILE NO. 1-A143AA

DRAWN GRS.	CHKD. <i>[Signature]</i>
ENG. R.C.H.	APPD. <i>[Signature]</i>

TELETYPE CORPORATION

7 **6414 WD**

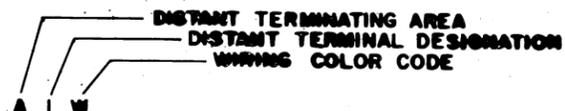
6440WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	1-20-64	84989
3	11-5-65	81001
4	11-5-65	81033
5	8-30-65	81076

NOTES

1. WIRING LEGEND



2. COLOR CODE

BK	BLACK	W Y	WHITE YELLOW
BR	BROWN	W G	WHITE GREEN
R	RED	W BL	WHITE BLUE
O	ORANGE	W P	WHITE PURPLE
Y	YELLOW	W S	WHITE SLATE
G	GREEN	BK R	BLACK RED
BL	BLUE	BK Y	BLACK YELLOW
P	PURPLE	BK G	BLACK GREEN
S	SLATE	R Y	RED YELLOW
WBK	WHITE BLACK	R G	RED GREEN
WBR	WHITE BROWN	WBK Y	WHITE BLACK YELLOW
WR	WHITE RED	WBK G	WHITE BLACK GREEN
WO	WHITE ORANGE	WRY	WHITE RED YELLOW

3. CONTACTS SHOWN IN UNOPERATED POSITION.

4. NUMBERS ENCLOSED BY PARENTHESES () ARE USED FOR REFERENCE AND ARE NOT NECESSARILY SHOWN ON THE PARTS.

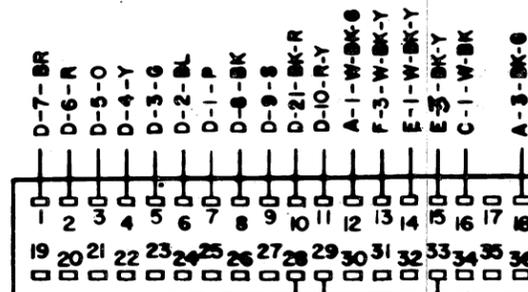
5. STRAP WITH #22 GAGE WIRE AS INDICATED.

6. THIS CONNECTOR MAY BE CALLED BY TWO DIFFERENT CODES.

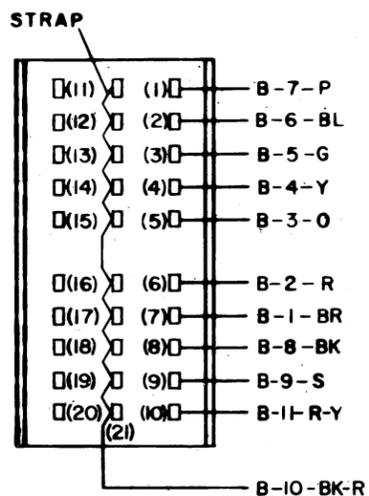
Y3227-0000

Y3229-0001

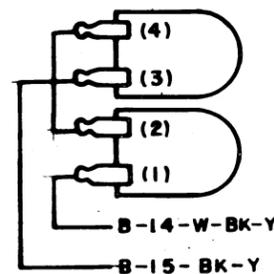
B
CONNECTOR (PLUG) NOTE 6
(VIEWED FROM RECEPTACLE END)



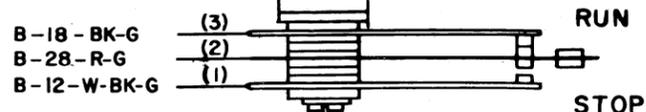
D
CODE READING CONTACT ASSEMBLY
(VIEWED FROM SOLDER TERMINAL END)



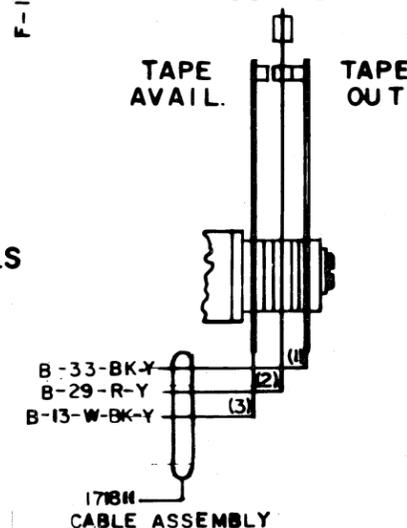
E
OPERATE MAGNET COILS



A
START-STOP (TIGHT-TAPE) CONTACT ASSEMBLY



F
TAPE-OUT CONTACT ASSEMBLY



ACTUAL WIRING DIAGRAM CX803 AND CX603 READER

APPROVALS

D AND R E OF M

E-NUMBER

PROD. NO. 6440WD

DATE: 8-20-63

P.D. FILE NO. 1-A143AA

DRAWN G.J.M. CHKD.

