35 EDGE PUNCHED CARD TYPING REPERFORATOR SET

WIRING DIAGRAMS

CONTENTS PAGE

1. GENERAL. 1
2. WIRING DIAGRAM INDEX 1

1. GENERAL

1.01 This section provides wiring diagrams for the 35 Edge Punched Card Typing Reperforator Set (1A KEYBOARD PUNCH).

1.02 The attached material consisting of eight detached pages provides a complete set of wiring diagrams for the set.

1.03 The functional schematic wiring diagram 6997WD shows the complete functioning paths of all relays, other apparatus, and includes pertinent notes.

1.04 The actual wiring diagram 6998WD identifies and designates the associated apparatus and includes pertinent notes.

1.05 The actual wiring diagrams 6999WD consists of four separate pages that include a control index sheet and three actual wiring diagrams. The control sheet index provides a complete content listing for the three actual wiring diagrams. The actual wiring diagram identifies and designates the associated apparatus and includes pertinent notes.

1.06 The actual wiring diagram 7885WD and print TP181821 identify and designate the associated apparatus and include pertinent notes.

2. WIRING DIAGRAM INDEX

TITLE	DRAWING NUMBER	SECTION ISSUE				
		1	2	3	4	5
Edge Punched Card Typing Reperforator Set — Schematic	6997WD	9				
Edge Punched Card Typing Reperforator — Actual	6998WD	5				
Edge Punched Card Typing Reperforator Base — Actual	6999WD	*				
*See Control Sheet						
Model 33 Keyboard — Actual	7885WD	3				
Circuit Board — Actual	TP181821	5				

6997 WD

NO	NOTES
1	NUMBERS ENCLOSED IN PARENTHESIS ARE FOR REFERENCE ONLY AND ARE NOT SHOWN ON COMPONETS.
2	ALL CAPACITANCE VALUES IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
3	INDICATES RESISTANCE-CAPACITANCE NETWORK WITH A 470Ω RESISTOR IN SERIES WITH A 0.11 MFD CAPACITOR.
4	
5	ASSOCIATED ACTUAL WIRING DIAGRAMS 6998WD 6999WD, 7885WD.
6	ALL CONTACTS SHOWN IN UNOPERATED CONDITION.
7	USE 3/4 AMP. FAST BLOWING FUSE ONLY.
8	ALL RESISTORS 1/2 WATT AND RESISTANCE VALUES IN OHMS, UNLESS OTHERWISE SPECIFIED.
9	UNIT AS SHOWN CONNECTED FOR .020 A SIGNAL LINE. FOR .060 A. SIGNAL LINE MOVE STRAP FROM M4 TO M7

REVISIONS

ISSUE	DATE	AUTH. NO.
1	5-17-65	16907-R
2	8-3-65	88543
3	9-17-65	86632
4	12-2-65	89571
5	8-8-66	89583
6	2-7-67	92526
7	5-17-67	93203
8	8-17-67	94312 A
9	10-5-67	94647-A

SELECTOR MAGNET DRIVER CARD 181821

SELECTOR MAGNET DRIVER ASSEMBLY 181815

TO AREA F7

SIGNAL LINE

TO AREA F7

SCHEMATIC WIRING DIAGRAM FOR EDGE-PUNCHED CARD TYPING REPERFORATOR

(SEND RECEIVE SET)
VSL318

APPROVALS

D AND R	E OF M
HAR	

E-NUMBER	
PROD. NO.	6997WD
DATE	2/24/65
P.D. FILE NO.	I-35/49.65.97A
DRAWN	VES
CHKD.	
ENGD.	DJD WMB
APPD.	

TELETYPE CORPORATION

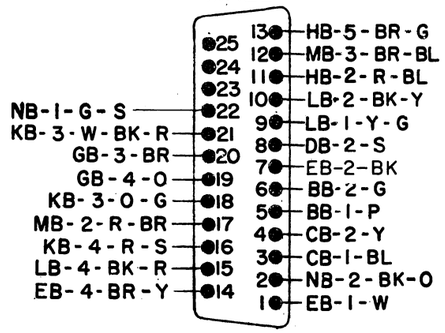
6997 WD

TC 484 (3-68)

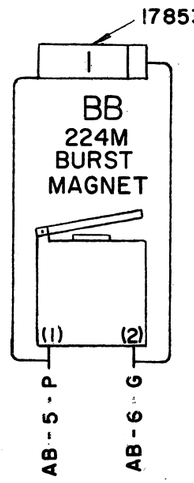
NO.	NOTES
1.	DISTANT TERMINATING AREA ↓ ↖DISTANT TERMINATING DESIGNATION A-2-W←COLOR CODE
2.	COLOR CODE BK-BLACK R-RED BR-BROWN G-GREEN BL-BLUE Y-YELLOW W-WHITE P-PURPLE O-ORANGE S-SLATE
3.	COMPONENTS VIEWED FROM SOLDERED TERM. ENDS.
4.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESIS ARE FOR REFERENCE AND NOT MARKED ON COMPONENTS.
5.	REFER TO 309320 FOR CABLE ASSEMBLY.
6.	ASSOCIATED SCHEMATIC REFER TO 6997WD.
7.	