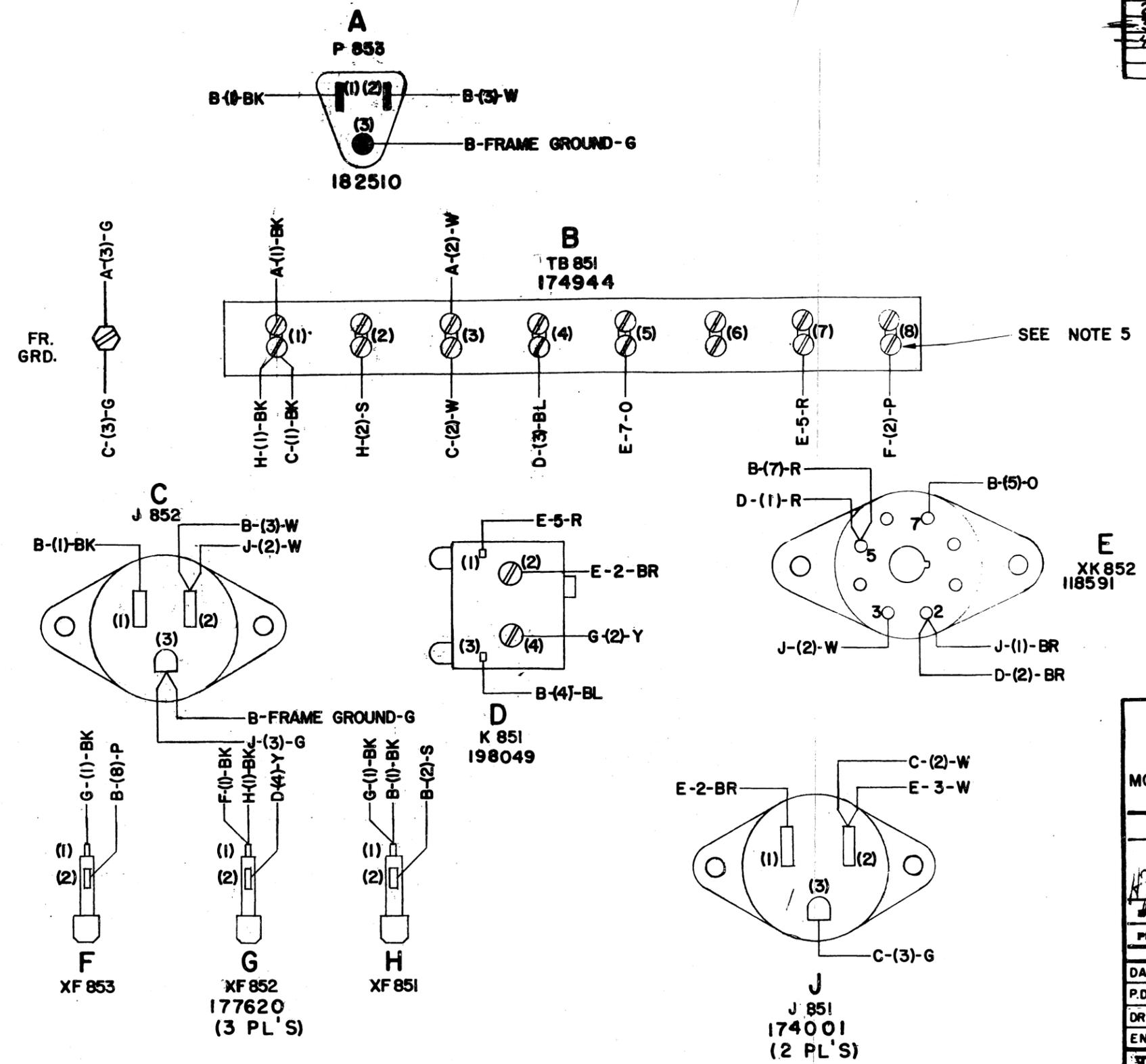
ENGD. J.H. APPD. *[Signature]*

TELETYPE CORPORATION

6440 WD

6443 WD		
ISSUE	DATE	AUTH. NO.
2	3-30-65	86358
3	8-16-66	88033
4	4-19-68	95619

- NO. NOTES
1. REFER TO 6442 WD FOR SCHEMATIC.
2. WIRE COLOR CODE
 BK - BLACK - RM 31880
 W - WHITE - RM 31881
 R - RED - RM 31882
 G - GREEN - RM 31883
 O - ORANGE - RM 31884
 BL - BLUE - RM 31885
 Y - YELLOW - RM 31886
 BR - BROWN - RM 31887
 P - PURPLE - RM 31888
 S - SLATE - RM 31889
3. TERMINAL DESIGNATIONS IN PARENTHESES () ARE FOR REFERENCE ONLY AND ARE NOT MARKED ON COMPONENTS.
4. FUSE VALUE CORRESPONDING TO FUSE HOLDER
 XF 851 - 1 AMP SL-BL
 XF 852 - 2 AMP SL-BL
 XF 853 - 1 AMP
5. USE I51626 TERMINALS, 12 PLACES.
6. WIRING LEGEND
 DISTANT TERMINATING AREA
 DISTANT TERMINATING DESIGNATION
 WIRE COLOR CODE
 A-I-BR.