ET:108147
TC255(6-54)

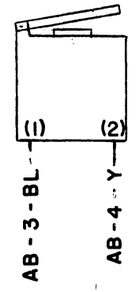
AB
145914
CONNECTOR
MALE



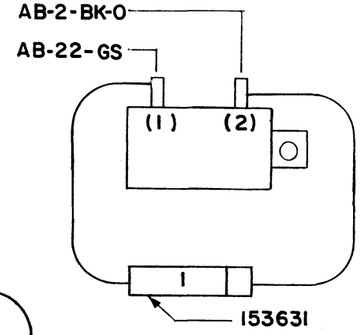
178535



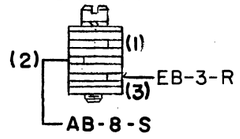
CB
190M
PRINT
SUPPRESS
MAGNET



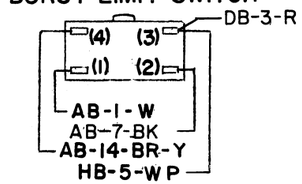
NB
MANUAL BACK SPACE
SOLENOID



DB
197067
STUNT BOX
CONTACT



EB
158163
BURST LIMIT SWITCH



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EJECT
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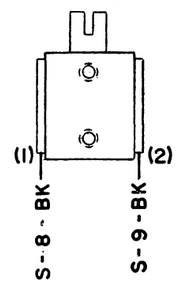
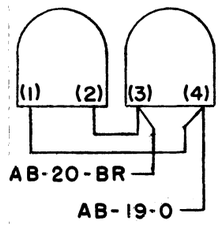
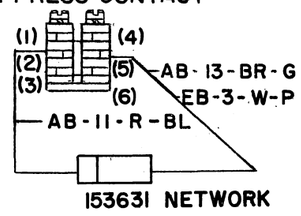


GB
271M
SELECTOR
COILS



HB
309355
PRINT
SUPPRESS CONTACT



S
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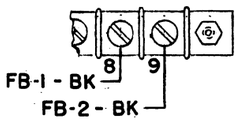
TERMINAL BLOCK



KB
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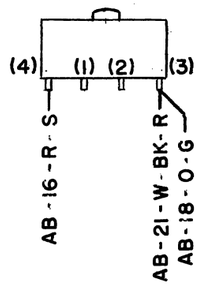
EJECT SWITCH



LB
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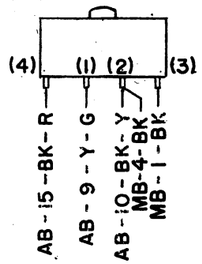
PRINT SUPPRESS
SWITCH



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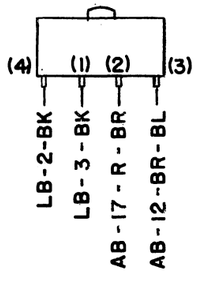
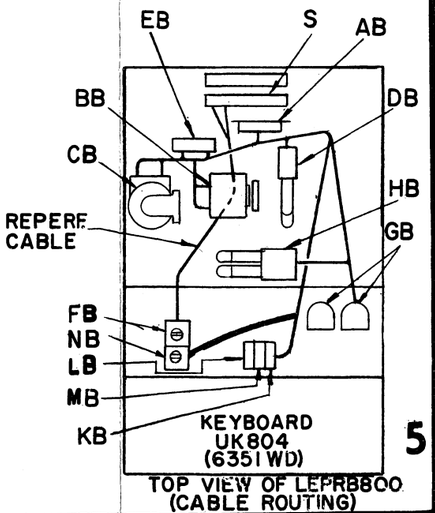




TOP VIEW OF LEPR8800
(CABLE ROUTING)

6998 WD		
ISSUE	DATE	AUTH. NO.
1	5-3-65	16907-R
2	9-24-65	86627
3	7-12-66	89584
4	2-7-67	92526
5	10-2-67	94647-A

APPROVALS	
D AND R	E OF M
E. NUMBER	
PROD. NO. 6998 WD	

ACTUAL
WIRING DIAGRAM
FOR
TYPING
REPERFORATOR
(LEPR 800)

DATE: 1-21-65	
P.D. FILE NO. 135/49.6597A	
DRAWN. V.E.S.	CHKD.
ENGD. B.J.D. W.M.B.	APPD.

5

TELETYPE CORPORATION

6998 WD

NO.	NOTES

SUPPORTING INFORMATION	
CATEGORY	NO.

CONTENTS

ISSUE CONTROL RECORD

SHEET NO.	ISSUE 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	X	X	X	X	X	X												
2	X	X	X	X	X													
3	X	X	X	X	X													

5

6999WD

REVISIONS APPLYING TO THIS CONTROL RECORD

ISSUE	DATE	AUTH. NO.
1	8-11-66	89585
2	9-16-66	89594
3	10-25-66	92366-RC
4	5-17-67	93203
5	8-18-67	94312A

ISSUE CONTROL
SHEET 1 OF 1

ACTUAL
WIRING DIAGRAM
FOR
TYPING
REPERFORATOR
BASE
(LEPRB 800)

WD NUMBER	6999
DRAWN R.W.M.	CHKD. R.E.A.
ENGD. W.M.B.	APPD. R.G.W.