ACTUAL WIRING DIAGRAM FOR MOTOR CONTROL RELAY ASSEM. NO. 198048	
APPROVALS	
D AND R	E OF M
NUMBER	
PROD. NO. 6443WD	
DATE: 8-29-63	
P.D. FILE NO. 1-A143 AA	
DRAWN. AHP	CHKD. JHH
ENGD. JHH	APPD. KRR
TELETYPE CORPORATION	
6443 WD	

NO.	NOTES
1.	REFER TO 6442 WD FOR ASSOCIATED SCHEMATIC
2.	TERMINAL DESIGNATIONS ENCLOSED IN () PARENTHESIS ARE FOR REFERENCE ONLY AND NOT MARKED ON COMPONENT.

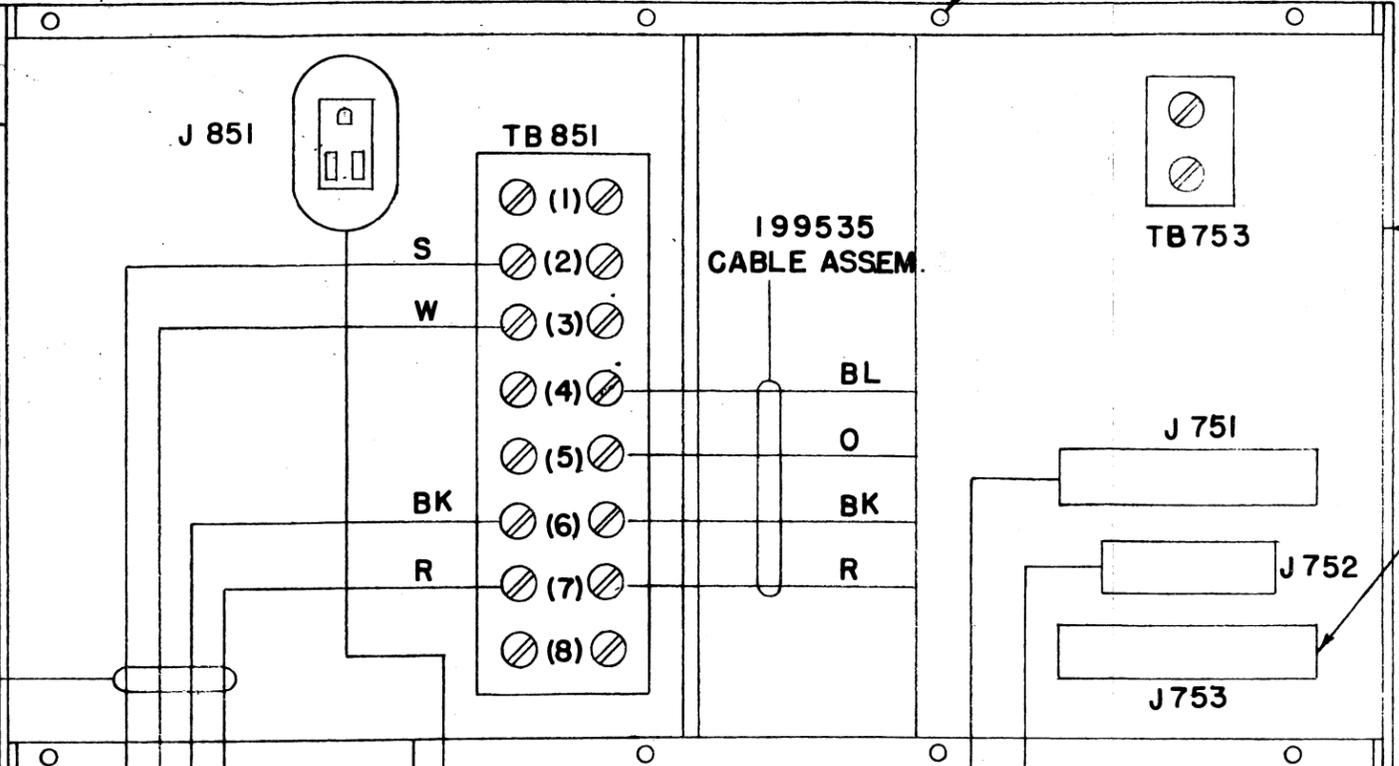
**198022 APPARATUS BOX ASSEMBLY
(AS VIEWED FROM WIRING SIDE)**

6447 WD		
REVISIONS		
ISSUE	DATE	AUTH. NO.
2	2-26-65	86356
3	10-1-65	88979