TELETYPE
CORPORATION

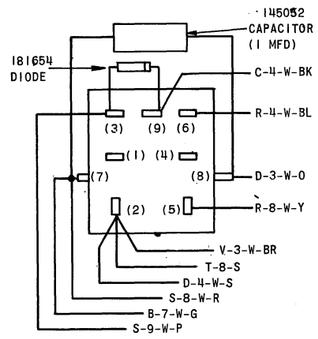
6999WD

TC 482 (1-66) SEE R&D ROUTINE #5 FOR USE OF THIS FORM

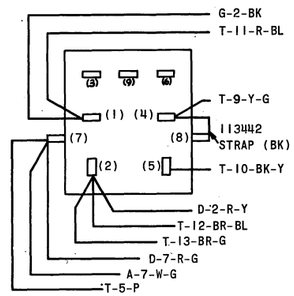
NO.	NOTES
1.	WIRING LEGEND: DISTANT TERMINATING AREA DISTANT TERMINATING DESIGNATION A-2-W — COLOR CODE
2.	COLOR CODE: BK - BLACK, R - RED BL - BLUE, G - GREEN BR - BROWN, Y - YELLOW W - WHITE, P - PURPLE O - ORANGE, S - SLATE
3.	COMPONENTS VIEWED FROM SOLDERED TERM. ENDS.
4.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESIS ARE FOR REFERENCE AND NOT MARKED ON COMPONENTS.
5.	REFER TO 309322 FOR CABLE ASSEMBLY MAIN AND 309319 CABLE ASSEMBLY, DIST
6.	ASSOCIATED SCHEMATIC, REFER TO 6997WD.
7.	
8.	* INDICATES 18GA. WIRE
9.	USE FAST BLOW FUSE TO PREVENT DAMAGE TO THE 8Ω RESISTOR.
10.	USE SLOW-BLOW FUSE.

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

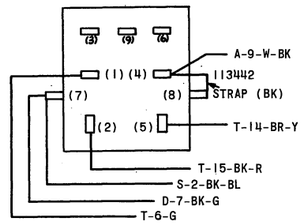
A
309318 RELAY



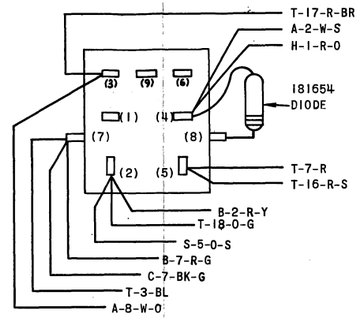
B
309318 RELAY



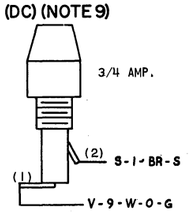
C
309318 RELAY



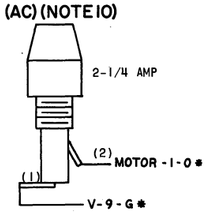
D
309318 RELAY



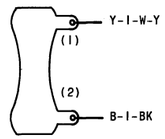
E
182182
FUSE HOLDER
(DC) (NOTE 9)



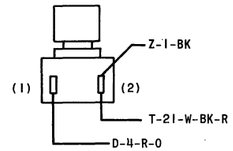
F
182182
FUSE HOLDER
(AC) (NOTE 10)



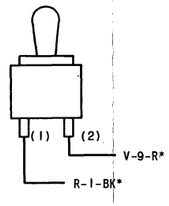
G
157313
RESISTOR
(1800Ω)
(5 WATT)



H
160369
SWITCH
(MANUAL EJECT)
(N.O.)



J
107393
SWITCH
(POWER)



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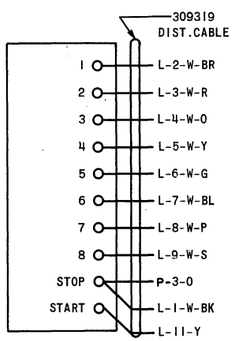
180987
DISTRIBUTOR
DISC



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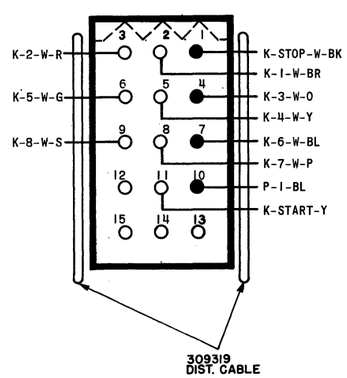
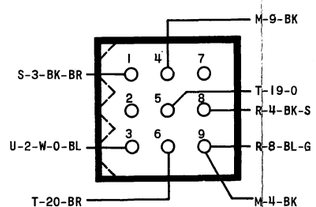
CONNECTOR



M
182645
CONNECTOR



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

SHEET 1

6999WD

REVISIONS

ISSUE	DATE	AUTH. NO.
1	3-4-65	16907-R
2	10-7-65	86629
3	12-2-65	89571
4	8-11-66	89585
5	10-25-66	92366-RC
6	5-16-67	93203
7	8-17-67	94312A

ACTUAL
WIRING DIAGRAM
FOR
TYPING
REPERFORATOR
BASE
(LEPRB800)

APPROVALS

D AND R	E OF M
H.V.K.	