198048
MOTOR START &
RELAY ASSEM.
(SHOWN WITH REAR
COVER REMOVED)

198045
CABLE ASSEM.

199542
POWER CORD
(TO CXB 200)



182510
CABLE ASSEM.
(AC INPUT)

199780
CABLE ASSEM.
(TO DATA SET)

198020
CABLE ASSEM.
(TO CXB 200)

198001
TRANSMITTER
CIRCUIT
ASSEM.

199547
JUMPER PLUG
ASSEM.
(P753)

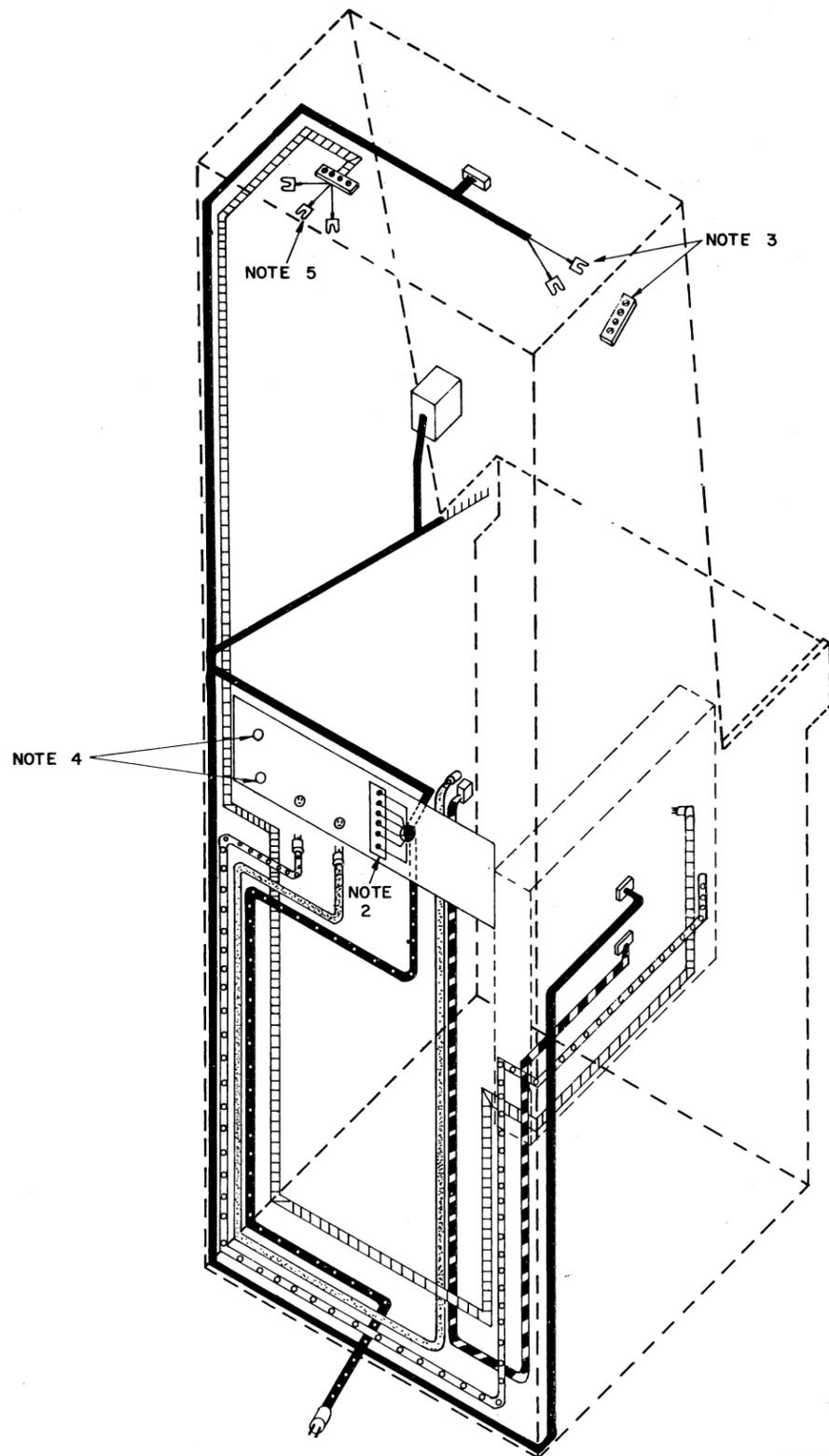
**ACTUAL WIRING
DIAGRAM
TYPE 5 DATA-
SPEED SENDER
(VS 227)
(VS 248)**

APPROVALS	
D AND R. <i>ARK</i>	E OF M <i>CS</i>
E-NUMBER	
PROD. NO. 6447 WD	
DATE: 9-11-63	
P.D. FILE NO. 1-A148 AA	
DRAWN R.C.B.	CHKD. F.D.B.
ENGD. J.H.H.	APPD. T.J.R.