E-NUMBER

PROD. NO. 6999WD

DATE 1-25-65

P.D. FILE NO. 1-33/49.65.97A

DRAWN R.W.M.	CHKD. R.E.A.
ENGD. B.J.B. W.M.B.	APPD. R.G.W.

TELETYPE CORPORATION

6999WD

7

B TC 434 (2-63)

SEE SHEET 1 FOR NOTES

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

6999WD

REVISIONS

ISSUE	DATE	AUTH. NO.
1	3-4-65	16907-R
2	10-7-65	86629
3	12-2-65	89571
4	8-11-66	89585
5	10-25-66	92366-RC
6	5-17-67	93203

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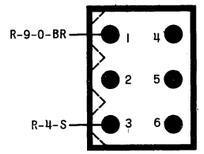
CONNECTOR



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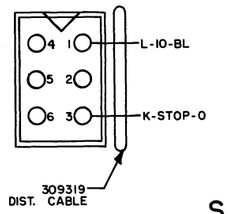
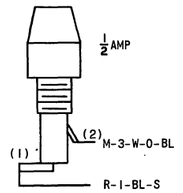
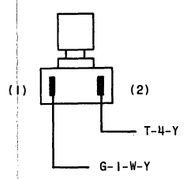


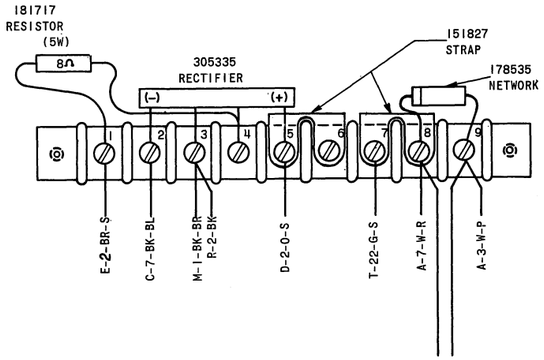
U
182182
FUSE HOLDER
(SMD)



Y
160370
MANUAL PRINT SWITCH
(N.C.)



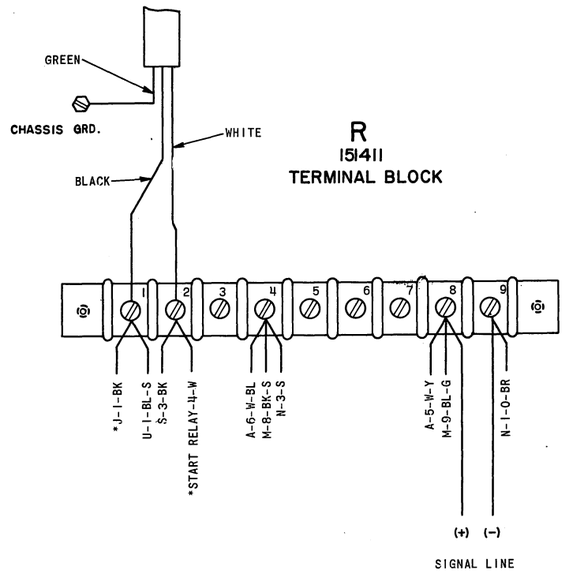
S
151411
TERMINAL BLOCK



REFER TO 6998WD
FOR THESE LEADS

182510
AC POWER CORD

R
151411
TERMINAL BLOCK



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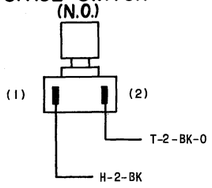
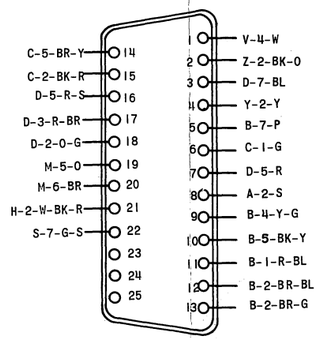
MANUAL BACK
SPACE SWITCH
(N.O.)



T
145913
CONNECTOR
(FEMALE)



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

SHEET 2

ACTUAL
WIRING DIAGRAM
FOR
TYPING
REPERFORATOR
BASE
(LEPRB800)

APPROVALS

D AND R	E OF M
H.J.K.	

E-NUMBER

PROD. NO. 6999WD

DATE 1-26-65

P.D. FILE NO. 1-33/49.65.97A

DRAWN R.W.M.	CHKD. R.E.A.
ENGD. B.J.B. W.M.B.	APPD. R.G.W.

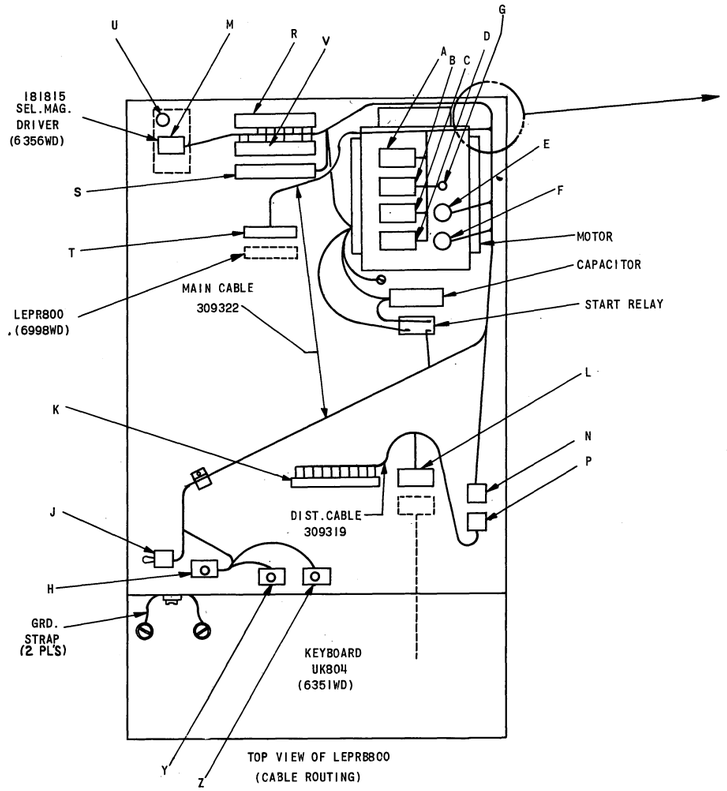
TELETYPE
CORPORATION

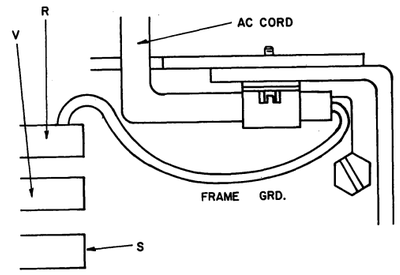
6

6999WD

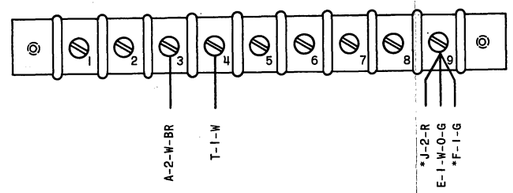
TC 434 (2-65)

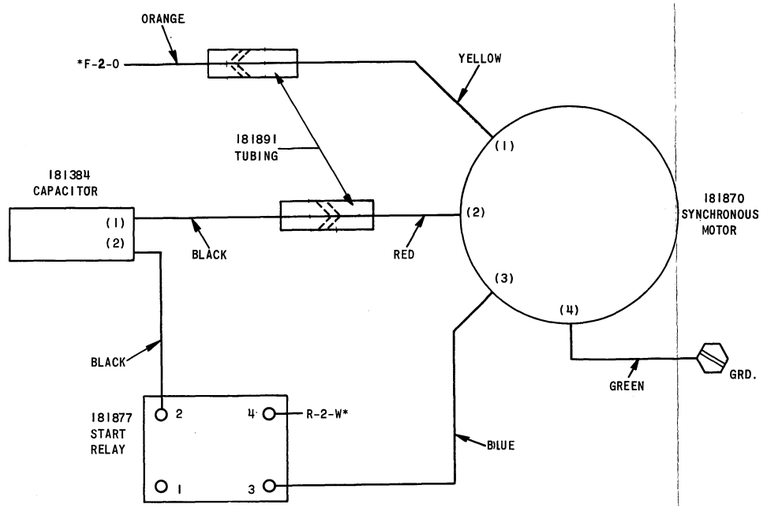
SEE SHEET 1 FOR NOTES





V
151411
TERMINAL BLOCK





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

6999WD

REVISIONS

ISSUE	DATE	AUTH. NO.
1	3-4-65	16907-R
2	10-7-65	86629
3	12-2-65	89571
4	8-11-66	89585
5	9-16-66	89594
6	5-17-67	93203

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

SHEET 3

ACTUAL
WIRING DIAGRAM
FOR
TYPING
REPERFORATOR
BASE
(LEPRB800)

APPROVALS	
D AND R	E OF M

E-NUMBER

PROD. NO. 6999WD

DATE 1-26-65

P.D. FILE NO. 1-33/49.65.97A

DRAWN R.W.M.	CHKD. R.E.A.
ENGD. B.J.B. W.M.B.	APPD. R.G.W.