**TELETYPE
CORPORATION**

3 6447 WD

NO.	NOTES
1.	COLOR CODE BK - BLACK G - GREEN W - WHITE R - RED O - ORANGE
2.	CONNECT BK TO TERMINAL 6 O TO TERMINAL 4 R TO TERMINAL 3 W TO TERMINAL 2
3.	CONNECT W TO TERMINAL 1 BK TO TERMINAL 2
4.	HOLES PROVIDED FOR WESTERN ELECTRIC 44A TERMINAL BOARD.
5.	CONNECT G TO FRAME GROUND W TO TERMINAL 1 BK TO TERMINAL 2



CABLE LEGEND

	148564
	199780
	DATA SET POWER CORD
	199542
	182510
	182510

7101WD

REVISIONS		
ISSUE	DATE	AUTH. NO.
2	10-1-65	88979
3	11-1-66	88034

CABLE DIAGRAM
FOR TYPE 5
DATA SPEED
SENDER CABINET
(VS229 & VS247)

APPROVALS	
D AND R <i>D.A.L.</i>	E OF M
E-NUMBER	
PROD. NO. 7101WD	
DATE 12-14-63	
P.D. FILE NO. 1-A143AA	
DRAWN GRS	CHKD. <i>GRS</i>
ENGD. RCH	APPD. <i>GRS</i>

TELETYPE
CORPORATION

3 7101WD

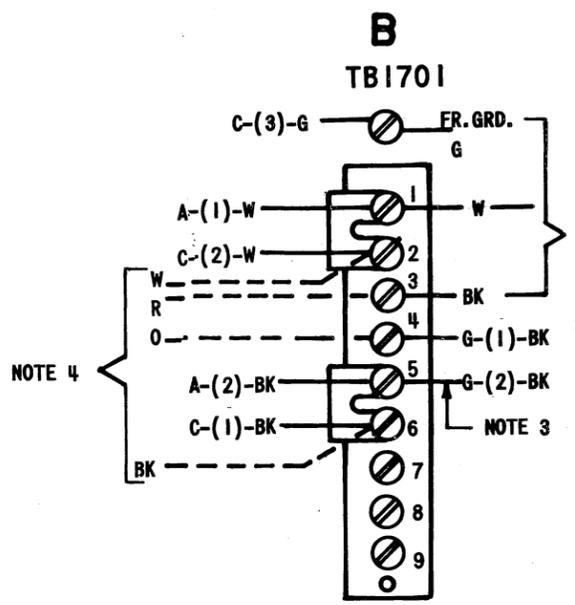
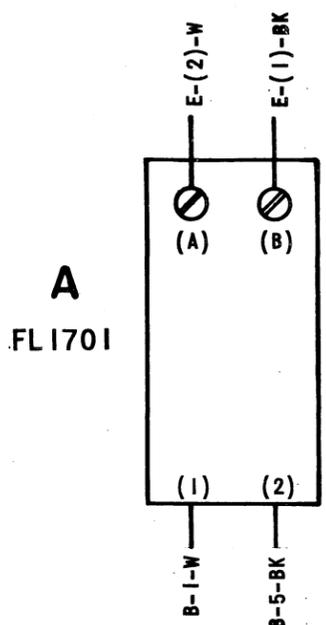
7103WD