TELETYPE
CORPORATION

6

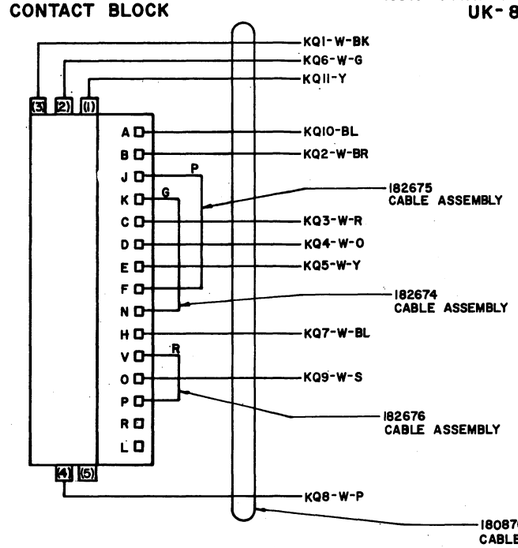
6999WD

B TC 434 (2-63)

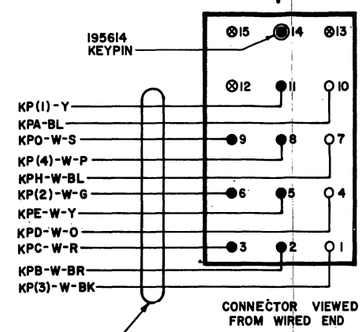
NO.	NOTES
1.	WIRING LEGEND: DISTANT TERMINATING AREA DISTANT TERMINATING DESIGNATION COLOR CODE KQ1-W-BK
2.	WIRE COLOR CODE: W-WHITE BL-BLUE BK-BLACK BR-BROWN O-ORANGE P-PURPLE Y-YELLOW S-SLATE G-GREEN R-RED
3.	TERMINALS DESIGNATED ( ) DO NOT APPEAR ON COMPONENT.
4.	
5	FOR SCHEMATIC WIRING DIAGRAM SEE 7882WD.
6.	ASSOCIATED UNIT ACTUAL WIRING DIAGRAMS: 7884WD PRINTER - UP800,801, 802, 803, 820 7886WD MOTOR 7887WD TAPE READER - UX800,801 7888WD CALL CONTROL - UCC-3 4970WD SELECTOR MAGNET DRIVER
7.	WIRING STATUS: RECTANGULAR BOX INDICATES HISTORY OF WIRING CHANGES 00-B — NOTE NUMBER — 00-A B - DENOTES WIRING BEFORE THE CHANGE DESCRIBED BY THE DESIGNATED NOTE ENTERED THE PRODUCT. A - DENOTES WIRING AFTER THE CHANGE DESCRIBED BY THE DESIGNATED NOTE ENTERED THE PRODUCT.