REVISIONS

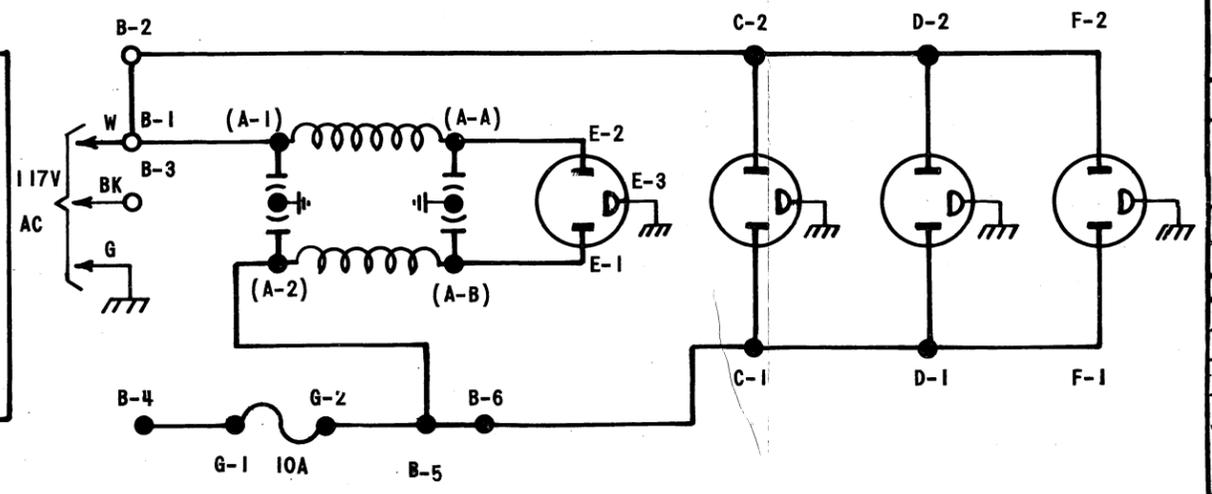
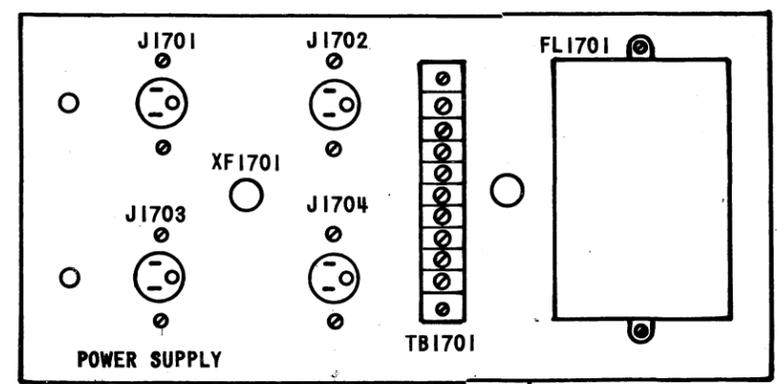
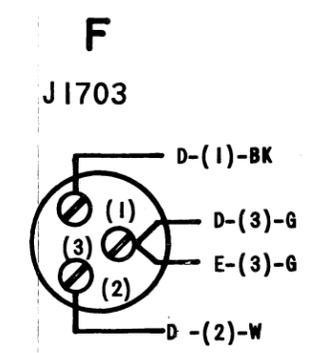
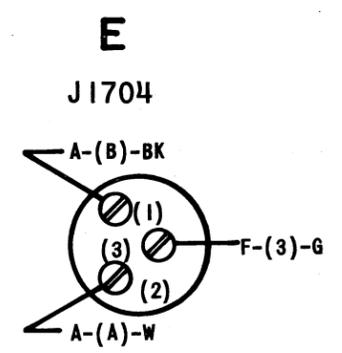
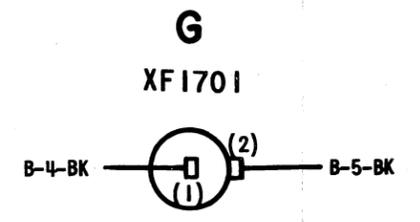
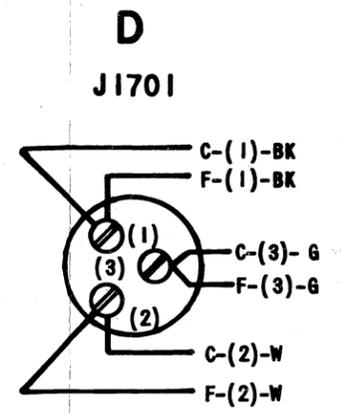
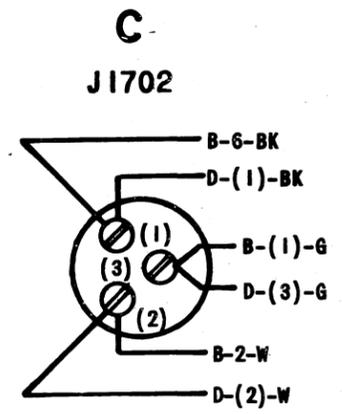
ISSUE	DATE	AUTH. NO.
2	8-28-64	83084
3	10-7-64	84000

- NO. NOTES**
- 1. WIRING LEGEND:**

 R-12-BL
 WIRE COLOR CODE
 - 2. TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESES ARE NOT MARKED ON THE COMPONENT.**
 - 3. 148574 CABLE ASSEMBLY.**
 - 4. 148563 FOR AC356 OR 148564 FOR AC364.**
 - 5. COLOR CODE:**
 BK-BLACK BL-BLUE
 BR-BROWN R-RED
 G-GREEN Y-YELLOW
 P-PURPLE O-ORANGE
 S-SLATE W-WHITE