KP KEYBOARD CONTACT BLOCK

NON PARITY KEYBOARD UK-800

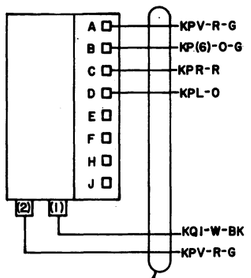


KQ 15 POINT PLUG CONNECTOR 182540 7

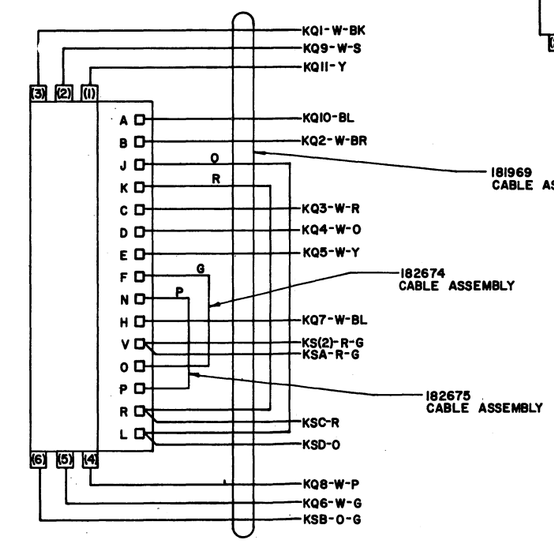


PARITY KEYBOARD UK-804

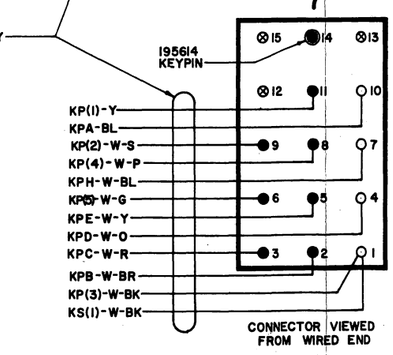
KS KEYBOARD CONTACT BLOCK LEFT



KP KEYBOARD CONTACT BLOCK RIGHT



KQ 15 POINT PLUG CONNECTOR 182540 7



7885 WD

REVISIONS		
ISSUE	DATE	AUTH. NO.
1	2-23-66	17470-R
2	11-3-66	92300 RC
3	8-8-67	94091-B

ACTUAL WIRING DIAGRAM FOR MODEL 33 8 LEVEL KEYBOARD NON PARITY-UK800 PARITY-UK804

APPROVALS	
D AND R	E OF M

E-NUMBER

PROD. NO. 7885WD

DATE 7-1-65

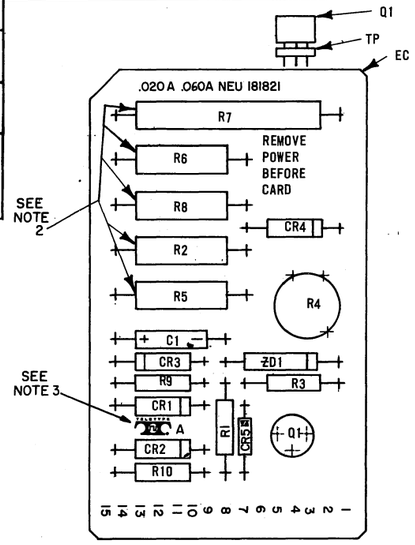
P.D. FILE NO. 1-165.153AA

DRAWN R.H.B.	CHKD.
ENGD. J.W.S.	APPD.

TELETYPE CORPORATION

7885 WD

NO.	NOTES
1.	REFER TO 6357WD FOR CARD MARKING INFORMATION.
2.	RAISE R2, 5, 6, 7, 8 - 1/32 TO 1/16" ABOVE CIRCUIT CARD.
3.	SCREEN WITH WHITE OR BLACK ENAMEL. TRADEMARK TO BE REDUCED TO SPECIFIED SIZE FROM APPROVED ARTWORK R&D PHOTO NO.661015-10.



CIRCUIT DESCRIPTION

THE SELECTOR MAGNET DRIVER CIRCUIT IS POWERED FROM A SOURCE OF 117 VOLT ALTERNATING CURRENT THROUGH A STEP DOWN ISOLATION TRANSFORMER. DIODES CR1 AND CR2 PROVIDE FULL WAVE RECTIFICATION OF THE REDUCED VOLTAGE TO -20 VOLTS DC AT TERMINAL 15. THE CIRCUIT COMMON IS CONNECTED TO TERMINAL 2 AND A POWER SUPPLY FILTER CAPACITOR IS CONNECTED BETWEEN TERMINALS 2 AND 15.

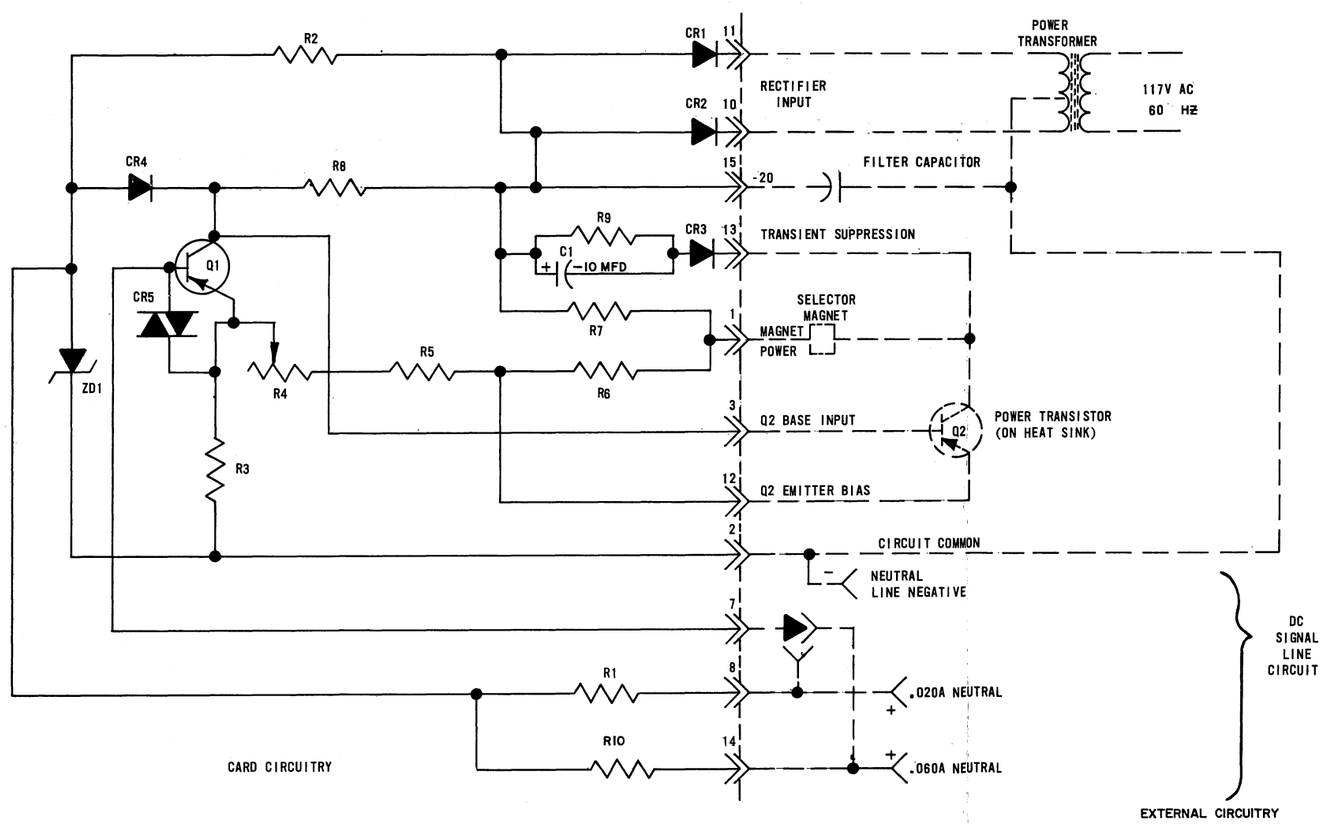
THE DIRECT CURRENT SIGNAL LINE CIRCUIT IS CONNECTED THROUGH TERMINALS 14 OR 8 AND 2 DEPENDING ON LINE CURRENT. TERMINAL 7 STRAPPED EXTERNALLY TO TERMINAL 14 OR 8, DEPENDING ON LINE CURRENT.