117V AC
60~
182510
POWER CORD



WCP

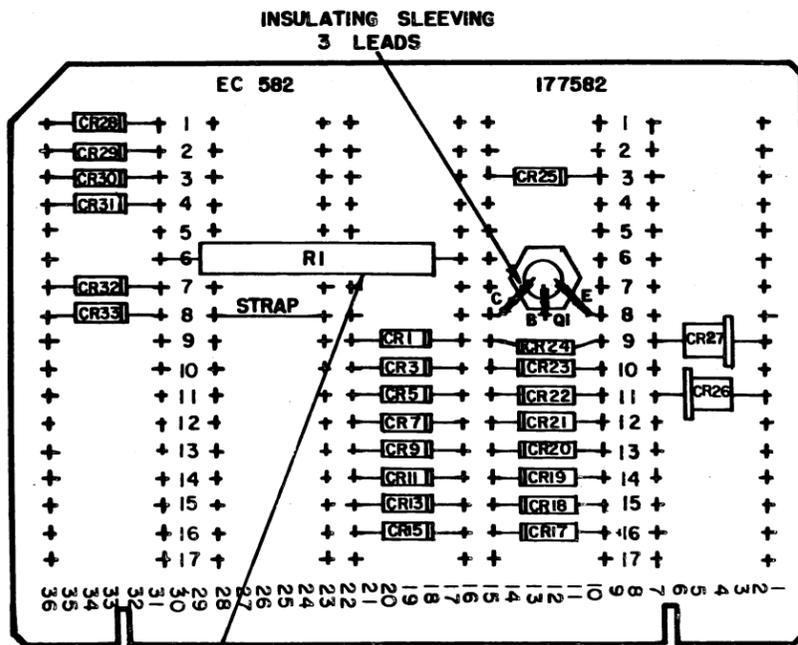
ACTUAL
WIRING DIAGRAM
FOR
ELECTRICAL
SERVICE PANEL
ASSEM. NO. 148562

APPROVALS

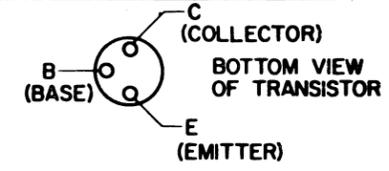
Q AND R	E OF M
<i>HJK</i>	<i>[Signature]</i>
E-NUMBER	
PROD. NO. 7103WD	
DATE: 11-16-63	
P.D. FILE NO. 1-A143AA	
DRAWN G.R.S.	CRKD.
ENGD. R.C.H.	APPD. <i>R.V.R.</i>

TELETYPE CORPORATION

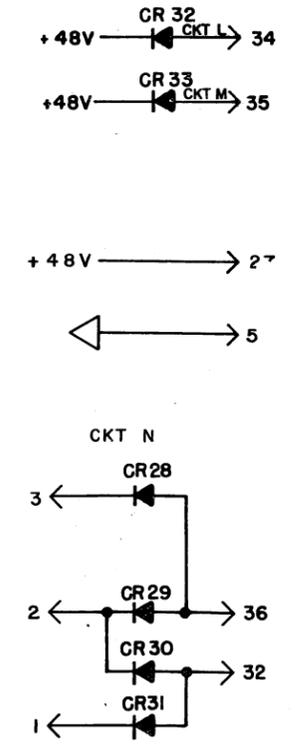
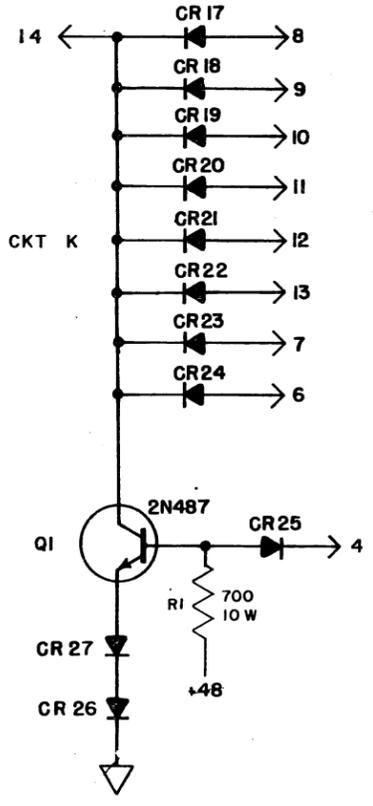
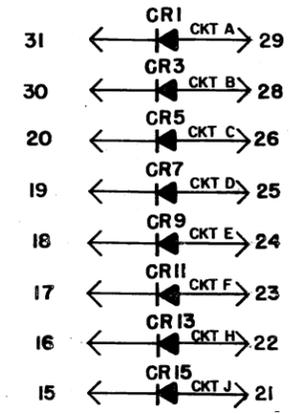
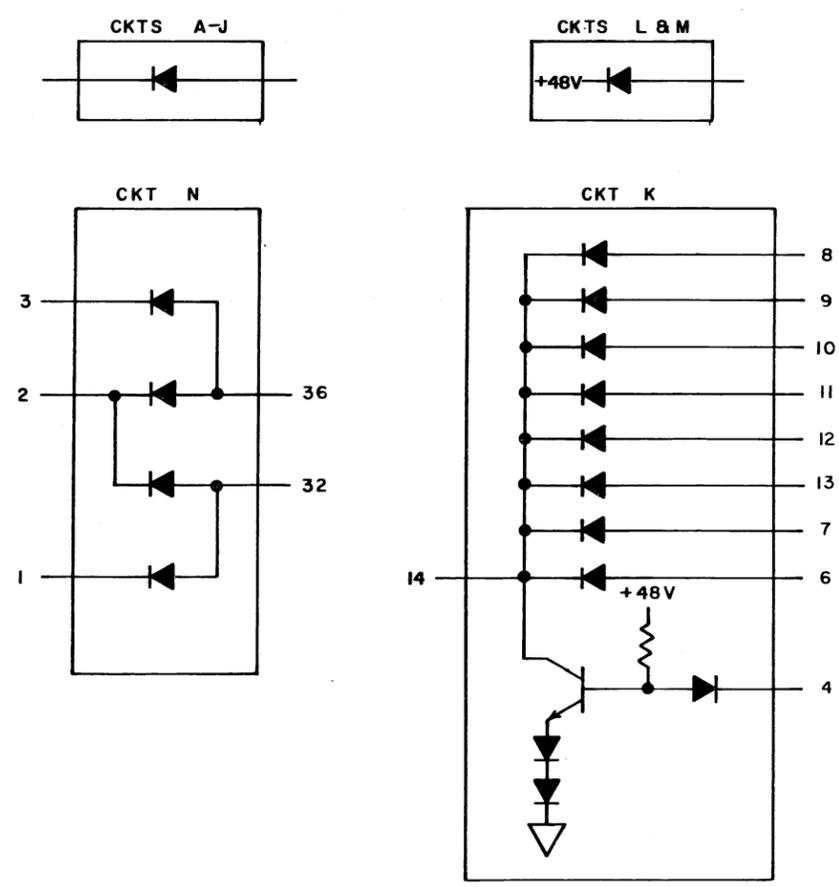
3 7103WD



RAISE R1 700Ω RESISTOR
125 MIN. OFF SURFACE OF CARD.
NOTE:
REFER TO 6050WD FOR BASIC MARKING INFORMATION



SYMBOLS



CIRCUIT BOARD EC 582

REF DESIG	TELETYPE PART NO.	TOTAL QTY.	NAME AND DESCRIPTION	LOCATING FUNCTION
CR1	177611	23	DIODE, 1N682	
CR3			SAME AS CR1	
CR5			" " "	
CR7			" " "	
CR9			" " "	
CR11			" " "	
CR13			" " "	
CR15			" " "	
CR17			" " "	
CR18			" " "	
CR19			" " "	
CR20			" " "	
CR21			" " "	
CR22			" " "	
CR23			" " "	
CR24			" " "	
CR25			" " "	
CR26	171541	2	DIODE, 1N1693	
CR27			SAME AS CR26	
CR28			SAME AS CR1	
CR29			" " "	
CR30			" " "	
CR31			" " "	
CR32			" " "	
CR33			" " "	
Q1	199536	1	TRANSISTOR	
	2669	1	WASHER, LOCK #10	ON TRANSISTOR STUD
	125231	1	NUT, HEX. #10-32	" " "
	144495	1	TRANSIPAD	OVER TRANS. LEADS
R1	148557	1	RESISTOR, 700 OHMS 10W	
		1	STRAP #24 GA. BARE	
EC	198010	1	CIRCUIT CARD, ETCHED	
	60263RM	3	SLEEVING	ON TRANSISTOR

177582

REVISIONS

ISSUE	DATE	AUTH. NO.
2	4-14-64	81749
3	2-12-65	84857
4	8-11-65	88019
5	8-16-66	88033

WDP

APPROVALS

R AND D <i>Agk</i>	E OF M <i>U</i>
E-NUMBER	
PROD. NO. 177582	
DATE 7-5-63	
R&D FILE 3-A148AA	
DRAWN A.H.P.	CHKD.
ENGD. J.L.	APPD.

TELETYPE CORPORATION

-177582