IN THE MARKING CONDITION, Q1 IS OFF-BIASED. WITH Q1 OFF, THE BASE OF Q2 WILL BE CLAMPED AT THE ZENER REFERENCE VOLTAGE BY DIODE CR4. THIS VOLTAGE CLAMP IS THEN TRANSLATED TO CURRENT REGULATION BY THE TRANSISTOR ACTION OF Q2. THE REGULATED MAGNET CURRENT IS ADJUSTED TO .500 AMPERES BY RHEOSTAT R4.

WITH THE SIGNAL LINE IN THE OPEN OR SPACING CONDITION, Q1 IS TURNED ON BY BASE CURRENT SUPPLIED THROUGH RESISTOR R1. THE POTENTIAL AT THE COLLECTOR OF Q1 WILL BE NEAR ZERO OFF-BIASING Q2. WITH Q2 OFF, NO SELECTOR MAGNET CURRENT FLOWS, ALLOWING THE MAGNET TO RELEASE. DURING THE TURN OFF OF Q2. THE INDUCTIVE TRANSIENT DEVELOPED AT THE COLLECTOR IS SUPPRESSED BY THE NETWORK CONSISTING OF CR3, R9 AND C1.

"SNAP-ACTION" IS SUPPLIED TO THE CIRCUIT TRANSITIONS BY FEEDBACK IN THE EMITTER CIRCUIT OF TRANSISTOR Q1.

CONSTANT CURRENT .500 AMP SELECTOR MAGNET DRIVER



CIRCUIT BOARD EC

REF. DESIG.	TELETYPE PART NO.	TOTAL QTY.	NAME AND DESCRIPTION	LOCATING FUNCTION
R1	182779		RESISTOR 420 OHMS 1/2W	.010 AMP. SWITCHING -
				- FOR .020A NEUTRAL
				LINE
R10	182797		RESISTOR 135 OHMS 1/2W	.030 AMP. SWITCHING
				- FOR .060A NEUTRAL
				LINE
R2	181669	1	RESISTOR 330 OHMS 2.5W	ZENER CURRENT
				LIMITING
R3	182778	1	RESISTOR 0.82 OHMS 1/2W	COMMON EMITTER BIAS
R4	182773	1	RHEOSTAT 3 OHMS 2.5W	OUTPUT CURRENT
				ADJUST
R5	181717	1	RESISTOR 8 OHMS 5W	Q2 EMITTER BIAS
R6	182770	1	RESISTOR 270 OHMS 4W	Q2 EMITTER BIAS
R7	182772	1	RESISTOR 14 OHMS 10W	Q2 COLLECTOR LOAD
R8	182627	1	RESISTOR 390 OHMS 4W	Q1 COLLECTOR LOAD
R9	182776	1	RESISTOR 150 OHMS 1/2W	Q2 COLLECTOR —
				TRANSIENT LIMITING
CR1	182520	2	DIODE IN3193	POWER RECTIFIER
CR2	182520		SAME AS CR1	POWER RECTIFIER
CR3	181619	2	DIODE IN482	COLLECTOR TRANSIENT
				LIMITING
CR4	181619		SAME AS CR3	VOLTAGE CLAMPING
CR5	178844	1	VARISTOR 100A	INPUT PROTECTION
ZD1	182774	1	DIODE, ZENER 4.7V 5% 3/4W	REFERENCE
C1	182628	1	CAPACITOR, 10 MFD, 25W VDC	COLLECTOR TRANSIENT
				LIMITING
Q1	181671	1	TRANSISTOR, HIGH GAIN	INPUT SWITCH
TP	144495	1	PAD, TRANSISTOR MOUNTING	
EC	181823	1	CIRCUIT BOARD, ETCHED	

181821

REVISIONS

ISSUE	DATE	AUTH. NO.
2	4-19-65	86501
3	9-19-66	88816
4	11-25-66	88816-1
5	5-5-67	93502

APPROVALS

R AND D	E OF M
H.J.K.	

E-NUMBER

PROD NO. 181821

DATE 7-30-63, 4-28-67

R&D FILE 2-30.152/153AA

DRAWN JER.-CG	CHKD. N.A.J.
ENGD. AS.-PRS	APPD. J.W.

TELETYPE CORPORATION

181821

TC 637(1-67)